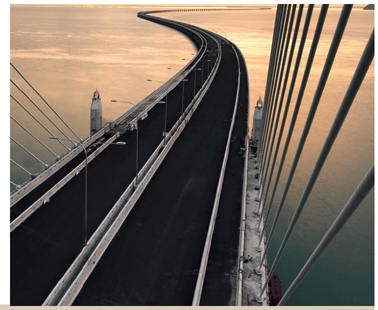
WELLS FARGO
Investment Institute



Investment Strategy

Weekly guidance from our Investment Strategy Committee **July 22, 2024**

Asset Allocation Spotlight

Michael Taylor, CFA
Investment Strategy Analyst

Veronica Willis
Global Investment Strategist

Evaluating performance of our capital market assumptions

We advise investors to select an asset-allocation strategy deemed fit for their designated financial goals, time horizon, and ability and willingness to withstand market ebbs and flows. Our strategic allocations are based on capital market assumptions (CMAs), which reflect prospective trends over multiple market cycles.

As forward-looking estimates, CMAs are not guarantees of returns or risk. Rather, they are average annual estimates; actual performance for each calendar year will likely fluctuate around CMA estimations. As part of a comprehensive formulation process, we regularly review previous CMAs and consider factors to account for deviations from original estimates. This evaluation step helps to refine our CMA estimates going forward.

10-year look back

We assessed the performance of CMAs from the onset of 2014 through December 31, 2023. Most of this period was expansionary, alongside historically low volatility. Periodic volatility since 2020 has helped restore the balance between return and risk (measured by standard deviation). Our overall assessment of CMA performance over this period can be summed up as follows:

- Expected returns for 2014 CMA estimates were generally higher than actual returns over the subsequent decade for fixed-income and international assets as well as the Commodities asset class. However, we underestimated returns for U.S. Large Cap Equities.

- We modestly overestimated expected risk in 2014 as the record-long 2009 – 2020 bull market led to historically low volatility for most of the period. Realized volatility has since reverted closer to our risk estimations.

- The rankings for most asset-class returns and risk aligned with realized performance, which benefited overall allocation performance in line with expected returns.

At a more detailed level, the performance highlights we observed for the 10-year period include the following:

Equities: U.S. equities experienced a record-long bull market from March 2009 to February 2020. Because the period contained much of that momentous bull market, returns for U.S. equities, particularly U.S. Large Cap Equities, exceeded 2014 expectations. Additionally, when we formulated the CMAs, international equities had underperformed U.S. equities for five years. As we expected, international equities continued to underperform U.S. equities, but by more than we anticipated. Going forward, we would expect U.S equities to perform more in line with historical averages.

Commodities: We overestimated Commodities returns by less than one standard deviation from its realized return over the 10-year period. We believe this resulted from a bear super-cycle that persisted for most of the 10-year time frame, which was driven mainly by China — the world's largest consumer of most commodities — as it continued to transition from a manufacturing-based economy to a service- and technology-based economy. The long-standing Commodities bear market lowered actual risk-adjusted returns relative to the historical returns we projected in 2014. Since 2020, a new bull super-cycle has begun lifting Commodities returns toward our estimates.

Volatility: Financial markets experienced an unprecedented period of low volatility in the years following the financial crisis (March 2009 – February 2020), leading us to modestly overestimate risks for most asset classes. We do not expect markets to experience the same level of low volatility that we saw during the previous bull market. Our current expectations for volatility are more in line with long-term historical averages than with the muted volatility of the 2009 – 2020 bull market.

Risk-adjusted returns: One benefit of a diversified allocation is the prospect for a better balance between return and risk. As the table illustrates, risk-adjusted returns (measured by the Sharpe ratio[1]) over long periods have tended to be more efficient for our balanced allocations than for those comprised solely of stocks or bonds. Looking ahead, moderately lower inflation and interest rates coupled with a boost in Commodities returns over the strategic horizon should help bolster risk-adjusted performance.

Table 1. Risk-adjusted returns over long term more efficient with balanced allocation

	1-year Sharpe ratio	3-year Sharpe ratio	5-year Sharpe ratio	10-year Sharpe ratio	15-year Sharpe ratio	20-year Sharpe ratio	25-year Sharpe ratio
Moderate Growth & Income Liquid	**0.71**	**0.06**	**0.53**	**0.53**	**0.78**	**0.56**	**0.51**
Global equities	1.07	0.32	0.63	0.54	0.68	0.49	0.36
Global fixed income	0.13	-0.84	-0.23	-0.08	0.18	0.22	0.25

Sources: © Morningstar Direct and Wells Fargo Investment Institute. Data as of December 31, 2023. Global equities represented by MSCI ACWI Index. Global fixed income represented by Bloomberg Multiverse Index. An index is unmanaged and not available for direct investment. **Past performance is no guarantee of future results. Moderate Growth and Income:** 2% Bloomberg U.S. Treasury Bills (1–3 Month) Index, 30% Bloomberg U.S. Aggregate Bond Index, 6% Bloomberg U.S. Corporate High Yield Bond Index, 5% J.P. Morgan EMBI Global, 27% S&P 500 Index, 10% Russell Midcap Index, 3% Russell 2000 Index, 8% MSCI EAFE Index, 5% MSCI Emerging Markets Index, 4% Bloomberg Commodity Index.

Although CMAs are not historical averages but rather forecasts of average annual returns over a long period of time, reviewing past CMAs helps to inform our process of formulating those forward-looking estimates and fine-tuning strategic allocations. Our updated 2024 CMAs reflect our expectations for asset-class performance based on long-term trends in capital markets — these include our expectations for 2.5% long-term inflation, fixed-income yields stabilizing moderately lower, and continued commodity price gains.

Our adjustments to the 2024 strategic mixes include reducing exposure to U.S. Small Cap Equities and adding to U.S. Large Cap Equities[2]. The number of non-earning companies in small caps has continued to increase, making this segment of the U.S. equity market less attractive from a risk-adjusted perspective. Even so, the expected return for the asset class should outpace less risky areas of the market over the long term, so it remains an important component of diversified strategic allocations. We also increased exposure to Private Equity, reflecting our expectation that the strategy will have favorable long-term risk-return dynamics.

1. The Sharpe ratio measures the additional return investors can expect for accepting additional risk.
2. For complete details of our CMA and strategic allocation adjustments, see our *2024 Capital Market Assumptions: Strategic asset allocation recommendations*, July 16, 2024

Equities

Chris Haverland, CFA
Global Equity Strategist

High bar for second-quarter earnings

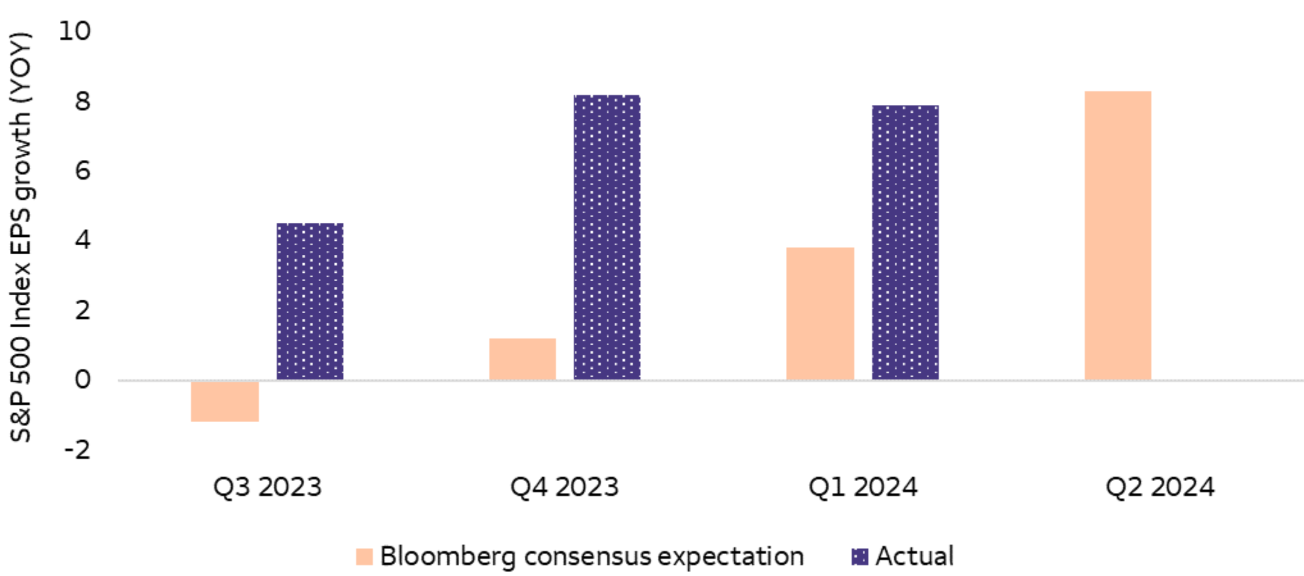
Second-quarter earnings season is upon us, and Bloomberg consensus is calling for S&P 500 Index profits to expand 8.3%. While this is close to the growth rate seen in the past two quarters, earnings often beat conservative expectations. If profits grew more than estimated, second-quarter growth could be the highest since the first quarter of 2022. Consensus shows revenue growth around 4.6% in the quarter, which implies that margins improved.

Eight of the eleven sectors are expected to be positive, led by Communication Services, Health Care, and Information Technology. Materials, Industrials, and Real Estate likely lagged in the quarter. While tech-related sectors continue to dominate earnings growth, profit gains are expected to broaden out as the year progresses.

Outlooks will be key as investors watch for hints of reduced pricing power, margin erosion, and productivity gains from artificial intelligence. Many companies are still dealing with a tight labor market, an uncertain economic environment, and higher interest rates. Consumer resiliency will be closely watched as modest signs of weakening have appeared in recent economic data.

2024 S&P 500 Index Bloomberg consensus earnings estimates have been stable over the past few months and remain above our target of $240. In 2025, we see continued revenue growth and expanding margins that could take S&P 500 Index earnings to $260. We maintain our view that U.S. Large Cap Equities (represented by the S&P 500 Index) is the highest-quality equity asset class, with generally strong company balance sheets, durable pricing power, and resilient earnings-growth potential.

The bar is high for second-quarter earnings growth



Sources: Bloomberg and Wells Fargo Investment Institute. EPS = earnings per share. YOY = year over year. Data as of July 19, 2024.

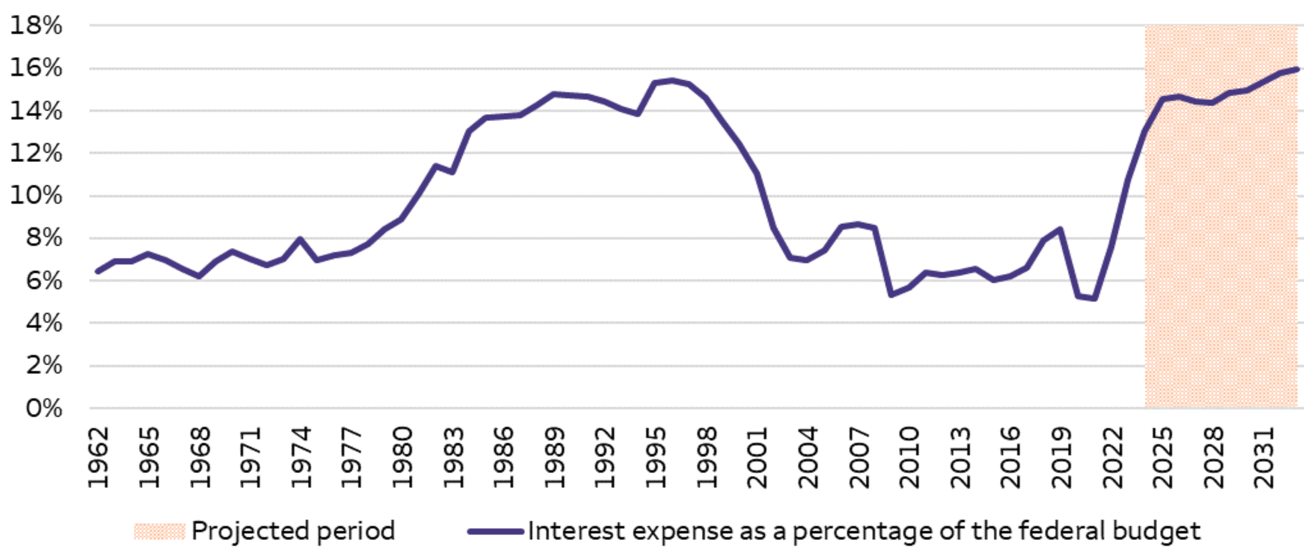
Fixed Income

Brian Rehling, CFA
Head of Global Fixed Income Strategy

Interest expense nears previous peak

An important metric for federal budget makers is the percent of the annual budget that must go to paying the interest on its debt. This expense peaked in 1996 at 15.5% of the budget and, thanks to falling interest rates, hit a recent low of 5.3% in 2020. However, significant fiscal spending in response to COVID-19 and increases in interest rates have significantly increased the annual interest expense on federal debt. According to the Congressional Budget Office (CBO), interest outlays are expected to increase toward a projected 13% of the federal budget this year. The CBO currently forecasts that the interest expense will account for close to 14.6% of the budget in 2025, and current CBO baseline projections show the debt service increasing to just under 16% of the federal budget by 2033.

Interest expense expected to steadily increase over the next decade



Sources: Congressional Budget Office and Wells Fargo Investment Institute. Data from 1962 – 2033, with 2024 – 2033 data representing CBO projections. Current as of June 1, 2024.

Under this scenario, interest-expense costs would remain manageable. However, additional economic shocks or a continued increase in interest rates could be concerning. To reverse course, we likely need to see spending restraint in Washington or a lower trajectory of interest rates. Although it is unlikely that investors will feel the most damaging effects of America's fiscal challenges soon, some repercussions have already started to trickle down to financial markets. We expect that firmer inflation along with more Treasury issuance will cause longer-term rates to remain higher than they were over the prior decade. Some restraint from yields may come from increased demand for fixed-income securities by an aging population, insurers, and pension plans, but we do not think it will be enough to outweigh the interest burden at its current trajectory.

We believe higher interest rates do present investors an opportunity to generate more yield from high-quality fixed-income investments. We currently have most favorable guidance on the U.S. Short Term Taxable Fixed Income asset class while remaining neutral on the U.S. Intermediate and Long Term Taxable Fixed Income asset classes.

Real Assets

Mason Mendez
Investment Strategy Analyst

John LaForge
Head of Real Asset Strategy

Gold climbs to all-time high on soft inflation data

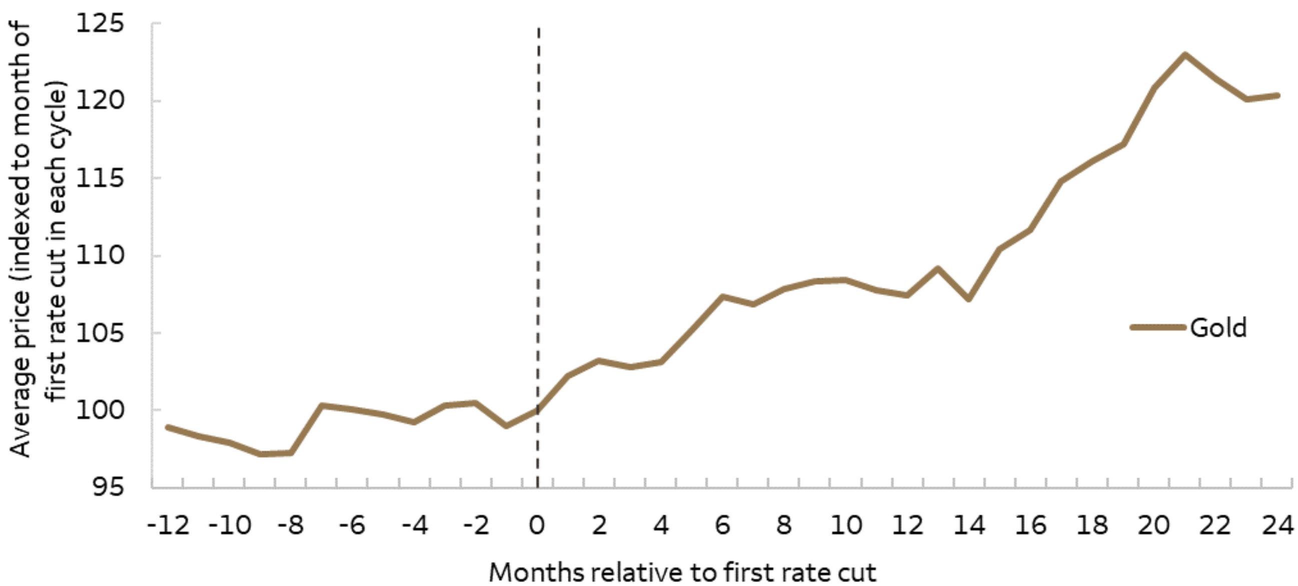
Gold prices climbed to new all-time highs last week, above $2,400 per troy ounce, following the release of the much-anticipated Consumer Price Index (CPI) report on Thursday, July 11. Overall, The CPI report showed year-over-year inflation declining from 3.3% in May to 3.0% in June.

The declining inflation rate is important to gold investors because it brings the Federal Reserve (Fed) one step closer to possibly lowering interest rates. This aligns with our expectation that the Fed will indeed begin cutting interest rates later in 2024 and continue cutting into 2025.

The chart below helps explain at least one reason why gold investors reacted so positively to the potential for upcoming Fed rate cuts. It highlights that the average price of gold has tended to rise quite nicely, and for nearly 21 months, following the start of past Fed interest-rate easing cycles. Why this has been the case historically has to do with gold being a non-interest-bearing asset, which investors often see as comparatively better on a risk-return basis relative to interest-bearing assets (such as U.S. Treasuries) as rates fall.

The bottom line is that gold fundamentals remain solid, and inflation rates have likely fallen enough for the Fed to begin cutting interest rates later this year. If this indeed occurs, history suggests that gold prices could move significantly higher for some time. We continue to recommend Precious Metals as one of our favorite Commodities sectors. Also, after gold's recent breakout to new highs, we are reviewing our 2024 and 2025 year end targets for potential changes.

Gold's average price performance around Fed easing cycles



Sources: Bloomberg & Wells Fargo Investment Institute. The chart includes price data from Fed easing cycles that began in November 1970, November 1971, December 1974, May 1980, November 1981, November 1984, June 1989, July 1995, September 1998, January 2001, September 2007, and July 2019. An index is unmanaged and not available for direct investment. **Past performance is no guarantee of future results.**

Alternatives

Mark Steffen, CFA, CAIA
Global Alternative Investment Strategist

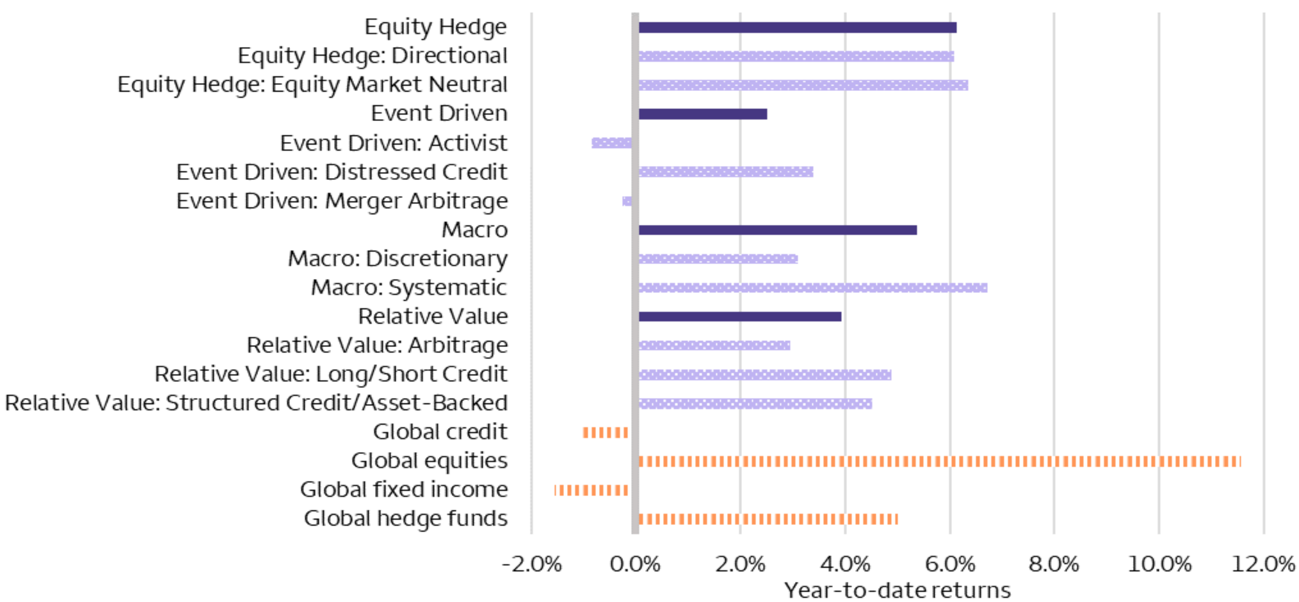
Hedge funds post strong returns through first half

The equity markets continued to rally through the first half of 2024, driven by a narrow subset of technology-related stocks. Aside from the strength in these mega-cap growth stocks, returns have been more modest or even negative, with smaller-cap, value-oriented stock returns slightly negative through June (-0.86% for the Russell 2000 Value index).

Despite trailing the large-cap equity benchmarks, hedge funds have posted solid results through the first half of 2024. Systematic Macro strategies led the way as trend following in equity markets and select agricultural commodity markets contributed to significant gains early in the year. Other standout performers included Equity Hedge strategies, posting a return of 6.3% through the first two quarters as the category has benefited from higher interest rates and a rally in equities related to artificial intelligence. In the Event Driven category, Distressed Credit strategies continue to post solid results (3.5%) as the opportunity set has expanded amidst the higher-for-longer interest-rate environment, impacting many overleveraged small and mid-sized businesses. Laggard hedge fund performers through the first half of 2024 include the Merger Arbitrage (unfavorable) and Activist (unfavorable) strategies. The late-2023 rally in both categories failed to carry forward into 2024 as both posted returns near 0%. On the fixed-income side, global fixed-income markets declined as investors digested the reality of fewer interest-rate cuts on the horizon. Yet, Long/Short Credit (favorable) performed well (4.8%) as markets rewarded sound credit selection amidst higher volatility levels.

While our guidance remains defensively positioned given the ongoing economic slowdown, we have been encouraged by the strong performance across many hedge fund categories.

Hedge fund performance versus global equity and fixed-income indexes over the first half



Sources: Bloomberg and Wells Fargo Investment Institute. Data from December 31, 2023 – June 30, 2024. Solid purple bars reflect alternative investment strategies, dotted purple bars reflect more specific sub-sets of these strategies, and striped orange bars represent broader market categories. See end of report for list of index definitions. An index is unmanaged and not available for direct investment. **Past performance is no guarantee of future results.** Indexes used: MSCI ACWI Index, Bloomberg Global Agg Sovereign Total Return Index Value Unhedged USD, Bloomberg Global Agg Credit Total Return Index Value Unhedged USD.

Alternative investments, such as hedge funds, private equity, private debt and private real estate funds are not appropriate for all investors and are only open to "accredited" or "qualified" investors within the meaning of U.S. securities laws.

Tactical guidance*

Cash Alternatives and Fixed Income

Most Unfavorable	Unfavorable	Neutral	Favorable	Most Favorable
	High Yield Taxable Fixed Income	Cash Alternatives Developed Market Ex-U.S. Fixed Income Emerging Market Fixed Income U.S. Long Term Taxable Fixed Income U.S. Intermediate Term Taxable Fixed Income	U.S. Taxable Investment Grade Fixed Income	U.S. Short Term Taxable Fixed Income

Equities

Most Unfavorable	Unfavorable	Neutral	Favorable	Most Favorable
U.S. Small Cap Equities	Emerging Market Equities	U.S. Mid Cap Equities Developed Market Ex-U.S. Equities	U.S. Large Cap Equities	

Real Assets

Most Unfavorable	Unfavorable	Neutral	Favorable	Most Favorable
		Private Real Estate	Commodities	

Alternative Investments**

Most Unfavorable	Unfavorable	Neutral	Favorable	Most Favorable
		Hedge Funds—Event Driven Hedge Funds—Equity Hedge Private Equity Private Debt	Hedge Funds—Relative Value Hedge Funds—Macro	

Source: Wells Fargo Investment Institute, July 22, 2024.

*Tactical horizon is 6-18 months

**Alternative investments are not appropriate for all investors. They are speculative and involve a high degree of risk that is appropriate only for those investors who have the financial sophistication and expertise to evaluate the merits and risks of an investment in a fund and for which the fund does not represent a complete investment program. Please see end of report for important definitions and disclosures.

Risk considerations

Forecast, targets, and estimates are not guaranteed and are based on certain assumptions and on our views of market and economic conditions which are subject to change.

Each asset class has its own risk and return characteristics. The level of risk associated with a particular investment or asset class generally correlates with the level of return the investment or asset class might achieve. **Stock markets**, especially foreign markets, are volatile. Stock values may fluctuate in response to general economic and market conditions, the prospects of individual companies, and industry sectors. **Foreign investing** has additional risks including those associated with currency fluctuation, political and economic instability, and different accounting standards. These risks are heightened in emerging markets. **Small- and mid-cap stocks** are generally more volatile, subject to greater risks and are less liquid than large company stocks. **Bonds** are subject to market, interest rate, price, credit/default, liquidity, inflation and other risks. Prices tend to be inversely affected by changes in interest rates. **High yield (junk) bonds** have lower credit ratings and are subject to greater risk of default and greater principal risk. The **commodities** markets are considered speculative, carry substantial risks, and have experienced periods of extreme volatility. Investing in a volatile and uncertain commodities market may cause a portfolio to rapidly increase or decrease in value which may result in greater share price volatility. **Real estate** has special risks including the possible illiquidity of underlying properties, credit risk, interest rate fluctuations and the impact of varied economic conditions.

Alternative investments, such as hedge funds, private equity/private debt and private real estate funds, are speculative and involve a high degree of risk that is appropriate only for those investors who have the financial sophistication and expertise to evaluate the merits and risks of an investment in a fund and for which the fund does not represent a complete investment program. They entail significant risks that can include losses due to leveraging or other speculative investment practices, lack of liquidity, volatility of returns, restrictions on transferring interests in a fund, potential lack of diversification, absence and/or delay of information regarding valuations and pricing, complex tax structures and delays in tax reporting, less regulation and higher fees than mutual funds. Hedge fund, private equity, private debt and private real estate fund investing involves other material risks including capital loss and the loss of the entire amount invested. A fund's offering documents should be carefully reviewed prior to investing.

Hedge fund strategies, such as Equity Hedge, Event Driven, Macro and Relative Value, may expose investors to the risks associated with the use of short selling, leverage, derivatives and arbitrage methodologies. Short sales involve leverage and theoretically unlimited loss potential since the market price of securities sold short may continuously increase. The use of leverage in a portfolio varies by strategy. Leverage can significantly increase return potential but create greater risk of loss. Derivatives generally have implied leverage which can magnify volatility and may entail other risks such as market, interest rate, credit, counterparty and management risks. Arbitrage strategies expose a fund to the risk that the anticipated arbitrage opportunities will not develop as anticipated, resulting in potentially reduced returns or losses to the fund.

Definitions

Bloomberg Global Aggregate Credit Total Return Index Value Unhedged USD is a flagship measure of global investment grade debt from twenty-four local currency markets. This multi-currency benchmark includes treasury, government-related, corporate and securitized fixed-rate bonds from both developed and emerging markets issuers.

Bloomberg Global Aggregate – Sovereign Index is a measure of investment grade rated debt from 25 local currency markets. This multi-currency benchmark includes government-related fixed-rate bonds from both developed and emerging market issues. Bonds classified as sovereign are only eligible.

Bloomberg Multiverse Index provides a broad-based measure of the global fixed-income bond market. The index represents the union of the Global Aggregate Index and the Global High-Yield Index and captures investment grade and high yield securities in all eligible currencies.

Bloomberg U.S. Aggregate Bond Index is composed of the Bloomberg U.S. Government/Credit Index and the Bloomberg U.S. Mortgage-Backed Securities Index and includes Treasury issues, agency issues, corporate bond issues, and mortgage-backed securities.

Bloomberg U.S. Corporate High Yield Bond Index covers the U.S.-dollar-denominated, non-investment-grade, fixed-rate, taxable corporate bond market. Securities are classified as high yield if the middle rating of Moody's, Fitch, and S&P is Ba1/BB+/BB= or below. Included issues must have at least one year until final maturity.

Bloomberg U.S. Treasury Bill (1–3 Month) Index is representative of money markets.

Bloomberg Commodity Index is a broadly diversified index of commodity futures on 20 physical commodities, subdivided into energy, U.S. agriculture, livestock, precious metals, and industrial metals sectors. Commodity weights are derived in a manner that attempts to fairly represent the importance of a diversified group of commodities to the world economy.

Consumer Price Index (CPI) produces monthly data on changes in the prices paid by urban consumers for a representative basket of goods and services.

J.P. Morgan Emerging Market Bond Index (EMBI) Global is a U.S.-dollar-denominated, investible, market-cap-weighted index representing a broad universe of emerging market sovereign and quasi-sovereign debt. While products in the asset class have become more diverse, focusing on both local currency and corporate issuance, there is currently no widely accepted aggregate index reflecting the broader opportunity set available, although the asset class is evolving. By using the same index provider as the one used in the developed market bonds asset class, there is consistent categorization of countries among developed international bonds (ex. U.S.) and emerging market bonds.

MSCI All Country World Index (MSCI ACWI) is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of 23 developed and 26 emerging markets.

MSCI EAFE Index (Europe, Australasia, Far East) Index is a free-float-adjusted market-capitalization-weighted index designed to measure the equity market performance of developed markets, excluding the U.S. and Canada.

MSCI Emerging Markets Index is a free-float-adjusted market-capitalization-weighted index designed to measure equity market performance of emerging markets.

Russell 2000® Value Index measures the performance of those Russell 2000 companies with lower price-to-book ratios and lower forecasted growth values.

Russell Midcap® Index measures the performance of the 800 smallest companies in the Russell 1000® Index, which represent approximately 25% of the total market capitalization of the Russell 1000 Index.

S&P 500 Index is a market capitalization-weighted index composed of 500 widely held common stocks that is generally considered representative of the US stock market.

An index is unmanaged and not available for direct investment.

General disclosures

Global Investment Strategy (GIS) is a division of Wells Fargo Investment Institute, Inc. (WFII). WFII is a registered investment adviser and wholly owned subsidiary of Wells Fargo Bank, N.A., a bank affiliate of Wells Fargo & Company.

The information in this report was prepared by Global Investment Strategy. Opinions represent GIS' opinion as of the date of this report and are for general information purposes only and are not intended to predict or guarantee the future performance of any individual security, market sector or the markets generally. GIS does not undertake to advise you of any change in its opinions or the information contained in this report. Wells Fargo & Company affiliates may issue reports or have opinions that are inconsistent with, and reach different conclusions from, this report.

The information contained herein constitutes general information and is not directed to, designed for, or individually tailored to, any particular investor or potential investor. This report is not intended to be a client-specific suitability or best interest analysis or recommendation, an offer to participate in any investment, or a recommendation to buy, hold or sell securities. Do not use this report as the sole basis for investment decisions. Do not select an asset class or investment product based on performance alone. Consider all relevant information, including your existing portfolio, investment objectives, risk tolerance, liquidity needs and investment time horizon. The material contained herein has been prepared from sources and data we believe to be reliable but we make no guarantee to its accuracy or completeness.

We advise investors to select an asset allocation strategy deemed fit for their designated financial goals, time horizon, and ability and willingness to withstand market ebbs and flows. Our strategic allocations are based on capital market assumptions (CMAs) that reflect prospective trends over multiple market cycles.

As forward-looking estimates, CMAs are not guarantees of returns or risk. Rather, they are average annual estimates; actual performance for each calendar year will likely fluctuate around CMA estimations. As part of a comprehensive formulation process, we regularly review previous CMAs and consider factors to account for deviations from original estimates. This evaluation step helps to refine our CMA estimates going forward.

Wells Fargo Advisors is registered with the U.S. Securities and Exchange Commission and the Financial Industry Regulatory Authority, but is not licensed or registered with any financial services regulatory authority outside of the U.S. Non-U.S. residents who maintain U.S.-based financial services account(s) with Wells Fargo Advisors may not be afforded certain protections conferred by legislation and regulations in their country of residence in respect of any investments, investment transactions or communications made with Wells Fargo Advisors.

Wells Fargo Advisors is a trade name used by Wells Fargo Clearing Services, LLC and Wells Fargo Advisors Financial Network, LLC, Members SIPC, separate registered broker-dealers and non-bank affiliates of Wells Fargo & Company. PM-01182026-6809163.1.1