2022 capital market assumptions for financial planning

Insights

This informational material is provided by U.S. Bank Asset Management Group who provides analysis and research to U.S. Bank and its affiliate U.S. Bancorp Investments. Contact your wealth professional for more details.

Each year we look ahead over the next business cycle, typically a five-to-seven-year time horizon, and develop a set of capital market assumptions (CMAs) across more than 30 asset classes. These assumptions incorporate historical precedent, current considerations and future inference to inform investment decisioning. However, financial planning discussions may benefit from a longer-term view.

While financial plans must incorporate the current market environment, they also reflect views over multiple future business cycles to develop savings and spending strategies. To this end, we developed a supplemental set of capital market assumptions for use in financial planning discussions, extending our forward-looking view from a five to seven-year single business cycle to a 20-year view spanning three to four business cycles.

Our financial planning CMA process supplements our cyclical process to assume asset relationships normalize over time. Building from the conclusion of our approximately five-to-seven-year cyclical returns assumptions, we hold asset factor relationships at longer-term medians for the remainder of our total 20-year forecast horizon.

For example, the 10-year U.S. Treasury returns -0.04% per year for our cyclical return assumption (next five years); we assume its yield will increase by around 1%. For the next 15 years, we assume interest rates continue to normalize, with real (net of inflation) interest rates rising toward the long-term average and following along with current market expectations. In this case, interest rates rise another 0.50% to reach a long-term average based on real interest rates and market expectations around 2.70%. While the terminal or ending interest rate is much higher than current interest rates, the period of rising rates indicates lower prices and, therefore, losses for fixed income investors. For the full 20-year period, this adjustment averages to a return of 1.79%.

Given the complexities in building such long-term assumptions, we focus on select asset classes central in building long-term investment portfolios. Thus, we focus on a narrower set of 22 asset classes from which we build our strategically asset allocated portfolios versus the thirty asset classes we forecast on the shorter cyclical process.

 Important disclosures provided on pages 3 and 4.

In extending our analytical framework from one business cycle to multiple cycles, we generally see investment returns improving from near-term expected returns low relative to history and then slightly improving over our full 20-year horizon. Short-term interest rates reverting toward historical average levels from the current low environment along with slightly higher inflation rates are helpful longer-term tailwinds for investors. The still low global economic growth environment remains a primary headwind for longer-term returns, along with the challenges of current historically high asset class valuations (prices relative to actual or expected cash flows) returning to longer-term normal levels. Rising interest rates challenge long-term bond investor returns while high market valuations, such as stock price levels relative to earnings, are a headwind for equity investments.

These calculations may prove useful in making longer-term plans around savings and spending. However, given the very long investment horizon, we emphasize that the potential variability of outcomes is relatively wide. For investors, our regular business cycle capital market assumptions tie to current capital market prices. Investors in asset classes not covered in our financial planning suite should use our business cycle-focused capital market assumptions, building a transition plan to our longer-term strategic asset classes that we anticipate should be more permanent exposures in client portfolios.

Capital market assumptions

Asset class	Index	Geometric return[1]	Arithmetic return[2]	Standard deviation[3]	Start date	End date
Cash	USTREAS T-Bill Cnst Mat Rate 3 Mon	1.31%	1.31%	0.27%	1/31/83	9/30/21
US 5-year Treasury notes	USTREAS T-Bill Cnst Mat Rate 5 Yr	1.59%	1.64%	3.19%	12/31/70	9/30/21
US 10-year Treasury notes	USTREAS T-Bill Cnst Mat Rate 10 Yr	1.79%	1.97%	6.20%	12/31/70	9/30/21
US 30-year Treasury notes	USTREAS T-Bill Cnst Mat Rate 30 Yr	1.74%	2.62%	14.07%	2/28/78	9/30/21
US 20+ year zero coupon Treasury	Bloomberg US Treasury Long TR USD	1.66%	2.13%	10.04%	12/31/90	9/30/21
US aggregate bond	BBgBarc US Agg Bond TR USD	2.20%	2.25%	3.13%	12/31/76	9/30/21
US municipal bond	BBgBarc Municipal TR USD	1.89%	1.95%	3.53%	1/31/81	9/30/21
US long-term IG corporate	ICE BofA 10+Y US Corp TR USD	2.84%	3.19%	8.63%	12/31/90	9/30/21
US high yield corporate	BofAML US HY Master II TR USD	4.00%	4.26%	7.27%	8/31/87	9/30/21
Hedge funds - debt	HFRI Relative Value (Total) Index	2.09%	2.17%	4.17%	12/31/90	9/30/21
Private debt	CDLI Direct Lending	6.00%	6.06%	3.42%	9/30/05	9/30/21
Reinsurance	SwissRe Global Cat Bond TR USD	6.05%	6.10%	3.05%	1/31/03	9/30/21
US large-cap equity	S&P 500 TR USD	6.75%	7.80%	15.09%	1/31/71	9/30/21
US mid-cap equity	Russell Mid Cap TR USD	7.74%	9.00%	16.60%	12/31/79	9/30/21
US small-cap equity	Russell 2000 TR USD	7.10%	8.75%	19.27%	12/31/79	9/30/21
Developed international equity	MSCI EAFE GR USD	5.81%	7.11%	17.01%	12/31/70	9/30/21
Emerging market equity	MSCI EM GR USD	8.96%	11.27%	23.04%	12/31/88	9/30/21
Hedge funds - equity	HFRI Equity Hedge (Total) Index	2.95%	3.32%	8.87%	12/31/90	9/30/21
Private equity	Cambridge Associates US Private Equity (Daily)	11.10%	11.15%	3.12%	3/31/87	9/30/21
US real estate	DJ Equity All REIT TR USD	6.13%	7.61%	18.23%	2/28/90	9/30/21
Direct real estate	NCREIF Property (Daily)	7.26%	7.28%	2.18%	2/28/06	9/30/21
Global infrastructure	FTSE Global Core Infrastructure TR USD	5.28%	5.85%	11.02%	12/31/78	9/30/21

Source: U.S. Bank Asset Management Group, Morningstar.

[1] Geometric return: Used to calculate average rate per period on investments that are compounded over multiple periods.

[2] Arithmetic return: A mathematical representation of the typical value of a series of numbers, computed as the sum of all the numbers in the series divided by the count of all numbers in the series. The arithmetic mean is sometimes referred to as the average or simply as the mean.

[3] Standard deviation: Applied to the annual rate of return of an investment to measure the investment's volatility. Also known as historical volatility; it is used by investors as a gauge for the amount of expected volatility.

Large-cap equity: The S&P 500 Index consists of 500 widely traded stocks that are considered to represent the performance of the U.S. stock market in general. Mid-cap equity: The Russell Midcap Index measures the performance of the mid-cap segment of the U.S. equity universe and is a subset of the Russell 1000 Index. It includes approximately 800 of the smallest securities based on a combination of their market cap and current index membership. Small-cap equity: The Russell 2000 Index measures the performance of the 2,000 smallest companies in the Russell 3000 Index and is representative of the U.S. small capitalization securities market. International developed equity: The MSCI EAFE Index includes approximately 1,000 companies representing the stock markets of 21 countries in Europe, Australasia and the Far East (EAFE). Emerging market equities: The MSCI Emerging Markets Index is designed to measure equity market performance in global emerging markets. Frontier market equities: The MSCI Frontier Markets Index captures large and mid-cap representation across 29 frontier markets countries. U.S. aggregate bonds: The Bloomberg Barclays Aggregate Bond Index is a broad-based benchmark that measures the investment grade, U.S. dollar denominated, fixed-rate taxable bond market, including Treasuries, government-related and corporate securities, mortgage-backed securities, asset-backed securities and commercial mortgage-backed securities. U.S. municipal bonds: The Bloomberg Barclays U.S. Municipal Bond Index is a broad-based benchmark that measures the investment grade, U.S. dollar denominated, fixed tax-exempt bond market. The index includes state and local general obligation, revenue, insured and pre-refunded bonds. U.S. high yield corporates: The BofA Merrill Lynch U.S. High Yield Master II Index is a commonly used benchmark index for high yield corporate bonds and measures the broad high yield market. Hedge funds – equity: The HFRI Equity Hedge Total Index (HFRI EHI) is an equally weighted index that uses the HFR (Hedge Fund Research) database and consists only of equity hedge funds (both long and short managers), with a minimum of $50 million or a 12-month track record and is reported in U.S. dollars. It is calculated and rebalanced monthly and shown net of all fees and expenses. Equity hedge strategies invest in a core holding of all equities hedged at all times with short sales of stocks/or stock index options. Some maintain a substantial portion of assets within a hedged structure and commonly employ leverage. Hedge funds – debt: The HFRI Relative Value Index includes investment managers who maintain positions in which the investment thesis is predicated on realization of a valuation discrepancy in the relationship between multiple securities. Managers employ a variety of fundamental and quantitative techniques to establish investment theses, and security types range broadly across equity, fixed income derivative or other security types. Fixed income strategies are typically quantitatively driven to measure the existing relationship between instruments and, in some cases, identify attractive positions in which the risk adjusted spread between these instruments represents an attractive opportunity for the investment manager. Private equity: The Cambridge U.S. Private Equity Index is based on returns data compiled for U.S. private equity funds (including buyout, growth equity and mezzanine funds) that represent the majority of institutional capital raised by private equity partnerships formed since 1986. Private debt: The Cliffwater Direct Lending Index (CDLI) seeks to measure the unlevered, gross of fee performance of U.S. middle market corporate loans, as represented by the asset-weighted performance of the underlying assets of Business Development Companies (BDCs), including both exchange-traded and unlisted BDCs, subject to certain eligibility requirements. The CDLI includes income return, realized gain/loss and unrealized gain/loss. U.S. REITs: The Dow Jones Select REIT Index intends to measure the performance of publicly traded REITs and REIT-like securities. The index is a subset of the Dow Jones U.S. Select Real Estate Securities Index (RESI), which represents equity real estate investment trusts (REITs) and real estate operating companies (REOCs) traded in the United States. The indices are designed to serve as proxies for direct real estate investment, in part by excluding companies whose performance may be driven by factors other than the value of real estate. Direct real estate: The NCREIF NPI Property Index measures the investment performance of a very large pool of individual commercial real estate properties acquired in the private market for investment purposes only. Returns may be delayed by up to six months. Quarterly performance is prorated based on the cube root for the months of the quarter. The Dow Jones U.S. Select REIT Index is used as a proxy until actual performance is received. Reinsurance: The Swiss Re Cat Bond Index is a market value-weighted basket of natural catastrophe bonds and is designed to reflect the returns of the catastrophe bond market.

 Important disclosures continued on page 4.

International investing involves special risks, including foreign taxation, currency risks, risks associated with possible differences in financial standards and other risks associated with future political and economic developments. Investing in emerging markets may involve greater risks than investing in more developed countries. In addition, concentration of investments in a single region may result in greater volatility. Equity securities are subject to stock market fluctuations that occur in response to economic and business developments. The value of large-capitalization stocks will rise and fall in response to the activities of the company that issued them, general market conditions and/or economic conditions. Stocks of mid-capitalization companies can be expected to be slightly less volatile than those of small-capitalization companies,but still involve substantial risk and may be subject to more abrupt or erratic movements than large-capitalization companies. Stocks of small-capitalization companies involve substantial risk. These stocks historically have experienced greater price volatility than stocks of larger companies and may be expected to do so in the future. While all investments involve risk, microcap stocks are among the most risky. Often, the biggest difference between a microcap stock and other stocks is the amount of reliable publicly-available information about the company. Many microcap companies are new and have no proven track record. Additionally, risks involve such things as the stocks do not pay dividends since profits are usually retained and reinvested back into the company, low liquidity and extreme market volatility. Many frontier markets do not have developed stock markets so investments are often private or direct in startups and infrastructure. Although it's possible to achieve strong results from investing in frontier markets, investors must also accept higher risks than in the United States or Europe. Some of the risks investors face in frontier markets are political instability, poor liquidity, inadequate regulation, substandard financial reporting and large currency fluctuations. In addition, many markets are overly dependent on volatile commodities. Investments in fixed income securities are subject to various risks, including changes in interest rates, credit quality, market valuations, liquidity, prepayments, early redemption, corporate events, tax ramifications and other factors. Investment in fixed income securities typically decrease in value when interest rates rise. This risk is usually greater for longer-term securities. Investments in lower-rated and non-rated securities present a greater risk of loss to principal and interest than higher-rated securities. Investments in high yield bonds offer the potential for high current income and attractive total return, but involve certain risks. Changes in economic conditions or other circumstances may adversely affect a bond issuer's ability to make principal and interest payments. The municipal bond market is volatile and can be significantly affected by adverse tax, legislative or political changes and the financial condition of the issues of municipal securities. Interest rate increases can cause the price of a bond to decrease. Income on municipal bonds is free from federal taxes, but may be subject to the federal alternative minimum tax (AMT), state and local taxes. Treasury Inflation-Protected Securities (TIPS) offer a lower return compared to other similar investments and the principal value may increase or decrease with the rate of inflation. Gains in principal are taxable in that year, even though not paid out until maturity. There are special risks associated with investments in real assets such as commodities and real estate securities. For commodities, risks may include market price fluctuations, regulatory changes, interest rate changes, credit risk, economic changes and the impact of adverse political or financial factors. Investments in real estate securities can be subject to fluctuations in the value of the underlying properties, the effect of economic conditions on real estate values, changes in interest rates and risks related to renting properties (such as rental defaults). Alternative investments very often use speculative investment and trading strategies. There is no guarantee that the investment program will be successful. Alternative investments are designed only for investors who are able to tolerate the full loss of an investment. These products are not suitable for every investor even if the investor does meet the financial requirements. It is important to consult with your investment professional to determine how these investments might fit your asset allocation, risk profile and tax situation. Private equity investments provide investors and funds the potential to invest directly into private companies or participate in buyouts of public companies that result in a delisting of the public equity. Investors considering an investment in private equity must be fully aware that these investments are illiquid by nature, typically represent a long-term binding commitment and are not readily marketable. The valuation procedures for these holdings are often subjective in nature. Private debt investments may be either direct or indirect and are subject to significant risks, including the possibility of default, limited liquidity and the infrequent availability of independent credit ratings for private companies. Hedge funds are speculative and involve a high degree of risk. An investment in a hedge fund involves a substantially more complicated set of risk factors than traditional investments in stocks or bonds, including the risks of using derivatives, leverage and short sales, which can magnify potential losses or gains. Restrictions exist on the ability to redeem or transfer interests in a fund. Insurance-linked securities (ILS) are financial instruments whose performance is determined by insurance loss events primarily driven by weather-related and other natural catastrophes (such as hurricanes and earthquakes). These events are typically low-frequency but high-severity occurrences. In exchange for higher potential yields, investors assume the risk of a disaster during the life of their bonds, with their principal used to cover damage caused if the catastrophe is severe enough.