



2022 Capital Market Assumptions

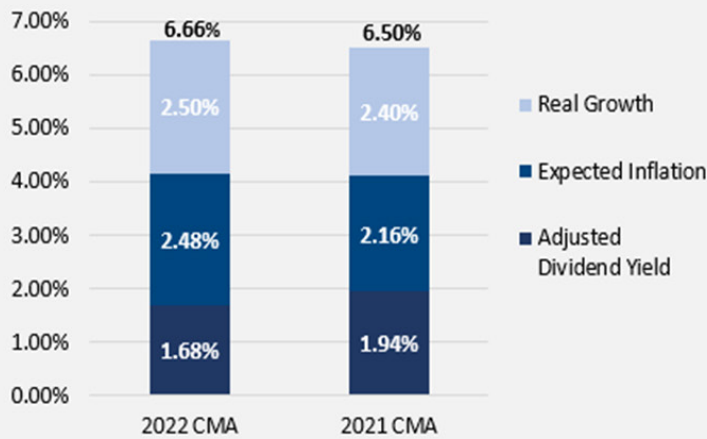
“The fundamental law of investing is the uncertainty of the future,” said Peter L. Bernstein, a notable 20th century economist. This has more than rung true for the past two years as clients and advisors navigated their way through a global pandemic that has whipsawed financial markets. Although we remain above pre-pandemic highs, uncertainty remains as policymakers decide how to unwind monetary stimulus that has previously provided a tailwind to equity markets. As tailwinds shift to headwinds and back to tailwinds over a business cycle, we reiterate our belief that it is important for investors to be equipped with forecasts that help shape the possibility of what the future holds.

Our capital market assumptions (CMAs) are hypothetical, forward-looking expectations of how asset classes may perform in the future. Furthermore, these CMAs are intended to act as a foundation for advisors and clients to formulate a strategic asset allocation plan over a long-term investment horizon and to aid clients in reaching their long-term financial goals. In order to capture the fluctuations within a full business cycle, we have characterized our CMAs with a 10-year investment time horizon. Since our expectations are geared towards the long run, we must differentiate between short-term volatility and focus on where our investment journey may take us over the next decade.

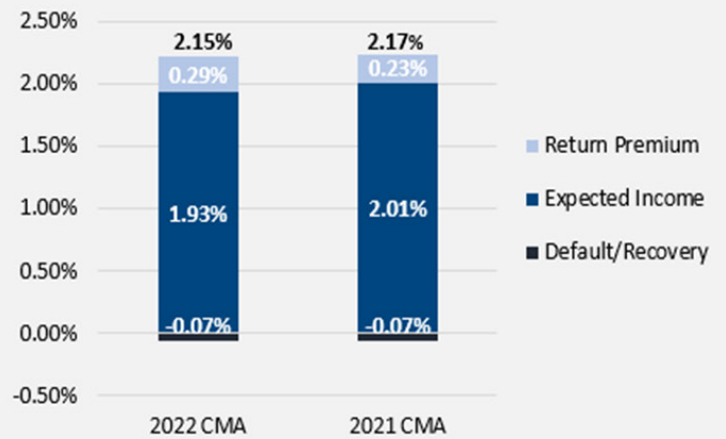
In formulating our CMAs, we consider historical, long-term trends that combine both the current valuations and the current environment of the market. Additionally, we overlay these historical trends with qualitative reasoning to ensure that thoughtful consideration is given to expected returns, risk (measured by standard deviation), and correlations. Given the role that return assumptions play in the asset allocation decision, we incorporate multiple views of the investment community. Meanwhile, the standard deviation and correlation assumption are both formulated by using a historical approach of representative indices.

By leveraging these inputs, we are able to utilize a building block approach that produces long-term asset class targets – consisting of equity, fixed income, and alternative investments. Our equity assumptions incorporate a combination of dividend yields, inflation expectations, and expected real earnings growth. Meanwhile, our fixed income assumptions include expected real yield, a historical premium/discount over treasuries, and a historical probability of defaults and loss severity. Lastly, the assumptions for alternative investments vary depending on asset class. For the real estate and master limited partnerships asset class forecasts, we take advantage of a hybrid approach that combines a current yield and income growth model with a historical income and growth model. Other alternative asset classes such as private equity, commodities, covered call, managed futures, and infrastructure use a more historical approach. The following are examples that illustrate how our building block approach is formulated and changed from 2021 to 2022 for both U.S. Large Cap and U.S. Core fixed income.

U.S. Large Cap Assumption



U.S. Core Fixed Income



Our 2022 CMAs are forecasts that do not guarantee asset class returns, rather they are intended to act as an indication of how asset classes may perform in the future. In order to capitalize on long-term opportunities and protect against market volatility, we believe it is important to maintain a well-diversified portfolio. Remember, investment objectives and constraints vary from investor to investor. Therefore, investors should compare the risk and return tradeoffs of different investment strategies to determine what is most suitable to meet long-term financial goals.

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Asset Class	Representative Index	2022 Arithmetic Expected Return	2022 Compounded Expected Return	2022 Standard Deviation	2022 Yield	10-Year Benchmark Return (2012-2021)
Cash	FTSE 3-Month Treasury Bills	1.00%	1.00%	0.46%	0.05%	0.60%
Municipal Bonds	Barclays Intermediate Municipal 5-10 Year	1.73%	1.66%	3.79%	1.11%	3.10%
Municipal High Yield	Barclays High Yield Municipal	3.18%	2.91%	7.60%	3.07%	6.72%
Investment Grade Credit	Barclays U.S. Corporate Investment Grade	2.67%	2.52%	5.82%	2.33%	4.70%
U.S. Core Fixed Income	Barclays U.S. Aggregate	2.06%	2.00%	3.39%	1.75%	2.90%
TIPS	Barclays U.S. Treasury TIPS	2.24%	2.10%	5.41%	-1.04%	3.09%
Non-U.S. Developed Fixed Income	FTSE WGBI NonUSD	1.72%	1.37%	8.80%	0.86%	0.34%
Bank Loans	Credit Suisse Leveraged Loan	3.95%	3.76%	6.34%	4.32%	4.69%
High Yield Bonds	ICE BofA U.S. High Yield	4.23%	3.84%	9.28%	4.85%	6.83%
Emerging Market Debt	50% JPM EMBI Global / 50% JPM GBI-EM Gbl Div	4.59%	4.17%	9.56%	4.89%	2.89%
Opportunistic Fixed Income	Barclays Universal Bond Index	2.63%	2.53%	4.76%	2.22%	3.31%
Preferred Securities	S&P Preferred Stock	3.70%	2.99%	12.40%	5.43%	7.47%
Absolute Return	Credit Suisse Multi-Strategy	4.48%	4.35%	5.29%	0.00%	5.97%
U.S. Large Cap Equity	S&P 500	6.54%	5.50%	15.05%	1.36%	16.55%
U.S. Mid Cap Equity	Wilshire U.S. Mid Cap	7.24%	5.73%	18.14%	1.28%	14.03%
U.S. Small Cap Equity	Wilshire U.S. Small Cap	6.93%	5.07%	20.13%	1.09%	13.88%
Global Equity	MSCI ACWI	6.96%	5.83%	15.64%	1.79%	12.44%
Non-U.S. Developed Equity	MSCI World ex U.S.	6.98%	5.72%	16.58%	2.63%	8.37%
Non-U.S. Developed Small Cap Equity	MSCI EAFE Small Cap	8.18%	6.69%	17.98%	2.16%	11.19%

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Emerging Markets Equity	MSCI Emerging Markets	9.14%	7.08%	21.19%	2.00%	5.87%
Equity Long/Short	HFRI Equity Hedge	5.29%	4.91%	8.99%	0.00%	7.19%
Convertible	ICE BofA All U.S. Convertible	5.15%	4.51%	11.77%	3.66%	13.89%
Covered Call	CBOE S&P 500 Buywrite BXM	6.14%	5.60%	10.87%	0.87%	7.54%
Private Equity	Pitchbook Private Equity All U.S.	10.15%	9.62%	10.78%	0.00%	17.16%
MLPs	Alerian MLP	8.19%	4.66%	27.67%	6.34%	-0.26%
Public Core Real Estate	FTSE NAREIT All Equity REITs	7.58%	6.26%	16.93%	2.59%	12.22%
Private Core Real Estate	NCREIF ODCE	5.76%	5.64%	5.14%	0.00%	8.99%
Private Debt	Blended Private Debt Index	5.74%	5.57%	6.11%	6.24%	7.91%
Commodities	Bloomberg Commodity	4.44%	3.21%	16.39%	0.00%	-2.85%
Infrastructure	S&P Global Infrastructure	6.58%	6.05%	10.74%	3.10%	7.73%
Reinsurance	SwissRE Cat Bond	5.53%	5.49%	3.08%	6.26%	5.75%
Managed Futures	Credit Suisse Managed Futures	3.98%	3.42%	11.08%	0.00%	1.87%

The 2022 Capital Market Assumptions have a 10-year time horizon and are used in our strategic asset allocation work as well as to provide guidance on the various asset classes. Financial plans typically have longer time horizons than 10 years and our work suggests that over longer time horizons, asset class returns revert towards long-term averages. For the purposes of financial planning with longer time horizons, we use weighted average capital market assumptions that blend our 10-year calculated CMAs with longer-term historical average returns.

The information provided is based on internal and external sources that are considered reliable; however, the accuracy of this information is not guaranteed. This piece is intended to provide accurate information regarding the subject matter discussed. Investing involves risk including the potential loss of principal. No investment strategy, including asset allocation and diversification, can guarantee a profit or protect against loss in periods of declining values. Past performance is no guarantee of future results. Indexes are unmanaged and investors are not able to invest directly into any index. This information does not constitute a solicitation or an offer to buy or sell any security mentioned.

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