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Through the Looking Glass

2025 Capital Market Assumptions

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Executive Summary

- Capital market assumptions (CMAs) represent forward-looking return and risk estimates for various asset classes.
- Our CMAs are designed to represent our views across a full market cycle, which has historically been 5-10 years.
- Our CMAs are forward-looking projections with fundamental underpinnings in market-based expectations. We apply modest, research-based views when appropriate.
- We believe a higher-for-longer interest rate environment will result in higher bond returns than were experienced from 2010-2022.
- Elevated equity valuations, particularly in US large cap, have resulted in us lowering our public equity estimated return relative to one year ago. We also expect a more normal volatility environment in equities going forward.

What are CMAs?

Capital market assumptions (CMAs) are estimated return and risk characteristics for a range of investments. CMAs typically include return and volatility forecasts for each asset class and a correlation table that estimates how correlated each asset class is with the others.

Capital market assumptions are primarily used for portfolio construction and financial planning. When used in portfolio construction, CMAs help illustrate the risk and return trade-offs between various portfolios. CMAs are also the inputs behind the wealth forecasts that frequently show up in financial planning.

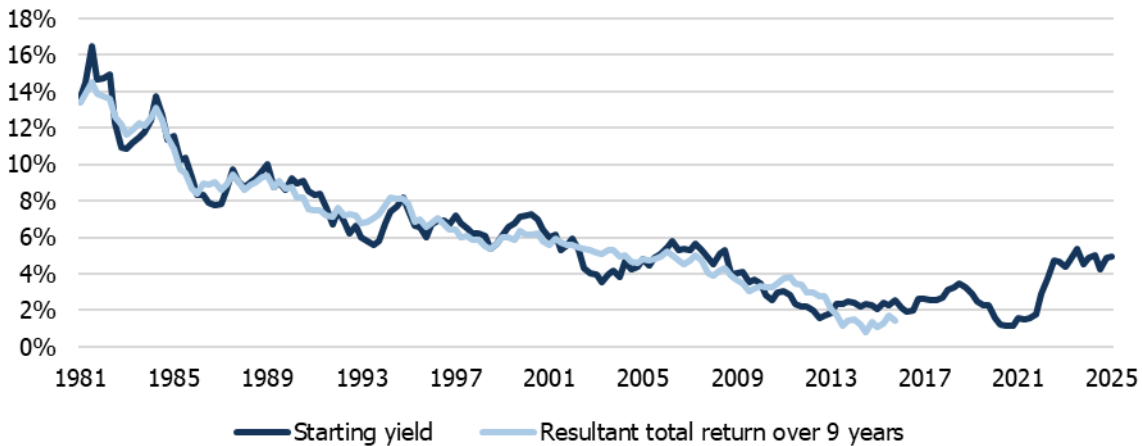
How are CMAs constructed?

We use a heavy dose of market-based expectations and modestly applied strategic views to

estimate capital market assumptions.

Market-based expectations are the foundation of our process. In fixed income, starting yields are a good guide to future returns (Fig. 1). We can also observe how market participants are pricing various interest rates and inflation over the next decade through the futures market. We use this market-based starting point and then make modest adjustments to reflect our views about the coming decade.

Fig. 1: Starting yield and future return (Bloomberg Aggregate Bond Index)



Source: Bloomberg, Mill Creek. As of 01/14/2025.

Our equity market starting point is similar. Short-term equity market returns are tough to predict, but we can also observe how market participants are pricing equities through their valuations, and valuations tend to be a reasonable guide to future returns (Fig. 2, next page) over a market cycle.

Why do we “nudge” returns instead of simply accepting market expectations? Market expectations are not a forecast – they are simply the probabilistic midpoint of the full range of potential outcomes that market participants have priced into the market. We apply our own views to the extent that we disagree with the “average view” embedded in the market.

Current bond yields are a good example. The Treasury financed the 2024 deficit through unusually high issuance of bills (debt that matures within one year) instead of issuing longer-dated bonds as would have been normal operating procedure. A consensus of researchers (both the Federal Reserve and private forecasters) believes this pattern of Treasury issuance has reduced longer-term bond yields by about 0.5% relative to where they would be with normal Treasury operations. Our method allows us to apply that information cohesively to our estimated returns for all asset classes.

Fig. 2: Equity valuation and future return (S&P 500)



Source: Bloomberg, Shiller Data Library, Mill Creek.

Modeling Illiquid Investments

Illiquid investments, like private equity, do not lend themselves to using reported volatility as a primary measure of risk. Private assets are not traded frequently and reported values are generally based on appraisals, which are typically model-based and at least somewhat subjective. It's not uncommon for an asset to be revalued slowly or hold a stable valuation for multiple quarters until a corporate action, like a merger, results in a new valuation data point. The result is that a private equity portfolio's "reported" volatility is usually very low and similar to corporate bonds. Most investors intuitively understand that the risk inherent in private equity is at least on par with public equities, not high-quality bonds.

In response to these issues, we use adjusted private capital indexes that have undergone a statistical "de-smoothing" in our asset allocation modeling (Fig. 3, next page). The adjustment process helps to better reflect the underlying economic risk in these assets as well as their correlation to traditional assets, but it creates a disconnect between the forward-looking estimated volatility of a portfolio and what an investor is likely to actually see in their return statements several years down the road. There's no perfect way to fit the square peg of private investments into the round hole of volatility, but we believe this process helps align public and private assets as well as possible in portfolio construction.

Fig. 3: Adjusted private equity volatility better reflects underlying risk (annualized standard deviation)



Source: Pitchbook, Bloomberg, Mill Creek. As of 6/30/2024 (latest available). Global equities refers to the MSCI ACWI USD Index.

2024 CMAs: Heightened Uncertainty

As we discussed in our 2025 outlook, titled "[Touch-and-Go](#)," we're constructive about the medium-term outlook but also recognize there is great economic and geopolitical uncertainty in the current environment that will drive higher portfolio volatility. Our CMAs (Fig. 4, next page) reflect these views.

Our equity return assumptions have declined slightly since last year in response to high returns that drove valuations, particularly in the US, even higher. We're not specifically forecasting a bear market, nor are we recommending an underweight to US equities as valuations are not useful guides for either of those predictions. Instead, we're simply suggesting that investors should expect lower average returns over the next decade.

We continue to find value in private credit and private equity, although the estimated return spread between taxable bonds and private credit isn't as wide as last year. Lending markets have partially healed following the 2022 banking mini-crisis and that normalization is showing up in private credit yields. Private equity valuations remain at a discount to public equity valuations and a lighter-touch regulatory environment has the potential to catalyze an acceleration in corporate action.

Within fixed income, our estimated bond returns remain commensurate with current yields and a view that interest rates are likely to remain elevated above 2010-2022 levels. The Federal Reserve's *dot plot* projects a neutral Fed Funds rate of 2.9%, but market participants are now projecting short-term rates of 4% in five years. Our cash return assumption is in between those views.

Fig. 4: 2025 Capital Market Assumptions

Asset Class	Estimated Return	Estimated Volatility	Sharpe Ratio
PUBLIC EQUITY			
Global Equity	7.7%	17.5%	0.24
United States Large Cap	7.5%	16.7%	0.24
United States Small Cap	8.4%	21.6%	0.23
Internationally Developed	7.9%	18.6%	0.23
Emerging Markets	8.5%	23.0%	0.22
FIXED INCOME			
US Taxable	5.0%	4.2%	0.36
US Corporate HY	6.4%	10.2%	0.29
Municipal Bonds	3.6%	3.0%	0.02
ALTERNATIVES			
Hedge Funds	4.7%	6.1%	0.19
Private Credit	8.9%	7.2%	0.75
Private Equity	12.5%	15.6%	0.58
CASH			
US Cash	3.5%	1.0%	-
OTHER			
Inflation (CPI)	2.5%		

Source: Mill Creek.

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