WEALTHSPIRE
ADVISORS

2024

Charting the Path Ahead

Capital Market Assumptions

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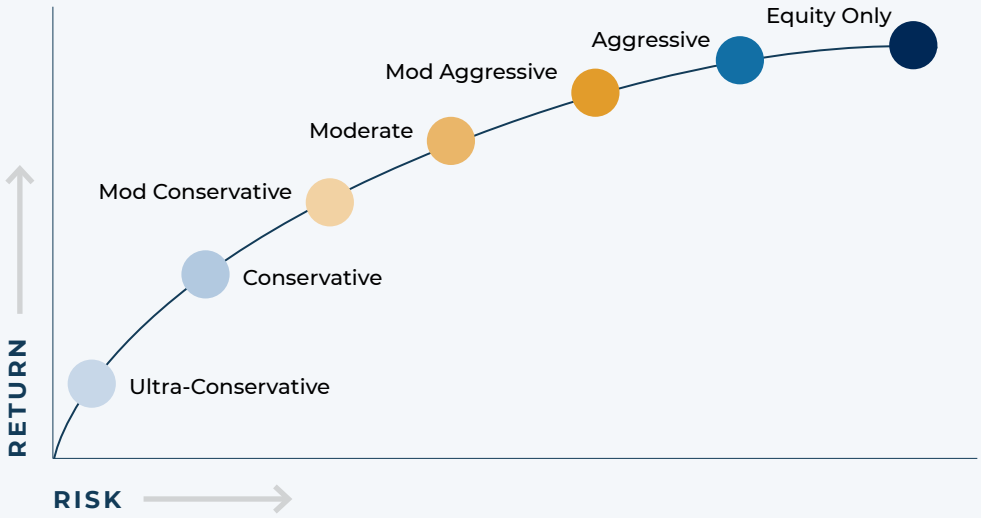
Introduction to Capital Market Assumptions

At Wealthspire, we believe financial planning is a multi-faceted process which balances a wide variety of inputs and variables to help inform financial decision making. Among the many steps that must be taken in building a financial plan is designing an investment portfolio that appropriately aligns risk and return while supporting cash flow needs throughout the duration of the plan. The expected risk and return of the investment portfolio are key inputs for financial modeling and wealth forecasting and are primarily determined by the portfolio's **strategic asset allocation.** The importance of the strategic asset allocation is well documented in academic literature, and so the process by which we arrive at an appropriate allocation for each client needs to be rigorous, practical, and objective.

Capital Market Assumptions (CMAs) serve as the foundation of this process because they represent expectations for return and risk across multiple asset classes. These assumptions are used to approximate the efficient frontier and evaluate tradeoffs between allocating to different types of investments. It's important to note that Wealthspire's portfolio construction framework focuses more on risk than return when determining the appropriate mix of assets for a given portfolio objective. This is because risk tends to be far more stable than return over time and can therefore be more reliably targeted. The CMAs produced for each asset class help to frame conversations around how much risk a client may be willing to take given an informed outlook for how risk and return are related.

ILLUSTRATION OF THE EFFICIENT FRONTIER

The efficient frontier helps us to visualize the tradeoff in risk and return across different portfolios.



Source: Wealthspire Advisors

On an annual basis, Wealthspire updates its CMAs for asset classes that represent the majority of the investable universe. These assumptions are generated for both a 10- and 30-year time horizon and incorporate inputs from both third-party and internally produced data. This document provides an overview of Wealthspire's current assumptions for a variety markets and asset classes, a discussion of how these assumptions have evolved over the past year, and a summary of the various methodologies used to arrive at each figure.

Market Trends And Observations

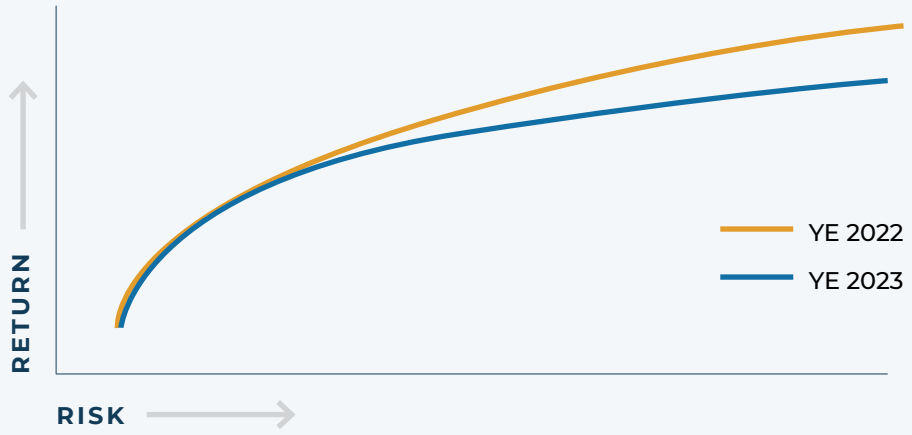
A Flatter Frontier Means Less Reward for Risk-Taking

In addition to providing the foundation for long-term financial planning, one of the key benefits of regularly revisiting capital market assumptions is that it enables us to objectively evaluate the relative attractiveness of different asset classes. In our view, the most profound development since the economy emerged from the throws of the COVID-19 pandemic has been the relative setup of stocks vs. bonds. As interest rates and inflation have moved higher, bond yields (the primary determinant of fixed income returns) have followed suit. At the same time, equity markets have recovered nicely from the bear market experienced in 2022 and continued to build upon an extended run of strong performance that dates back to the market bottom in 2009. These two undercurrents have combined to compress bond prices and push US large cap equity valuations to elevated levels.

Valuation (for equities) and yield (for bonds) provide the structural foundation for forecasting long-term returns, and at present, the expectations for these asset classes have converged. Stocks are still expected to provide healthy real returns over the long-term, but investors today are faced with a vastly different tradeoff between risk and reward than they may have become accustomed to. Higher expected returns for bonds and lower expected returns for stocks has led to a flattening of the efficient frontier, which means that the reward for taking incremental risk in a portfolio is much smaller.

THE EFFICIENT FRONTIER HAS FLATTENED

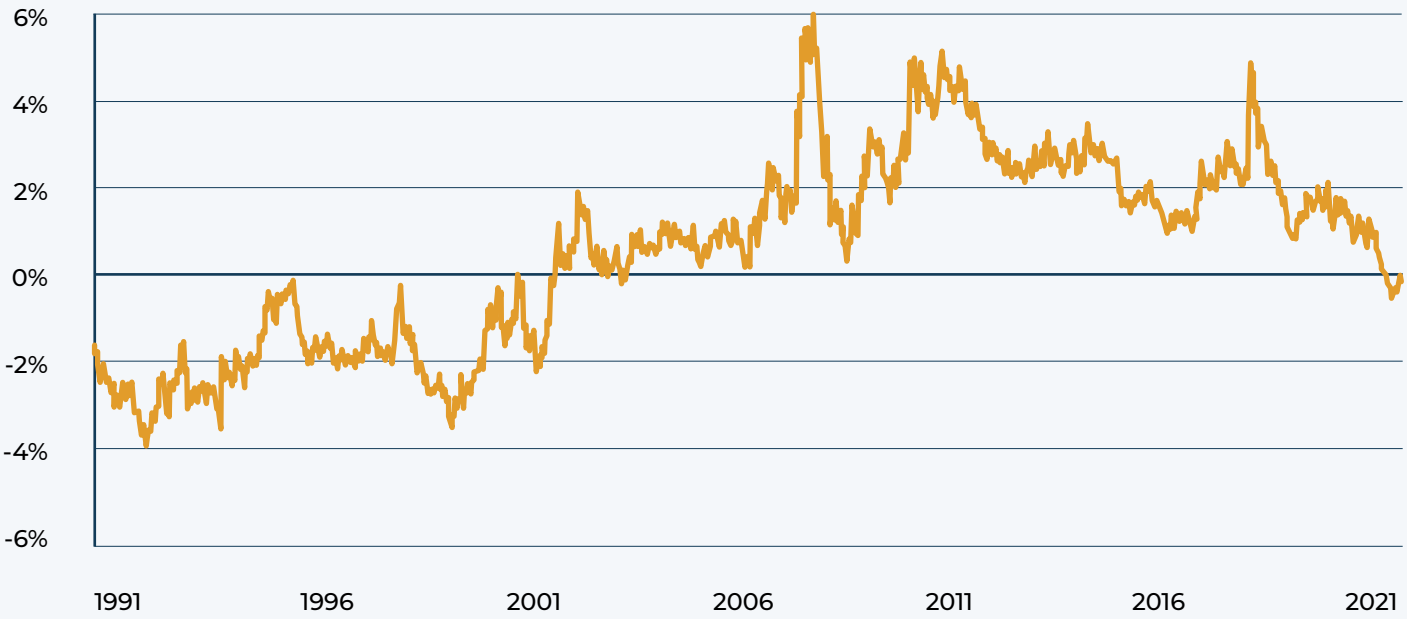
Source: Wealthspire Advisors



This dynamic can best be illustrated by comparing expected returns for two portfolios at different points in time. One year ago, the difference in expected return between a 55% stock / 45% bond portfolio and an 80% stock / 20% bond portfolio was 0.74% over a 10-year period. Fast forward to today, and the difference in expected return between these same two portfolios is only 0.37%. The difference in risk (the downside risk of the more aggressive portfolio is about 50% higher) between the portfolios is unchanged, but the return an investor can expect to pick up by moving from the more conservative portfolio to the more aggressive one has been cut in half.

The relative attractiveness of stocks vs. bonds can also be viewed through a cash flow lens. The so-called "Fed Model" argues that risky stocks should offer investors a higher yield than less risky bonds. As such, stocks can be viewed as expensive relative to bonds when their earnings yield approaches or falls below that of bonds. The logic follows that while declining earnings yield (expected earnings per share / price) signals that stocks may be expensive and future returns muted, higher bond yields are a harbinger of stronger future bond returns. For over 20 years, the Fed Model suggested that equities offered better relative value than bonds, but in October of 2023, we reached parity.

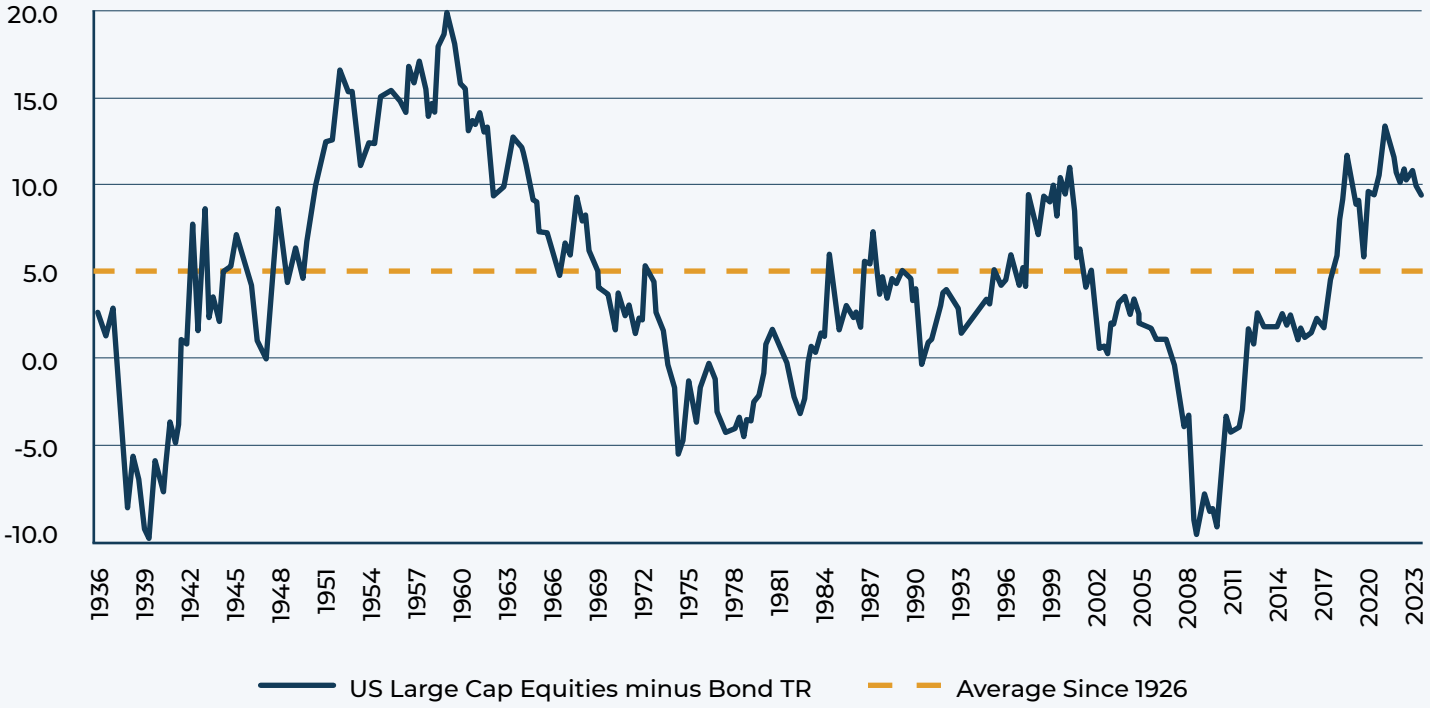
S&P 500 EARNINGS YIELD MINUS 10-YEAR TREASURY YIELD



Source: Bloomberg Finance, LP (data through 12/31/2023)

While we do not advise investors to use the Fed Model as a buy/sell signal, we view it as an instructive thought exercise that suggests to us a re-framing of expectations is likely required. The table below shows the trailing 10-year performance of Large Cap Stocks vs. Intermediate-Term Fixed Income going back almost 100 years. The historical data suggests that the average difference in return between stocks and bonds has been about 5% (though there has been a great deal of variance). The data shows that since 2016 (which suggests a starting period prior to the Global Financial Crisis), equity investors have seen greater than average outperformance of stocks vs. bonds.

US LARGE CAP EQUITIES MINUS BOND TR - ROLLING 10 YEAR (Annualized)



Source: Morningstar. Bonds represented IA SBBI US Intermediate Government Total Return (TR) Index from 1926 – 1980, Barclays US Agg Bond TR thereafter through 12/31/2023. S&P Represented IA SBBI US Large Stock TR Index 1926-1936. S&P 500 TR thereafter through 12/31/2023.

	Last 10 Years	Historical Average	Capital Market Assumptions for the Next 10 Years
US Large Cap / S&P 500	12.0%	9.6%	5.3%*
Core Bonds / Bloomberg US Agg	1.8%	5.1%	4.6%*
Satellite Bonds / Bloomberg US Corporate HY	4.6%	8.3%**	5.7%*
Difference Stocks vs. Core Bonds	10.2%	4.5%	0.7%
Difference Stocks vs. Satellite Bonds	7.4%	3.0%**	-0.4%

*Bloomberg Finance, L.P.; Historical average of US Large Cap and Core Bonds goes back to 1926 through 12/31/2023, Corporate High Yield to 1983 through 12/31/2023. *Wealthspire CMAs based on average of six outside providers and internally generated capital market assumptions as of 12/31/2023. **Stocks vs. Satellite Bonds reflects difference from Common time period starting in 1983.*

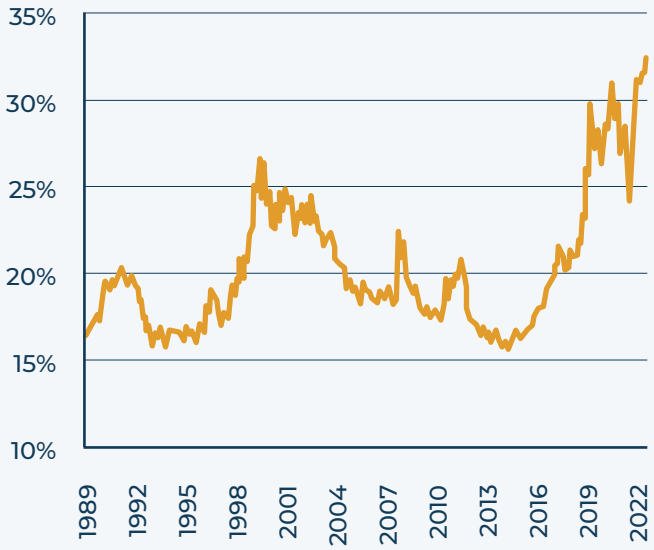
It may be difficult for some investors to shed the memory of what has been a difficult multi-year stretch for fixed income returns, but as regimes change, portfolio construction considerations should follow suit. Simply put, investors should not expect a repeat of the last ten years.

Large vs SMID / Mag 7

2023 was an incredibly unique year for equity markets. Enthusiasm around generative AI was a major catalyst for technology stocks, fueling a narrow market rally led by a cohort of names that has come to be known as the "Magnificent 7". Altogether, these companies (Apple, Nvidia, Amazon, Microsoft, Alphabet, Meta, and Tesla) produced a 107% return and accounted for approximately two-thirds of the S&P 500's performance during the year, while the remaining 493 stocks in the index returned an average of just ~12.5%. This has resulted in a highly concentrated equity market with a wide divergence in valuations across companies of different sizes.

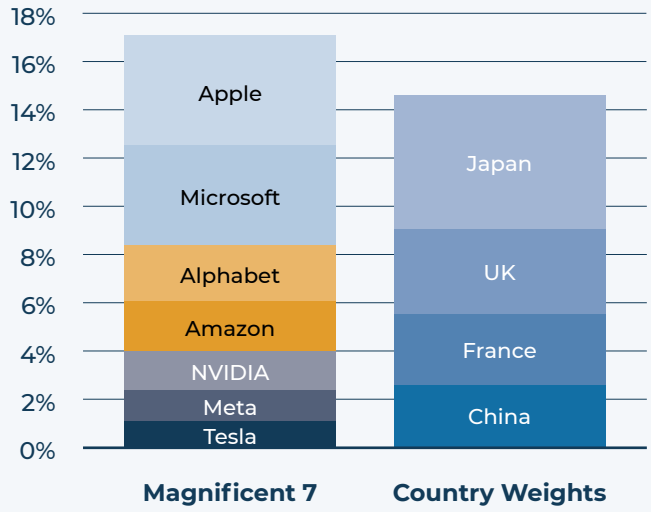
The top 10 holdings in the S&P 500 now account for over 30% of the index, up from just 17% less than ten years ago. The influence of the "Magnificent 7" is massive even on a global scale, with their combined market value higher than that all of the stocks from Japan, France, China, and the United Kingdom combined.

CONCENTRATION OF TOP 10 HOLDINGS: S&P 500



Source: Morningstar. Data as of 12/31/2023.

WEIGHTINGS IN MSCI ACWI INDEX



Source: Morningstar. Data as of 12/31/2023.

From our perspective, there is lots to unravel when it comes to assessing what the next chapter of this saga might look like. On one hand, it is impossible to ignore the fact that the incredible rally experienced in 2023 has pushed valuations in the top-heavy S&P 500 index to elevated levels. These lofty valuations have led to a meaningful decline in expected returns for large cap stocks and have made small and mid-cap stocks appear very attractive on a relative basis. For reference, our 10-year forecast for US Large Cap Stocks has declined by 1.16% YoY as compared to just 0.39% for US SMID (a moniker used to encapsulate both small and mid-cap markets).

On the other hand, there is some justification for the elevated multiples and market dominance exhibited by the "Magnificent 7". When viewed through a prism which accounts for the explosive growth that these companies have experienced, things start to look less disjointed.

MAGNIFICENT 7 FUNDAMENTALS VS. REST OF S&P 500

	Q4 '23 Sales Growth	Q4 '23 Margin %	2023 Return	P/E Multiple	LT Consensus EPS Growth	PEG Ratio
Magnificent 7	14%	23%	107%	30x	20%	1.5x
S&P 493	2%	9%	12.5%	18x	12%	1.5x

Source: Bloomberg Finance, LP. (data as of 1/31/2024)

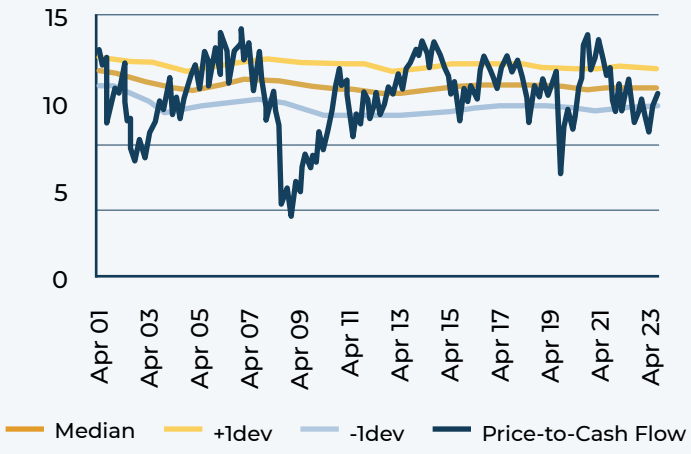
The above table highlights that the outperformance of the "Magnificent 7" is supported fundamentals, as earnings and profitability have kept pace with stock prices. On the right-hand side, we highlight the PEG ratio, which represents the P/E multiple divided by the **earnings growth** rate. The PEG ratio can be helpful in putting valuation multiples into context because it enables us to evaluate how much an investor is paying (in the form of higher multiples) for earnings growth. The "Magnificent 7" stocks are currently carrying a PEG ratio equal to that of the rest of the market, suggesting that they might not be nearly as expensive as would be gleaned from looking at earnings multiples alone.

The question going forward becomes whether this momentum can be sustained, as a company still needs to produce on its earnings growth expectations in order for its elevated price to remain justified. The road ahead will be about results, and with the most influential components of large cap stock indices priced for perfection, these names are likely vulnerable to pullbacks if future results disappoint. This backdrop brings valuation back to the forefront, and we believe that investors would be well served to avoid chasing recent returns and look to small and mid-cap stocks to maintain a diversified approach to investing.

S&P 500 MEDIAN PRICE / CASH FLOW

Source: Bloomberg Finance, LP. (data through 12/31/2023)

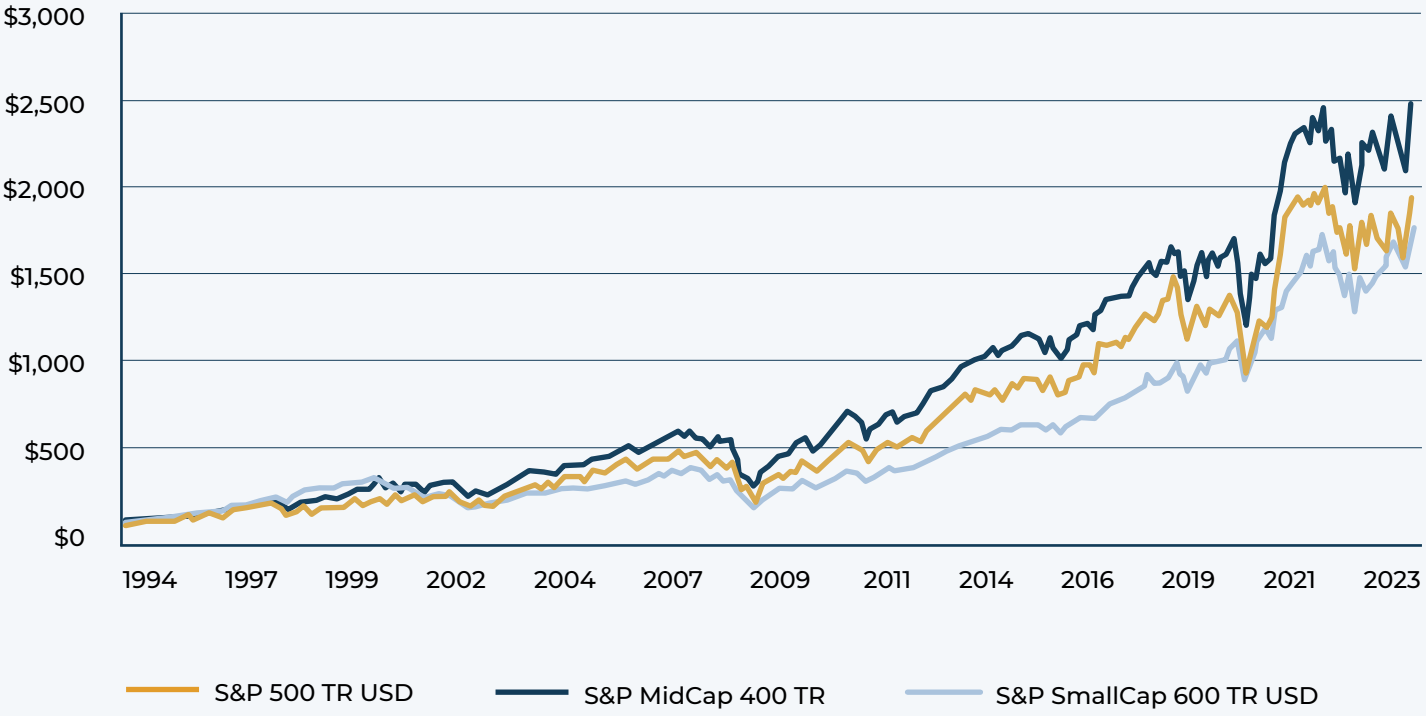
S&P MIDCAP 400 MEDIAN PRICE / CASH FLOW



Source: Bloomberg Finance, LP. (data through 12/31/2023)

In fact, many investors would be surprised to learn that mid-cap stocks have produced the strongest returns of any market cap segment over the past 30 years. This has been the topic of many academic studies, but one prominent explanation is that mid-cap stocks provide a strong balance between financial stability and long-term growth potential. As such, momentum can play an important role in mid-cap stock returns because many of the most successful companies will eventually become leaders in their respective industries and "graduate" into large cap names, bringing investors along for the ride.

GROWTH OF $100 INVESTMENT: 1994-2023



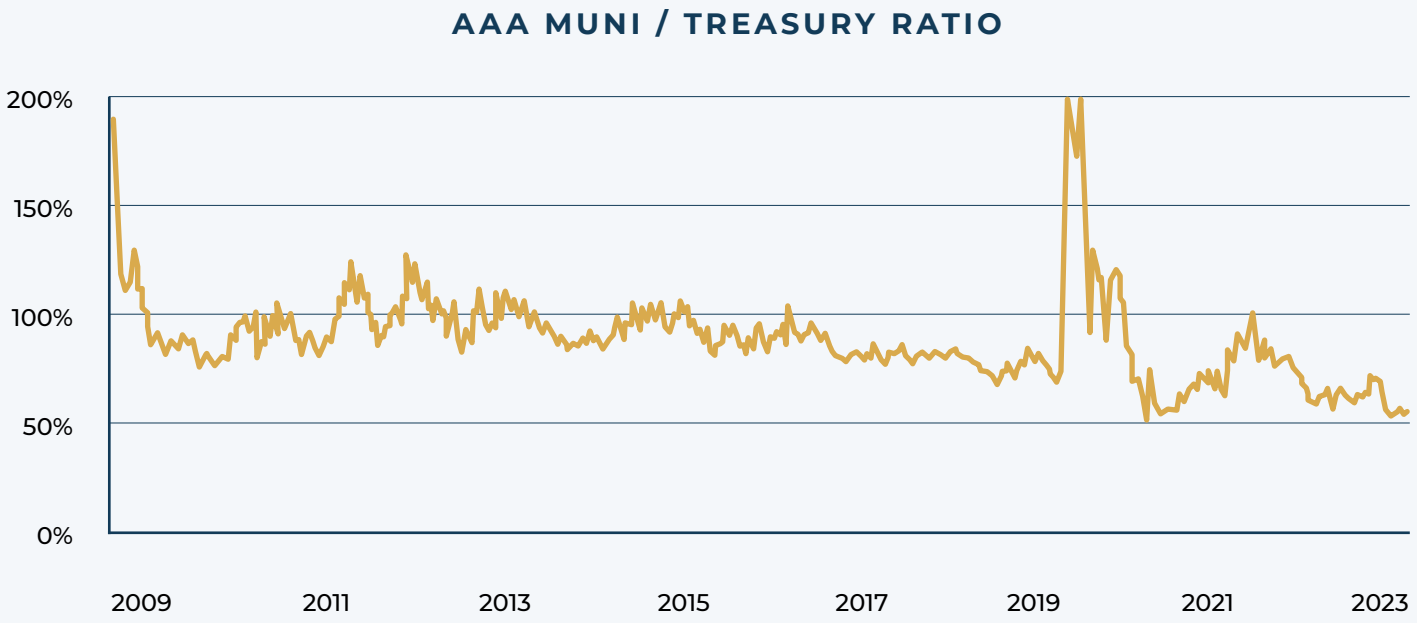
Source: Morningstar. (data through 12/31/2023)

Historically, markets have shown a tendency to over-appreciate the near-term implications of transformative technologies while under-appreciating the long-term benefits. Balancing the long-term opportunity afforded by generative AI with cautionary large cap valuations will be a key determinant of investment success going forward. Given the growth potential and the "head start" that companies in the "Magnificent 7" have gained on their competitors, we are not advocating that investors completely shy away from large cap stocks, but rather look to round out portfolio exposures and keep valuation top of mind when allocating assets. Valuation remains the strongest determinant of long-term equity market returns, and right now, valuations are suggesting to us that the probability of continued large cap outperformance has considerably waned.

Municipal Bond Markets Have Quickly Evolved

In addition to using Capital Market Assumptions to evaluate relative value across asset classes, the review process also lends itself to identifying opportunities that might not be explicitly captured in the headline numbers. One such area that has stood out throughout the 2024 process is the municipal bond market.

Despite being an asset class that doesn't draw much attention, municipal bonds are an essential tool for any investor looking to optimize their portfolio on an after-tax basis. As such, municipal investors often pay close attention to the relative value of municipal bonds by comparing their yields to that of taxable bonds of comparable tenor. The most common way to make this relative value assessment is by looking at the Municipal/Treasury (M/T) ratio, which simply converts the relative yield of a AAA rated municipal bond with that of a US Treasury. The range within which the M/T ratio has traded in recent years is materially lower than its longer-term averages and has recently reached its lowest level on record, suggesting that municipal bonds offer the least amount of value relative to treasuries than they ever have.



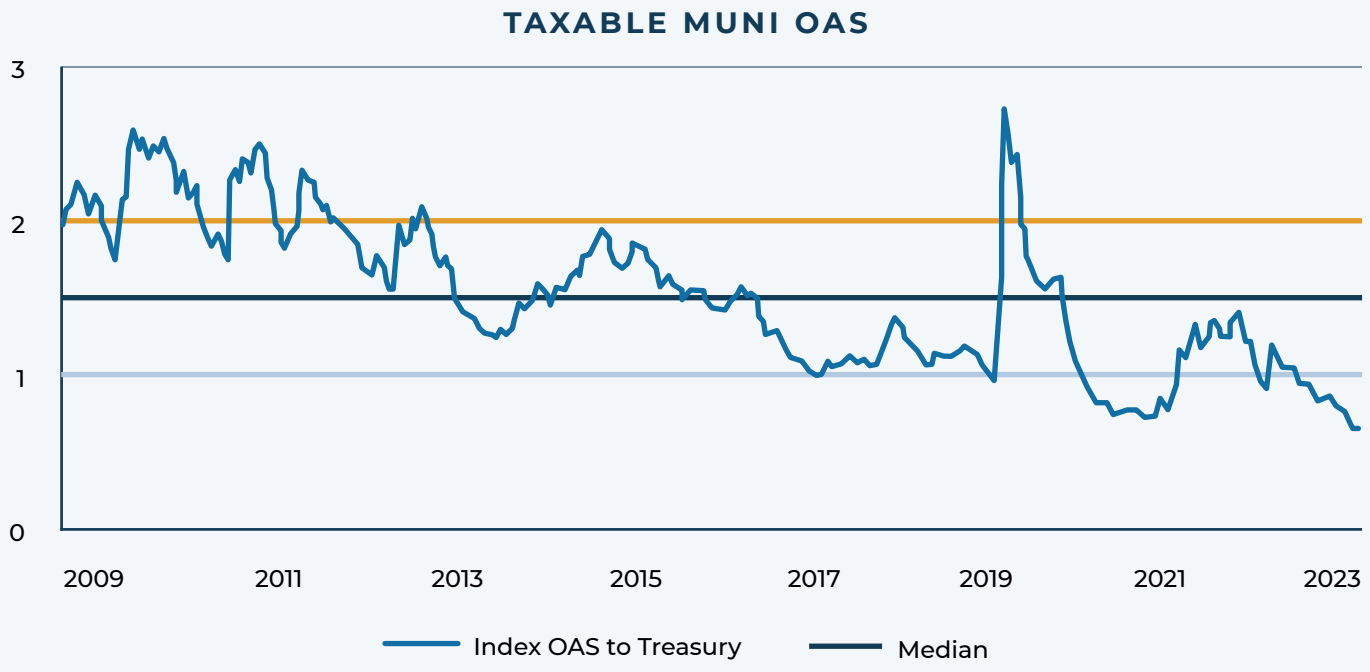
Source: Bloomberg Finance, LP. (data through 12/31/2023)

A key factor in driving M/T ratios lower has been an imbalance of supply and demand. Assistance from federal funds and improving state finances has led to smaller amounts of new municipal bond issuance, while expectations of higher future tax rates due to expanding federal deficits has pushed demand higher. Higher demand and lower supply have combined to push prices higher and yields lower in the municipal bond market.

Historically, M/T ratios were consistently high enough that the majority of investors subject to taxation could find value in adding municipal bonds to their portfolios. However, this is no longer the case. No two investor circumstances are identical, but in the current market, investors should prioritize flexibility when it comes to buying tax-exempt vs. taxable bonds because a tax-exempt bond will not always be the most tax-efficient investment.

The evolving municipal bond landscape also has implications in the taxable municipal market, which contains securities that are issued by local governments to finance projects that the federal government will not subsidize. Typically, this is because the project or activity may directly or indirectly benefit private industry as opposed to being wholly earmarked for public benefit.

Taxable municipal bonds have been a popular asset class due to their relatively low default rates when compared to similarly rated corporate bonds. There has also been significant demand from foreign buyers and pension funds which cannot take advantage of the federal tax exemption associated with other municipal bonds. As a result, spreads in the taxable municipal bond market have been on a consistent downward trend for over a decade.



Source: Bloomberg Finance, LP (data through 12/31/2023)

Bond spreads are a representation of how much an investor is being paid (in the form of yield) for taking on credit risk, with tighter (lower) spreads reflecting reduced compensation for risk-taking. An important consideration for investors in all types of bonds is finding the right balance between risk and reward. In the case of taxable municipal bonds, the marketplace is comprised of bonds with longer duration (more interest rate risk) as compared to traditional municipals as well as corporate bonds. With spreads now at all time lows, the math has shifted such that the total yield offered by taxable municipal bonds is, in many cases, lower than for other types of bonds. This has created a situation where taxable municipal bonds carry more interest rate risk without the commensurate pickup in yield one should expect as compensation for taking on such risk.

This is a dynamic that would not necessarily be reflected in Capital Market Assumptions (which are designed to capture a broader opportunity set), but one that we have been watching closely throughout the past few years. Our approach has always been to use Capital Market Assumptions as the primary foundation for portfolio construction but allow for flexibility in terms of implementation within asset classes in order to extract additional value over longer time periods. In our view, the rapidly evolving bond market is a perfect place to identify areas of relative value within an asset class.

The Numbers

Our updated capital market assumptions reveal a flatter stock-bond frontier and suggest a setup more reminiscent of what might be expected during the later stages of an economic cycle (muted equity returns and elevated rates). Below are a few key takeaways from the data:

- **The efficient frontier has continued to flatten** over the past 12 months and relative value opportunities remain prevalent within and across asset classes. As such, **investors should expect to be compensated less for adding incremental equity risk to a portfolio.**
- Large cap stocks have enjoyed an extended run of outperformance and valuation multiples reflect a highly optimistic view of the future. **Value-conscious investors should look to SMID Cap stocks and international markets for pockets of relative opportunity.**
- Stocks have enjoyed a ~10% return advantage over bonds during the past 10 years. **We expect the next 10 years to look very different.**
- Within fixed income, investors should be thoughtful about maximizing after-tax returns. **Muni/Treasury ratios are at all-time lows, which suggests a higher allocation to taxable bonds might be appropriate for many investors.**
- Cash assumptions have continued to move higher as a result of elevated interest rates. As inflation retreats to its long-run cycle-neutral level, **there may be opportunities for cash to generate positive real returns.** However, **investors should be careful not to over-extend into cash** as its short duration nature hinders its ability to produce long-term compound growth.
- **Expected returns in private markets have exhibited a higher degree of stability year-over-year.** Investors who have the capacity to take on illiquidity may find that private strategies offer a more attractive trade-off between risk and reward.

10-YEAR CAPITAL MARKET ASSUMPTIONS*

Asset Class	10 Years CMA 12/31/22	10 Year CMAs Current	Difference (YoY)
US Large Cap	6.43%	5.27%	**-1.16%**
US SMID Cap	7.08%	6.69%	**-0.39%**
INTL Developed	7.99%	7.20%	**-0.79%**
Emerging Markets	9.36%	8.14%	**-1.22%**
Taxable Core Bonds	4.38%	4.56%	**+0.18%**
Municipal Core Bonds	3.17%	3.45%	**+0.28%**
High Yield Bonds	6.31%	5.72%	**-0.59%**
Public Real Estate	6.76%	7.01%	**+0.25%**
Private Real Estate	4.16%	5.21%	**+1.05%**
Private Credit	8.74%	8.57%	**-0.17%**
US Private Equity (Buyout)	7.63%	7.55%	**-0.08%**
Inflation	2.50%	2.50%	**--**
Cash	2.50%	3.00%	**+0.50%**

**as of 12/31/2023*

30-YEAR CAPITAL MARKET ASSUMPTIONS*

Asset Class	30 Years CMA 12/31/22	30 Year CMAs Current	Difference (YoY)
US Large Cap	6.81%	6.19%	**-0.62%**
US SMID Cap	7.02%	6.81%	**-0.21%**
INTL Developed	7.49%	7.13%	**-0.36%**
Emerging Markets	9.11%	8.49%	**-0.63%**
Taxable Core Bonds	4.13%	4.45%	**+0.27%**
Municipal Core Bonds	3.02%	3.31%	**+0.29%**
High Yield Bonds	6.06%	5.64%	**-0.42%**
Public Real Estate	6.72%	6.93%	**+0.21%**
Private Real Estate	4.96%	5.78%	**+0.82%**
Private Credit	8.34%	8.17%	**-0.17%**
US Private Equity (Buyout)	6.75%	7.05%	**+0.30%**
Inflation	2.50%	2.50%	**--**
Cash	2.50%	2.50%	**--**

**as of 12/31/2023*

Methodology

At Wealthspire, we combine internally generated assumptions for each asset class with those of various third-party providers in order to arrive at a balanced and consensus outlook. Combining a variety of assumptions allows us to incorporate multiple different methodologies and avoid potential biases.

Third-party assumptions are compiled from BNY Mellon, JP Morgan, BlackRock, Vanguard, Research Affiliates, and AQR. The former four firms represent more "consensus" views while the latter two represent somewhat "alternative" views. Wealthspire also develops its own internal assumptions and combines them with those of the aforementioned third parties to arrive at a final consensus estimate. Some asset class and sub-asset class forecasts are not universally provided by all firms. In these instances, there may be less forecasts averaged together for a final estimate (i.e. Tax-Free Fixed Income, or Volatility/Correlation forecasts). This process is revisited on a semi-annual basis in order to ensure that Wealthspire's assumptions are properly accounting for ever-changing market dynamics.

Below, we provide a high-level overview of conventional approaches to generating assumptions for each asset class.

Equity

Most equity return assumptions (including Wealthspire's internal estimates) utilize a "building block" approach which dissects returns into multiple components. Examples of inputs include earnings/revenue growth, **dividend yield**, valuation **multiple reversion,** and currency fluctuation. In a traditional building block approach, each component is added together to arrive at a final estimate. Most providers that Wealthspire references employ some variant of a building block methodology across all public equity asset classes (including public real estate / REITs).

Wealthspire's internal estimate utilizes three inputs: Earnings Growth, Dividend Yield, and Valuation Reversion (Price / Cash Flow). The approach can be formulaically expressed as follows:

Earnings Growth + Dividend Yield + Price / Cash Flow Multiple Reversion

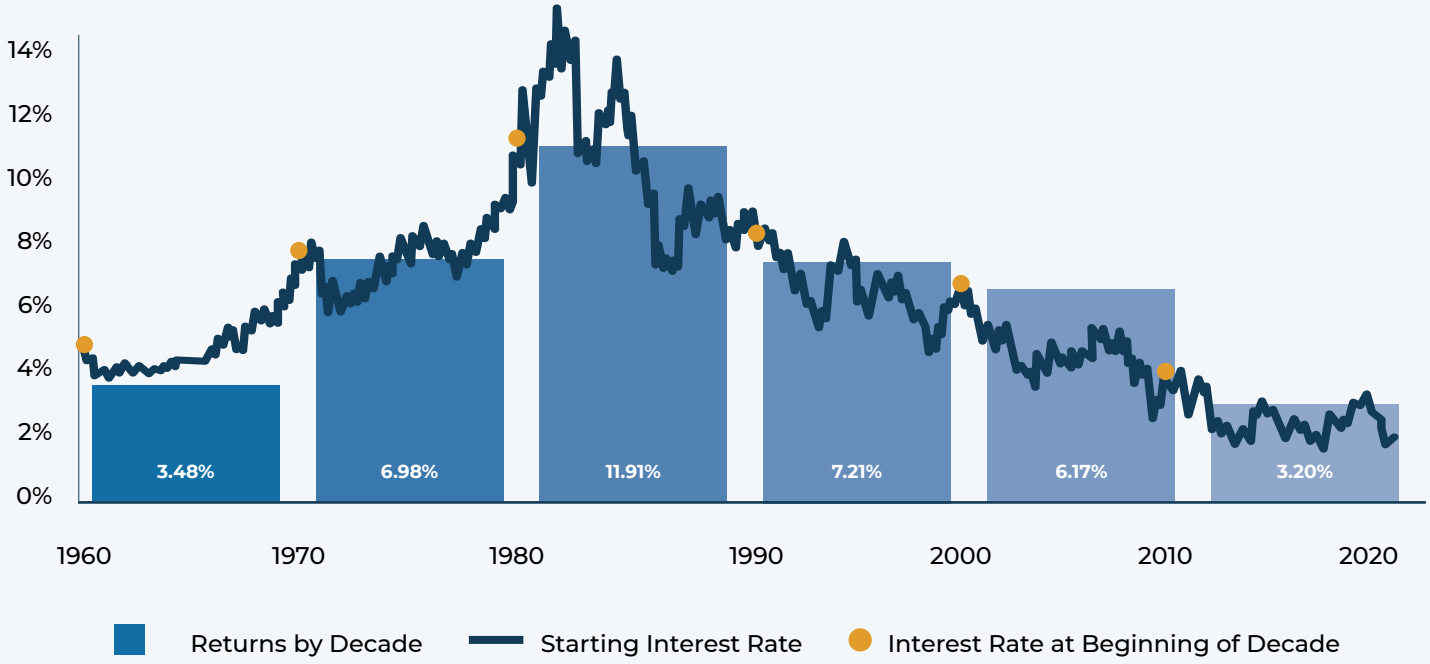
Earnings growth assumptions are based upon long-term market trends (5% for US equities, 4% for international equities). These figures are revisited on a regular basis. Dividend yield assumptions are based upon current market conditions but historically have remained generally range bound. In measuring valuation, **P / CF (Price / Cash Flow)** is preferred to **P / E (Price / Earnings)** because cash flows have historically been more stable over time and are not as easily manipulated in financial statements. Looking back to the 2008 market peak for example, an analysis of P/E would not have been as useful in signaling that stocks were expensive.

As with all asset classes for which an assumption is generated, Wealthspire combines its own internal estimate with those of third-party providers in order to arrive at a "consensus" estimate.

Fixed Income

When generating return assumptions for fixed income asset classes, it is important to make a distinction between "core" and "satellite". Core fixed income is predominantly investment grade in nature and is thus comprised of high quality bonds with little chance of default (for example, US Treasuries and high quality corporates). As a result, for core asset classes – which include Taxable Core (Agg) and Municipal Bonds – starting yield is far and away the most important input. Some providers may also apply some scenario analyses which attempt to predict the direction of rate changes over time, or will make modest adjustments to account for other risks (such as spread and term risks), but these additional inputs will only modestly impact the final estimate. The chart below helps to illustrate the predictive power of starting yield in estimating fixed income returns.

U.S. BOND RETURNS FOLLOW INTEREST RATES

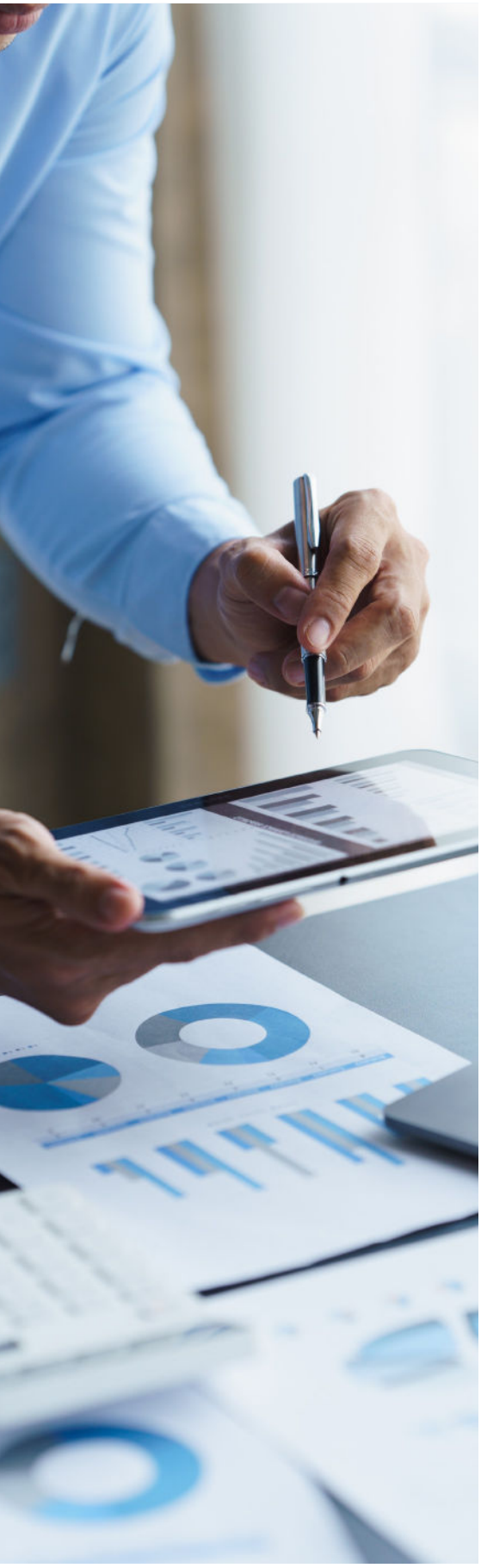


Source: Morningstar, Federal Reserve Bank of St. Louis (data through 12/31/2022)

As such, Wealthspire's internal estimate for both Taxable Core (Agg) and Municipal Bonds is predominantly focused on the concept of **Yield To Worst** (YTW). YTW is the "worst case" measure of bond returns assuming no default and if held to maturity or call date. Some bonds are issued with call provisions which allow the issuer to retire the debt at some date prior to maturity. If a bond is called, it reduces its yield generating potential since investors lose out on coupon payments that would have otherwise been paid. For this reason, YTW is preferred over **Yield To Maturity** (YTM) as it is the most practical and conservative estimate of an investment grade bond's return. YTW calculations are available for a variety of different fixed income indices, and Wealthspire utilizes these figures as the primary starting point for its internal estimates.

For "satellite" fixed income asset classes (such as High Yield Bonds), YTW is again a useful starting point, but more projections must be made with respect to default and recovery rates. The default rate simply refers to the percentage of bonds that will enter default over the investment time horizon. Recovery rates are a measure of how much value is retained by bond holders after a default occurs. Typically, when a bond issuer goes bankrupt, bond investors have recourse for preserving some value by taking ownership of the issuer's assets. As such, it is rare for bond holders to see 100% losses in the event of a default/bankruptcy. Historically, default and recovery rates have been tied to the economic cycle, and so it is important to adjust these assumptions as economic conditions change over time.

Wealthspire begins its analysis with an estimated YTW figure for the representative satellite fixes income index and applies a probability-weighted scenario analysis which incorporates different assumptions for defaults and recoveries. A bear case assumes above average default rates and lower than average recovery rates, a bull case assumes below average default rates and higher recovery rates, and a base case assumes an environment in line with historical norms. These returns are blended together to arrive at a final weighted estimate.



Private / Illiquid Strategies

There are a variety of approaches to CMA generation in private asset classes. The 3rd party providers that we leverage begin with comparable public market return assumptions and then make subtle adjustments based upon anticipated manager alpha (typically demanded by investors in private markets) and an illiquidity premium (defined as the excess return an investor might demand in exchange for locking up capital over a period of multiple years). Lastly, an assumption for fees is backed out of the estimate. Unlike in public markets, private strategies cannot be accessed via passive (low cost) vehicles, and fees are thus simply an associated cost of access to the asset class and must be incorporated into return assumptions.

Internally, we take a similar approach but simplify the process by focusing only on illiquidity premia (calculated based on historical data). For example, private equity estimates use public small to mid-cap equities as a baseline, whereas mid-market lending uses estimated returns from syndicated loans (often referred to as bank loans). Both are adjusted for the aforementioned illiquidity premia. As with public asset classes, the 3rd party and internal estimates are combined to arrive at a final figure.

Cash / Inflation

Cash and inflation assumptions are among the more difficult to produce given the myriad economic factors that contribute to both over time. Once again, we leverage a combination of 3rd party and internally produced data to generate our estimates.

External assumptions lever a combination of macro-economic views on the fed, debt loads, inflation, yield curve and the historical relationships of other variables to produce an expected return for cash. Inflation is even more convoluted as the views are joined by trade balance, view of the dollar, and fiscal/monetary policy.

For the internal cash estimate, we look at historical averages and trends. Notably, we look at what type of real return (the return above the rate of inflation) might be expected from cash over the long-term. The inflation estimate thus influences the cash estimate, and this is true in the case of 3rd party calculations as well. Currently, our assumption is for cash returns to roughly track the rate of inflation over the long-term, and as a result, the two estimates are equal.

Our internal inflation assumption, among other factors, leverages market expectations for inflation implied by treasury inflation protected securities (TIPS). Beyond TIPS, we review long-term historical averages and trends in inflation alongside guidance from the Federal Reserve's policy mandate. Specifically, in pursuing its price stability mandate, the Federal Reserve targets 2% inflation as measured by PCE. However, CPI is the more commonly cited measure of inflation (and the one referenced in our CMA's). CPI has historically run slightly higher than PCE, and so we assume that the Federal Reserve will enact policies intended to keep CPI in the 2%-2.5% range in the long run. We account for this in our estimate of inflation, as the Federal Reserve is likely to use the power of monetary policy to push inflation towards its long-term target rate to the extent it is required.

Definitions

1. STRATEGIC ASSET ALLOCATION
The process of dividing investments among different asset classes such as equities (ex. U.S. Large Cap, International), fixed income (ex. Taxable, Municipal) and cash equivalents to optimize the balance between risk and reward based on investment needs. The strategic asset allocation establishes a base policy which is generally adhered to with a high level of discipline and is informed by expected rates of return, risk, time horizon, and investment objectives.

2. EARNINGS GROWTH
The annual growth rate of a company's earnings (profits) per share.

3. DIVIDEND YIELD
A dividend is a portion of a company's profit paid to common and preferred shareholders. They provide an incentive to own stock in stable companies even if they are not experiencing much growth. Dividend yield measures the size of a company's dividend payment relative to its share price. Dividend yield is often considered a component of total return, and is thus included in prospective estimates of expected return.

4. PRICE / EARNINGS (P/E)
A ratio used by investors to help evaluate how cheap or expensive a company's stock is. P/E ratios are used by investors and analysts to determine the relative value of a company's shares in an apples-to-apples comparison. It can also be used to compare a company against its own historical record or to compare aggregate markets against one another or over time. It can be expressed as a formula by dividing the company's share price by its earnings (profits) per share.

5. PRICE / CASH FLOW (P/CF)
Similar to P/E, a ratio used by investors to help evaluate how cheap or expensive a company's stock is. It can be expressed as a formular by dividing the company's share price by its cash flow per share.

6. MULTIPLE REVERSION
The expected migration of a company's valuation multiple (ie P/E, P/CF) toward its long-term average over time. For example, if a company's long-term average P/E multiple is 20x and the company currently trades at a multiple of 25x, the concept of multiple reversion assumes that the price of the company will move lower relative to its earnings over the estimated time horizon. Put another way, an investor should expect the company's share price to grow more slowly than its earnings.

7. YIELD TO MATURITY (YTM)
Total return anticipated on a bond if the bond is held until it matures (with all payments made as scheduled and reinvested at the same rate).

8. YIELD TO CALL (YTC)
The total return anticipated on a bond if it is held until the call date (valid only if the security is called prior to maturity).

9. YIELD TO WORST (YTW)
The lowest potential yield that can be received on a bond without the issuer defaulting. It is the "worst case scenario" and can be captured by lowest of YTC or YTM.

10. STANDARD DEVIATION
A statistic that measures the dispersion of an investment's return relative to its long-term average. The larger the standard deviation, the more "volatile" an investment's return stream.

11. CONDITIONAL VALUE AT RISK (CVAR)
A statistic that measures the average of extreme losses in a portfolio or investment. cVAR uses the expected volatility of a portfolio or investment to estimate the expected loss if a worst-case threshold is ever crossed. For example, a cVAR of 20% with a 1% threshold suggests that in the worst 1% of scenarios, an investment could be expected to lose 20% of its value.

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