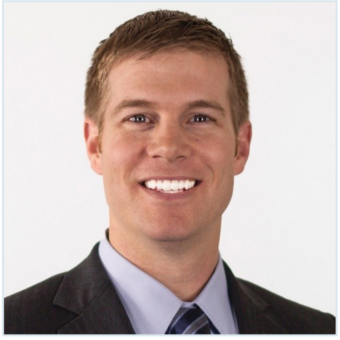
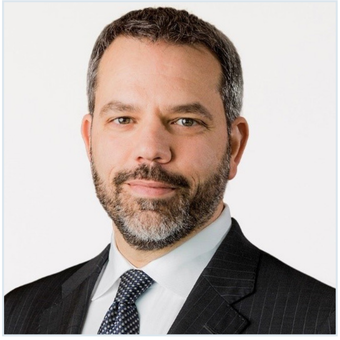
Using Capital Market Assumptions to Deliver Optimized Outcomes



Jacob Borbidge
Portfolio Manager and
Head of Research
Invesco Investment Solutions



Nicholas Savoulides
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Chief investment officers face myriad challenges in today's markets. They must meet heightened expectations from clients and navigate prolonged volatility, all while keeping abreast of new technologies, evolving investment approaches and a changing regulatory environment.

As markets become more complex and more uncertain, there's growing demand for portfolio solutions that focus on specific outcomes, beyond simply absolute returns, and CIOs are looking for sophisticated tools and teams to help them deliver those outcomes.

Whether the desired outcome is higher-level income or growth potential with downside protection, achieving it requires nuanced portfolio construction and a deeper analysis of the markets through the lens of the desired outcome. Invesco Investment Solutions uses its capital market assumptions, or CMAs, to tailor investment strategies that seek to deliver clients' desired outcomes.

"It's helpful to own the process of building capital market assumptions," said Jacob Borbidge, a portfolio manager and head of research at Invesco. "Unless you own the process, you can never really understand all the inner workings and what's going on under the hood of your return-forecasting methodology. Then, in addition to that, you can also look at specific components of your forecasting process and make an assessment on whether that component is consistent with the goal or the outcome of the portfolio."

IT'S ALL ABOUT THE LAYERS

Borbidge likens the firm's CMA method to peeling an onion. The outer layer of the onion represents broad asset classes, such as equities and fixed income. The next layer includes the composition underlying each of those asset classes.

"We can peel back even further and look within each one of those subcomponents," he said. "What are the underlying factor exposures? With each increasing level of depth of information, you can ask the question again: Does the exposure, does that investment get me closer to or further from the outcome that I'm trying to achieve?"

Borbidge's team tests such questions in multiple ways. They look at forward expectations with CMAs, but they also perform historical and theoretical testing, via the Invesco Vision tool, to see how the portfolio might have performed in previous or hypothetical environments. Invesco then takes the findings and shows clients their likelihood of being able to deliver on desired outcomes — and what type of tweaks are needed to increase those odds.

Still, Borbidge said, while analytics is fundamental to the process, the power of the platform goes beyond just the numbers to how Invesco's client solutions team delivers the message and insights for clients.

"Our client solutions team is very talented at distilling these insights down to a small number of actionable items that are easy for the investors to understand, implement and measure," he said.

The investment process involves taking outcomes into consideration at every step — research, allocation, manager selection and portfolio construction — via a collaborative approach. The relationship begins with in-depth conversations and front-loaded research to understand the risk and return drivers of specific asset classes already in the portfolio.

Sometimes clients will have their own CMAs. In such cases, Invesco can serve as a sounding board, helping evaluate the validity of those assumptions through the Invesco Vision tool and providing feedback as to how they compare to Invesco's CMAs.

"Alternatively, we can rely entirely on a client's CMAs in proposing a solution or evaluating the sensitivity of a proposal on areas of difference," Borbidge said.

Even clients without existing CMAs typically already have an investment strategy in place or preconceived notions of how they want to deliver on their desired outcome amidst current and expected market conditions.

"We need to start out by understanding what that client's approach is to deliver on that investment strategy, and we also need to understand the goal of the investment strategy," Borbidge said. "We do that by meeting with the client, asking a lot of questions, going back and forth — in terms of hearing their goal and articulating that into what we would say the investment language is around the goal — until we come to an agreement."

NEW LEVEL OF TRANSPARENCY

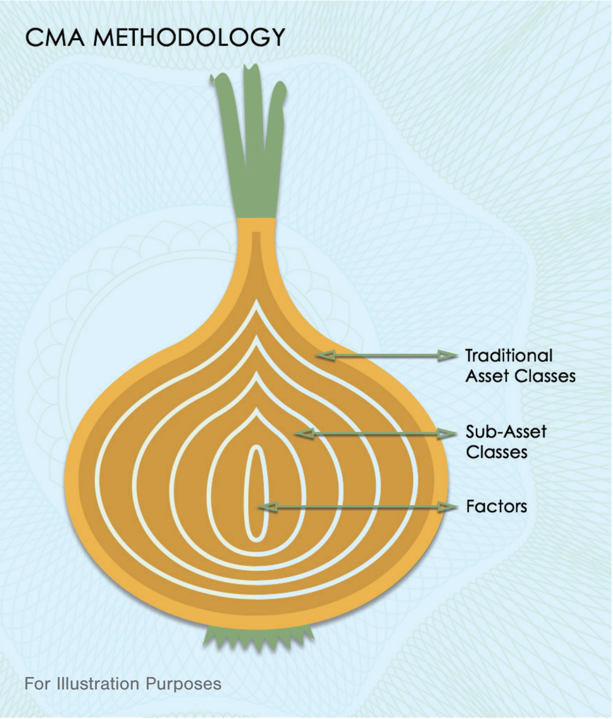
Next, the team examines those goals through both asset allocation and factor allocation lenses. The asset lens involves looking at CMAs for each asset class, including expected return, volatility and correlation with other asset classes, in terms of both current and historical market data.

Using the factor lens, analysts examine equity and fixed-income factors to make sure that the overall portfolio is tilting toward the desired outcome, keeping in mind that each factor may perform differently at various points in a market cycle. That focus on factors provides clients with a new level of transparency into their portfolios — and the risks they contain.

"We may see a concentration in a particular factor where an investor may have thought their portfolio was well diversified because they had broad coverage from an asset class standpoint, but the ways that they've gained access to those asset classes have similar factor characteristics across the board," said Nicholas Savoulides, Invesco's head of solutions research and portfolio analytics. "So a portfolio that on one level looks fairly well diversified actually has risk concentration that can have a meaningful impact — either positive or negative — on performance in certain market environments."

Those insights provide investors an opportunity to understand their portfolios in ways they hadn't previously. Invesco can then use those insights to determine whether it makes sense to remove holdings in assets or eliminate factors that aren't contributing to the desired outcome, and then to determine other ways to construct the portfolio to better deliver on the goals developed throughout the process.

Peeling Back the Onion



INVESTMENT INSIGHTS

"Without CMAs, you're just looking at risks. At the end of the day, it's all about trade-offs. Different entities may have different measures of risk, but in most cases they share a common desire to achieve returns. CMAs, therefore, are at the heart of much of what we work on."

– Nicholas Savoulides

One outcome that has seen significant increase in demand is diversified growth across asset classes with downside protection. That demand reflects a continued need among pension funds to find ways to improve their funding ratio by growing their assets. But, of course, focusing too closely on growth can bring its own set of risks.

"The challenge is to be aware of how much risk you're taking on," Savoulides said. "You don't want to make an underfunded plan more challenged by building a poorly diversified portfolio with added downside exposure."

Another outcome that has been in high demand over the past decade is income generation. The approach to that outcome, however, has changed significantly in recent years following a continued decline in interest rates accompanied with tightening credit spreads. Both of these developments have bid up the price of income-generating assets. For defined contribution plans, the ability to deliver income — despite market challenges — is key, since offering income potential increases the likelihood that retirees will remain in the plan and stay on as clients.

Each specific outcome necessitates a unique approach to portfolio construction.

"There are certain asset classes that we would build and invest in for a total return portfolio that we would pass on when we're investing for income," Borbidge said. "For example, small-cap equities may have very attractive total returns, or even risk-adjusted return potential, but from an income-generation standpoint, small-cap equities in the United States tend not to deliver a lot in terms of dividends."

THE IMPORTANCE OF CMAs

Regardless of the outcome, capital market assumptions are vital to the process. Based on a "building block methodology," CMAs estimate the returns of traditional asset classes using underlying drivers to estimate returns over specific time horizons.

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CMAs allow Invesco to forecast the return that a portfolio, asset class or factor could generate over a specific market horizon. At the same time, they account for various risk assumptions, recognizing that the attractiveness of any asset may vary over time and that investors must be able to manage those risks.

Typically, the process involves building out an investment strategy over a full market cycle, or 10 years. That means that the foundational risk assumption must take a long-term view of risk.

"We'll want to make sure that view also includes some significant market corrections, to understand the potential risks if our investment period experiences a significant recession or market downturn," Savoulides explained.

In addition to updating its CMAs on a quarterly basis to account for market changes, Invesco is always looking for new ways to expand its coverage to include new data sets and better forecast risk. The firm has recently introduced a five-year time horizon and is considering implementing multi-period optimizations. It has also increased its coverage universe, adding equity and fixed income in China, Hong Kong and Poland, all in the past two years.

While Invesco produces dozens of CMAs for a broad range of assets classes, the firm still has to be able to assign expected return estimates to countless funds. To do so, Invesco relies on an approach that entails creating a replicating portfolio comprised only of CMA assets.

"Through that exercise, we're able to systematically assign returns to any fund or benchmark we might be looking at, which makes our process more systematic and robust," Savoulides said.

DEMAND FOR ALTERNATIVES

Invesco regularly expands the universe of assets it covers, responding to both investor demand and the increased availability of data. On the demand side, investors continue to look for ways to further diversify their portfolios while still delivering on their desired outcomes. And technological advancements have allowed Invesco to start covering alternatives such as direct investments in real estate, private equity, and private infrastructure in both equity and debt.

Alternative assets can be a good fit for clients who don't have an immediate need for liquidity in their portfolio. On a practical level, private assets can operate nicely in the context of overall allocation.

According to Savoulides, "They have good correlation characteristics, and you also get a liquidity premium for holding on to them."

The greater emphasis on private and alternative investments also mirrors broader market trends, as investors look to improve their risk-adjusted returns and the overall diversification of their portfolios in a volatile, aging bull market.

"There is more capital invested on the private side of markets now than 10 years ago," Borbidge said. "If we want to understand the full market portfolio, private markets are a much more significant component, or a much larger weight, in that whole portfolio than they would have been years ago." •

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– Jacob Borbidge

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