

Capital market assumptions (CMAs): Evaluating institutional investors' risk and return expectations

This article is a review of The Subjective Risk and Return Expectations of Institutional Investors, a paper in the Fisher College of Business Working Paper Series written by Spencer J. Coutts, Andrei S. Gonçalves and Johnathan A. Loudis.



In its 35th year, Risk and Reward provides a platform for Invesco's investment professionals to produce original research and investment strategy content. This Q2 2024 edition contains four additional articles. Contact your local Invesco representative for the full edition.

Financial market research generally assumes that the beliefs of market participants are rational and homogenous. But both assumptions have recently been questioned. This article explores the relationships between subjective beliefs, alpha, beta, and future realized returns based on the long-term capital market assumptions (CMAs) of leading financial institutions.

Academic financial market research traditionally uses realized returns to measure risk.¹ This approach implicitly assumes that market participants' forecasts are objective and based on all available information – and consequently identical.

But if investors have subjective expectations that deviate from the rational ideal, empirical tests might “reject” a valid asset-pricing model if they are too optimistic, or “accept” an invalid one if they are too pessimistic – which necessitates more research into how subjective risk perceptions are related to the risk premia investors demand for holding risky assets.² The authors attempt to help fill this gap by exploring the long-term capital market assumptions (CMAs) of major asset managers and institutional investor consultants.

CMAs are important for the business of numerous large financial institutions, many of which have teams of highly trained experts dedicated to their creation. They are also used by institutional investor consultants to advise their clients on portfolio allocation. Usually, CMAs comprise long-term return, standard deviation (volatility), and correlation estimates for various asset classes. Since they are fully developed documents that institutions produce of their own volition, it seems reasonable to suppose that they typically encapsulate more sophisticated beliefs than what is conveyed by surveys of households or individual investors.

The sample

This analysis encompasses 34 institutions – 18 asset managers and 16 consultants.



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Table 1

Sample coverage by year

Panel A: Number of managers, consultants, and asset classes

	1987	1996	1997	1998	2000	2002	2004	2006	2008	2010	2012	2014	2016	2018	2020	2022
# of institutions	1	1	3	4	5	8	7	10	11	14	17	14	16	20	21	24
# of institutions (direct data)	0	1	3	4	5	5	5	7	8	10	12	12	13	17	20	22
# of managers	0	0	1	1	1	1	1	1	4	5	6	5	6	10	11	15
# of consultants	1	1	2	3	4	7	6	9	7	9	11	9	10	10	10	9
# of asset classes	4	7	13	13	13	16	16	18	18	19	20	20	20	20	20	20
Avg # of asset classes per institution	4	7	9	9	9	9	10	12	12	12	13	14	14	13	14	14

Panel B: Number of institutions covering each asset class

US cash	1	1	3	4	5	8	7	10	11	14	17	14	16	20	21	24
US TIPS	0	0	0	1	1	5	6	9	10	14	16	13	14	17	17	21
US bonds	1	1	3	4	5	8	7	10	11	12	16	13	16	17	17	19
US government bonds	0	0	1	0	1	2	2	2	3	3	7	8	10	14	12	18
US municipal bonds	0	0	0	0	0	1	1	1	3	4	6	6	6	8	8	10
US inv grade corporate bonds	0	0	0	0	0	1	1	1	1	2	7	4	5	6	9	13
US high yield corporate bonds	0	0	2	3	5	5	5	7	9	11	13	11	13	16	17	21
Global bonds ex US	0	1	3	4	4	4	4	7	8	9	13	11	12	12	14	19
Private debt	0	0	0	0	0	0	0	0	0	1	2	1	3	4	7	11
US equities large cap	1	1	3	4	5	8	7	10	11	14	17	14	16	20	21	24
US equities small cap	0	1	2	2	2	4	3	7	7	9	12	11	12	13	13	17
Global equities developed ex US	0	0	2	3	5	7	7	9	10	12	15	14	16	19	21	22
Global equities emerging	0	0	2	3	5	5	5	7	9	11	14	12	14	18	18	22
Private equity	0	1	1	1	3	6	7	9	9	12	15	12	13	16	17	19
REITS	0	0	1	2	2	3	2	5	6	7	11	10	12	14	16	17
Private real estate	1	1	2	2	3	4	6	10	9	11	16	13	14	15	16	19
Hedge funds	0	0	0	0	0	3	3	7	6	9	12	10	11	14	17	18
Commodities	0	0	1	1	0	0	0	6	7	10	13	11	13	17	17	19
Venture capital	0	0	0	0	0	0	0	0	0	0	1	2	3	2	2	3
Infrastructure	0	0	0	0	0	0	0	1	2	2	4	4	4	6	10	10

Source: Coutts, S., Gonçalves, A., and J. Loudis (2023).

Most of the data comes from direct requests and/or online searches for CMAs, with a small proportion coming from pension funds' internal reports (which usually report their third-party consultants' CMAs) if the two other means are not available.

There are several major asset managers and leading consultants in the sample. At the end of 2021, the aggregated assets under management (AuM) of all 18 asset managers was more than USD 23.6 trillion, representing more than a quarter of the combined AuM of the world's 50 biggest managers. Furthermore, the sample includes the primary consultant of more than half of all US public pension from 2001 to 2021.

CMAs for 19 asset classes that are significant for institutional investors and covered by a reasonable number of institutions over a reasonable period of time are included. They are broadly divided into four categories: debt, equity, real estate, and alternatives. As shown in table 1 – from which some years are omitted for space reasons – both the number of asset classes and the number of institutions increase over the 35-year study period from 1987 to 2022. A risk-free

20th asset, proxied by US cash is also included, which is covered by all institutions at all times.

The subjective risk-return trade-off

For every institution, asset class and year, the dataset provides expected returns, volatilities, and correlations between asset classes (table 2, panel A), from which expected excess returns as well as their volatilities and correlations were derived (table 2, panel B).

Subjective market betas were constructed for every institution, asset class, and year, based on two market proxies, US large-cap equities ("Equity CAPM") and the aggregate portfolio of US pension funds ("Pension CAPM"). By combining these betas with the subjective expected return on the respective market proxy, subjective risk premia and subjective alphas can be calculated.

Irrespective of the proxy used, deviations from market risk premia are economically small, as is the average subjective alpha of each asset class. Overall, most of the variation in subjective expected returns is driven by variation in subjective risk premia

Table 2
Average beliefs in 2022 (expected returns, volatilities, and correlations), pooled across institutions

Panel A: Raw returns

	E[R]	$\sigma[R]$	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
(1) US cash	3.0	0.9	1																			
(2) US TIPS	4.1	6.0	0.07	1																		
(3) US bonds	4.5	5.0	0.15	0.74	1																	
(4) US government bonds	4.1	7.4	0.16	0.65	0.84	1																
(5) US municipal bonds	3.7	4.9	0.06	0.60	0.75	0.61	1															
(6) US inv grade corp bonds	5.5	7.4	0.03	0.66	0.84	0.60	0.71	1														
(7) US high yield corp bonds	6.9	9.8	-0.05	0.35	0.30	-0.02	0.38	0.51	1													
(8) Global bonds ex US	3.8	7.6	0.09	0.59	0.68	0.62	0.54	0.66	0.31	1												
(9) Private debt	8.7	12.1	-0.06	0.14	0.02	-0.21	0.10	0.35	0.67	0.14	1											
(10) US equities large cap	7.6	16.6	-0.04	0.19	0.18	-0.09	0.17	0.35	0.69	0.19	0.59	1										
(11) US equities small cap	8.9	21.2	-0.05	0.11	0.09	-0.18	0.13	0.32	0.67	0.12	0.58	0.89	1									
(12) Global equities developed ex US	8.5	18.3	-0.04	0.20	0.19	-0.09	0.18	0.36	0.67	0.29	0.55	0.83	0.78	1								
(13) Global equities emerging	10.4	23.4	-0.01	0.20	0.17	-0.12	0.17	0.33	0.64	0.19	0.51	0.72	0.69	0.80	1							
(14) Private equity	10.8	22.7	-0.03	0.15	0.05	-0.17	0.10	0.29	0.61	0.16	0.62	0.76	0.73	0.70	0.63	1						
(15) REITS	8.0	19.8	-0.05	0.28	0.27	0.05	0.26	0.38	0.64	0.28	0.48	0.71	0.69	0.65	0.56	0.58	1					
(16) Private real estate	6.8	13.6	0.00	0.17	0.14	-0.02	0.10	0.17	0.38	0.11	0.43	0.44	0.44	0.38	0.34	0.49	0.61	1				
(17) Hedge funds	6.3	7.8	0.00	0.20	0.13	-0.18	0.15	0.35	0.65	0.19	0.56	0.74	0.74	0.74	0.68	0.62	0.56	0.39	1			
(18) Commodities	5.6	17.9	-0.02	0.17	-0.06	-0.22	-0.05	0.11	0.35	0.06	0.34	0.33	0.33	0.40	0.40	0.33	0.28	0.21	0.43	1		
(19) Venture capital	14.5	29.5	0.01	0.04	-0.09	-0.25	-0.04	0.19	0.59	-0.07	0.63	0.73	0.71	0.67	0.59	0.76	0.46	0.47	0.58	0.31	1	
(20) Infrastructure	8.2	16.5	-0.03	0.28	0.19	-0.09	0.21	0.32	0.62	0.26	0.58	0.70	0.66	0.70	0.63	0.66	0.64	0.51	0.61	0.40	0.55	1

Panel B: Excess returns

(1) US cash	0.0	0.0	1																			
(2) US TIPS	1.1	6.0	0.00	1																		
(3) US bonds	1.5	5.0	0.00	0.74	1																	
(4) US government bonds	1.1	7.3	0.00	0.65	0.84	1																
(5) US municipal bonds	0.6	4.9	0.00	0.60	0.75	0.61	1															
(6) US inv grade corp bonds	2.4	7.4	0.00	0.67	0.85	0.61	0.71	1														
(7) US high yield corp bonds	3.9	9.9	0.00	0.36	0.31	0.00	0.39	0.52	1													
(8) Global bonds ex US	0.6	7.6	0.00	0.59	0.67	0.61	0.53	0.66	0.31	1												
(9) Private debt	5.5	12.2	0.00	0.17	0.03	-0.19	0.11	0.36	0.67	0.15	1											
(10) US equities large cap	4.6	16.6	0.00	0.20	0.20	-0.08	0.18	0.36	0.69	0.20	0.59	1										
(11) US equities small cap	5.8	21.3	0.00	0.12	0.11	-0.17	0.14	0.32	0.67	0.12	0.58	0.89	1									
(12) Global equities developed ex US	5.4	18.4	0.00	0.21	0.20	-0.09	0.19	0.37	0.67	0.29	0.55	0.83	0.78	1								
(13) Global equities emerging	7.3	23.4	0.00	0.20	0.18	-0.11	0.17	0.33	0.64	0.20	0.51	0.72	0.69	0.80	1							
(14) Private equity	7.8	22.7	0.00	0.16	0.06	-0.17	0.11	0.29	0.61	0.17	0.62	0.76	0.73	0.70	0.64	1						
(15) REITS	4.9	19.9	0.00	0.30	0.28	0.07	0.27	0.39	0.64	0.29	0.49	0.71	0.69	0.65	0.56	0.58	1					
(16) Private real estate	3.8	13.7	0.00	0.18	0.15	-0.02	0.10	0.18	0.39	0.11	0.44	0.45	0.44	0.39	0.34	0.49	0.62	1				
(17) Hedge funds	3.0	7.9	0.00	0.21	0.14	-0.17	0.16	0.36	0.65	0.19	0.57	0.74	0.74	0.73	0.68	0.63	0.56	0.39	1			
(18) Commodities	2.6	18.0	0.00	0.18	-0.05	-0.21	-0.04	0.11	0.36	0.06	0.34	0.33	0.34	0.41	0.41	0.33	0.28	0.21	0.43	1		
(19) Venture capital	11.9	29.5	0.00	0.04	-0.10	-0.26	-0.03	0.19	0.59	-0.07	0.62	0.72	0.71	0.67	0.59	0.75	0.46	0.47	0.56	0.31	1	
(20) Infrastructure	5.0	16.6	0.00	0.29	0.20	-0.07	0.22	0.33	0.63	0.26	0.59	0.70	0.67	0.70	0.63	0.66	0.65	0.51	0.62	0.40	0.55	1

Source: Coutts, S., Gonçalves, A., and J. Loudis (2023). E[R] = average nominal returns; $\sigma[R]$ = average volatilities.

– that is, compensation for market beta – rather than subjective alphas.

Specifically, in the Equity CAPM, over 75% of the variation in subjective expected returns is driven by subjective risk premia. In the Pension CAPM the percentage is even higher, with subjective risk premia driving more than 90% of the variation.

These findings indicate a strong and positive subjective risk-return trade-off, which plots subjective expected returns against subjective market betas in the Equity CAPM.

Heterogenous beliefs

The views reflected in the CMAs can be heterogenous in two distinct forms.



The subjective beliefs of large financial institutions tend to better reflect market reality than the often studied surveys of retail investors' beliefs and may therefore serve as a useful guide for retail investors.

First, they may differ between institutions, i.e., institutions may disagree. Second, asset class views can differ, allowing for a risk-return trade-off across asset classes.

To explore this further, the within-year variation in expected returns were decomposed through fixed effects for institutions and asset classes. Fixed effects for asset classes explain more than 80% of variation in subjective expected returns in a typical year. This striking result sheds additional light on why expected return variation is driven largely by subjective risk premia. Alphas are important in explaining the variation in expected returns across institutions within a specific asset class (i.e., disagreement), but this is overwhelmed by the much larger variation in risk premia across asset classes. Belief distortions play a relatively modest role, with average subjective expected returns, volatilities, and betas all lining up well with their respective realized return counterparts.

On the whole, this reinforces the general finding that the institutional investors' CMAs are more grounded in financial reality than the documented subjective beliefs of individual or retail investors. However, there are still some mismatches; for example, expected alphas (mispricing), on average, do not predict subsequent realized alphas. Moreover, expected volatilities and betas predict cross-sectional variation but not time-series variation in their subsequent realized counterparts. These more nuanced results suggest that institutions can further improve the process of formulating their beliefs and return expectations.

Conclusion

Overall, their research provides three stylized facts about the subjective risk and return expectations of major asset managers and institutional investor consultants. Importantly, these findings apply across multiple asset classes:

- (1) There is a strong and positive subjective risk-return trade-off, with most of the variation in subjective expected returns coming from variation in compensation for market beta (subjective risk premia).
- (2) Both this trade-off and belief variation are stronger across asset classes than across institutions, showing that, even though institutions disagree on their beliefs about these assets, this disagreement is small relative to their agreement on the variation in risk premia across asset classes.
- (3) The subjective expected returns of the institutions in the sample effectively predict subsequent realized returns over time and across asset classes.

Together, these findings imply that, when modeling the subjective beliefs of institutional investors, researchers should incorporate a risk-return trade-off. In addition, accounting for this trade-off when modelling multiple asset classes appears more important than incorporating disagreement across institutions or belief distortion.

The findings also have implications for non-institutional investors: The subjective beliefs of large financial institutions tend to better reflect market reality than the often studied surveys of retail investors' beliefs and may therefore serve as a useful guide for retail investors.

Notes

- 1 E.g. Fama and MacBeth (1973).
- 2 Adam and Nagel (2023).



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This article is based on The Subjective Risk and Return Expectations of Institutional Investors, a paper in the Fisher College of Business Working Paper Series. The full study can be downloaded from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4458499.



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“CMAs represent beliefs that are more rational than those of most individual or retail investors”

Historically, many studies of the risk-return trade-off had little choice but to assume a financial landscape populated by rational investors with shared beliefs. Yet a wealth of research has shown households, individual investors, and even some financial professionals do not fit this assumption. Risk & Reward spoke to Spencer J. Coutts, Andrei S. Gonçalves, and Johnathan A. Loudis, authors of the research behind our feature article, who delved deeper into whether institutional investors might be closer to the rational ideal.

Risk & Reward

How might we define the role of CMAs in developing a portfolio?

Andrei S. Gonçalves

We perhaps first need to ask why people invest in financial markets. The objective is to obtain the highest possible reward for the lowest possible risk. In baseline models, we typically define reward as the expected return and risk as the volatility of a portfolio over time. The aim of portfolio allocation is to use a set of assets to achieve the best possible risk-reward combination. This requires three elements to be considered: The first is the expected return of each asset or asset class; the second is the volatility of each asset or asset class; and the third is the correlation across different assets or asset classes.

CMAs are assumptions about these inputs. From the perspective of an institution, if these three inputs are known, mathematical models can be used to combine different assets to produce an optimum risk-reward balance. So the role of CMAs for institutional investors is basically to help build portfolio allocation models. By applying quantitative approaches and incorporating their beliefs or expectations, institutions try to come up with the most effective allocation decisions to maximize the welfare of their clients conditioned on their beliefs about financial markets.

Risk & Reward

Was there anything specific that sparked your interest in CMAs as a research subject?

Spencer J. Coutts

There's a long list of academic literature that analyzes what are called the subjective beliefs of investors. There have been some interesting findings over time, including that these beliefs are irrational (or not necessarily consistent with what actually happens in the financial markets) in important ways. However, these findings have typically been based on the beliefs of individual or retail investors, who may not be as sophisticated as institutional investors. That was really a springboard for this project. We wanted to understand whether the beliefs of institutional investors display some important irrationalities that have been documented for their individual or retail investor counterparts.

Our hypothesis in approaching this study was that the beliefs implied from CMAs are a little more rational than those survey-based beliefs of retail investors. Whether or not this is the case has important implications for asset pricing because

asset prices, fundamentally, are driven by the expectations of marginal investors in the marketplace – a group that likely includes institutional investors.

Risk & Reward

Why has work in this field been relatively limited to date?

Johnathan A. Loudis

Historically, a major challenge in studying institutional investor beliefs was the lack of access to comprehensive data in a single dataset. A major challenge and accomplishment of this project was to gather and synthesize the CMAs of many institutional investors in a consistent and coherent manner, not the least of which included securing buy-in from institutions.

This lack of accessible beliefs data, whether it be from institutions or individual investors, is one reason why the approach of the vast majority of financial economists up until the 1990s – or even the 2000s – was to assume all investors had rational expectations. This wasn't necessarily a theoretical limitation – rather, it was a limitation given the data at the time. This is also why researchers focused on readily available realized return data. The catch was that, to use realized return as a proxy for investor expectations, researchers had to assume investors had rational beliefs. Today, of course, we can measure investor beliefs that deviate from this benchmark, which is why this gap in the literature is now being filled.

Risk & Reward

Your analysis identifies a strong and positive subjective risk-return trade-off. What does your work tell us about the roles of alpha and beta in this trade-off?

Andrei S. Gonçalves

Many models in finance start from a set of investors' preferences, beliefs, and demands – for example, how much of a particular asset they are going to want to hold given those preferences and beliefs. An equation that tends to be common across these models is that expected returns in equilibrium are a function of two components.

The first component is the risk premium, meaning how much compensation is required for beta (or market risk exposure), and the second is the deviation of expected returns from the risk premium – which is typically called alpha (or mispricing). In a perfect model – one without any frictions or any problems in financial markets –



We wanted to understand whether the beliefs of institutional investors display some important irrationalities that have been documented for their individual or retail investor counterparts.

the alphas would all be zero, so all the expected returns would be driven by the risk premium, or compensation for beta.

What's great about CMA data is that we can observe betas and expected returns, so we can understand what proportion of the expected returns is driven – at least as reflected in the beliefs of these institutions – by risk premium versus alpha. We find the majority of the variation in expected returns in CMAs seems to be connected to the variation in risk premium, not the variation in alpha.

Risk & Reward

What about variation in beliefs?

Spencer J. Coutts

We find most of the belief variation is driven by variation across asset classes rather than across institutions. Consider, for example, equities and bonds. While institutions disagree about the expected returns on equities and bonds, their disagreement is small relative to their agreement on the difference in expected returns between equities and bonds.

Again, this is the beauty of using CMA data. Historically, if you had to make the “rational expectations” assumption, you would have to estimate risk exposures to an individual asset by running a regression of realized asset returns on the realized risk factor returns (such as the market return in the CAPM). With subjective investor beliefs, we don't need to rely on realized return data. We can just directly measure how much investors think they're being compensated for risk exposure versus how much they think they're being compensated, in the form of an expected return on a given asset, for subjective mispricing.

Risk & Reward

You mentioned the importance of determining whether institutions' beliefs are more rational. Does this research tell us anything about how their subjective beliefs relate both to objective beliefs and to realized returns?

Johnathan A. Loudis

Yes, documenting the relationship between institutions' subjective beliefs and future realized returns was a key goal of our analysis. If institutions have beliefs that display some rationality, then their forecasts of expected future returns should be positively related to future realized returns – and that's what we find. This is in stark contrast to the results in many prior studies of individual investors, which typically find a null or negative relationship.

This isn't to say that if an expected return published in a CMA this year is 10% then return next year is going to be exactly 10% (or even close to 10%), because there is a large amount of noise in realized returns. That is, returns have a large component that cannot be anticipated even by perfectly rational investors. But expected

returns in our sample do predict future returns in the sense that, roughly speaking, a 1 percentage point increase in expected returns through these CMAs corresponds to a 1 percentage point increase in future realized returns, on average.

Risk & Reward

Is it fair to infer that institutions' beliefs, as encapsulated in CMAs, are well grounded in what happens in financial markets?

Andrei S. Gonçalves

To answer this question, we first need to go back to the broader literature and the tremendous amount of research into the subjective beliefs of individual or retail investors. A key finding from that work is that those investors as a whole seem to be disconnected from the reality of financial markets.

One reason for this is that these investors tend to look to past returns. They assume that the returns that materialized in the recent past are a good representation of what will happen going forward – which is to say they're backward-looking. We certainly find the beliefs of institutional investors, as expressed in their CMAs, are much more forward-looking. In particular, CMAs seem to rely more heavily on valuation ratios than on recent past returns. As financial economists well know, valuation ratios are a good predictor for long-run returns in financial markets. Of course, anyone in charge of CMAs already knows this. It's not a revelation that's going to make their heads explode. Their methodologies are inevitably going to result in beliefs that are much more solid and much more grounded in the reality of financial markets.

That said, there is one important detail that sometimes gets overlooked. There is a long literature on equity return predictability showing that it's hard to use valuation ratios (and other return predictors) in real time to predict returns quantitatively. That is, it is easy to know whether future average returns are high or low based on whether valuation ratios are low or high. However, it is not easy to know just how high or low future average returns are based on current valuation ratios. What's striking in our results is that CMAs correctly predict future average returns quantitatively. For instance, when CMAs collectively state an expected equity return of 10%, then future equity returns are indeed 10%, on average.

Also, there's another important dimension here. If you ask individual or retail investors, as several studies have, about their views on expected returns for different asset classes, or over time, you often find that they perceive a high risk to have a low expected return – and vice versa. In reality, as we know, this is not the case. At the asset class level, when there's high risk, there's less demand, which – in equilibrium – produces high expected returns. And it seems CMAs reflect this quite well.



What's striking in our results is that CMAs correctly predict future average returns quantitatively. For instance, when CMAs collectively state an expected equity return of 10%, then future equity returns are indeed 10%, on average.



Institutions think about capital market assumptions in depth and reflect on them thoroughly, often in the form of quantitative models.

Risk & Reward

Does your research challenge previous findings?

Spencer J. Coutts

It would be fairer to say that it builds on them. There's now a growing amount of work in this field, and we like to think of our study as complementary to the efforts of other researchers. There is one earlier paper that makes use of CMAs.¹ Its authors deserve a lot of credit for their data gathering efforts and for providing evidence of how CMAs deviate from the expected beliefs of individual or retail investors in terms of rationality. But it only studied one asset class – equities – with their sample based mostly on post-2010 data, whereas we study 19 asset classes using data going back to the late 1980s. We build on that valuable contribution by considering a much wider range of asset classes, by exploring whether there's a subjective risk-return trade-off in the cross section of those asset classes, and by investigating whether asset classes with higher betas demand a higher risk premium.

This is important from the perspective of rationality. One could argue that, for equities, it is a bit more straightforward to come up with valuation ratios and other considerations that inform CMAs – whereas it might be more difficult for other asset classes. But we're able to demonstrate some signs of rationality in CMAs across the board.

Our dataset also goes much further back in terms of time series, which allows us to evaluate these questions over multiple market cycles. In the very earliest years, we only have the data from one institution. But we're able to add to that dimension over the 35-year period of the study. This is obviously central to evaluating and demonstrating how our findings hold over time.

Risk & Reward

What are the most important messages that investors can take away from your research?

Johnathan A. Loudis

Maybe the message for an individual or retail investor is that, unless you're especially sophisticated or you're putting a lot of time and energy into thinking through your beliefs, it may be beneficial to use the CMAs these institutions create as a key input to form your own beliefs. This is especially the case if you're investing for the long term.

As our research shows CMAs represent beliefs that are more rational than those of typical individual or retail investors as reflected in prior surveys. This is because the institutions that create them think about capital market assumptions in depth and reflect on them thoroughly, often in the form of quantitative models.

It's vital to emphasize, though, that you shouldn't be using CMAs to try to time the market. Rather, you should understand that CMAs do a good job of capturing what's likely to happen going forward on average – both across asset classes and over time – and that this means they can provide a solid foundation for long-term asset allocation.

As we've discussed, a wealth of research shows individual or retail investors typically think markets are going to continue to perform as they did in the recent past, which we know is not generally true. If these investors need inputs on portfolio allocation or on risks and rewards – to return to where this conversation began – grounding their beliefs in the assumptions that institutions provide through CMAs is a reasonable starting point, and one that is certainly closer to the rational expectations benchmark than those based on existing surveys of individual investors.

Risk & Reward

Thank you!

Note

1 Dahlquist and Ibert (2024).



References

Dahlquist, Magnus and Markus Ibert (2024): Equity Return Expectations and Portfolios: Evidence from Large Asset Managers, *The Review of Financial Studies*, Volume 37, Issue 6, 1887-1928.

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