Quarterly Review and Outlook Using the CAPE Ratio

Q2 2026 – **Robert J. Shiller and Laurence Black**

A Flipping of the Narratives

The outbreak of military conflict—and the threat of further escalation—involving Iran and the broader Middle East has introduced new and destabilizing narratives into the global environment. Such events reshape expectations, cause chaos often in unpredictable ways, and fuel the creativity of propagandists. A useful analogy in the United States is the NCAA Basketball Tournament. Sixty-eight teams enter, games are played rapidly, and upsets are common. Outcomes that once seemed highly unlikely can suddenly occur because of a single remarkable play or a critical mistake. Results are not determined by rankings alone, but by momentum, confidence, and perception.

Prior to March 2026, markets were moving along confidently, supported by a set of narratives that appeared broadly favorable. Artificial intelligence (AI) dominated the conversation with its promise of transformative change, alongside the expansion of data center infrastructure. These trends were reinforced by supportive fiscal conditions stemming from major U.S. spending initiatives, all unfolding against a backdrop of relatively mild inflation—though increasingly tempered by growing concerns around private credit. The war in the Middle East has shattered this, altering the trajectory, producing what might be described as a collision of stories. The optimism surrounding AI and data center expansion now intersects with renewed concerns about geopolitical instability and the long-term risk of chronic unemployment as machines increasingly replace human labor. While a fragile peace has been announced recently, history suggests that such moments of stability can give way suddenly to renewed uncertainty—often driven less by fundamentals alone than by shifts in narrative and collective belief.

Today, markets appear increasingly "twitchy." Elevated valuation levels, combined with ongoing geopolitical uncertainty, have made them highly sensitive to shifts in prevailing narratives. A recent example is the *Citrini Report*, titled *"2028 Global Intelligence Crisis,"* which outlined a worst-case scenario in which artificial intelligence takes numerous jobs and significantly erodes the value of software companies. The report gained rapid attention and coincided with a sharp market decline. Whether this extreme outcome ultimately proves accurate is, in a sense, secondary. What mattered was the narrative itself—how it spread, captured attention, and influenced behavior—once again underscoring the power of stories to move markets.

The unpredictability of geopolitics adds yet another layer of uncertainty to the current environment, making it more constructive to step back and focus on long-term expectations. Our own approach, using CAPE ratio, often involves leaning against dominant narratives. At present, the narrative surrounding artificial intelligence is exceptionally strong. We do believe that AI represents a genuinely productive and long-term technological advancement. History, however, argues for caution when enthusiasm becomes embedded in valuations. Viewed through this lens, the U.S. market—measured by the S&P 500 Index—still appears expensive, with expected nominal returns of approximately 3.2%. By contrast, Europe offers meaningfully higher expected nominal returns of around 8.2%, while Japan appears more moderately priced, with expected returns in the 6.1% range.

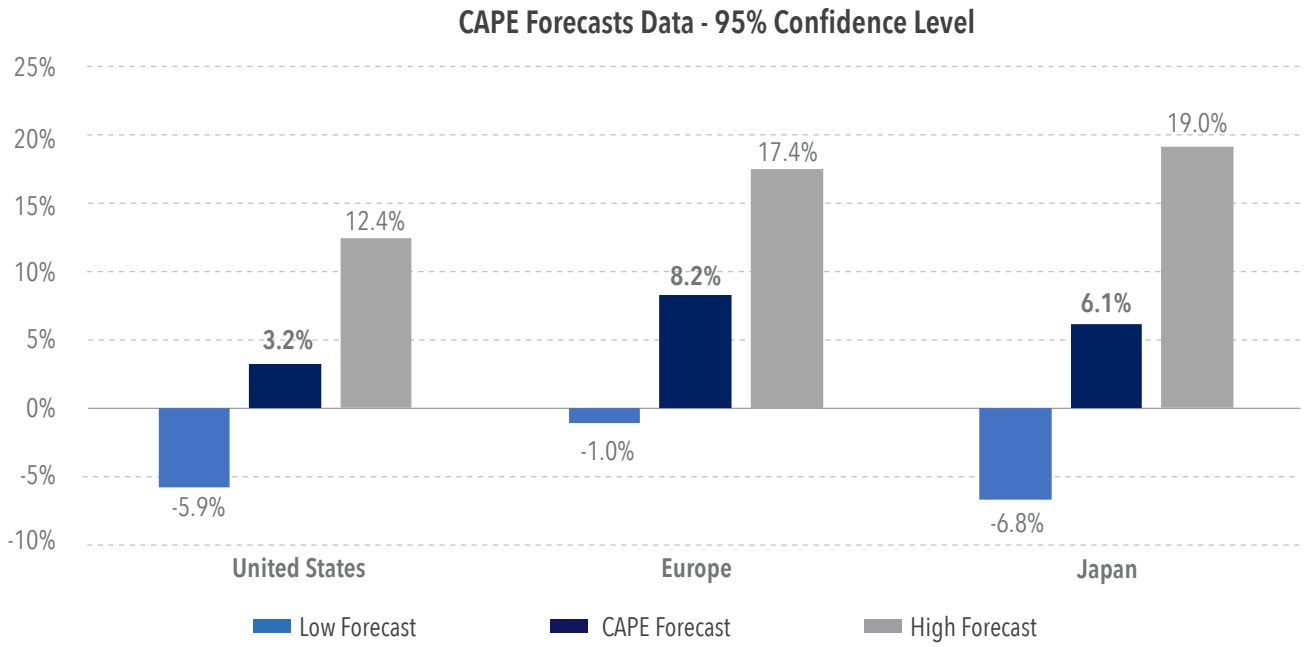
The late 1990s—and especially the year 2000—were marked by extraordinary enthusiasm, yet not every company benefited equally, and many disappeared altogether. Who remembers Pets.com? A similar pattern may well emerge today. Even as the technology itself continues to advance, not every hyperscaler will ultimately succeed. The result could be a period of lower returns—an outcome consistent with what the elevated U.S. CAPE ratio already suggests.

There is significant enthusiasm surrounding Claude from Anthropic, which is increasingly viewed as a leading AI tool for business applications. Claude is named after Claude Shannon, the pioneer who laid the foundation for the modern information age through his groundbreaking work on communication protocol and the introduction of the "bit." This raises an important question: What happens to OpenAI if Claude emerges as the dominant business platform? During recent travel across Europe—and in similar discussions in the United States—we asked how many people are aware of, or actively using, Llama, Meta's large language model. Awareness and usage were surprisingly low, aside from confusion with the animal from which it takes its name. This is notable given that Meta's spending on data-center infrastructure rivals that of other major hyperscalers. The gap between heavy investment and actual user adoption across AI companies highlights a familiar challenge. As with past periods of technological exuberance—including the peak of the millennium bubble—capital flows and early leadership do not always translate into lasting success. This divergence underscores just how difficult it is to identify eventual winners in the midst of a technological frenzy.

The implication is not to abandon equities, but rather to approach them with balance and diversification, with a deliberate focus on avoiding overpriced securities. Narratives will undoubtedly continue to rise and fall—often abruptly. Against this backdrop, foreign and emerging markets appear relatively inexpensive and offer compelling potential. While maintaining some exposure to U.S. equities remains important, elevated CAPE levels suggest it is prudent to lean against dominant narratives and utilize a more value-oriented investment approach.

Key Findings: Our Forecasts based on the CAPE Ratio

These forecasts are expressed in local currencies and represent nominal returns. We present a range reflecting a 95% prediction interval to highlight the degree of uncertainty surrounding each estimate. While we rely on conventional analytical tools to generate expected return forecasts, financial markets are inherently unpredictable, making forecasting a challenging exercise. Moreover, unforeseen events can introduce additional uncertainty and may affect outcomes in either a positive or negative direction.



Source: Data Robert Shiller online data, MSCI, World Bank and OECD.

A Note About Forecasting

These are annualized, long-term forecasts with a 10-year horizon. They are intended to provide a broad framework to guide investors around strategic equity allocations, rather than to support market-timing decisions or short- to medium-term forecasts, which are inherently unreliable. All figures represent nominal, annualized total returns expressed in local currencies and should be viewed as illustrative guides only. The forecasts do not attempt to explicitly

account for one-off or hard-to-quantify factors such as COVID-19, political regime changes, or shifts in monetary policy—not because these factors are unimportant, but because incorporating them would require speculation rather than disciplined analysis. To reflect uncertainty, we present 95% prediction intervals alongside the point estimates. Readers should also recognize that prediction intervals themselves are constrained by fundamental epistemic uncertainty—uncertainty that cannot be fully quantified. For example, some may argue that the upper bound of the 10-year return forecast for Japan shown in the preceding table is unrealistically high, based on the belief that investors there have internalized the lessons of the 1980s and 1990s and will avoid repeating extreme overvaluation. Whether this belief proves correct, it ultimately depends on human judgment and collective behavior—factors that remain impossible to assess with certainty.

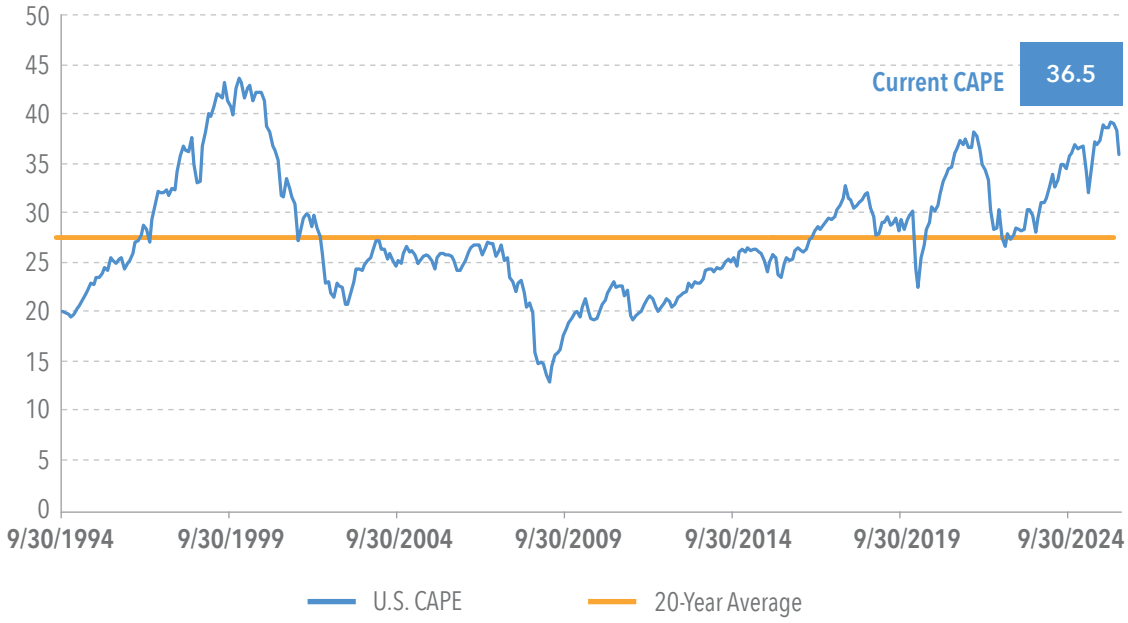
United States – Forecasts Based on the S&P 500 Index

The CAPE Ratio for the United States is 36.5 and the expected 10-year annualized nominal total return is 3.2%. Returns for the S&P 500 Price Return Index are expected to be around 1.25%, here we subtract the average historical dividends of 1.95%. We also present a range of potential outcomes for U.S. returns to reflect underlying uncertainty. Professor Shiller created a series of value-based indices with Barclays, namely the *Shiller Barclays CAPE Family of Indices*, which seek to identify undervalued sectors or stocks using the CAPE Ratio. These indices aim to earn a long-term value premium. While past performance is not guaranteed, if an investor purchased a value-based index and held this for the long term, they may generate higher returns than forecast if the value factor performs well.

UNITED STATES FORECAST RETURNS	EXPECTED ANNUALIZED RETURNS
Expected Nominal Total Returns* (S&P 500 Total Return Index)	3.2%
Upper Range of Expected Nominal Total Returns* (95% Confidence Level)	12.4%
Lower Range of Expected Nominal Total Returns* (95% Confidence Level)	-5.9%
Approximate Expected Nominal Price Returns* (S&P 500 Price Return Index)	1.25%

*using the CAPE Ratio

Historical U.S. CAPE Ratio



Europe – Forecasts Based on the MSCI Europe Index

The CAPE Ratio for Europe is 21.4 and the expected 10-year annualized nominal total return is 8.2% as of the end of this quarter. Within this framework, price returns for the MSCI Europe Price Return Index are projected to be around 5.2%, based on subtracting the historical dividend yield and assuming this holds true for the next 10 years. We also present a range of potential outcomes to reflect the uncertainty surrounding European equity returns.

EUROPE FORECAST RETURNS	EXPECTED ANNUALIZED RETURNS
Expected Nominal Total Returns* (MSCI Europe Total Return Index)	8.2%
Upper Range of Expected Nominal Total Returns* (95% Confidence Level)	17.4%
Lower Range of Expected Nominal Total Returns* (95% Confidence Level)	-1.0%
Approximate Expected Nominal Price Returns (MSCI Europe Price Return Index)	5.2%

*using the CAPE Ratio

Historical Europe CAPE Ratio

Japan – Forecasts Based on the MSCI Japan Index

The CAPE Ratio for Japan is 26.8 and the expected 10-year annualized nominal total return with the CAPE Ratio is 6.1%. Within this framework, price returns for the MSCI Japan Price Return Index are forecast to be 3.9%, again we subtract the historical dividend yield sourced from Bloomberg and assume this holds for the next 10 years. We present a range of potential outcomes to reflect the uncertainty around Japanese equity returns. It is important to note our forecasts include historical data from the bubble period in Japan in the 1980's and this may overstate some of the numbers.

JAPAN FORECAST RETURNS	EXPECTED ANNUALIZED RETURNS
Expected Nominal Total Returns* (MSCI Japan Total Return Index)	6.1%
Upper Range of Expected Nominal Total Returns* (95% Confidence Level)	19.0%
Lower Range of Expected Nominal Total Returns * (95% Confidence Level)	-6.8%
Approximate Expected Nominal Price Returns (MSCI Japan Price Return Index)	3.9%

*using the CAPE Ratio

Historical Japan CAPE Ratio

Approach to Forecasting

In this section, we outline our approach to forecasting expected equity returns. We begin by estimating nominal total returns using the CAPE ratio, as developed by Robert Shiller and John Campbell in their seminal paper, *"Stock Prices, Earnings, and Expected Dividends."* Our forecasts are generated by regressing subsequent 10-year nominal returns on the prevailing CAPE level. For each country, we also present ranges around these estimates to indicate the uncertainty around our forecasts.

Professor Shiller has noted, including in the third edition of Irrational Exuberance, that long-term equity returns are influenced not only by valuation measures such as the CAPE ratio, but also by estimates of long-term interest rates. Looking ahead, we expect advances in the emerging field of narrative economics—particularly through the expansion of our use of digitized text and artificial intelligence—to enhance return forecasting. These tools may eventually allow researchers to identify and quantify the public diffusion of economic narratives and to construct time series that track how collective beliefs evolve around key themes. Examples include the intense and politicized narratives surrounding the COVID-19 pandemic, concerns about the prospects of global conflict, or shifting attitudes toward climate change.

Over time, incorporating such narrative indicators may help narrow prediction intervals and improve forecasts of economic and financial variables. At this juncture, however, our approach relies primarily on the CAPE ratio as an indicator of relative over- or under-pricing to predict long-term market expectations.