

Employees' Retirement System of Rhode Island

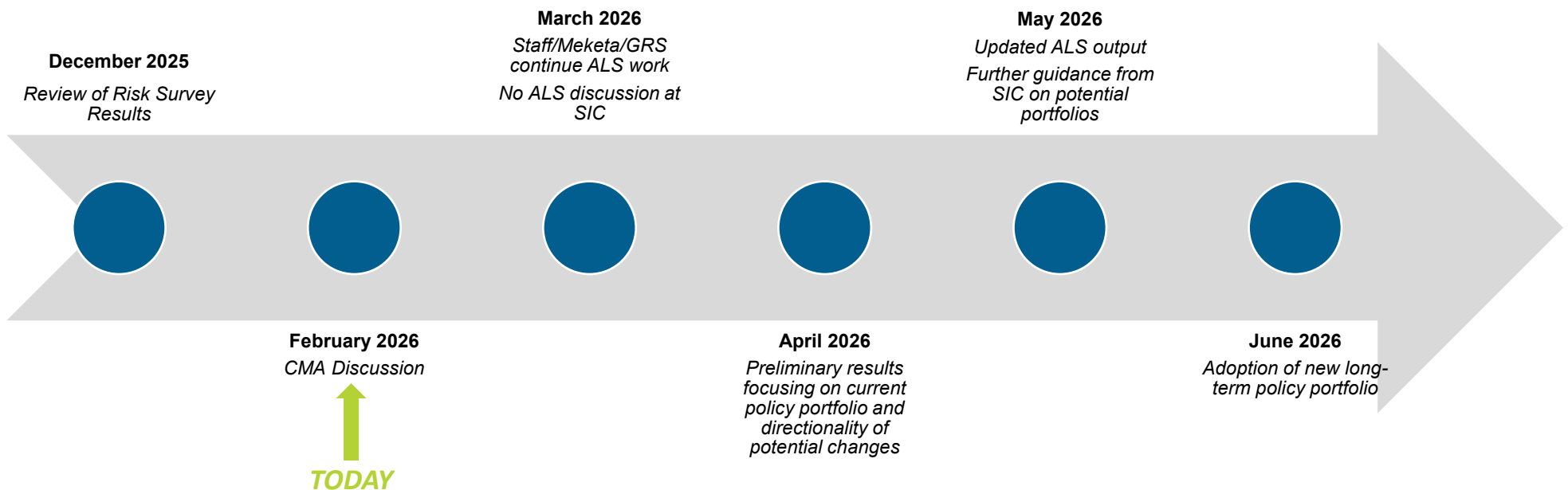
February 25, 2026

Asset-Liability Study: Part 2
Capital Market Assumptions

Goals of Today

1. Review Asset-Liability Study (“ALS) timeline.
2. Present Meketa’s 2026 Capital Market Assumptions (“CMAs”), including market context and background on the CMA development process.
3. Propose inclusion of one new asset class/strategy, Long Volatility, within the Crisis Protection Class for use in the 2026 ALS.
4. Receive feedback/guidance from the SIC to utilize proposed CMAs in the 2026 ALS.

Asset-Liability Study Timeline



- Excluding today (February 2026), there will be three main ALS-oriented SIC meetings (April-June).
- Meketa and Staff expect to conclude the Asset-Liability Study in June 2026.

Capital Market Assumptions

Setting Capital Market Assumptions (“CMAs”)

- CMAs are the inputs needed to calculate a portfolio’s expected return, volatility, and relationships (i.e., correlations) to the broader markets.
 - CMAs are also used in mean-variance optimization, simulation-based optimization, asset-liability modeling, and every other technique for finding “optimal” portfolios.
- Consultants (including Meketa) generally set their CMAs once per year.
 - Our results are typically published in January based on previous December 31 data.
- This process involves setting long-term expectations for a variety of asset class/strategy attributes:
 - Returns
 - Standard Deviations
 - Correlations
- Meketa’s process relies on both quantitative and qualitative methodologies.
- We do not assume any “alpha generation”, and all assumptions are inclusive of estimated fees.

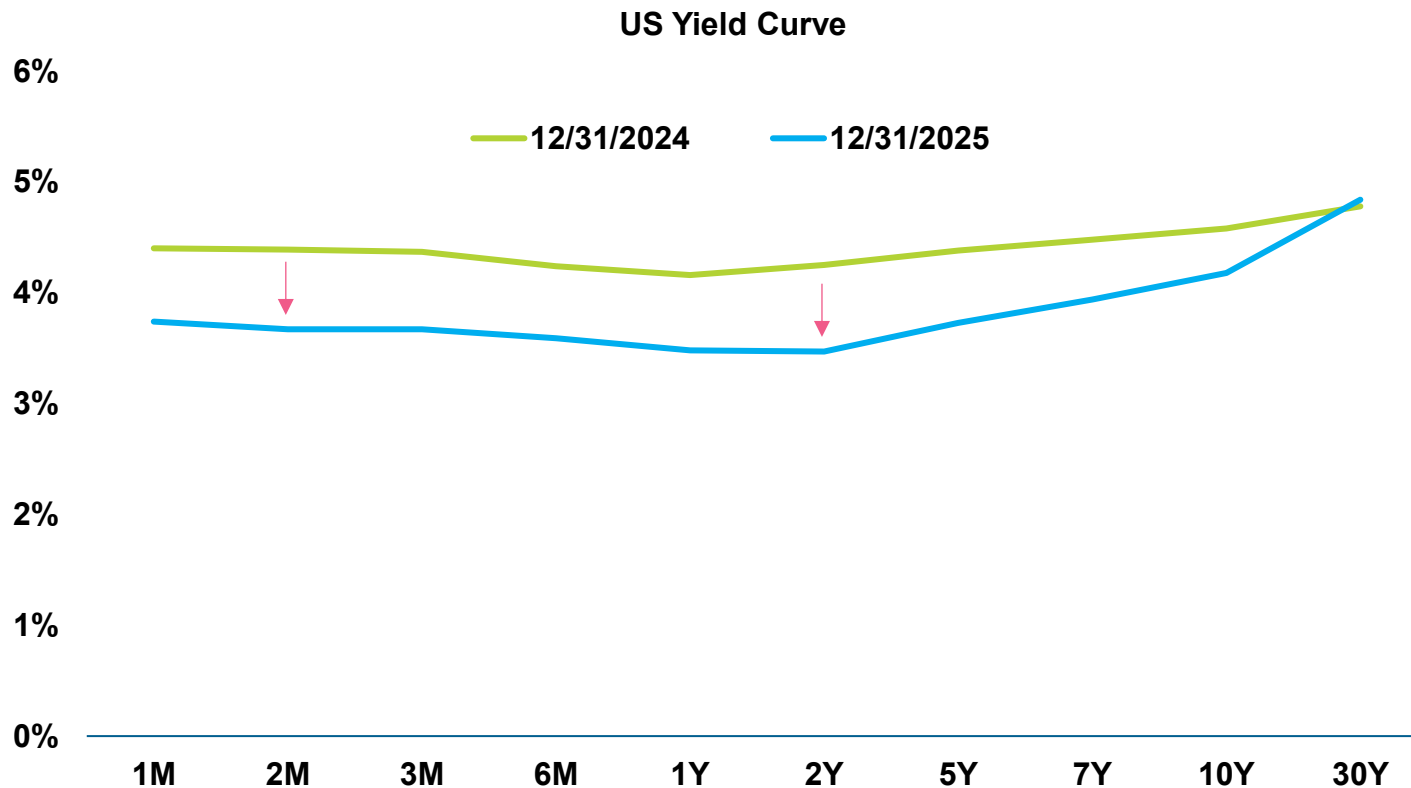
Generic Asset Classes – Expected Return and Changes from 2025

Asset Class	2026 10-year Expected Return (%)	Δ From 2025 (%)
Cash Equivalents	2.8	0.0
Investment Grade Bonds	4.2	-0.7
Long-term Government Bonds	4.5	-0.5
TIPS	3.8	-0.5
High Yield Bonds	5.4	-0.9
Bank Loans	5.6	-0.7
Emerging Market Debt	5.7	-0.6
Private Debt	7.8	-0.9
US Equity	6.3	-0.1
Developed Non-US Equity	6.2	-1.0
Emerging Non-US Equity	6.2	-0.9
Global Equity	6.3	-0.3
Private Equity	9.0	-0.8
Real Estate	7.1	+0.2
Infrastructure	7.4	+0.2
Commodities	5.0	-0.5
Hedge Funds	3.8	-0.4
Inflation	2.3	0.0

- 2026 expected returns declined for nearly all asset classes.
- Very few asset classes currently offer an expected return above 7% on a standalone basis, making it challenging to achieve a Total Portfolio expected return at or above 7%.

Falling Interest Rates

- The short and intermediate portions of the yield curve moved down, driven by multiple Fed rate cuts.
- The result was a shift away from the slightly “U”-shaped curve to a somewhat more traditional shape (i.e., upward sloping, at least beyond two years).



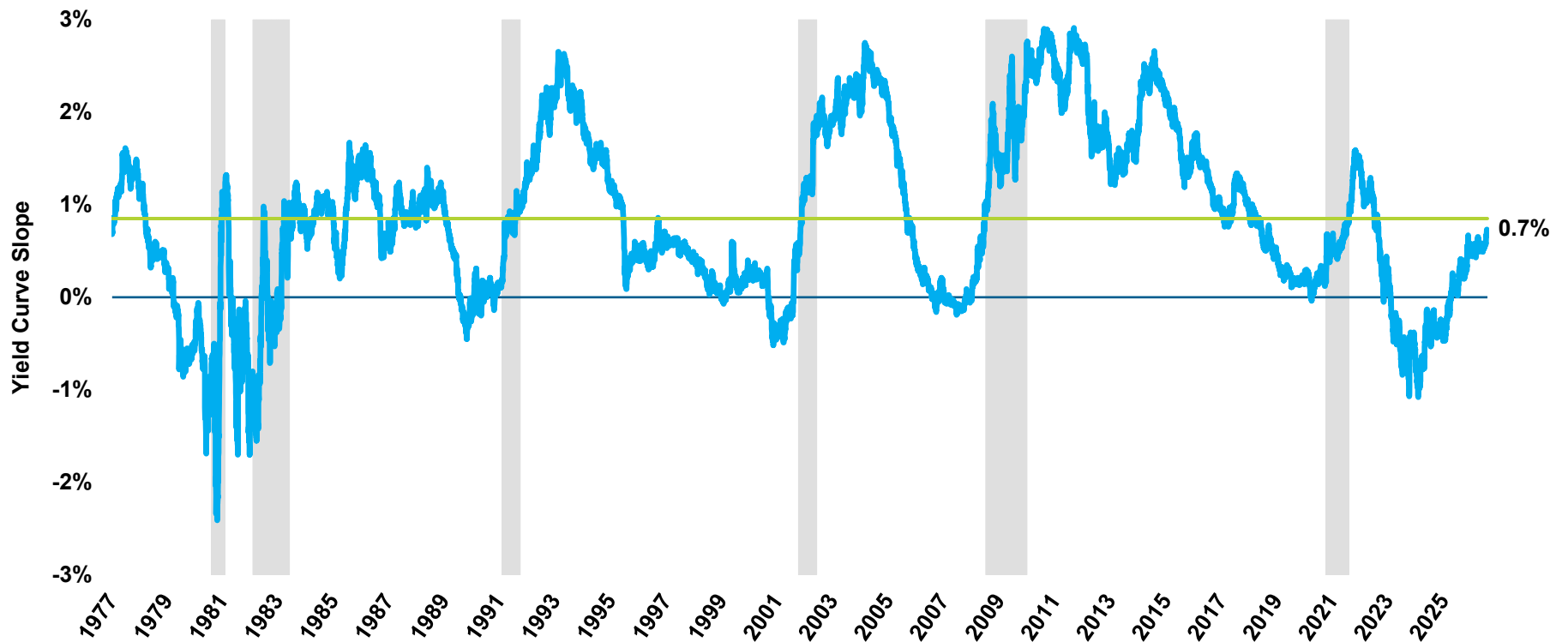
Source: Bloomberg. Data is as of December 31, 2025.

Normalizing Yield Curve

→ The yield curve began the year with a positive 2-10 spread but the curve was inverted in some other sections.

- The 2-10 spread moved closer to its long-term average during the year.

Yield Curve Slope



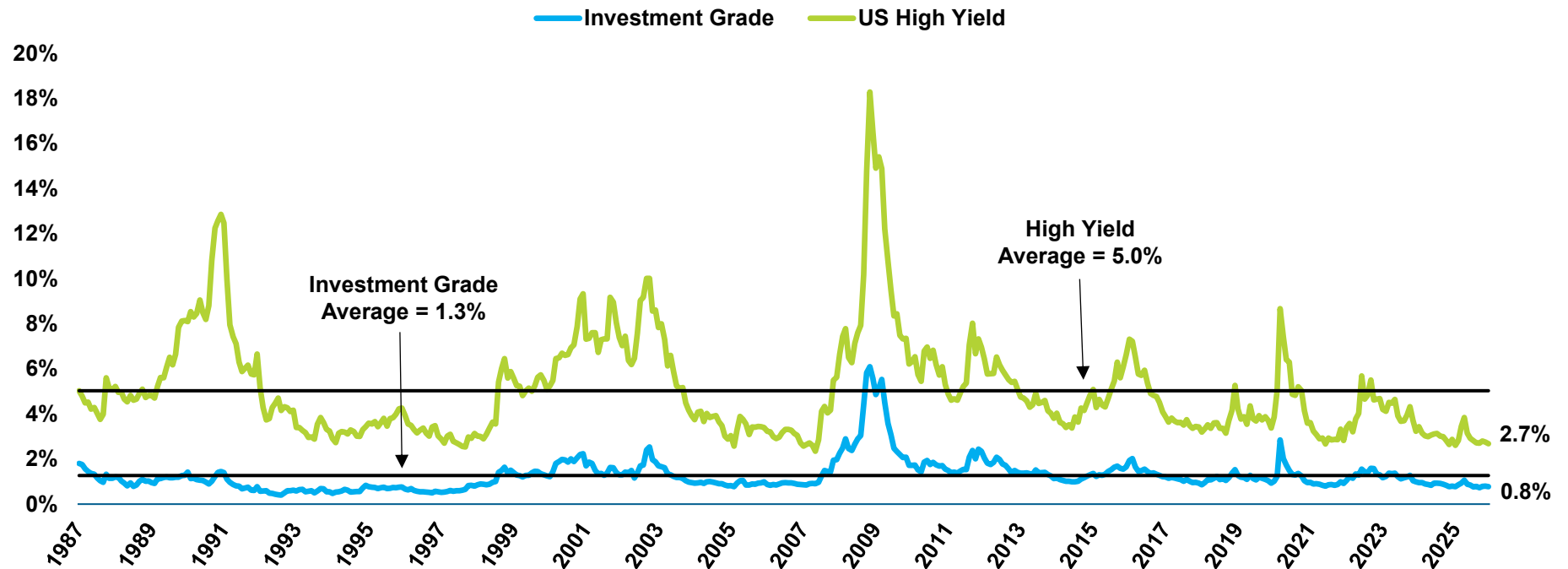
Source: FRED. Yield curve slope is calculated as the difference between the 10-Year US Treasury Yield and 2-Year US Treasury Yield. Data is as of December 31, 2025.

Slightly Narrower Credit Spreads

→ Credit spreads tightened slightly in 2025, moving further below their long-term averages.

- The spread for high yield bonds declined from 287 basis points to 266 basis points, while the spread for investment grade corporates declined from 80 basis points to 78 basis points.

US Investment Grade and High Yield Credit Spreads



Source: Bloomberg. High Yield is proxied by the Bloomberg High Yield Index and Investment Grade Corporates are proxied by the Bloomberg US Corporate Investment Grade Index. Spread is calculated as the difference between the Yield to Worst of the respective index and the 10-Year US Treasury yield. Data is as of December 31, 2025.

Lower Yields

- Short-term interest rates declined as the Fed cut its target rate, and the yield on the 10-year Treasury decreased.
- Tighter credit spreads amplified the yield reduction in credit markets.

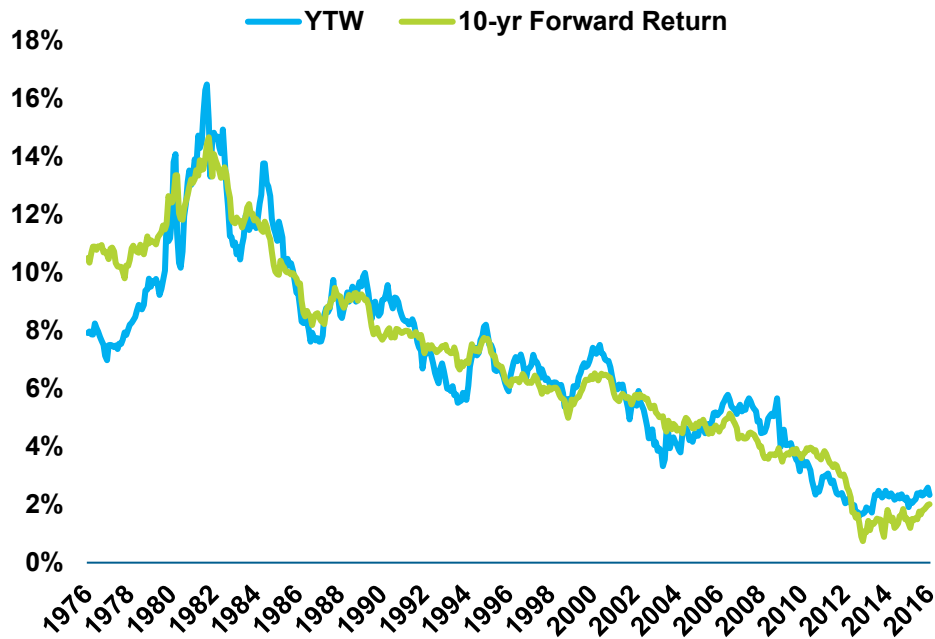
Index	Yield to Worst 12/31/25 (%)	Yield to Worst 12/31/24 (%)
Fed Funds Effective Rate	3.50 – 3.75	4.25 – 4.50
10-year Treasury	4.18	4.58
Bloomberg Aggregate	4.32	4.91
Bloomberg Corporate	4.81	5.33
Bloomberg Securitized	4.61	5.25
Bloomberg Global Aggregate	3.52	3.68
Bloomberg US Corporate High Yield	6.53	7.49

Source: Bloomberg. Data is as of December 31, 2024 and December 31, 2025.

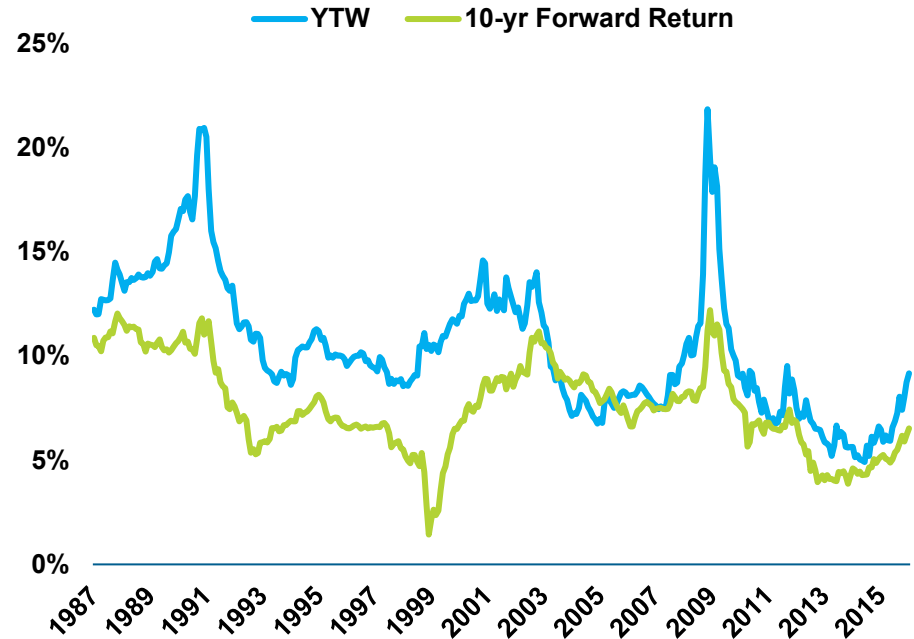
Yields Drive Future Returns

→ Changes in interest rates matter because yields have proven a very good predictor of future returns for bonds,¹ at least over a 10-year horizon.

YTW and Returns for Investment Grade Bonds



YTW and Returns for High Yield Bonds



¹ When predicting returns for bonds, default risk should also be taken into account. For example, defaults are why the return for high yield bonds have generally been below the starting yield.

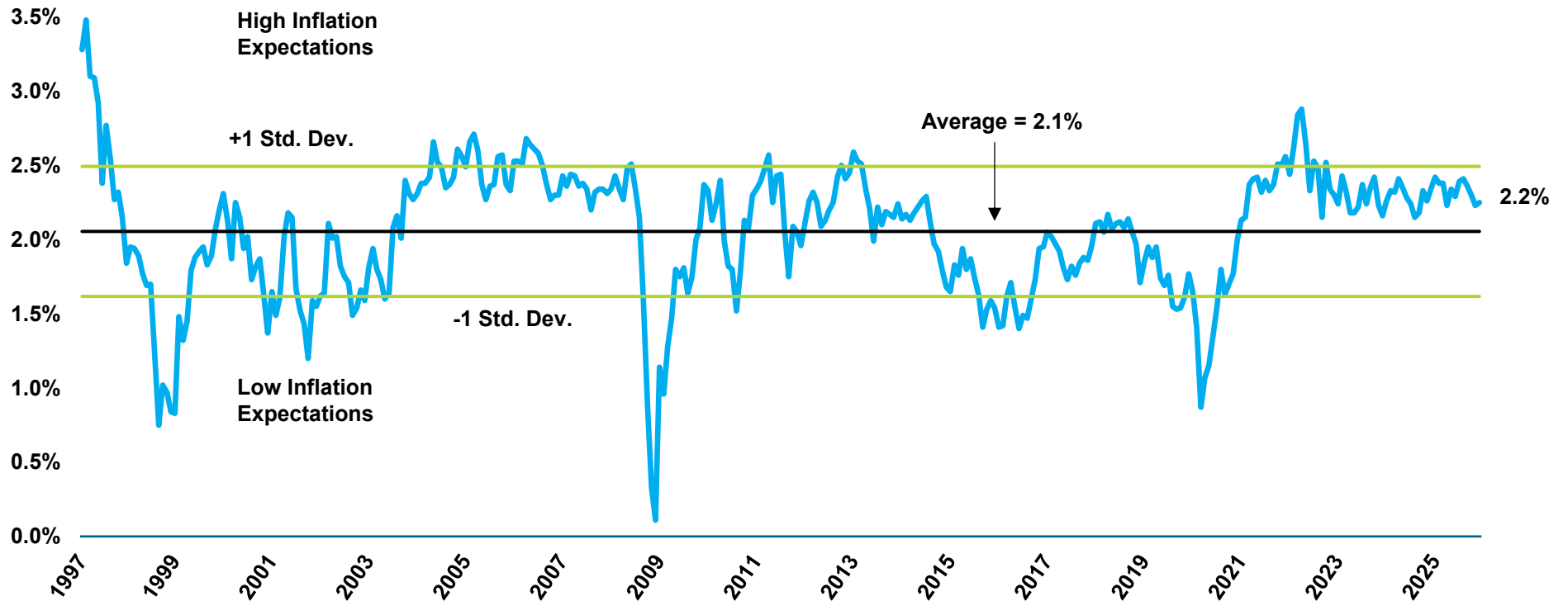
Source: Bloomberg Aggregate and Bloomberg High Yield indices. Data is as of December 31, 2025.

Similar Inflation Expectations

→ Despite many inflation-related headlines during the year, the market’s expectations for inflation were little changed at the end of 2025.

- The 10-year breakeven inflation rate decreased slightly, from 2.3% to 2.2%.

Ten-Year Breakeven Inflation

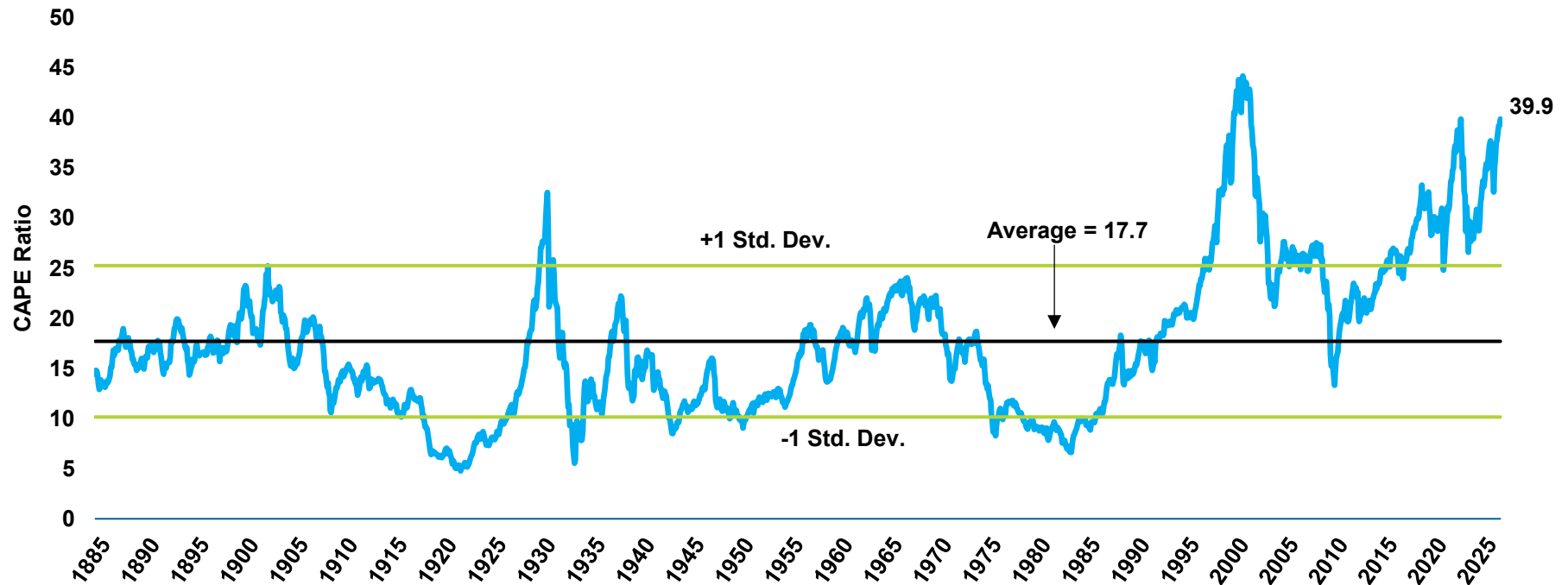


Source: US Treasury and Federal Reserve. Inflation is measured by the Consumer Price Index (CPI-U NSA). Data is as of December 31, 2025.

Surprisingly Little Change in US Equity Valuations

- US stocks had another good year, with the S&P 500 index gaining 17.9%.
- Valuations are higher than one year ago, with the CAPE moving from 38 to 39.9.
- Still, valuations remain elevated relative to their long-term history.

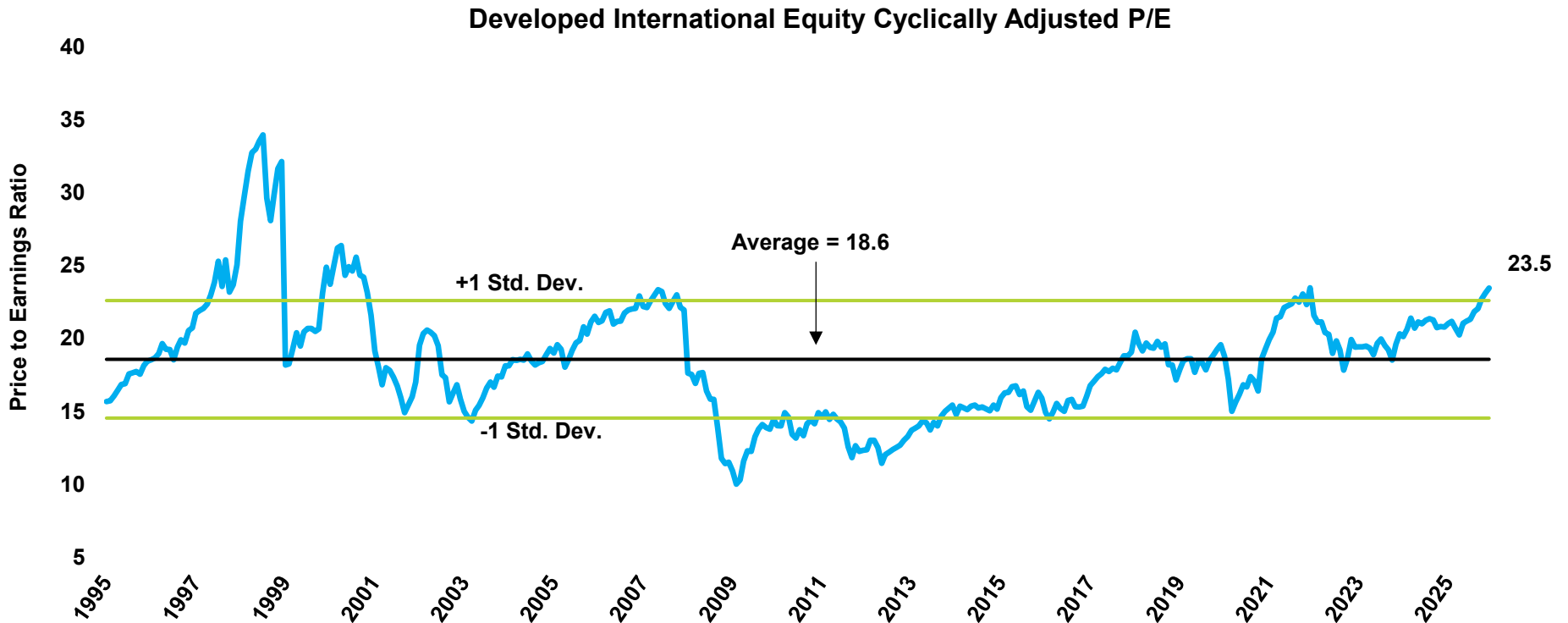
US Equity Cyclically Adjusted Price/Earnings



Source: Robert Shiller, Yale University, and Meketa Investment Group. Data is as of December 31, 2025 for the S&P 500 Index.

Higher Non-US Developed Equity Valuations

- EAFE equities had a great year, posting a 31.2% gain for USD investors.
 - A currency tailwind aided these gains, as EAFE posted a 20.6% return in local currency terms.
- The gains also reflected higher valuations, with the price-earnings ratio going from 21 to 23.5.
 - EAFE valuations are now above their historical average.

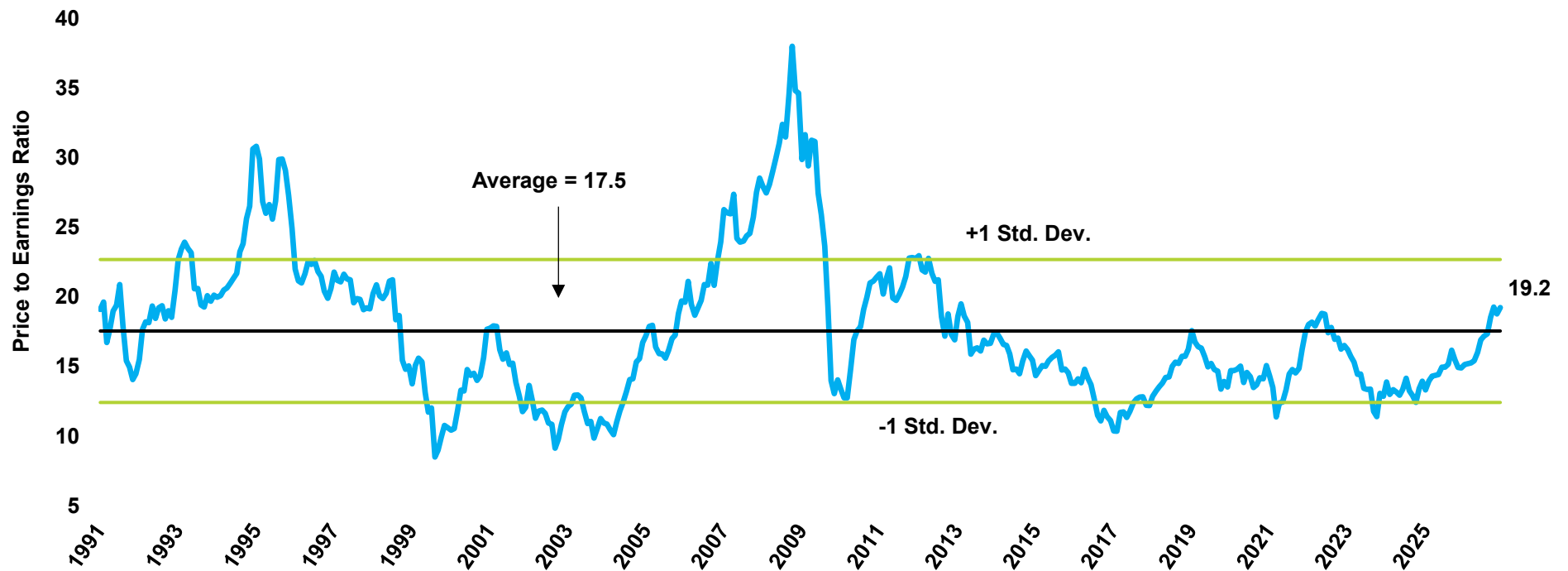


Source: MSCI and Bloomberg. Earnings figures represent the average of monthly "as reported" earnings over the previous ten years. Data is as of December 31, 2025.

Higher Prices in Emerging Market Equities

- Emerging market equities had a great year, gaining 33.5% for USD investors.
- These gains were driven largely by higher valuations, with the price-earnings ratio going from 14.8 to 19.2.
 - As a result, EM equity valuations have also moved above their long-term average, with the EM ex-China index continuing to trade at higher valuations than the China index.

Emerging Market Equity Cyclically Adjusted P/E

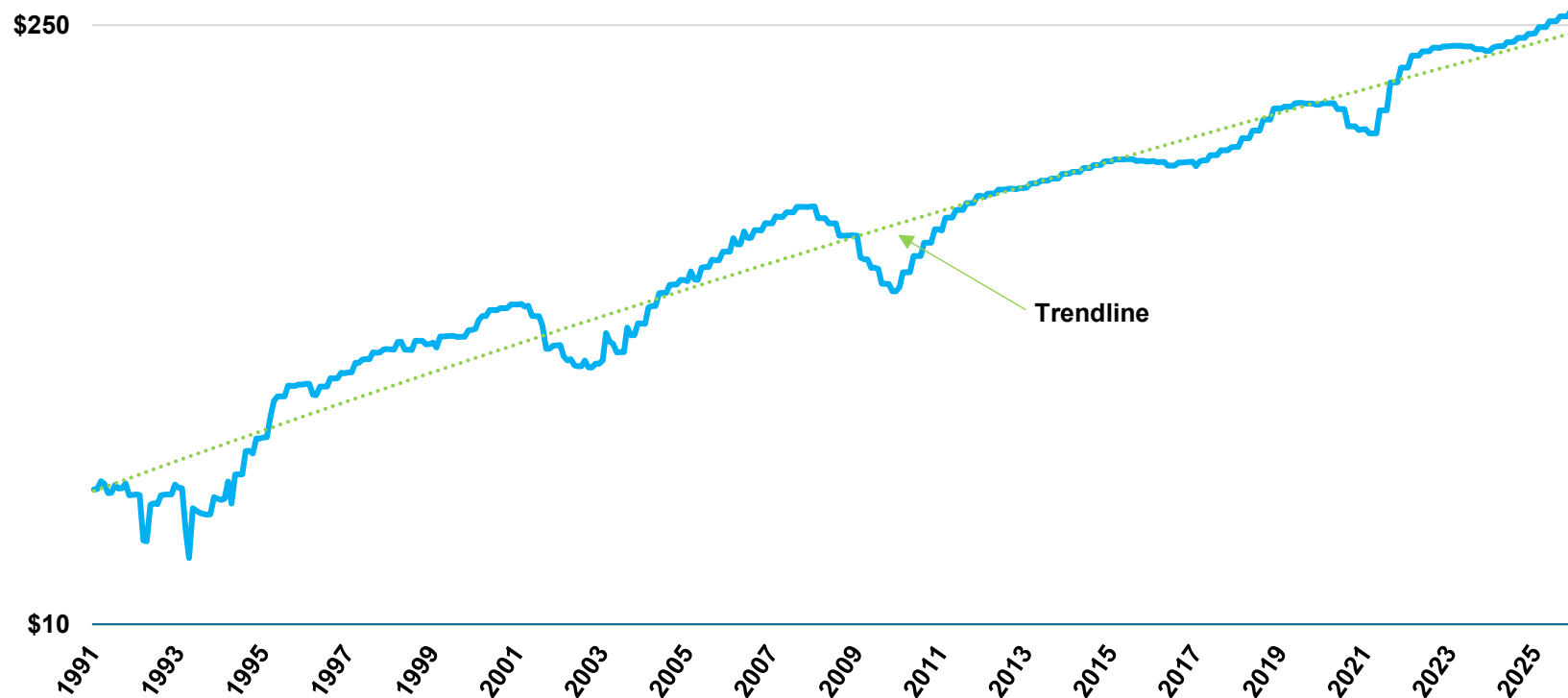


Source: MSCI and Bloomberg. Earnings figures represent the average of monthly "as reported" earnings over the previous ten years. Data is as of December 31, 2025.

Strong US Earnings Growth

- S&P 500 earnings (EPS) had a good year, growing by 13%.
 - At year-end, estimates were that EPS had hit a new peak.

S&P 500 Earnings Per Share (Log Scale)

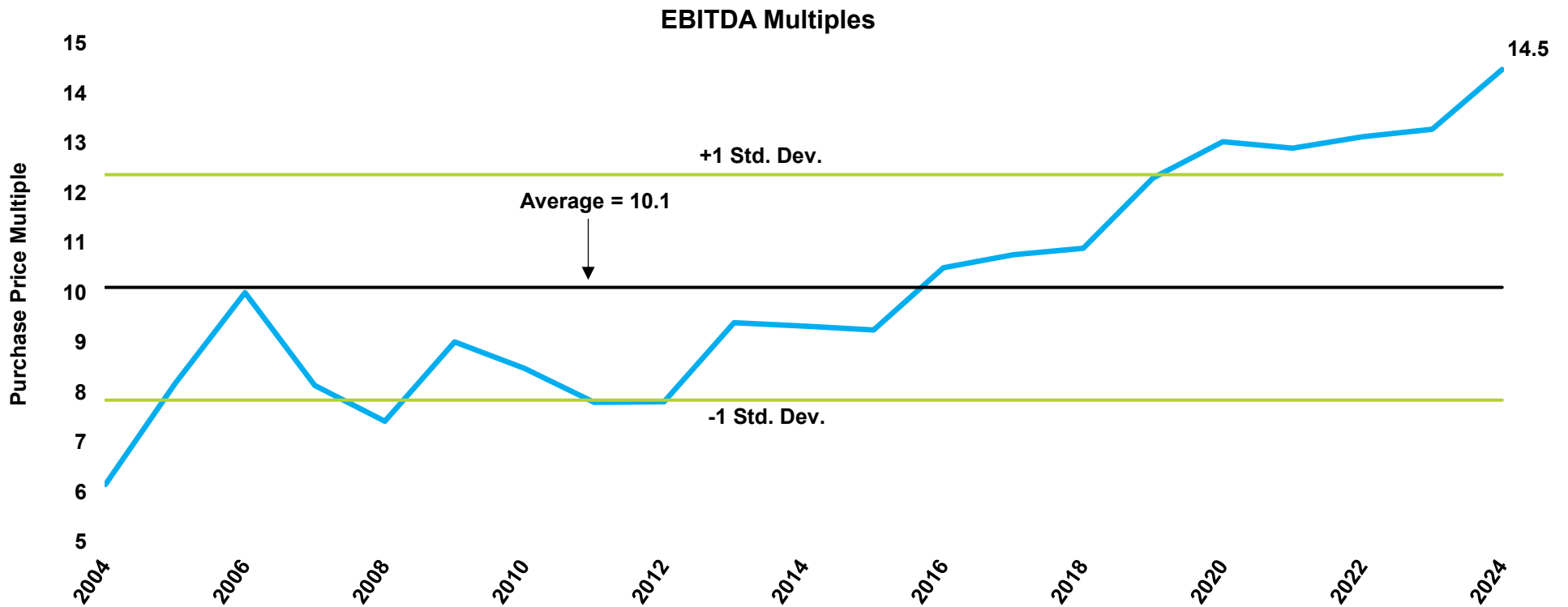


Source: S&P 500 Index data from Bloomberg. Represents trailing 12-month "as reported" earnings per share. Data is as of December 31, 2025.

Private Equity Prices Rebounding

→ EBITDA multiples for buyouts have risen substantially over the past ten years.

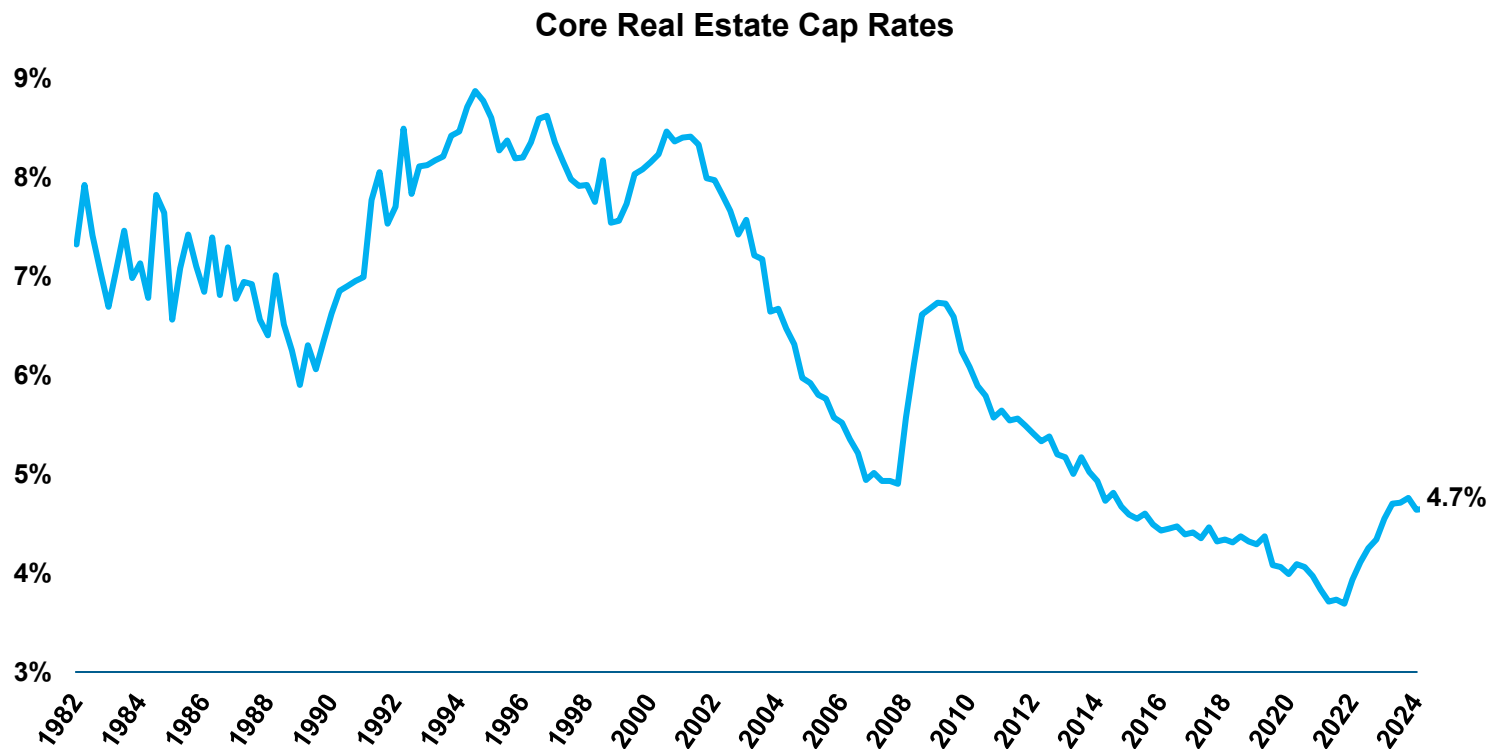
- Preliminary data for 2025 show a slight downtick in multiples, but that is based on a very small fraction of the anticipated number of deals (~15% of the number of deals from 2024).



Source: Preqin Median EBITDA Multiples Paid in All LBOs. Data pulled as of 1/8/2025.

Real Estate Valuations Solidifying

- Cap rates appeared to level off in 2025.
 - This is likely welcomed by investors who have seen cap rates rise (and prices fall) for several years.
- Still, cap rates remain below the trough experienced during the Global Financial Crisis (“the GFC”).

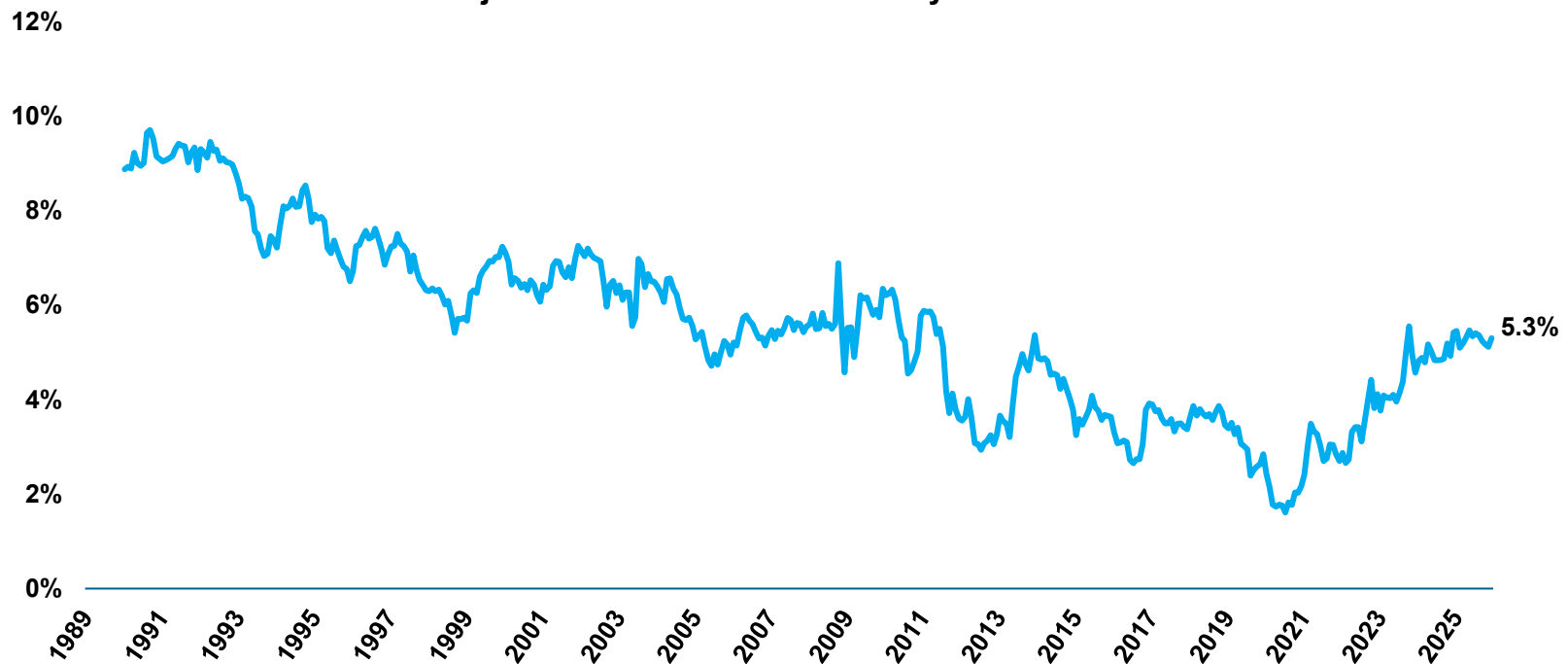


Source: NCREIF NPI value-weighted cap rates. As of September 30, 2025.

Slightly Lower Projected Rates in the Future

- As interest rates have declined, so have the market’s predictions for future interest rates.
 - The market is forecasting that the 10-year Treasury yield in ten years will be 5.30%, versus a prediction of 5.42% twelve months ago.
- Lower future interest rates for “risk-free” assets implies lower expected returns for any forecasting model that includes a risk premium approach.

Market Projection for the 10-Year Treasury Yield in Ten Years



Source: FRED. Represents the Fitted Instantaneous Forward Rate 10 Years Hence, as of December 31, 2025.

ERSRI Asset Classes

ERSRI Asset Class and Meketa’s Modeling Approach

Strategic Classes	Components	Asset Class	Notes
Growth	Public Growth	Global Equity	Modeled as ACWI. Can be regional if desired.
	Private Growth	Private Equity	---
		Non-Core Real Estate	50% Value Add / 50% Opportunistic RE
Income	Income	Equity Options	---
		CLOs	---
		Liquid Credit	Modeled as High Yield Bonds
		Private Credit	---
Stability	Crisis Protection Class	Systematic Trend Following	---
		Long Duration Treasuries	---
	Inflation Protection	Private Real Assets (ex-Real Estate)	Modeled as 50% Core / 50% Non-Core Private Infrastructure
		Core Real Estate	---
	Volatility Protection	Absolute Return	Modeled as RMS Diversifiers
		Investment Grade Fixed Income (ex-Treasuries)	Modeled as 50% IG Corporate / 50% MBS
		Strategic Cash	---

--- indicates one-for-one match between asset class and Meketa’s CMAs

ERSRI Asset Class and Respective Expected Returns

Strategic Classes	Components	Asset Class	2025 ER	2026 ER
Growth	Public Growth	Global Equity	6.7	6.3 ↓
	Private Growth	Private Equity	9.8	9.0 ↓
		Non-Core Real Estate	9.1	9.4 ↑
Income	Income	Equity Options	5.6	5.5 ↓
		CLOs	6.9	5.8 ↓
		Liquid Credit	6.3	5.4 ↓
		Private Credit	8.7	7.8 ↓
Stability	Crisis Protection Class	Systematic Trend Following	3.5	3.6 ↑
		Long Duration Treasuries	5.0	4.5 ↓
	Inflation Protection	Private Real Assets (ex-Real Estate)	7.2	7.5 ↑
		Core Real Estate	5.5	5.8 ↑
	Volatility Protection	Absolute Return	4.7	4.5 ↓
		Investment Grade Fixed Income (ex-Treasuries)	5.4	4.6 ↓
		Strategic Cash	2.8	2.8
Total Policy Portfolio Expected Return/Risk			7.1%/ 12.2%	6.7% / 12.4%

ERSRI Asset Class and Respective Expected Volatilities

Strategic Classes	Components	Asset Class	2025 Volatility	2026 Volatility
Growth	Public Growth	Global Equity	17.0	17.0
	Private Growth	Private Equity	25.0	26.0 ↑
		Non-Core Real Estate	22.4	22.4
Income	Income	Equity Options	13.0	13.0
		CLOs	13.0	13.0
		Liquid Credit	11.0	11.0
		Private Credit	15.0	15.0
Stability	Crisis Protection Class	Systematic Trend Following	18.0	18.0
		Long Duration Treasuries	12.0	12.0
	Inflation Protection	Private Real Assets (ex-Real Estate)	18.0	19.0 ↑
		Core Real Estate	12.0	12.0
	Volatility Protection	Absolute Return	4.0	5.0 ↑
		Investment Grade Fixed Income (ex-Treasuries)	5.2	5.2
		Strategic Cash	1.0	1.0
Total Policy Portfolio Expected Return/Risk			7.1%/ 12.2%	6.7% / 12.4%

Our Process

Asset Class Definitions

- We identify asset classes and strategies that are both investable and appropriate for the long-term allocation of funds.
- Several considerations influence this process:
 - Unique return behavior
 - Observable historical track record
 - A robust market
 - Client requests
- We then make forecasts for each asset class.
 - We created inputs for 115 “asset classes” for our 2026 Capital Markets Assumptions.

Building 10-Year Forecasts

→ Our first step is to develop 10-year forecasts based on fundamental models.

- Each model is based on the most important factors that drive returns for that asset class:

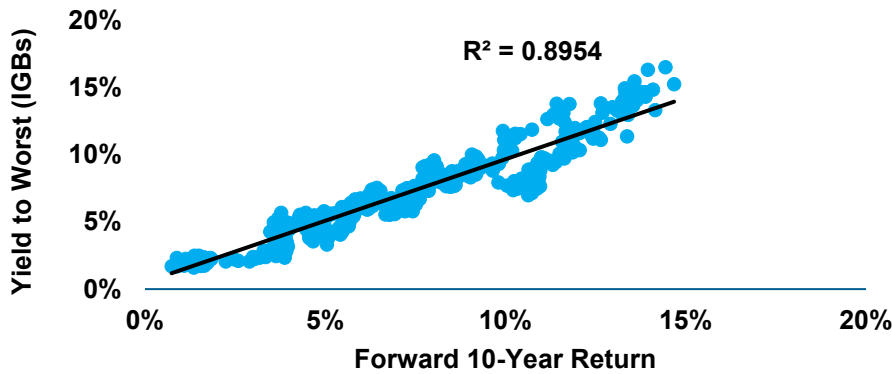
Asset Class Category	Major Factors
Equities	Dividend Yield, Earnings Growth, Valuation
Bonds	Yield to Worst, Default Rate, Recovery Rate
Commodities	Collateral Yield, Roll Yield, Inflation
Infrastructure	Public IS Valuation, Income, Growth, Leverage
Natural Resources	Price per Acre, Income, Public Market Valuation
Real Estate	Cap Rate, Yield, Growth, Leverage
Private Equity	EBITDA Multiple, Leverage, Public VC Valuation
Hedge Funds and Other	Leverage, Alternative Betas

→ The common components are income, growth, and valuation.

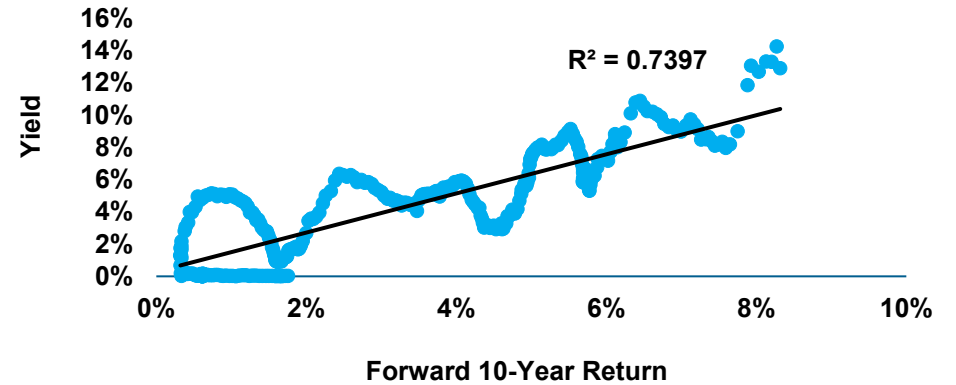
- Leverage and currency impact are also key factors for many strategies.

Some Factors are Naturally More Predictive Than Others

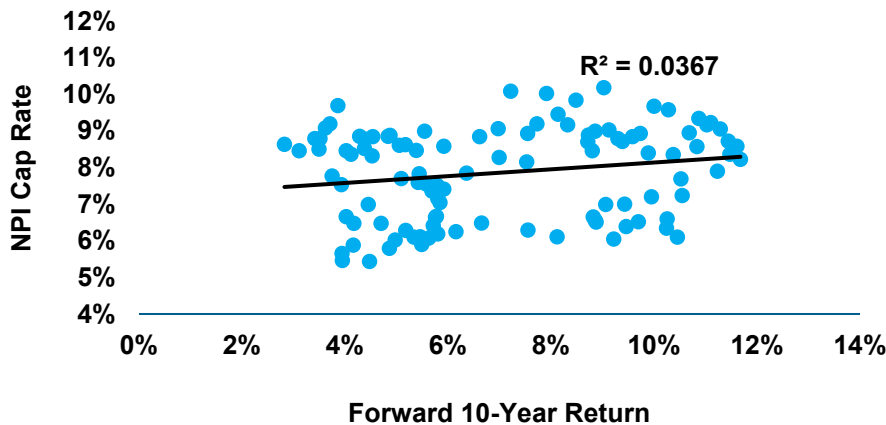
Investment Grade Bonds
Yield to Worst vs. Forward 10-Year Returns



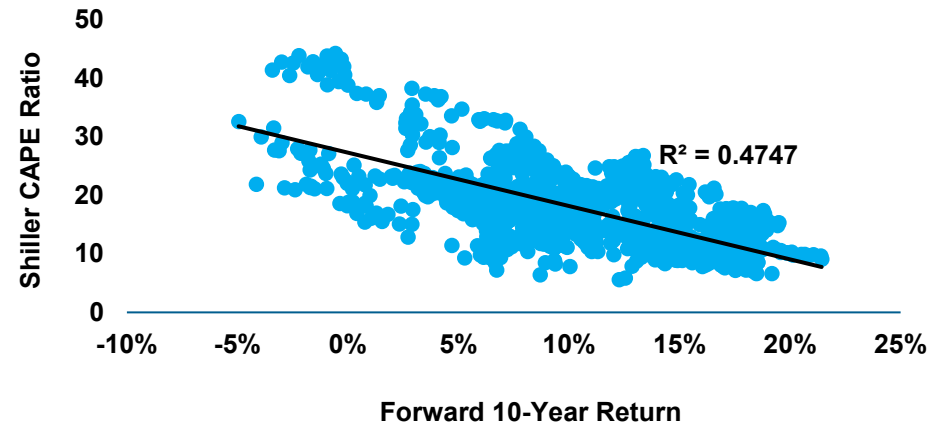
Cash (90-Day T-Bill)
Yield vs. Forward 10-Year Returns



Core Real Estate
Cap Rates vs. Forward 10-Year Returns



US Equities
Shiller CAPE vs. Forward 10-Year Returns

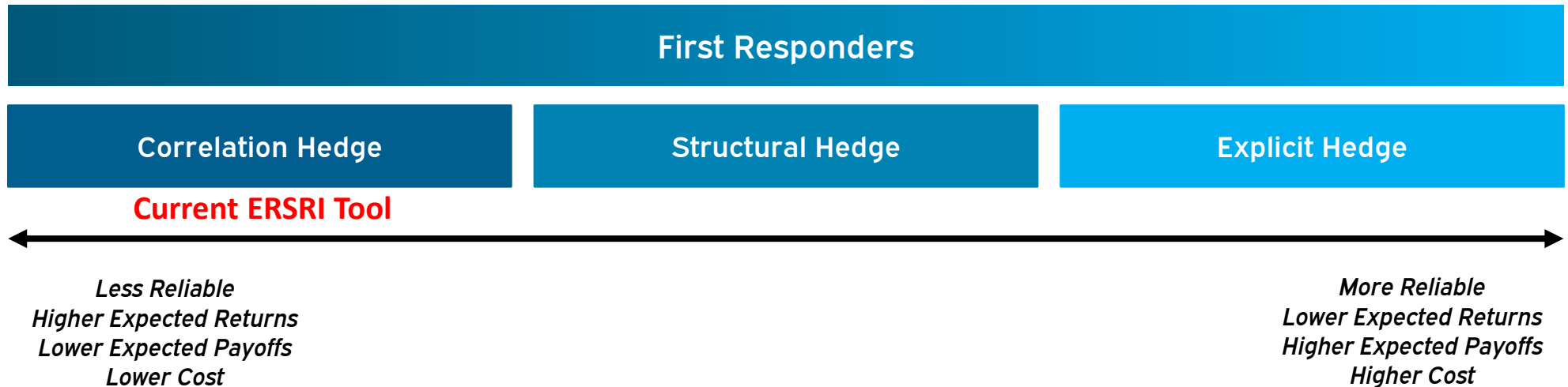


Sources: Bloomberg, FRED, NCREIF, S&P, Robert Shiller (Yale University), and Meketa Investment Group. As of December 31, 2024.

New Asset Class (Long Volatility)

The First Responders “Tool Kit”

- First responders are meant to be the first line of defense in an equity event.
- Strategies should produce meaningful gains in the initial stages of a market shock.
- There are three main types of hedging all of which can be found within the First Responders component of RMS:
 1. Correlation hedge: a bet that one asset will produce good returns when another produces bad returns.
 2. Structural hedge: an investment in a security that has a close inverse relationship with another.
 3. Explicit hedge: analogous to an insurance contract (e.g., an ongoing payment in exchange for a payoff if an event X occurs).
- Strategies vary primarily by certainty, payoff magnitude, expected return, and cost.





First Responders Strategy Summaries

Correlation Hedge

Strategies:
→ Long US Treasuries

Performance Drivers:
→ Investors often seek high quality assets when markets decline

Most Effective When...
→ Flight-to-safety 

Least Effective When...
→ Rising rates 

Implementation Example
→ Buying 20+ year US Treasuries


Strategy Benefits
→ Well known
→ Low cost
→ Historically reliable


Things to consider...
→ Relies on the behavior of others
→ Negative real yields
→ Changing correlations?

Structural Hedge

Strategies:
→ Long Volatility

Performance Drivers:
→ Volatility increases as equity price changes accelerate

Most Effective When...
→ Increasing volatility 

Least Effective When...
→ Stable / low volatility 

Implementation Example
→ Buying CBOE VIX options


Strategy Benefits:
→ High certainty
→ High event payoffs
→ Flexible implementation


Things to consider...
→ Low expected returns
→ Complexity
→ Ability to hold

Explicit Hedge

Strategies:
→ Tail risk hedging

Performance Drivers:
→ Continual insurance payment for a guaranteed payoff

Most Effective When...
→ Sharp drawdowns 

Least Effective When...
→ Stable, bull markets 

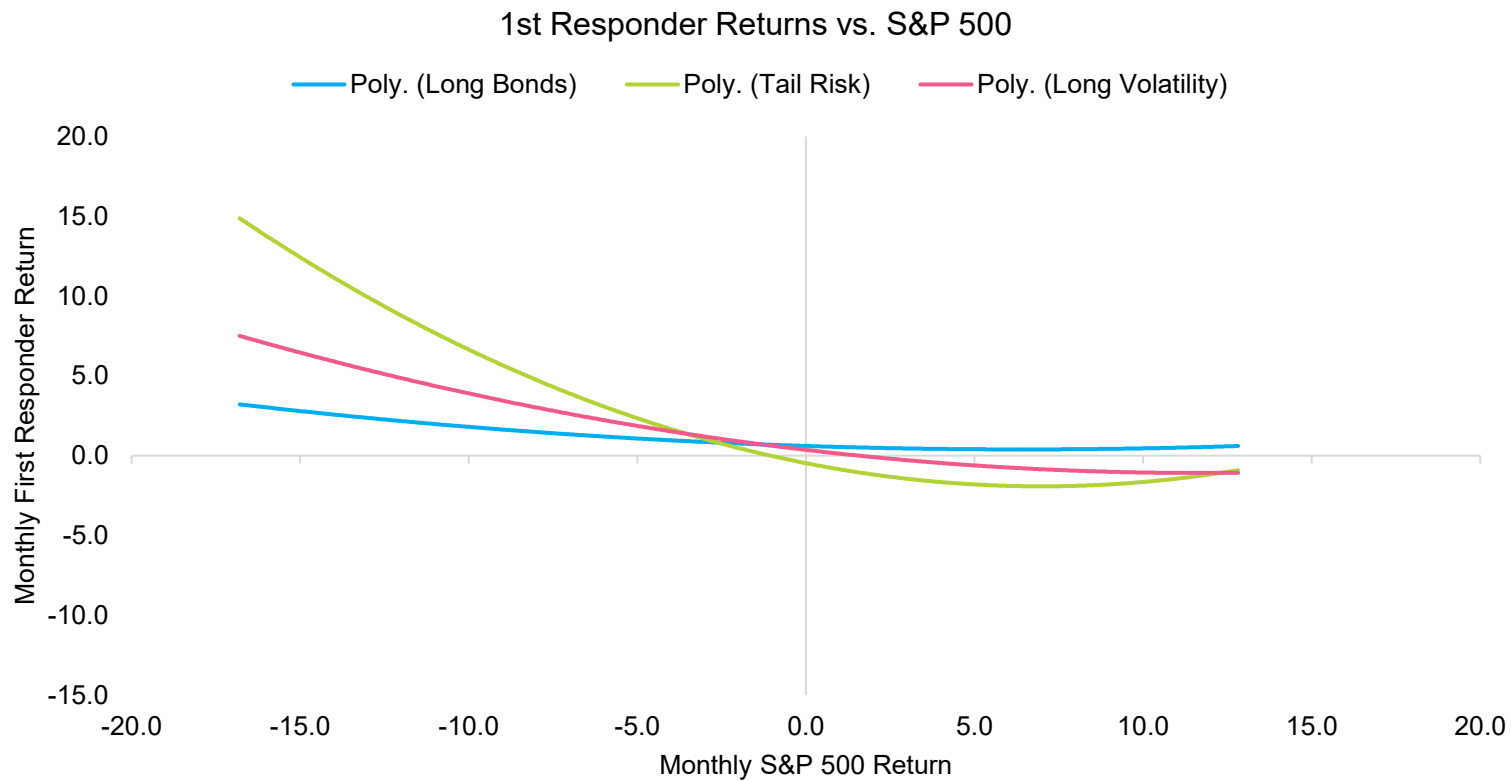
Implementation Example
→ Buying equity put options

Strategy Benefits:
→ Guaranteed payoff
→ Targets specific levels
→ Highest payoff

Things to consider...
→ Explicit ongoing cost
→ Most difficult to hold
→ Counterparty risk

Convexity Profiles

- All strategies have historically produced positive results in equity selloffs
- However, the amount of payoff has varied with the most reliable hedges (tail risk and long volatility) provided the highest convexity (return).



Approach to Modeling Long Volatility

→ Meketa has two options for modeling Long Volatility:

Mean-Variance	Simulation-based
<ul style="list-style-type: none"> • 0.5% expected return and 9.0% volatility • -0.5 correlation to Global Equity • Pros <ul style="list-style-type: none"> ○ Simple, easy to understand • Cons <ul style="list-style-type: none"> ○ Assumes normal distribution ○ Cannot recognize non-linearity and convexity 	<ul style="list-style-type: none"> • Conditional payoff based on Global Equity simulated returns: <ul style="list-style-type: none"> ○ Global Equity >0%: -4% return (negative carry) ○ Global Equity < 0%: -0.25x of GE ○ Global Equity < -10%: -0.5x of GE ○ Global Equity < -20%: -1.0x of GE ○ Global Equity < -30%: -1.15x of GE ○ Global Equity < -40%: -1.2x of GE ○ Global Equity < -50%: -1.25x of GE • Pros <ul style="list-style-type: none"> ○ More accurately reflects actual payoff structure ○ Calibrated based on a universe of actual performance histories with conservative adjustments • Cons <ul style="list-style-type: none"> ○ No explicit expected return or volatility assumption (through simulation process, ER and Vol approximate mean-variance assumptions)

→ **Meketa recommends ERSRI utilize the simulation-based approach for the 2026 Asset-Liability Study**

Conclusion

Conclusion

- Meketa’s 2026 CMAs project lower returns for most well-diversified, institutional portfolios.
- Several asset classes also saw marginal increases to their volatility assumptions.
- Meketa and Staff propose the utilization of Meketa’s standard CMAs in the 2026 Asset-Liability Study, including the exploration of Long Volatility via Meketa’s simulation-based CMA.
 - Given the variety of classes already utilized in ERSRI, Meketa and Staff do not believe that additional asset classes (excluding Long Volatility) need to be incorporated at this time.
- The ALS will examine potential outcomes for ERSRI as a system over time.
 - Liquidity analysis will also be incorporated based on expected contributions, benefit payments, and private markets allocations (i.e., capital calls, distributions, etc.)
- **Meketa and Staff are seeking additional direction/guidance from the SIC on the CMAs before beginning the ALS modeling process.**

Appendix

2026 Peer Comparison Sample

- The table below highlights 10-year expected returns from a sample of investment consultants & asset managers.
- Data was sourced from publicly available documents/websites on 2/15/25.
 - Peer data are all 2026 CMAs but represented a mix of 11/30 and 12/31 end dates for inputs.

Asset Class	Meketa	Verus	Wilshire	Callan	Vanguard	BlackRock	Northern Trust	Average (ex Meketa)
US Equity	6.3%	5.5%	4.5%	7.4%	4.9%	5.2%	6.8%	5.7%
Developed Non-US Equity	6.2%	6.8%	5.5%	7.3%	5.9%	7.1%	6.8%	6.6%
Emerging Markets Equity	6.2%	6.7%	5.7%	7.5%	4.2%	5.9%	6.9%	6.1%
Investment Grade Bonds	4.2%	4.7%	4.9%	4.8%	4.6%	4.1%	5.0%	4.7%
High Yield Bonds	5.4%	5.7%	6.1%	5.9%	4.8%	5.7%	5.5%	5.6%
Private Equity	9.0%	9.0%	6.1%	8.5%	---	12.9%	10.2%	9.3%
Private Real Estate*	7.2%	8.5%	6.9%	---	---	---	7.9%	7.8%
Core Private Real Estate	5.8%	7.2%	6.0%	6.3%	---	5.8%	---	6.3%

*Private Real Estate represents the firm’s stated, single line item assumption or an assumed blend of 50% Core / 25% Value Add / 25% Opportunistic.

2025 Peer Survey

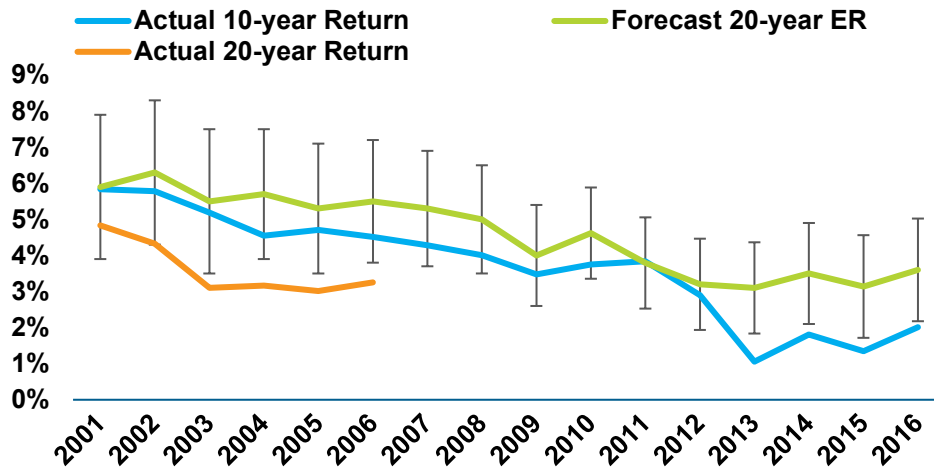
- Annually, Horizon Actuarial Services, LLC publishes a survey of capital market assumptions that they collect from various investment advisors.¹
- The Horizon survey is a useful tool to determine whether a consultant’s expectations for returns (and risk) are reasonable.

Asset Class	Horizon 10-Year Average (%)	Meketa 10-Year (%)
Cash Equivalents	3.6	2.8
TIPS	4.4	4.3
US Core Bonds	5.0	4.9
US High Yield Bonds	6.0	6.3
Emerging Market Debt	6.0	6.3
Private Debt	7.9	8.7
US Equity (large cap)	6.4	6.4
Developed Non-US Equity	7.0	7.2
Emerging Non-US Equity	7.4	7.1
Private Equity	9.1	9.8
Real Estate	6.2	6.9
Infrastructure	7.2	7.2
Commodities	4.7	5.5
Hedge Funds	5.9	4.2
Inflation	2.4	2.3

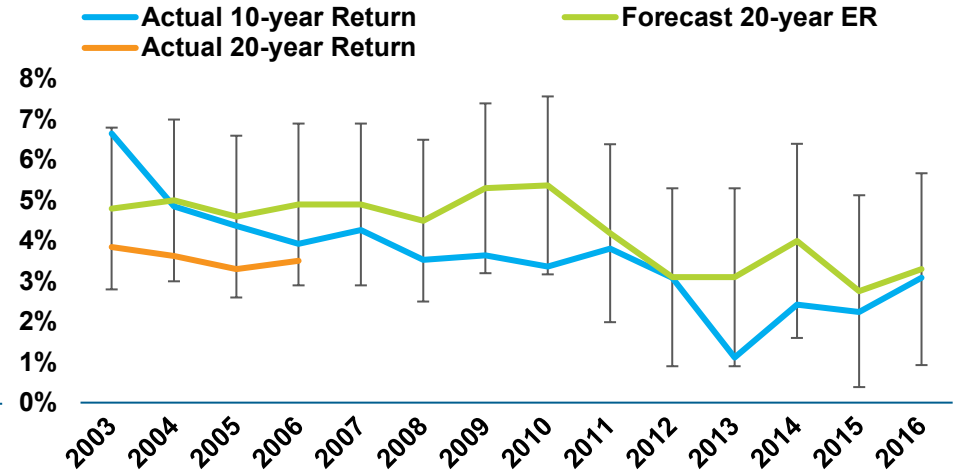
¹ The 10-year horizon included all 41 respondents to the survey. Figures are based on Meketa’s 2025 CMAs. The survey is typically published in August.

Our Track Record

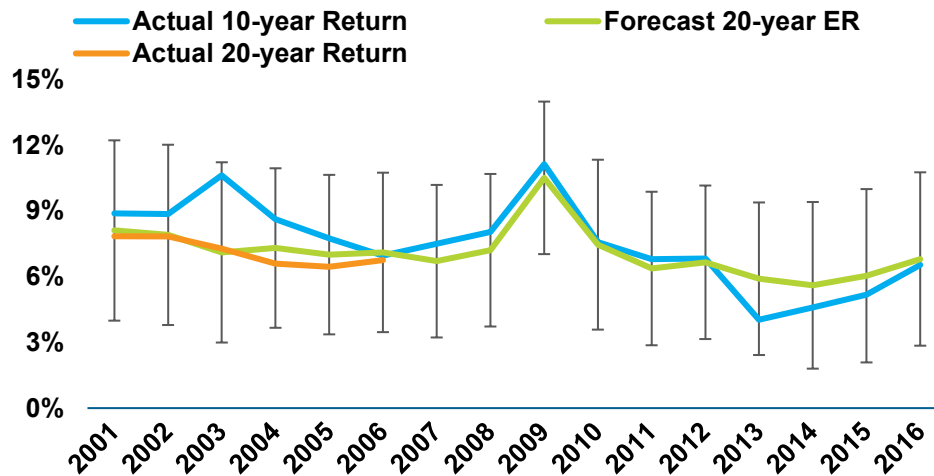
Investment Grade Bonds



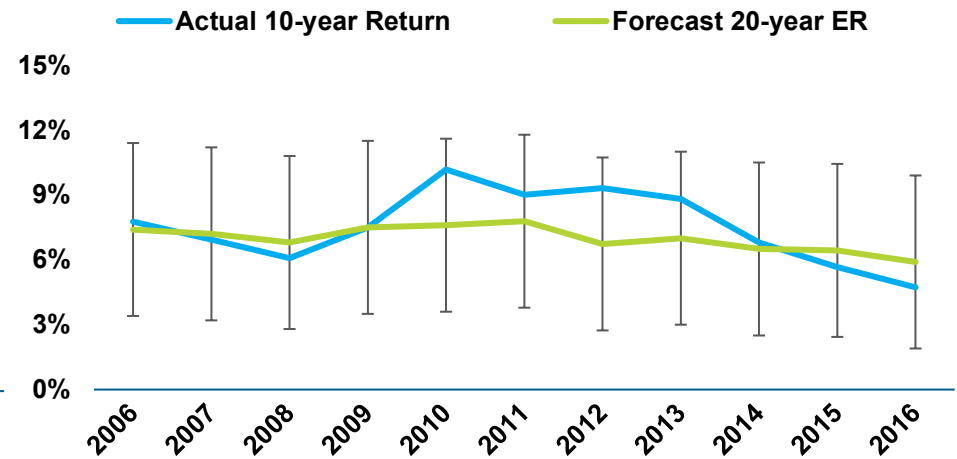
TIPS



High Yield Bonds

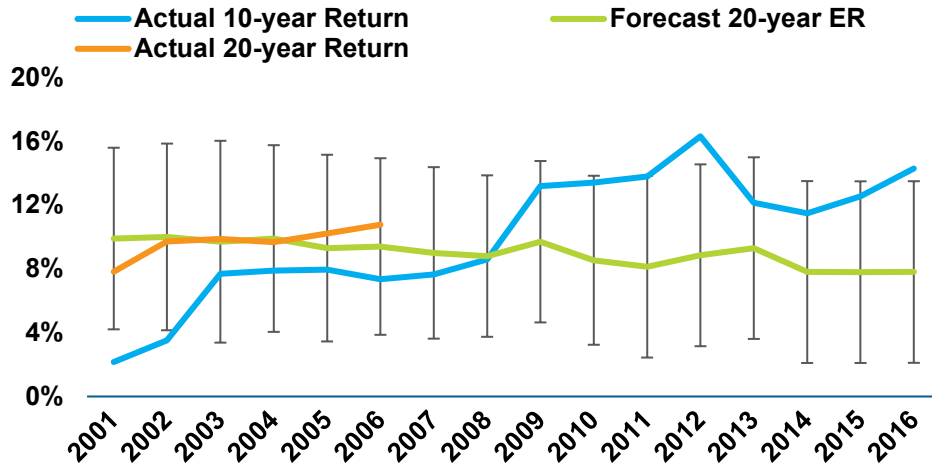


Core Real Estate

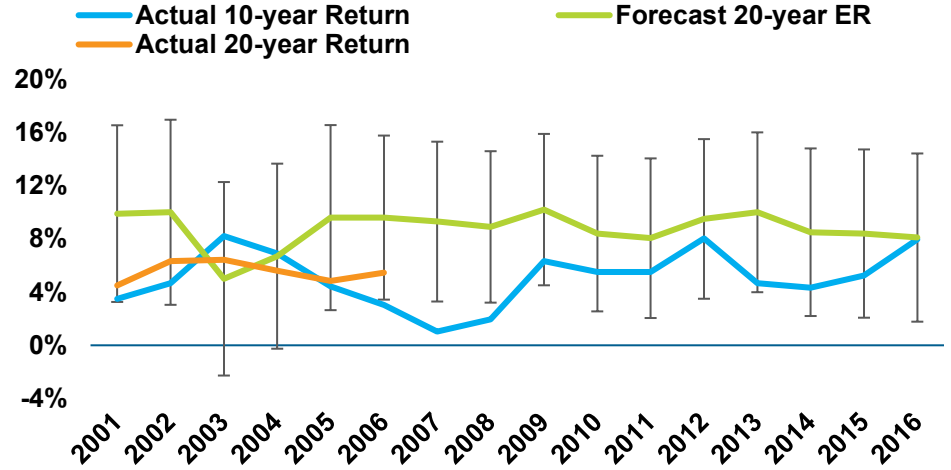


Our Track Record (continued)

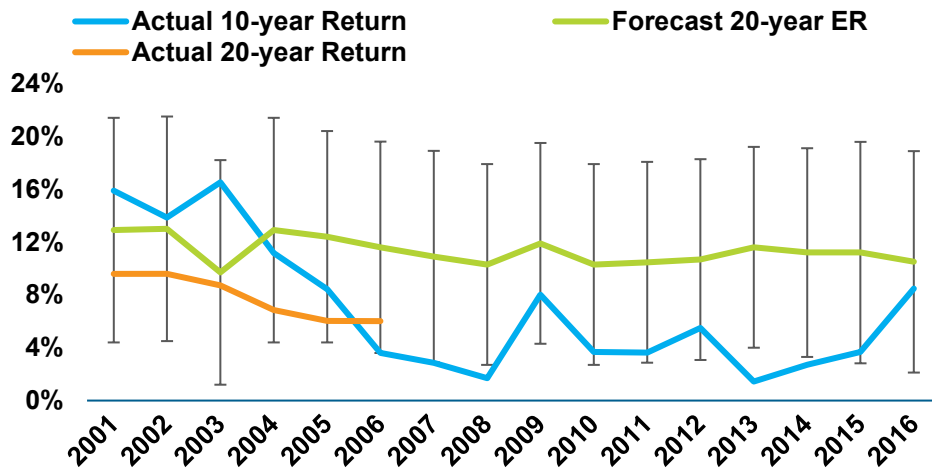
US Equity



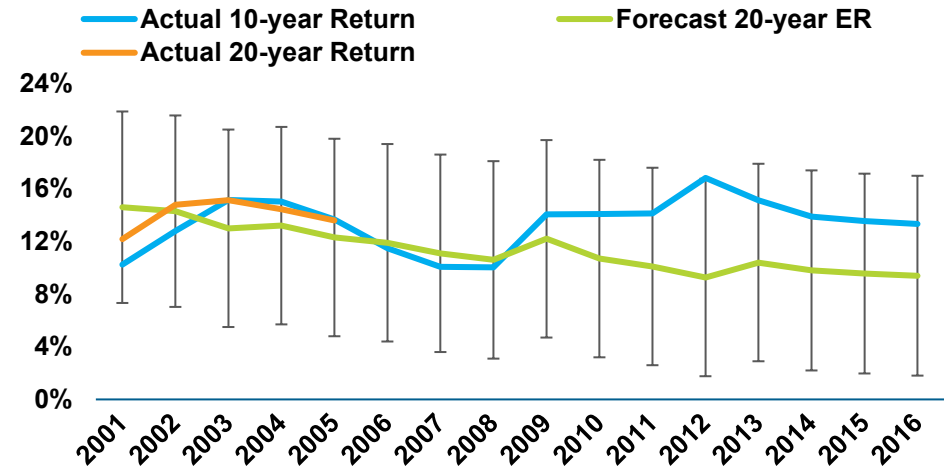
EAFE Equity



Emerging Markets Equity



Private Equity



**10-year Geometric Expected Returns
Rate Sensitive**

	2026 E(R) (%)	2025 E(R) (%)	Δ From 2025 (%)	Notes
Cash Equivalents	2.8	2.8	0.0	lower yields offset by steady target rates
Short-term Investment Grade Bonds	3.7	4.2	-0.5	lower yields
Investment Grade (Core) Bonds	4.2	4.9	-0.7	lower yields
Long-term Government Bonds	4.5	5.0	-0.5	lower yields
Long-term Corporate Bonds	5.1	5.9	-0.8	lower yields
Short-term TIPS	3.7	3.9	-0.2	lower real yields
TIPS	3.8	4.3	-0.5	lower real yields
Long-term TIPS	4.5	5.0	-0.5	price impact from higher expected real yields
Global ILBs	4.7	4.2	+0.5	higher global inflation, currency tailwind, and higher yields
Foreign Bonds	3.0	2.4	+0.6	currency tailwind and higher yields
<i>US Inflation</i>	2.3	2.3	0.0	

**10-year Geometric Expected Returns
Credit**

	2026 E(R) (%)	2025 E(R) (%)	Δ From 2025 (%)	Notes
High Yield Bonds	5.4	6.3	-0.9	tighter spreads
Bank Loans	5.6	6.3	-0.7	tighter spreads
Multi-Sector Credit	5.5	6.3	-0.8	tighter spreads
Collateralized Loan Obligations (CLOs)	5.8	6.9	-1.1	lower yields
Emerging Market Bonds (major)	5.9	6.9	-1.0	lower yields
Emerging Market Bonds (local)	6.0	6.5	-0.5	lower yields
Emerging Market Corporate Bonds	5.1	5.6	-0.5	lower yields
Private Debt	7.8	8.7	-0.9	lower yields, changed weightings to be closer to broad opportunity set
<i>Direct Lending</i>	7.0	7.6	-0.6	<i>tighter spreads, increased our default rate assumption</i>
<i>Asset Based Lending</i>	7.9	9.3	-1.4	<i>lower yields (also changed assumptions for default & recovery)</i>
<i>Special Situations Lending</i>	8.9	9.4	-0.5	<i>lower yields (also higher assumptions for default & loss rate)</i>

10-year Geometric Expected Returns Equities

	2026 E(R) (%)	2025 E(R) (%)	Δ From 2025 (%)	Notes
US Equity	6.3	6.4	-0.1	higher prices partly offset by earnings growth
Developed Non-US (EAFE) Equity	6.2	7.2	-1.0	higher prices
Emerging Market Equity	6.2	7.1	-0.9	much higher prices partly offset by earnings growth
<i>Emerging Market ex-China</i>	6.0	7.5	-1.5	<i>higher prices</i>
<i>China Equity</i>	5.9	6.0	-0.1	<i>higher prices partly offset by higher projected earnings growth</i>
Frontier Market Equity	6.1	8.9	-2.8	much higher prices (and lower EPS growth assumption)
Global Equity	6.3	6.6	-0.3	higher prices partly offset by earnings growth
Private Equity	9.0	9.8	-0.8	lagged impact of pricing
<i>Buyouts</i>	8.6	9.5	-0.9	<i>lagged impact of pricing, less leverage, cost of debt</i>
<i>Growth Equity</i>	9.4	10.1	-0.7	<i>lagged impact of pricing</i>
<i>Venture Capital</i>	9.8	10.4	-0.6	<i>lagged impact of pricing</i>

**10-year Geometric Expected Returns
Real Estate and Infrastructure**

	2026 E(R) (%)	2025 E(R) (%)	Δ From 2025 (%)	Notes
Real Estate	7.1	6.9	+0.2	lower borrowing costs
<i>US REITs</i>	5.9	5.3	+0.6	<i>higher yields</i>
<i>Core Private Real Estate</i>	5.8	5.5	+0.3	<i>lower borrowing costs</i>
<i>Value-Added Real Estate</i>	8.7	8.4	+0.3	<i>lower borrowing costs</i>
<i>Opportunistic Real Estate</i>	9.8	9.5	+0.3	<i>lower borrowing costs & higher cap rates assumption</i>
Infrastructure	7.5	7.2	+0.3	lower cost of debt partly offset by lower income
<i>Infrastructure (Public)</i>	7.5	7.6	-0.1	<i>mixed valuation impact</i>
<i>Infrastructure (Core Private)</i>	6.5	6.2	+0.3	<i>lower cost of debt partly offset by lower income</i>
<i>Infrastructure (Non-Core Private)</i>	8.4	8.2	+0.2	<i>higher leverage assumption partly offset by higher cost of debt assumption</i>

**10-year Geometric Expected Returns
Natural Resources and Commodities**

	2026 E(R) (%)	2025 E(R) (%)	Δ From 2025 (%)	Notes
Natural Resources	7.1	7.4	-0.3	higher prices
Natural Resources (Public)	7.3	7.8	-0.5	higher prices
Natural Resources (Private)	7.1	7.4	-0.3	higher prices
<i>Energy</i>	<i>8.1</i>	<i>8.8</i>	<i>-0.7</i>	<i>higher prices</i>
<i>Mining</i>	<i>6.1</i>	<i>8.3</i>	<i>-2.2</i>	<i>much higher prices</i>
<i>Timberland</i>	<i>5.3</i>	<i>5.3</i>	<i>0.0</i>	<i>higher growth assumptions offset by higher prices</i>
<i>Farmland</i>	<i>6.1</i>	<i>3.6</i>	<i>+2.5</i>	<i>higher growth assumptions</i>
<i>Sustainability</i>	<i>8.0</i>	<i>8.6</i>	<i>-0.6</i>	<i>higher prices</i>
MLPs	6.1	5.7	+0.4	slightly higher yields
Gold Mining	5.3	7.9	-2.6	much higher prices
Gold (Metal)	4.8	2.3	+2.5	switched from real yield model to Kaufmann & Winters gold price model
Commodities	5.0	5.5	-0.5	assuming lower diversification return (higher correlations)

**10-year Geometric Expected Returns
Hedge Funds and Miscellaneous**

	2026 E(R) (%)	2025 E(R) (%)	Δ From 2025 (%)	Notes
Hedge Funds	3.8	4.2	-0.4	higher prices & lower yields
<i>Long-Short</i>	2.9	3.1	-0.2	<i>higher prices</i>
<i>Event Driven</i>	5.0	5.1	-0.1	<i>higher prices & lower yields</i>
<i>Global Macro</i>	4.4	4.5	-0.1	
<i>Trend Following</i>	3.5	3.4	+0.1	
<i>Fixed Income/L-S Credit</i>	4.1	4.9	-0.8	<i>lower yields and tighter spreads</i>
<i>Relative Value/Arbitrage</i>	4.0	4.9	-0.9	<i>tighter spreads</i>
RMS Aggregate	3.5	3.7	-0.2	
Long Vol	0.5	0.7	-0.2	
Insurance Linked Strategies	3.8	4.8	-1.0	lower yields
Alternative Risk Premia	5.2	5.2	0.0	
Bitcoin	5.7	2.9	+2.8	changed model to include CAPM approach in addition to tail model

Meketa Investment Group 2026 Annual Asset Study: Correlation Expectations

	Cash Equivalents	Investment Grade Corporate Bonds	Mortgaged Backed Securities	Long-term Gov. Bonds	CLOs	High Yield Bonds	Private Debt	Global Equity	Put Write	Private Equity	Core Private Real Estate	Value-Added Real Estate	Opp. Real Estate	Infra. (Private)	CTA Trend Following	RMS
Cash Equivalents	1.00															
Investment Grade Corporate Bonds	0.01	1.00														
Mortgaged Backed Securities	0.15	0.75	1.00													
Long-term Government Bonds	0.08	0.61	0.74	1.00												
CLOs	-0.03	0.44	0.06	-0.10	1.00											
High Yield Bonds	-0.08	0.66	0.35	-0.03	0.67	1.00										
Private Debt	0.04	0.50	0.16	-0.35	0.87	0.87	1.00									
Global Equity	-0.03	0.53	0.28	-0.07	0.54	0.80	0.73	1.00								
Put Write	-0.07	0.41	0.18	-0.12	0.54	0.74	0.58	0.86	1.00							
Private Equity	0.11	0.17	0.03	-0.10	0.63	0.66	0.72	0.91	0.74	1.00						
Core Private Real Estate	0.20	0.45	0.45	0.10	0.40	0.45	0.44	0.39	0.35	0.41	1.00					
Value-Added Real Estate	0.15	0.45	0.45	0.00	0.45	0.50	0.46	0.50	0.45	0.44	0.90	1.00				
Opportunistic Real Estate	0.10	0.40	0.40	-0.05	0.50	0.55	0.51	0.60	0.50	0.49	0.85	0.90	1.00			
Infrastructure (Private)	0.20	0.46	0.20	0.15	0.51	0.64	0.51	0.65	0.54	0.50	0.60	0.59	0.57	1.00		
CTA (Trend Following)	0.02	-0.02	-0.10	0.07	-0.12	-0.10	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	1.00	
RMS Diversifier Aggregate	-0.08	0.33	0.09	0.04	0.37	0.37	0.32	0.42	0.35	0.24	0.13	0.16	0.21	0.29	0.58	1.00

Equities

→ We use a fundamental model for equities that combine income and capital appreciation:

$$E(R) = \text{Dividend Yield} + \text{Price Return} + \text{Currency Effect}$$

$$\text{Price Return} = \text{Earnings Growth} + \text{Multiple Effect}$$

→ We use the current dividend yield on the respective index.¹

→ Our basis for earnings growth is a combination of real GDP growth, inflation, and exposure to foreign revenue sources.

- We adjust this using an estimate of what percentage of economic growth will translate to earnings growth.

→ We use a combination of valuation metrics to calculate the multiple effect.

- These include PE, PE10, and a form of the dividend discount model.

→ The models assume reversion to the mean or fair value.

→ We arrive at our preliminary 10-year assumption (in local currency).

$$\text{US Equity } E(R) = 1.2\% + [(1 + 6.4\%) \times (1 - 1.1\%) - 1] = 6.3\%$$

→ For non-US equities, we add the expected currency effect vs. the US Dollar to the local expected return.

¹ The source for dividend yields is S&P 500 for the US and MSCI for non-US equities. Note that in multiple places in this presentation, we display rounded values in the inputs, which may result in minor discrepancies in the results.

Equities: Earnings Growth

- For projected earnings growth, we add expected real GDP and expected inflation to arrive at nominal GDP.¹
 - The model is based on the theory that a region's companies will grow at roughly the same rate as its economy, as defined by GDP, over the long term.
- However, the amount of economic growth that translates to EPS growth has been quite different among markets historically.
 - This is due to a variety of factors, including the global footprint of companies, market composition, profitability, the level of interest rates, government policies, societal norms, and net issuance of shares.
- Therefore, we use an estimate of the percentage of GDP growth that will translate to EPS growth for each market.

	US	EAFE	EM	China	ACWI
Estimated % of Growth Translating to EPS	130	85	73	60	109

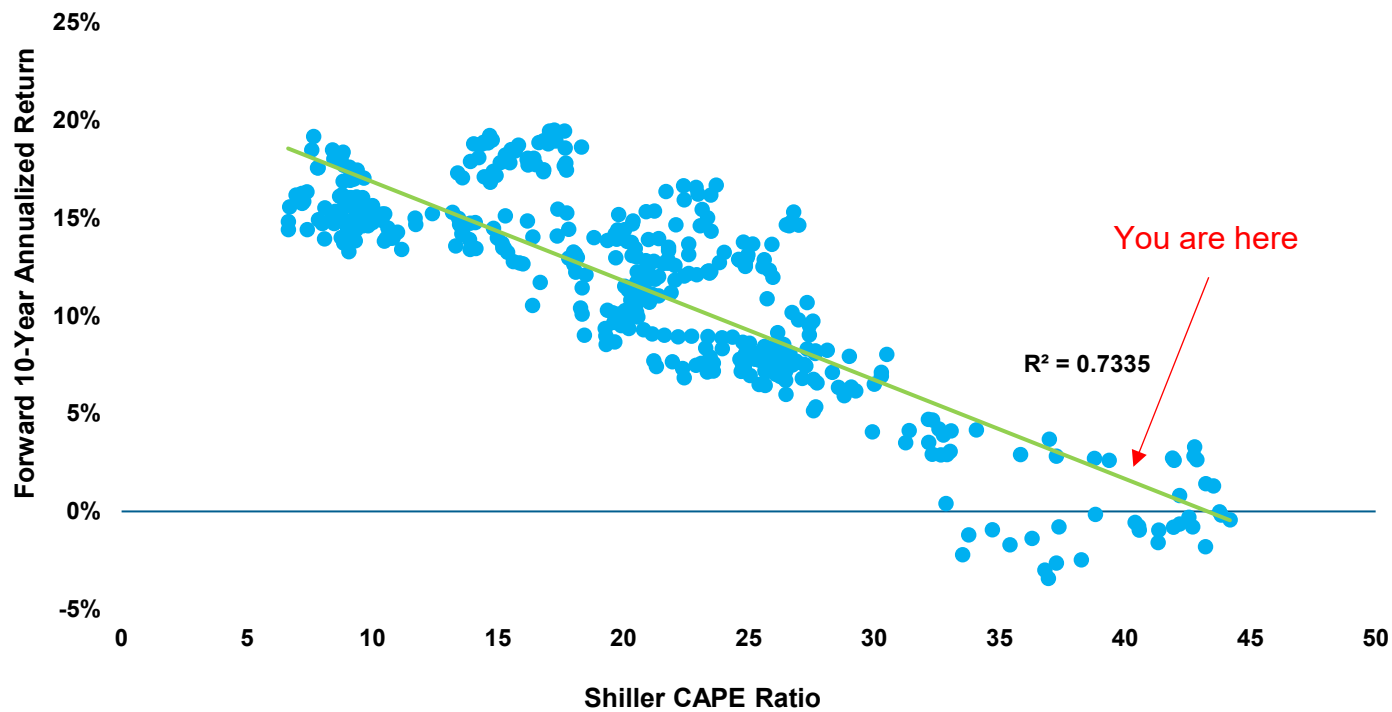
¹ We constructed 5-year GDP based on the IMF World Economic Outlook as of October 2025 and Oxford Economics projections, and then use Oxford Economics projections for the remaining five years to arrive at a ten-year forecast for each. We constructed inflation projections based on the IMF World Economic Outlook as of October 2025, historical averages and 5-year Inflation swaps maturing 5 years from now where available (e.g., US, Euro Area, UK).

Equities: Impact of Prices on Returns

→ Valuations have mattered, historically. Relative prices have been indicative of future equity returns.

- Higher prices have led to lower future returns, and vice versa.

US Equities: Shiller CAPE vs. Forward 10-Year Returns



Source: Robert Shiller, Yale University, and Meketa Investment Group. Data is based on monthly returns and Cyclically Adjusted P/E ratio on S&P 500 Index for the period from January 1980 through December 2025.

Equities: Valuation Model 1

- We use several models with different lenses on valuations for public equities.
- In model one, to calculate the price return, we estimate the fair value of the index in ten years.
 - We first calculate future earnings per share (EPS) by compounding current EPS¹ at our projected earnings growth rate.
 - We average the next ten years of projected EPS to arrive at an EPS 10 in ten years.

Index	US	EAFE	EM	EAFE Sm	EM Small	Frontier
Average EPS10 in 10 years	384.3	205.6	109.7	22.2	94.0	71.6

- We multiply EPS10 by our projected PE10 ratio to arrive at a ten-year price target.
 - We assume investors will pay slightly different ratios for earnings in different regions.¹

$$US\ Price\ Target = 3843 \times 28.3 = 10,861$$

- We divide this future price by the current price and then annualize the price change.

$$US\ Price\ Return = (10861 \div 6846)^{1/10} - 1 = 4.7\%$$

- We subtract the projected earnings growth from the price change to arrive at the multiple effect.

$$Multiple\ Effect_{Model\ 1} = 4.7\% - 6.4\% = -1.7\%$$

¹ We assume that PE10 reverts 75% of the way back to its historical median. We use the median PE10 for the trailing 20 years. Throughout this document, numbers may not sum due to rounding.

Equities: Valuation Model 2

→ In model 2, to calculate the price return, we estimate the fair value of the index in ten years.

→ We first calculate future EPS by multiplying current EPS by projected earnings growth.

$$US\ EPS = 269.3 \times (1 + 6.4\%)^{10} = 499.7$$

→ We multiply EPS by our projected PE ratio¹ to arrive at a ten-year price target.²

$$US\ Price\ Target = 499.7 \times 19.4 = 9,699$$

→ We divide this future price by the current price and then annualize the price change.

$$US\ Price\ Return = (9699 \div 6846)^{1/10} - 1 = 3.5\%$$

→ We subtract the projected earnings growth from the US price return to arrive at the multiple effect.

$$Multiple\ Effect_{Model\ 2} = 3.5\% - 6.4\% = -2.8\%$$

¹ We assume that PE reverts 75% of the way back to its historical median. We use a historical PE (trailing twelve months) that is consistent with the median for the past twenty years.

² Throughout this document, numbers may not sum due to rounding.

Equities: Valuation Models 3 and 4

- Our third and fourth equity models use a form of the dividend discount model (DDM).
- This is based on the premise that the level of interest rates affect current valuations when discounting future cash flows (or earnings).
- This time value of money concept can be quantified by using the DDM.
 - The DDM calculates a present value for the stock market based on interest rates.
- First, we determine what the implied cost of equity (i.e., discount rate) has been historically.
 - This is based on historical interest rates, growth rates, inflation, and prices.
- We then turn that into a “premium” over government bond rates that can be applied to the current level of interest rates to arrive at a new discount rate.

Equities: Valuation Models 3 and 4 (continued)

→ To calculate fair value, we use the Dividend Discount Model.

$$\text{Fair Value} = E \times (1 + G) \div (D - G)$$

- For earnings (E), we use EPS10 for model 3 and current EPS for model 4.
- For the growth rate (G), we use our projected earnings growth rate.
- For the discount rate (D), we add the current level of short-term interest rates to an expected premium over this rate.¹

$$\text{US Implied Discount Rate} = 3.7\% + 5.5\% = 9.2\%$$

→ The fair value can be calculated as:

$$\text{Fair Value}_{\text{Model 3}} = 179.5 \times (1 + 6.4\%) \div (9.2\% - 6.4\%) = 6,840$$

$$\text{Fair Value}_{\text{Model 4}} = 269.3 \times (1 + 6.4\%) \div (9.2\% - 6.4\%) = 10,259$$

→ We find the difference between fair value and current value, and we assume 75% reversion to fair value is achieved over a ten-year period.

$$\text{Multiplier Effect}_{\text{Model 3}} = 0.75 \times [(1 + (6839 - 6846) \div 6846)^{(1/10)} - 1] = 0.0\%$$

$$\text{Multiplier Effect}_{\text{Model 4}} = 0.75 \times [(1 + (10259 - 6846) \div 6846)^{(1/10)} - 1] = 3.1\%$$

¹ We use the historical discount rate as a starting point, but projected discount rates can vary. For example, in 2026 we are using discount rates slightly below the historical average with the exception of China.

Equities: Combined Impact of Equity Valuations

- Looking at multiple valuation metrics increases the confidence we have in our models.
 - This is especially true when different models point in opposing directions.
- Combining the four approaches also smooths out the changes from year to year.

Average Multiple Effect Based on the Valuation Models (per annum)

US Equities (%)	EAFE Equities (%)	EM Equities (%)	Global Equities (%)	China Equities (%)
-1.1	-0.7	-1.7	-1.0	-1.3

Source: Meketa analysis of MSCI and Bloomberg data.

Currency Effect

- For non-US equities (and all assets with non-USD exposure), we calculate an adjustment for the expected impact of currency movements.
 - We use a two-factor model that is based on PPP theory and IRP theory.
 - PPP posits that money will flow to the currency with lower cost of goods and services.¹
 - IRP posits that money will flow to the currency with the higher interest rate.²
 - For developed markets, we put 60% weight on IRP and 40% on PPP.
 - For emerging markets, we put 75% weight on PPP and 25% on IRP.
- We cap the currency adjustment at +/- 0.5% per annum, given the unpredictable nature of currency markets.

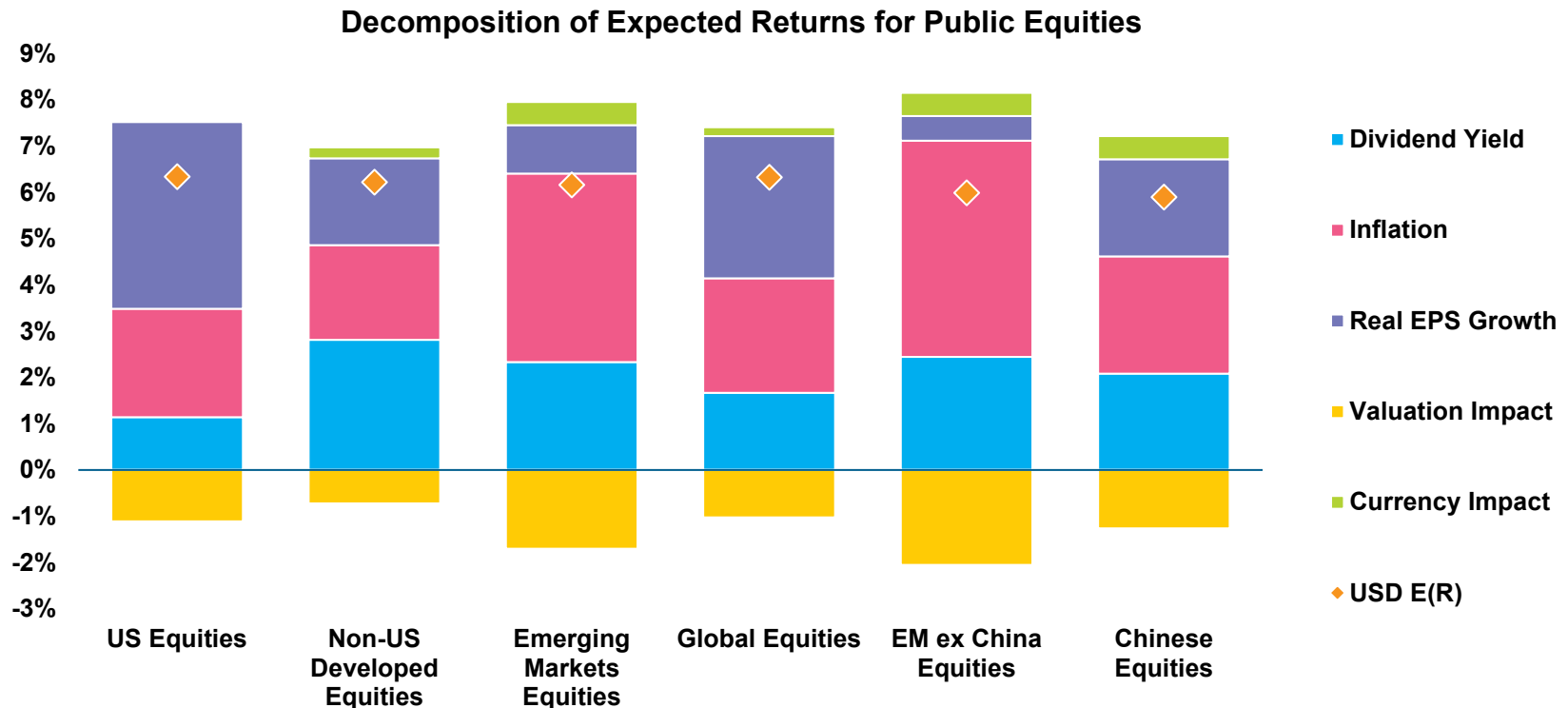
Market	PPP Impact (%)	IRP Impact (%)	Net Effect (%)	Capped Net Effect (%)
EAFE	2.3	-1.1	0.2	0.2
EM	7.0	0.7	5.4	0.5
Global	1.3	-0.2	0.2	0.2
China	3.5	-0.7	2.5	0.5

¹ Sources for PPP data: World Bank (PPP Conversion Factor) and The Economist (Big Mac Index).

² We use the central bank discount rate or equivalent for the major countries of each region (source: FRED).

Equities: Comparing Drivers of Expected Return

- Real EPS growth is the main driver of expected return for US equities.
 - Despite relatively low anticipated inflation, US equities also have the highest nominal EPS growth.
- The valuation headwind is expected to be the largest for emerging markets and EM ex-China.



Source: Meketa analysis of MSCI and Bloomberg data.

Equities: US Mid, Small, and Micro

- The models smaller cap stocks are similar to that used for the overall equity model.
- To calculate the price return, we estimate the fair value of the index in ten years. We do this using both price-earnings and price-book ratios.
- We calculate future EPS by looking at a similar ratio of historical earnings growth for each index vs. the Russell 1000 index.
 - We assume earnings will grow at the same rate for midcap, at 0.95x for small cap, and 0.9x for microcap (this is subjective and reflects have smaller stocks have switched from out-earning to under-earning large cap).
 - We multiply EPS by our projected PE ratio¹ to arrive at a ten-year price target.
- We take a similar approach for price-book, comparing current ratios to historical ratios.
 - Price-book can be particularly helpful for small and micro cap, as short-term earnings volatility can distort PE comparisons.
- We divide the future price by the current price and then annualize the price change.
- We add the price change to the dividend yield to arrive at the expected return.

¹ For the US, we use the median PE (trailing twelve months) for the longest available period. We assume a higher PE for mid, small, and micro that is consistent with their historical valuations relative to large cap. We assume reversion 75% back toward the historical median.

Bonds

- The short version for most investment grade bond models is: $E(R) = \text{current yield to worst}$.
- The longer version accounts for the expected term structure in the future, as well as credit risk.
 - If the average duration is roughly five years, we calculate the expected yield in five years.
 - The net effect tends to be minimal; for example, if rates rise, higher income in years 5 to 10 is offset by price declines in years 1 to 5.
- For cash, we use an average of the current rate and the rate suggested by the Taylor Rule (inputs are current and potential GDP, current and desired inflation).
- For TIPS, we add the real yield for the TIPS index to the expected Inflation rate.
- As with equities, we also make currency adjustments when necessary.
 - This impacts foreign and EM local currency debt.

Bonds: Credit

→ For anything with credit risk, we take into account our expected default and recovery rates.

	Inv. Grade Corporate (%)	Long Term Corporate (%)	Foreign Debt (%)	EM Debt (major) (%)	EM Debt (local) (%)	High Yield (%)	Bank Loans (%)
Default Rate	0.08	0.08	0.09	1.72	0.36	2.50	2.50
Loss Rate	50	50	50	50	50	45	40

→ As a guide, we use historical global default and recovery data for each asset class.

- When the composition of an asset class changes over time (e.g., for emerging market debt), we look at each rating bucket as it is currently weighted.

Private Credit

- For direct lending and asset based lending, we use a building blocks approach that is based on income and loss thereof.
- For income, we use the most recent yield and spread data available for the Lincoln Senior Debt Index.
 - We add an upfront fee (paid by the borrower) or original issue discount if applicable.
 - This usually ranges between 1% and 3%.
 - We incorporate default and recovery rates.
 - We use a default rate that is 1-2% higher than for bank loans.
 - While the data that is available on direct lending supports this level, we do not have access to long-term data on private credit defaults (e.g., that incorporates major default events like the GFC).
 - Where applicable, we add leverage and subtract the cost of borrowing.
 - We add an equity kicker (more applicable in asset based lending), adjusted for defaults.
 - Managers expect 2.5% to 5% return from warrants, co-invests or other equity structures.
 - We subtract estimated management fees and carried interest.

Private Credit: Aggregate

- For Special Situations Lending, we use a combination of models for capital solutions and more traditional distressed debt.
 - The capital solutions model resembles that for direct lending, but with higher equity kickers, coupons, and default rates.
 - The distressed debt model resembles that for public high yield bonds and is based on data for the Bloomberg US CCC and Ca-D indices.
 - It uses a much higher default rate than high yield bonds (often in the range of 20-35%).
 - We subtract estimated management fees and carried interest.
- For aggregate private credit, we take a weighted average based on a mix of the broad opportunity set and a typical client allocation to private debt.

Component	Weight (%)	10-Year E(R) (%)
Direct Lending	45	7.0
Asset Based Lending	30	7.9
Special Situations	25	8.9
Private Debt Composite	NA	7.8

Private Equity: Buyouts

- For Buyouts, we start with public equity expected returns.
- We add a premium or discount based on the pricing of buyouts relative to stocks.
 - We use the most recently available EV/EBITDA multiples from Preqin to provide an indication of valuations.
- We add a premium for control (e.g., for greater operational efficiencies) and leverage.
 - We assume leverage of 1.25x - 1.35x.
- We subtract borrowing costs and estimated fees, including carry.
 - We assume borrowing costs are consistent with the yield on bank loans.
- We also look at how closely valuations compared to price changes occurring in the public markets, noting that buyouts pricing often lags that of public equities.

Private Equity: VC and Growth Equity

- For Venture Capital (VC), we create a public market proxy that we can compare through time.
 - This composite is composed of: traditional technology, biotech, pharmaceuticals, life sciences, IT services, internet, AI, and clean tech and environmental stocks.
 - The weighting to each sector varies through time.
 - The data is an imperfect proxy and the correlation with future returns is not high.
 - Still, this proxy provides some indication of pricing relative to the broader market.
 - We also note any lag we observe between VC valuations and price changes for public markets.
 - We use this to make an assessment of what size the return premium should be relative to public markets.
- For Growth Equity, we infer a return that is between that of buyouts and venture capital.
 - The relative weightings place the return closer to that of VC than buyouts.
- For VC and growth equity, we subtract estimated fees, including carry.

Private Equity: Aggregate

→ For aggregate private equity, we take a weighted average based on a mix of the broad opportunity set and a typical client allocation to private equity.

Component	Weight (%)	10-Year E(R) (%)
Buyouts	65	8.6
Growth Equity	10	9.4
Venture Capital	25	9.8
Private Equity Composite	NA	9.0

Real Estate: Core

→ For Core Real Estate (RE), we use two models.

- The first model adds a premium to the most recently available value-weighted cap rate from NCREIF.
 - Core RE has historically returned approximately 1.3% more than its value-weighted cap rate at the start of the period over the subsequent ten years.
- The second model combines income with capital appreciation potential.
 - The income for core RE has historically been the cap rate minus 2-3% (for Cap Ex).
 - We assume income (NOI) grows at the rate of inflation.
 - We assume there is some measure of fair value for cap rates relative to bond yields.
 - We make a price adjustment based on the forward yield curve.
- We adjust for leverage, borrowing costs, and estimated fees.

Real Estate: Non-Core

- For non-core real estate, we start with historical premiums versus core RE.
 - This includes the effect of greater control, development, buying at distress, etc.
- We add a non-US component (e.g., premium for lower cap rates) and a currency effect.
 - We assume 10% to 30% of non-core commitments will be ex-US (with the majority in Europe).
- We lever the portfolio and then subtract the cost of borrowing.
 - We assume value-added leverage ranges 50-60% while opportunistic ranges 60-75%.
 - The cost of debt is higher for value added than core, and higher still for opportunistic.
- Finally, we subtract estimated management fees and carried interest.
- For high yield real estate debt, we use our high yield bond model.
 - We use the YTW on the Bloomberg CMBS BBB index and then add a “high yield” spread on top of this.
 - Data is sparse on default rates and spreads.
 - We are using a higher default rate than for high yield bonds.
 - We adjust for leverage, borrowing costs, and estimated fees.

Real Estate: Aggregate

→ To arrive at the aggregate private real estate assumption, we take a weighted average of our expectations for each of the four components.

- These reflect the weights of a typical client portfolio, balanced with the market opportunity set.

Component	Weight (%)	10-Year E(R) (%)
Core Private RE	55	5.8
Value-added RE	25	8.7
Opportunistic RE	10	9.8
High Yield RE Debt	10	8.5
Private Real Estate	NA	7.2

→ The aggregate real estate composite is 90% private real estate and 10% REITs.

Infrastructure: Core and Non-Core

- For private infrastructure, our model combines income and capital appreciation.
- For income, we use our best estimate of expected yield based on the funds that we track.
 - We assume a range of 4-5% for core and 2-4% for non-core.
- We assume asset prices grow at the rate of inflation or GDP growth, whichever is greater.
 - Inflation-linked assets often can pass along their costs, even if it may be at a lag.
- We add a premium or discount based on the pricing of unlisted infrastructure.
 - We use the most recently available EV/EBITDA transaction multiples from Macquarie to provide an indication of relative valuations.
- We add a control premium for non-core IS (as these more closely resemble buyouts).
- We lever the portfolios and then subtract the cost of borrowing.
 - We assume core is levered at 30%-45%, and non-core at 40%-65%.
 - We assume the cost of debt for non-core is much higher than for core, though below that for buyouts.
- Finally, we add any currency effect and subtract estimated management fees and carry.

Infrastructure: Aggregate

→ To arrive at the aggregate private infrastructure assumption, we take a weighted average of our expectations for each of the two components.

- These reflect the weights of a typical client portfolio, balanced with the market opportunity set.

Component	Weight (%)	10-Year E(R) (%)
Core Infrastructure	50	6.5
Non-Core Infrastructure	50	8.4
Private Infrastructure	NA	7.4

→ The aggregate infrastructure composite is 90% private infrastructure and 10% public infrastructure.

Hedge Funds

- To construct the hedge fund models, we use a variety of traditional and alternative betas:¹
 - Traditional betas include:
 - Equities, distressed debt, credit, commodities, bonds
 - Alternative betas include :
 - Carry trade, convert arb, currency, momentum
- We also add leverage (where appropriate) and subtract the cost of debt and estimated fees.
- For example, our long-short equity model is fairly straight forward.
 - We assume the average fund is 50-60% net long and has an equivalent beta to the global stock market.
 - We multiply this beta times our expected return for global equities, then add this to our cash expected return for the portion that is not invested.

$$\text{Gross } E(R) = 0.6 * 6.3\% + 0.4 * 2.8\% = 4.9\%$$

- We then subtract estimated management fees and carried interest to arrive at a net return.

¹ Note that we do not assume "alpha" for hedge funds nor any other asset class.

Risk Mitigating Strategies

- We include expectations for a Risk Mitigating Strategies (RMS) aggregate as well as for one of the potential underlying categories, RMS Diversifiers.
- The RMS Aggregate is composed of three categories that we refer to as first responders, second responders, and diversifiers.¹
 - The composition represents a typical client weight, though many clients use different allocations.

Composite	Long-Term Government Bonds	Long Volatility	CTAs (trend following)	RMS Diversifiers
RMS Aggregate	1/6th	1/6th	1/3rd	1/3rd

- The RMS Diversifiers Aggregate is composed of strategies that are designed to have a modestly positive expected return without being highly correlated with a broader (growth-driven) portfolio.
 - Again, the composition represents a typical client weight.

Composite	Global Macro (%)	Alternative Risk Premia (%)	Market Neutral (%)	Insurance Linked Strategies (%)	Relative Value (%)	Event Driven (%)
RMS Diversifiers	30	40	10	10	5	5

¹ Note that we combine long-term government bonds and long volatility strategies to form the "first responders" category.

Public versus Private Equity Valuation Data

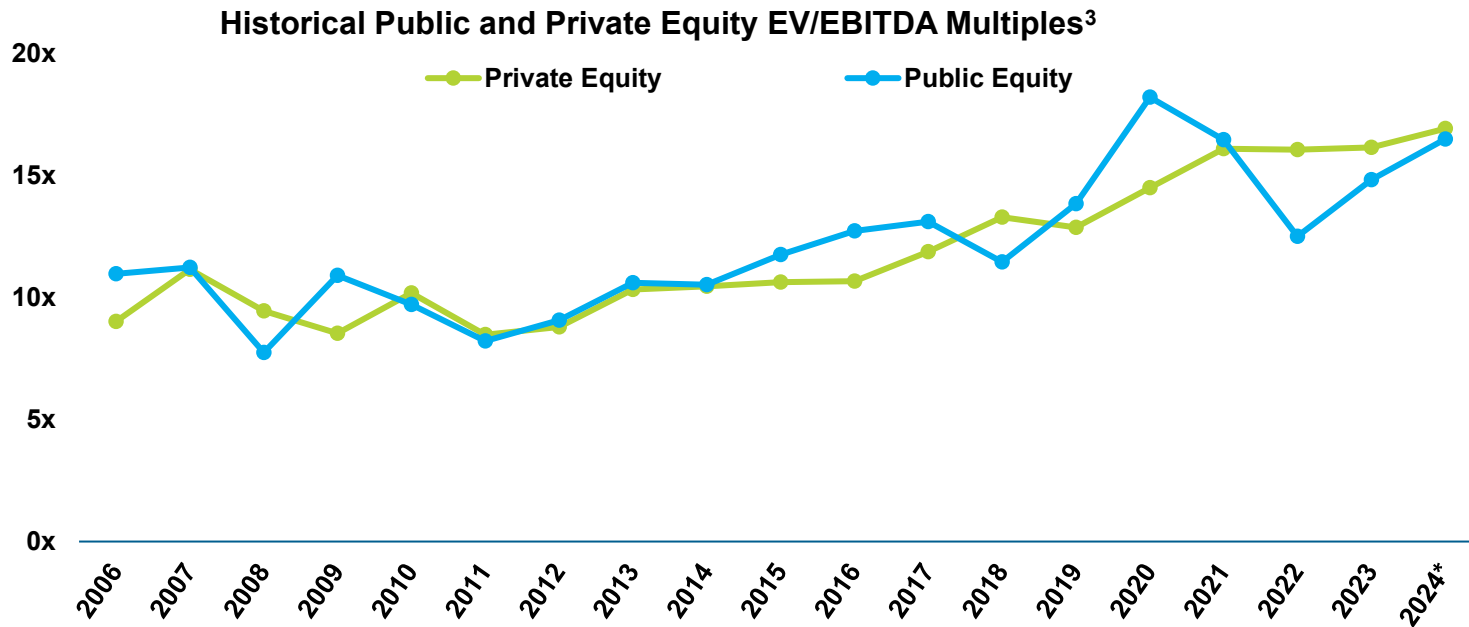
- Comparing valuations across public and private equity markets includes a number of structural challenges.
 - The primary challenge is private equity's shorter history and limited dataset.
- Another challenge is choosing a metric that is comparable across both public and private markets.
 - Common public market valuation metrics such as the p/e and p/b ratios are not available in private markets.
- The EV/EBITDA multiple, however, is available for both private and public equity data sets.¹
 - $EV/EBITDA = \text{Enterprise Value of a company} / \text{Earnings Before Interest, Taxes, Depreciation, and Amortization}$)²
- By incorporating measures of price and earnings, it serves as a reasonable metric for comparisons.

¹ EV/EBITDA is among the most common valuation metrics to be reported publicly or made available to data providers on private company transactions. This metrics is often viewed as the most relevant valuation metrics in buyout deals.

² EBITDA is fairly straight-forward accounting measure that is generally applied the same for both public and private markets. However, the definition of enterprise value is more elastic. See the Appendix for more information.

Historical Valuations

- Historically, the valuations for public and private equity have tended to move tightly together.
- Gaps tend to occur during significant market events such as the GFC and COVID Pandemic.
 - Valuations for buyouts followed a similar pattern as stocks, but on a lagged and smoother basis.¹
- The gap between public and private equity valuations peaked during the rate hiking cycle of 2022.²
 - They appear to have since evened out again.



¹ The GPs who own the companies typically do not mark their valuations down or up as quickly as can happen in the stock market. Price changes in private equity tend to be reflected on a lagged basis in reporting, sometimes taking as long as three quarters to reflect equivalent changes in public securities. The result is a “smoothing” of the returns experienced by private equity investors. Source: Meketa, “Private Equity Primer” 2022.

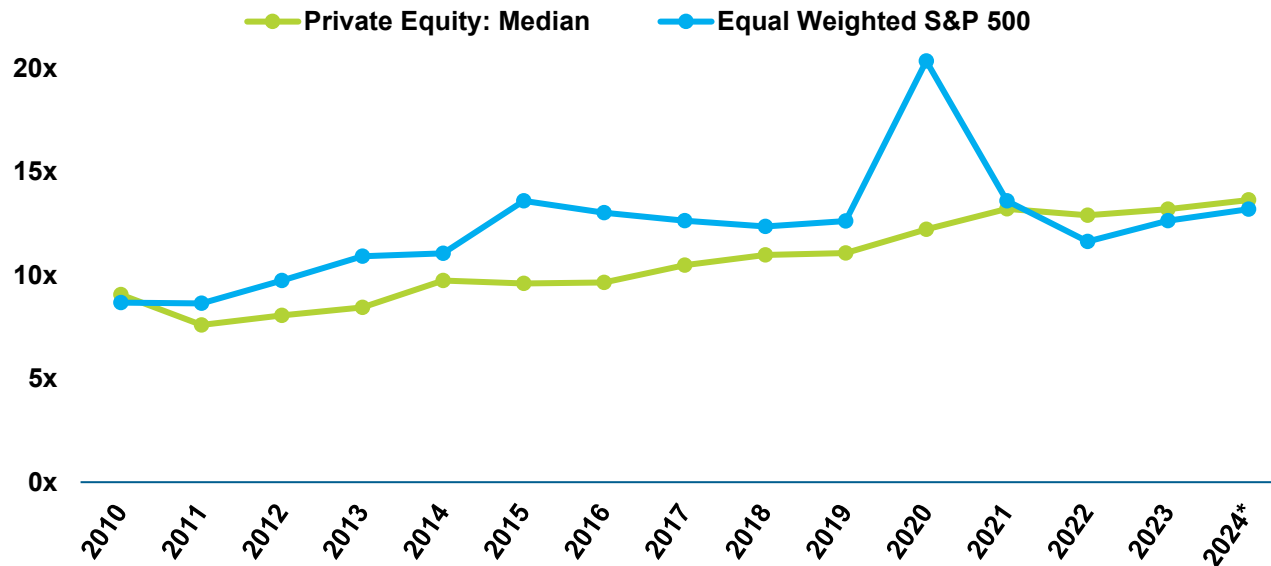
² Another factor that may partly explain the gaps between public and private market valuations during periods of market volatility is the fact that the private equity valuations reflect the mean over the course of the year, not a year-end metric.

³ Sources: Bloomberg as of 12/31/2024. Prequin as of 9/30/2024, pulled in March 2025. Public equity valuation is the S&P 500’s Current EV/Trailing 12-month EBITDA. Private equity valuation is the North American Buyout mean EV/EBITDA.

Historical Valuations (continued)

- Because mean valuations naturally weigh higher value stocks/deals more heavily, it may be helpful to analyze the data in a way that mitigates this skew.
- This chart compares the equal-weighted S&P 500 to private equity’s median EV/EBITDA.
- As expected, valuations for both public and private equity are lower.
- Importantly, the data points to a similar conclusion as when comparing mean valuation metrics.
 - Namely, valuations diverged during the pandemic and rate hike cycle, but appear to have since evened out.

Equal Weighted S&P 500 & Median Private Equity Valuations¹



¹ Sources: Bloomberg as of 12/31/2024. Preqin as of 9/30/2024, pulled in March 2025. Public equity valuation is the equal-weighted S&P 500’s Current EV/Trailing 12-month EBITDA. Private equity valuation is the North American Buyout median EV/EBITDA. Note: 2024* indicates that public equity is as of 12/31/2024 and private equity is as of 9/30/2024.

THIS REPORT (THE “REPORT”) HAS BEEN PREPARED FOR THE SOLE BENEFIT OF THE INTENDED RECIPIENT (THE “RECIPIENT”).

SIGNIFICANT EVENTS MAY OCCUR (OR HAVE OCCURRED) AFTER THE DATE OF THIS REPORT, AND IT IS NOT OUR FUNCTION OR RESPONSIBILITY TO UPDATE THIS REPORT. THE INFORMATION CONTAINED HEREIN, INCLUDING ANY OPINIONS OR RECOMMENDATIONS, REPRESENTS OUR GOOD FAITH VIEWS AS OF THE DATE OF THIS REPORT AND IS SUBJECT TO CHANGE AT ANY TIME. ALL INVESTMENTS INVOLVE RISK, AND THERE CAN BE NO GUARANTEE THAT THE STRATEGIES, TACTICS, AND METHODS DISCUSSED HERE WILL BE SUCCESSFUL.

THE INFORMATION USED TO PREPARE THIS REPORT MAY HAVE BEEN OBTAINED FROM INVESTMENT MANAGERS, CUSTODIANS, AND OTHER EXTERNAL SOURCES. SOME OF THIS REPORT MAY HAVE BEEN PRODUCED WITH THE ASSISTANCE OF ARTIFICIAL INTELLIGENCE (“AI”) TECHNOLOGY. WHILE WE HAVE EXERCISED REASONABLE CARE IN PREPARING THIS REPORT, WE CANNOT GUARANTEE THE ACCURACY, ADEQUACY, VALIDITY, RELIABILITY, AVAILABILITY, OR COMPLETENESS OF ANY INFORMATION CONTAINED HEREIN, WHETHER OBTAINED EXTERNALLY OR PRODUCED BY THE AI.

THE RECIPIENT SHOULD BE AWARE THAT THIS REPORT MAY INCLUDE AI-GENERATED CONTENT THAT MAY NOT HAVE CONSIDERED ALL RISK FACTORS. THE RECIPIENT IS ADVISED TO CONSULT WITH THEIR MEKETA ADVISOR OR ANOTHER PROFESSIONAL ADVISOR BEFORE MAKING ANY FINANCIAL DECISIONS OR TAKING ANY ACTION BASED ON THE CONTENT OF THIS REPORT. WE BELIEVE THE INFORMATION TO BE FACTUAL AND UP TO DATE BUT DO NOT ASSUME ANY RESPONSIBILITY FOR ERRORS OR OMISSIONS IN THE CONTENT PRODUCED. UNDER NO CIRCUMSTANCES SHALL WE BE LIABLE FOR ANY SPECIAL, DIRECT, INDIRECT, CONSEQUENTIAL, OR INCIDENTAL DAMAGES OR ANY DAMAGES WHATSOEVER, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE, OR OTHER TORT, ARISING OUT OF OR IN CONNECTION WITH THE USE OF THIS CONTENT. IT IS IMPORTANT FOR THE RECIPIENT TO CRITICALLY EVALUATE THE INFORMATION PROVIDED.

CERTAIN INFORMATION CONTAINED IN THIS REPORT MAY CONSTITUTE “FORWARD-LOOKING STATEMENTS,” WHICH CAN BE IDENTIFIED BY THE USE OF TERMINOLOGY SUCH AS “MAY,” “WILL,” “SHOULD,” “EXPECT,” “AIM,” “ANTICIPATE,” “TARGET,” “PROJECT,” “ESTIMATE,” “INTEND,” “CONTINUE,” OR “BELIEVE,” OR THE NEGATIVES THEREOF OR OTHER VARIATIONS THEREON OR COMPARABLE TERMINOLOGY. ANY FORWARD-LOOKING STATEMENTS, FORECASTS, PROJECTIONS, VALUATIONS, OR RESULTS IN THIS REPORT ARE BASED UPON CURRENT ASSUMPTIONS. CHANGES TO ANY ASSUMPTIONS MAY HAVE A MATERIAL IMPACT ON FORWARD-LOOKING STATEMENTS, FORECASTS, PROJECTIONS, VALUATIONS, OR RESULTS. ACTUAL RESULTS MAY THEREFORE BE MATERIALLY DIFFERENT FROM ANY FORECASTS, PROJECTIONS, VALUATIONS, OR RESULTS IN THIS REPORT.

PERFORMANCE DATA CONTAINED HEREIN REPRESENT PAST PERFORMANCE. PAST PERFORMANCE IS NO GUARANTEE OF FUTURE RESULTS.