



Spring 2026

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PAPERS Spring Forum Conference Coming Soon

The PAPERS Education Committee and staff are busy developing topics, engaging speakers and firming up plans for a fabulous agenda at the annual Spring Forum, scheduled to take place at the Harrisburg Hilton, May 27-28, 2026.

Registration opens March 15th for this conference, the premier public employee pension system event in Pennsylvania, providing an essential platform for trustees, administrators, and industry professionals to gain insights, exchange ideas, and network with peers.

Key Topics:

- *From Policy to Practice: IRS Changes & the Future of Public Pensions*
- *Pennsylvania Pension Pulse: A 2026 Legislative Update*
- *Compliance & Administration Unlocked: Best Practices*
- *Cybersecurity 2026: Defending Against a Borderless, AI-Drive Threat*
- *Cost Efficiency, Governance and Fiduciary Excellence*
- *Active, Passive and Everything in Between?*
- *The Golden Age of Behavioral Biases*
- *Brick by Brick: Investing in the Future of Housing*
- *AI Adoption: The Macro Shock of the Decade*

See [Page 2](#) for more details about each of these presentation topics.

Whether you're a trustee, administrator, or service provider, this event will offer valuable knowledge and tools to help you address the challenges and opportunities facing public pension funds.

Who Should Attend:

- Pension Trustees, Plan Administrators, Investment Professionals
- Consultants, Actuaries, Attorneys
- Service Providers to Public Employee Retirement Systems

Registration is now easier than ever by using PAPERS' new on-line process which may be accessed beginning 3/15/2026 at: <https://pa-pers.org/conferences>. Early Bird registration and hotel room conference rates are in effect through 11:59 p.m. on May 4th.

There are two ways to book overnight lodging at the Hilton at the special \$169/night room rate (pending availability of remaining rooms):

- **On-line:** use the link <https://group.hilton.com/bnsbth>
- **By Phone:** Call 717-233- 6000, choose **Option1** and provide **group code 966**

**Upcoming
Conferences**
@ Harrisburg Hilton Hotel

Spring Forum
May 27-28, 2026
(Wednesday-Thursday)

Fall Workshop
Nov. 18-19, 2026
(Wednesday-Thursday)

Current PAPERS Associate and Affiliate Member firms may become a corporate sponsor for either or both conferences.

Choose from one of three levels of sponsorship:

- **Platinum - \$6,000**
- **Gold - \$4,000**
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Details may be found under **Become a Sponsor** on the PAPERS website or by calling Karen Deklinski at 717-979-5788.

PAPERS 2026 Forum Tentative Agenda Topics

From Policy to Practice: IRS Changes and the Future of Public Pensions

A timely and practical session breaking down the latest guidance from the Internal Revenue Service and what it means for compliance, governance, and long-term sustainability in public pension systems.

Pennsylvania Pension Pulse: A 2026 Legislative Update

An inside look at the latest pension legislation in the Pennsylvania and what it means for public plans, governance, and fiscal strategy.

Compliance & Administration Unlocked: Best Practices That Protect and Perform

A practical, forward-focused session on proven strategies that strengthen oversight, streamline operations, and keep your organization confidently compliant.

Cybersecurity 2026: Defending Against a Borderless, AI-Driven Threat Landscape

An executive-level presentation on the evolving global threat environment, emerging industry-specific risks, strategies to reduce breach impact, and how AI-accelerated attacks are reshaping modern cyber defense.

Cost Efficiency, Governance, and Fiduciary Excellence

This session explains how a Total Cost of Ownership (TCO) framework looks beyond management fees to uncover cost drivers across the entire investment value chain. Participants will learn how integrating TCO into governance practices strengthens oversight, improves net returns, and helps trustees fulfill their fiduciary responsibilities with confidence.

Active, Passive and Everything in Between?

This session explores how to evaluate active and passive equity managers, what truly drives performance, and the often-overlooked cost of taking risk. We'll examine why passive strategies have outperformed many active managers since 2010—and what that means for building a smarter, more cost-effective portfolio.

The Golden Age of Behavioral Biases: How Psychology drives markets and fuels extremes.

This session examines how behavioral biases shapes market cycles, investment outcomes, and everyday decision making. It challenges the assumptions that fundamentals alone drive markets and shows how psychology fuels booms and busts. You will get a framework to think more probabilistically and navigate uncertainty better with greater discipline and make stronger decisions

Brick by Brick: Investing in the Future of Housing

Despite years of headlines warning about a national housing shortage, many local markets are facing pockets of oversupply. How can both be true? This session explores the demographic shifts, affordability pressures, and migration trends reshaping housing demand across the country. We'll also examine how technology, evolving consumer preferences, and declining home affordability are accelerating growth and innovation in the for-rent sector — and what it means for real estate investors looking ahead.

AI Adoption: The Macro Shock of the Decade

In a short period, AI (artificial intelligence) has advanced from novelty to an integral part of workflows, often matching or surpassing human performance in areas such as image classification, algorithm design, and data analysis.

From the PAPERS Board President



Happy New Year 2026!

It is my hope that everyone and their families had a joyous, healthy holiday season.

I want to thank Karen, Doug and Lori for a great job on the November Forum. Also, thanks to Bill Rubin for filling

in during my unexpected absence. Thanks to Jennifer Mills and the Education Committee for selecting informative topic for the Forum, to the presenters for their insights and talents and a special thank you to our Sponsors, without whose support we could conduct the forums.

The Education Committee is already working hard planning session presentations for the May Forum.

As the Pension landscape is changing every day in Washington, a educated Pension Plan Trustee is vital to acknowledge any changes effecting their respective Pension Plans.

PAPERS primary mission is Trustee Education, something we do very well. There are many plans out there that I believe could benefit from our Trustee Education. All they need is to be asked to give a try. Feel free to contact Karen or myself to follow up with any plans you may speak to about PAPERS.

Have a great rest of winter and spring and see everyone in Harrisburg in May.

Bob Mettley

PAPERS Membership Categories

- **Participating** (\$150/year) - *Public employee retirement systems (pension funds)*
- **Associate** (\$1,500/year) - *Corporate providers of legal and investment services to pension plans*
- **Affiliate** (\$750/year) - *Corporate providers of other services, exclusive of legal and investment services, to pension funds.*
- **Sustaining** (\$75/year) - *Individual membership open only to those persons with an interest in public pensions but not affiliated with an organization which qualifies for group membership pin any other category above*

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Then and Now: Tracking Progress in the New Real Estate Cycle

By: Sabrina Unger, American Realty Advisors

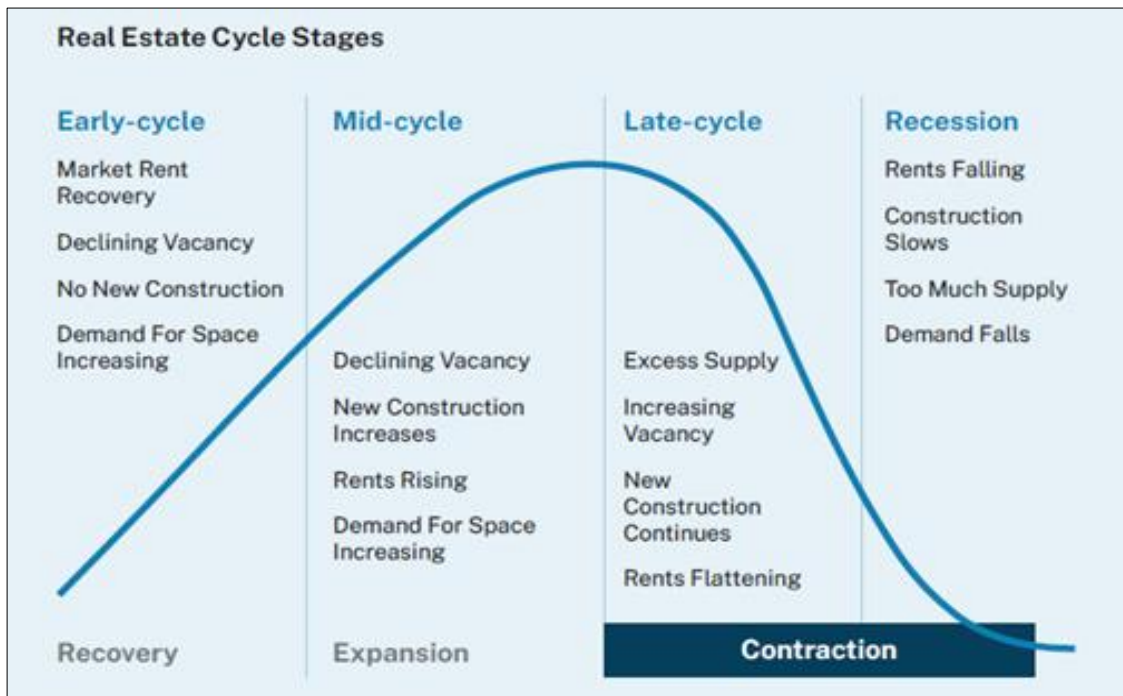


Sabrina Unger, Managing Director, is the Head of Research & Strategy at American Realty Advisors and is responsible for leading the firm's research initiatives and developing investment analysis in support of new acquisitions and strategy implementation, as well as serving as a member of the firm's Investment Committee. She has been published in numerous leading industry publications, is chair of the ULI Real Estate Research Forum and was named a Woman of Influence by GlobeSt Real Estate Forum. She holds a bachelor's degree from SIU-Carbondale and a master's degree from DePaul University, and has completed certificate coursework at both NYU and the London School of Economics.

Eighteen months ago, property markets were emerging from one of the most challenging periods in recent memory. Transaction activity was muted, pricing discovery was uneven, and confidence remained fragile—but early signs of improvement were beginning to take shape beneath the surface.

Today, those early signals offer a clear point of comparison, helping frame how market conditions have progressed. They also help explain why today's environment increasingly supports renewed investment in private real estate, supported by a generally stable macroeconomic footing that could enable continued improvement across the real estate asset class.

Then: Cycle fundamentals looked to be bottoming.



Now: Fundamentals in most sectors are firmly in the “Early Cycle” phase.

- Development pipelines have thinned; Apartment and industrial development pipelines are down over 50% from peak (53.2% and 52.2%, respectively).¹
- Rents are stabilizing and beginning to find their footing.
- Fundamental improvements are supporting the turnaround in market confidence and returns.

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¹ Data is from CoStar as of Q3 2025. Peak was Q1 2021 for apartments and Q3 2022 for industrial.

Then and Now.... (Continued from Page 4)

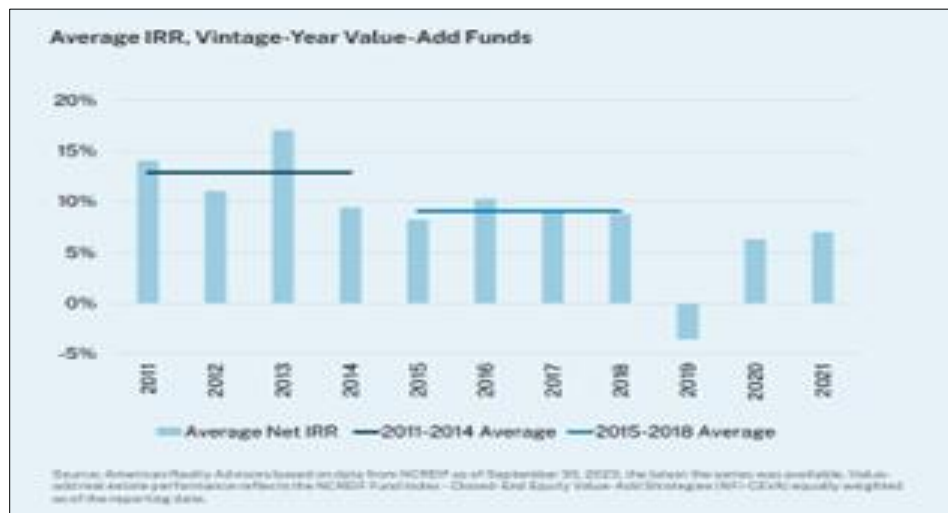
Then: Liquidity and pricing measures were still constrained.



Now: Liquidity has returned and pricing is normalizing.

- Transaction volumes have increased year over year for six consecutive quarters.
- Year-to-date volume through September (\$352.9 billion) is the highest same nine-month period since 2022.
- Nearly all recovery metrics have moved to normal territory; only bond spreads remain outside normal bounds.
- CMBS issuance is healthy, and bank lending has become less restrictive, supporting further improvement in performance.

Then: Investing earlier in recoveries has been better than waiting.



Now: Returns have been positive for five consecutive quarters.

- Returns turned positive in Q3 2024 after seven negative quarters.²
- Unlevered returns through Q3 2025 confirm we are firmly in the early-cycle investment window.³
- Values remain down ~19% from recent peak, offering compelling entry discounts.⁴
- Investors can benefit from expected recovery upside by acting now.

What should investors focus on in commercial real estate for 2026?

With many hallmarks of recovery now firmly emerging, the early stages of this cycle offering promising conditions for proactive investors. **The foundation for a functional, steady recovery is in place, and real estate markets appear to reflect that shift more fully.** Those considering entry may benefit from attractive pricing, gradually improving fundamentals, and a supportive capital environment. While each cycle unfolds differently, current trends suggest that early action could position investors well for the next phase of growth.

² Source: Expanded NCREIF Property Index as of Q3 2025.

³ Source: Expanded NCREIF Property Index as of Q3 2025.

⁴ Current values compared to peak reflect difference in appreciation index values for the Expanded NCREIF Property Index, with peak recorded in Q2 2022 and current values as of Q3 2025.

Scaling the Contribution Cliff:

Managing Cashflows in a New Era for Public Pensions

Submitted by Insight Investment, a BNY affiliate

Public pension plans have traditionally relied on contributions to help fund benefit payments and administrative expenses. As funding levels improve, these contributions often decline – and in some cases end – due to actuarial funding policies. While this reflects stronger balance sheets, it creates a structural challenge: liquidity needs continue, even as incoming cashflows fall.

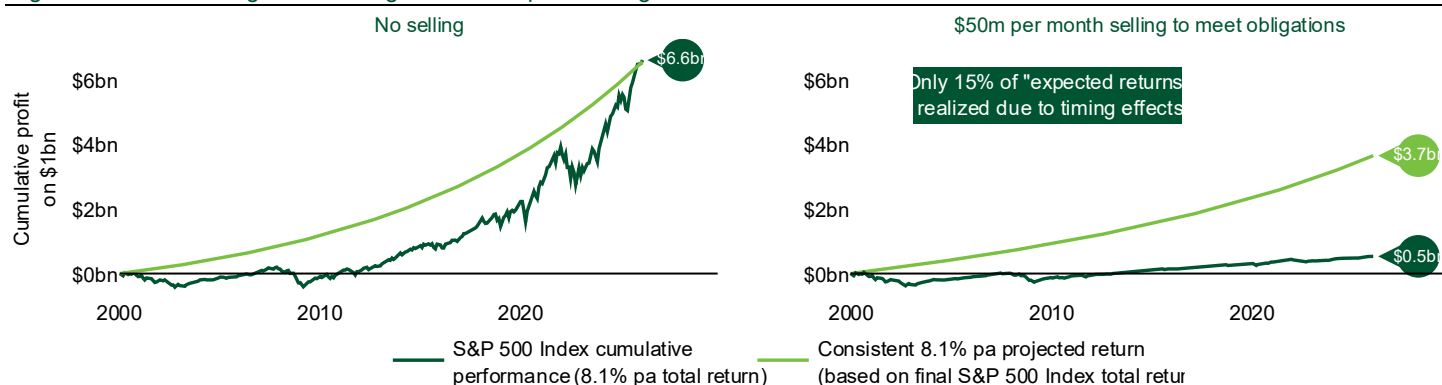
This shift is occurring alongside increased allocations to illiquid assets and a market environment in which the traditional relationship between equities and bonds is less reliable than in past decades. Together, these dynamics are reshaping liquidity management for public plans.

Understanding the contribution cliff

As contributions decline, plans increasingly rely on asset sales to meet benefit obligations. When those sales occur during market downturns, they can erode long-term wealth – a risk known as sequencing risk. For example, a \$1 billion equity portfolio forced to sell \$50 million per year during weak early-2000s returns, would have ended up with only 15% of the wealth of a comparable portfolio with no withdrawals (Figure 1).

Meanwhile, expanded allocations to private equity, real estate, private credit, and infrastructure bring their own constraints. Illiquid assets cannot be easily sold to raise cash, and secondary-market transactions may require meaningful discounts. This combination – shrinking contributions and rising illiquidity – makes it more difficult to manage negative cashflows without impacting long-term investment goals.

Figure 1: Forced selling at the wrong time can impair asset growth⁵



A liability-aware approach to liquidity

One potential approach is to structure fixed-income portfolios using liability-aware and cashflow-matching principles. Because bond coupons and principal payments are contractually defined, portfolios can be built to align with projected benefits, administrative expenses, and other cash needs. This may help plans:

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⁵ S&P 500 Index total returns for period 12/31/1999 – 01/31/2026. Source: Bloomberg, Insight. For illustrative purposes only. The quoted benchmark does not reflect deductions for fees, expenses or taxes. The benchmark is unmanaged and does not reflect actual trading. There could be material factors relevant to any such comparison such as differences in the volatility, and regulatory and legal restrictions between the index shown and the strategy. Investors cannot invest directly in any index.

Scaling the Contribution Cliff.... (Continued from Page 6)

- Reduce reliance on asset sales during market stress
- Improve predictability of cashflows
- Support return-seeking allocations in illiquid markets
- Strengthen funded-status and contribution stability over time

These portfolios can be customized across government, corporate, structured, and municipal bonds – with diversification across geographies – to help manage credit risk and pursue attractive yields while maintaining liquidity.

Why this matters for stakeholders

A more resilient liquidity structure may help meet a range of stakeholder objectives. Retirees and employees may benefit from improved benefit security. Policymakers and taxpayers may gain greater contribution stability. Rating agencies and bondholders may see clearer alignment between asset cashflows and liabilities. Investment teams may also gain flexibility to maintain long-term strategies without pressure to sell assets at inopportune times.

Find out more: Inquiries@insightinvestment.com

Full article and disclosures:

[Insight Investment - Scaling the Contribution Cliff Cashflow Solutions for Public Pensions](#)

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The Quality Paradox: Losing The Battle, Winning The War

By: *Mark Roach and Mario Tufano, CS McKee*

	<p>Mark Roach Director, Small & Micro Cap Equities B.A in Business, Baldwin Wallace College MBA, University of Chicago Booth School</p>	<p>Mario Tufano, CFA Sr. Portfolio Manager, Small Cap Equities B.S. In Finance, Penn State University</p>	
<p>Mr. Roach and Mr. Tufano both manage CS McKee's Small Cap Value and SMID Core products.</p>			

Financial markets frequently move in cycles characterized by discipline and madness. From the Nifty Fifty era, to the dot-com bubble, to the 2020–2021 stimulus rally, euphoric phases have repeatedly rewarded speculation while fundamentals temporarily lost relevance. Each of these phases rewards speculators and punishes those obsessing over fundamentals, until it doesn't. Eventually, the party ends and quality and price matter again.

We appear to be in one of those transitions now. After a decade-plus of easy money, markets are adjusting to higher inflation and rates. But the shift isn't clean. While fundamentals matter in the long-term, narratives and momentum can still influence short-term performance. This effect is particularly seen in small caps where risk appetite runs hottest.

Everyone knows quality when they see it, but pinning it down is harder. Research like AQR's "Quality vs. Junk" framework quantifies it with the following metrics: profitability, stable earnings, reasonable leverage, and disciplined capital allocation. Across full market cycles, quality wins on a risk-adjusted basis. But during speculative runs while everyone chases the latest narratives as if they were lottery tickets? It gets left behind.

Figure 1: Junk Back in Vogue



Source: CS McKee; FactSet - 12/31/25

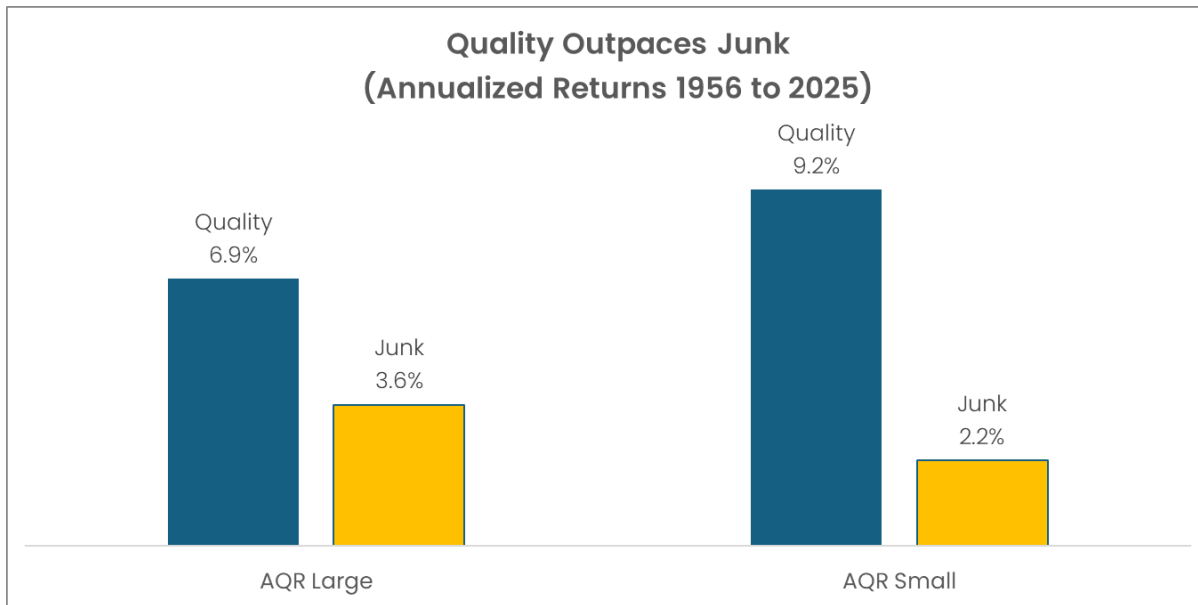
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The Quality Paradox... (Continued from Page 8)

2025 was a textbook example as junk topped quality across the board. Through November, low-quality small caps were up 21% versus 13% for high-quality, before leveling out a bit by year-end (18% vs. 14%). We've seen this movie before. When investors fall in love with "optionality" and ignore current fundamentals, neither value nor quality provides much protection.

These dislocations are frustrating to live through, but they're also predictable. When the speculation burns out and capital gets pickier, quality businesses reprice higher relative to the junk that's been leading the charge.

Figure 2: Despite periodic junk rallies, quality wins over the long haul



Source: AQR; annualized returns in excess of T-bills - 10/31/25

Zoom out and the picture changes completely. Since 1956, quality small caps returned 9.2% annually versus 2.2% for junk, the results are not even close. Quality doesn't win by dodging every downturn; it wins by losing less and compounding steadily when markets recover. The gap is notable everywhere but widest in small caps, where the difference between durable businesses and vulnerable ones matters most.

Eugene Fama said efficient markets price in all available information. While generally true, markets are also brutally efficient at pricing collective psychology. Right now we're in one of those moments where sentiment trumps fundamentals. History says these periods can last longer than seems reasonable, but they end abruptly when the narrative breaks and capital discipline returns.

While early signs suggest the current junk rally might be moderating, transitions are rarely linear. When the turn comes, it typically happens fast. Sticking with quality isn't about calling the exact inflection point, it's about being positioned when it arrives! Especially now, with higher rates, tighter liquidity, and growing intolerance for businesses that can't stand on their own.

*Updated and translated from "Is Quality Investing Back "En Vogue" by Mario Tufano-CFA and Mark Roach."
Translation by Jason Thon.*

Nothing in this article represents a recommendation to buy or sell any particular security. Investors should consult their own investment adviser to determine whether a particular investment or strategy is appropriate for their specific situation.

A road less traveled, in bonds:

Why we look for exposure beyond the index



By Chengjun (Chris) Wu, CFA, Federated Hermes
Vice President, Senior Portfolio Manager

Government bonds, investment grade corporates, high yield—these are the usual suspects of the bond universe. But our view is that if you're only sticking to the index, you're missing out on a wealth of opportunities that rarely make the headlines.

Spreads across many traditional sectors have narrowed significantly. For example, even after recent widening, investment-grade corporate spreads remain tight, at 82 basis points (bps), leaving limited room for further compression. By comparison, the average over the past 10 years has been close to 120 bps. If there was ever a time to look off the beaten path, it's now. In contrast to the bulk of fixed income, many sectors outside the index are offering up attractive yields—just when we need them most.

Two sectors that we like right now are agency collateralized mortgage obligation (CMO) floaters and trade finance. With regard to agency CMO floaters, spreads are currently wide, though reinvestment risk may be elevated. Trade finance, for its part, can offer yields of 200 bps or more above the Secured Overnight Financing Rate (SOFR) along with low correlations, but liquidity is a constraint. Two sectors on which we are less sanguine are prime jumbo and single-family rentals, where valuations look stretched.

Of course, it's not all smooth sailing. We've seen some idiosyncratic credit events—Tricolor, First Brands, a few regional banks. But these have been isolated, not systemic. Care is required when navigating these waters, ensuring we're not chasing yield, but assessing return potential relative to risk with discipline.

The current economic backdrop is not one-size-fits-all. Instead, it's "K-shaped," with an upper, more-affluent branch and a lower, less-affluent branch. Higher-income consumers are still spending, which bodes well for prime credit. As for subprime, that's a different story—those borrowers are feeling the pinch of inflation, and we believe we may see some spread widening there. But unless we hit a real rough patch in the labor or equity markets, I don't expect trouble to spill over into prime. In fact, I'm optimistic: supportive policies, easing trade tensions, and the AI investment boom all point to continued growth.

In a world where the index is offering less, we believe it makes sense to consider opportunities beyond the benchmark. By embracing out-of-index sectors, we're seeking to build more resilient, more dynamic portfolios for our clients. So, here's to looking beyond the index. The road less traveled might just be where the best risk/return opportunities are hiding.

DISCLOSURES

Views are as of January 28, 2026 and are subject to change based on market conditions and other factors. These views should not be construed as a recommendation for any specific security or sector. Bond prices are sensitive to changes in interest rates, and a rise in interest rates can cause a decline in their prices. High-yield, lower-rated securities generally entail greater market, credit, and liquidity risk than investment-grade securities and may include higher volatility and higher risk of default. Bond credit ratings measure the risk that a security will default. Credit ratings of A or better are considered to be high credit quality; credit ratings of BBB are good credit quality and the lowest category of investment grade; credit ratings of BB and below are lower-rated securities; and credit ratings of CCC or below have high default risk. The value of some mortgage-backed securities may be particularly sensitive to changes in prevailing interest rates, and although the securities are generally supported by some form of government or private insurance, there is no assurance that private guarantors or insurers will meet their obligations. Variable and floating-rate loans and securities generally are less sensitive to interest rate changes but may decline in value if their interest rates do not rise as much or as quickly as interest rates in general.

Conversely, variable and floating-rate loans and securities generally will not increase in value as much as fixed-rate debt instruments if interest rates decline. Investments in trade finance-related instruments may entail credit, liquidity, currency, and market risks in addition to other risks, such as the risk of investing in foreign securities and emerging market securities. Secured Overnight Financing Rate (SOFR): a broad measure of the cost of borrowing cash that is collateralized by U.S. Treasury securities. The New York Fed publishes SOFR on a daily basis. The spread is the difference between the yield of a security versus the yield of a United States Treasury security with a comparable average life. Diversification does not assure a profit nor protect against loss.

Past performance is no guarantee of future results.

Issued and approved by Federated Investment Management Company 52173 (2/26)

Solving for 2026

By: JEFFREY BLAZEK, CFA, Neuberger Berman

Five Investment Themes for 2026

At the close of 2025, Neuberger's investment leaders gathered to identify the key investment trends on the horizon. In *Solving for 2026*, we share their insights on the evolving macroeconomic environment and their expectations for equities, fixed income and private markets— distilled into five key themes for investors as they consider risk and opportunity in the New Year.

1. Policy Crosscurrents: Expect Divergence in Monetary and Fiscal Approaches

Policymaking is being complicated by an unusual combination of economic factors: AI productivity gains are driving growth while unemployment faces a slow grind higher. For the Fed, and other data-dependent central banks observing similar trends, the pace and extent of easing will be in question as the year plays out.

Investment Spotlight: Bullish for equities in the U.S. and Japan; cautious on Europe; positive for longer rates.

2. AI Is in the Driver's Seat

The AI investment megatrend is driving capex, inflation, labor markets and asset prices, with policymakers responding reactively as countries seek to establish dominance. **Investment Spotlight:** A broadening investment set means there is an AI opportunity beyond the U.S. and China; the prospect of greater market volatility given areas of frothiness also argues for diversification.

3. Fixed Income: The Worst Is Over for Long Rates

Current yields appear to be reflecting the known risks around fiscal overreach and debt sustainability, suggesting that the worst may be over for long-term interest rates. In credit, heightened idiosyncratic risk may continue heading into 2026, as the credit cycle matures and AI creates further disruption. **Investment Spotlight:** As the Fed and other central banks adopt a more dovish bias, consider opportunities further out on the curve, pairing shorter and longer duration assets and taking selective credit exposure.

4. Equity: AI Is a Double-Edged Sword

The opportunity in AI is real, but so is the risk. The accelerating AI rollout in more traditional sectors, from health care to financial services, will add efficiencies and enhance margins beyond mega-cap tech, supporting broadening of investment and earnings growth. **Investment Spotlight:** AI will likely drive an extraordinary process of "creative destruction" for companies and industries, requiring selectivity in investment choices. Focus on companies with durable returns on their AI spending and implementation strategies.

5. Private Markets: Seismic Shifts Take Shape

Although dealmaking continues to pick up, it may take several years to work through the backlog of companies looking for exits. This creates opportunities for providers of liquidity to private equity sponsors and their limited partners. Secondaries, capital solutions and equity co-investment all have potentially attractive, multiyear opportunities. **Investment Spotlight:** In private equity, focus on liquidity providers to top-tier sponsors via midlife co-investments, GP-led continuation funds and custom hybrid capital solutions.

Link to entire article here: [Solving for 2026](#)



Jeff Blazek, CFA and Managing Director, is Multi-Asset Co-Chief Investment Officer. Jeff joined Neuberger Berman in 2024 and, along with Multi-Asset Co-CIO, Erik Knutzen, is responsible for co-leading the firm's multi-asset investment activity, driving portfolio construction and developing investment outlooks. He serves as co-chair of the firm's Asset Allocation Committee and Public Private Investment Committee, and he is also a member of the Investment Risk Committee. Previously, Jeff spent over 12 years at Cambridge Associates, having founded and led the firm's New York City office, and serving as co-leader of the Endowment & Foundation practice and as Head of the Healthcare practice. Jeff has also worked in-house at two investment offices: Managing Director at New York-Presbyterian Hospital for three years, and Portfolio Manager at Teacher Retirement System of Texas for five years. Jeff has over 26 years of investment experience. Jeff holds a Bachelor of Business Administration and Master of Professional Accounting from University of Texas at Austin, and he is a CFA Charterholder. Jeff serves on the BBA Advisory Board for UT's McComb School of Business.

H1 2026 Sector Outlook: Energy Infrastructure Credit

By: Don Dimitrievich, Nuveen



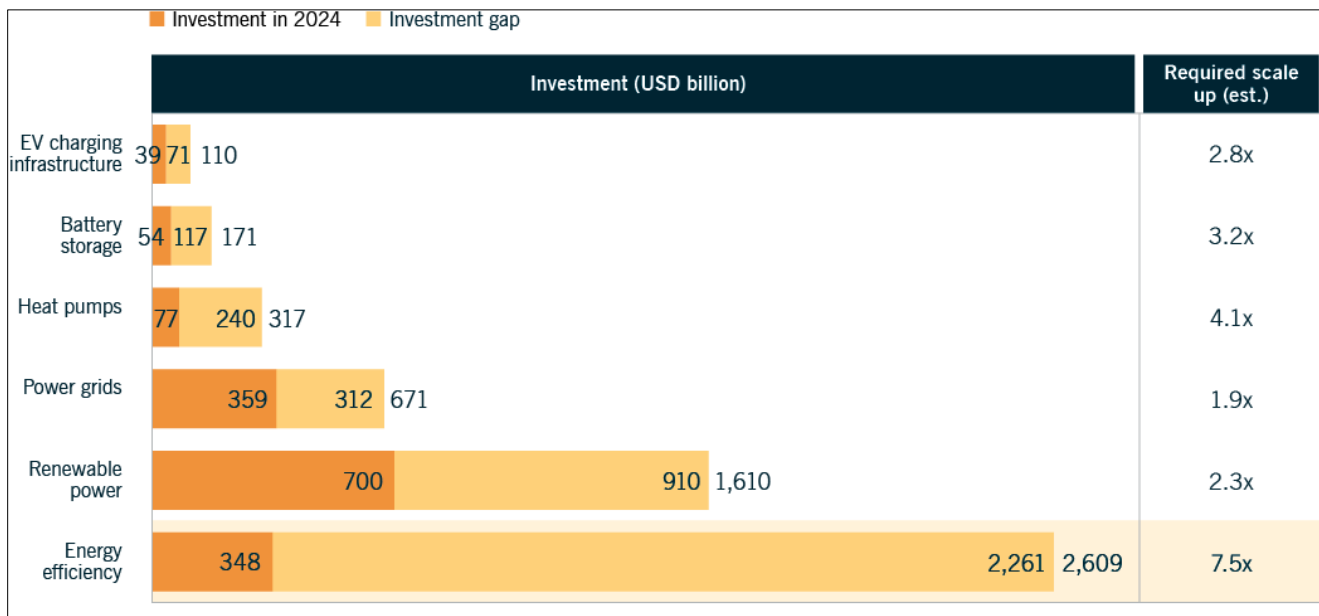
Don Dimitrievich is a Senior Managing Director and Portfolio Manager for Energy Infrastructure Credit (EIC) at Nuveen, where he develops and leads investment strategy, oversees portfolio management, and is the Chair of the Investment Committee for the EIC platform. Don joined Nuveen in November 2022 to establish a multi-billion credit and structured equity investment business to ensure secure energy supply and provide sustainable energy solutions to decarbonize energy consumption. Don brings over 25 years of investment experience to his role. Prior to joining Nuveen, Don was Head of Energy & Power and a Partner at HPS Investment Partners from 2012 where he founded and ran the energy and power investment vertical.

Infrastructure debt as an asset class continues to present attractive investment opportunities for infrastructure investors, supported by rapid power demand growth from AI data centers, onshoring of manufacturing and electrification. In the U.S., energy and power spending continues to steadily climb, from approximately \$520 billion in 2015 to \$600 billion in 2024, and is forecast to grow to over \$700 billion by 2035.¹

While building additional generation capacity will be essential for the U.S., solutions that mitigate power delivery constraints are more attractive from an investment point of view, due to historical underinvestment in transmission and distribution networks, and demand growth increasingly occurring in areas that are already experiencing congestion. Energy efficiency can alleviate both the need for additional generation and delivery challenges. In its global analysis of key energy transition technologies, IRENA (International Renewable Energy Agency) identified energy efficiency as having the largest investment gap versus forecasted demand (2024 versus 2025 – 2030).

Energy efficiency has the largest investment gap versus forecasted demand

(2024 versus 2025 – 2030 forecast)



Source: International Renewable Energy Agency (IRENA) “Global landscape of energy transition finance 2025” report as of November 2025.

(Continued on Page 13)

H1 2026 Sector Outlook... (Continued from Page 12)

A consequence of congestion and heightened power delivery costs is the further divergence between wholesale and retail power prices. Community solar projects are compensated at retail power rates, which are materially higher. Despite policy headwinds at the federal level for renewables, many state-level incentive programs provide long-term revenue stability. The distributed nature of community solar reduces interconnection risks and construction timelines, with distributed projects typically taking six months to two years. In contrast, utility scale projects completed in 2024 spend an average of five-and-a-half years in the interconnection queue in addition to construction time.²

U.S. liquified natural gas (LNG) represents a transformative investment opportunity driven by growth that is comparable to the growth projected for AI datacenters. LNG feedgas volumes are likely to more than double by 2030 — with LNG exports expected to constitute 22.4% of U.S. gas consumption, second only to power generation. The regulatory environment has dramatically improved under the Trump Administration, which reversed the prior Administration's export restrictions and has expedited approvals. Four U.S. LNG projects reached final investment decision in 2025 (versus zero in 2024), representing between \$8 – 12 billion in project finance commitments.

These energy and power investment segment themes: community solar, energy efficiency, and U.S. LNG represent attractive risk-adjusted opportunities, as all are policy-supported and address critical supply-demand imbalances that will likely persist for the next decade.

Find out more in [Alternative credit insights: Diversify globally, derisk locally.](#)

Disclosures

1 IEA (2025), World Energy Investment 2025, IEA, Paris <https://www.iea.org/reports/world-energy-investment-2025>, Licence: CC BY 4.0, Nuveen Analysis

2 For projects completed in 2024

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Cost Efficiency and Investment Governance for Public Pension Plans

By: Christopher Tessman & Ian Leverich, Wilshire

Christopher Tessman is a Senior Vice President at Wilshire, specializing in client service for public pension plans and overseeing Wilshire Compass. Since joining Wilshire in 2000, Mr. Tessman has played a key role in advising a diverse array of asset owners, including public and corporate pension plans, foundations, endowments, insurance companies, family offices, and other wealth managers.



Ian Leverich, Managing Director, is responsible for XTP's business development and client service in North America, assisting allocators with oversight of the costs and fees incurred on their funds' behalf. He has worked with many of the largest public funds, corporate pensions, foundations, and endowments in the world – developing strategies to mitigate risk and lower investment implementation costs.

Public pension funds face increasing pressure to reduce costs and improve returns. A disciplined approach to uncovering hidden costs in portfolios can be critical to understanding the Total Cost of Ownership (TCO), improving governance, and fulfilling fiduciary responsibilities.

A comprehensive TCO framework goes beyond headline management fee analysis. TCO addresses cost drivers across the investment value chain, from management fees to trade execution, settlement, and custody costs. Plan sponsors can achieve this with a bottom-up analysis of all cost elements and operational processes that prioritize risk management, transparency, and contract compliance. A robust governance model should cover the full spectrum of asset classes and investments, including public markets, private markets, foreign exchange, and services providers. Optimizing costs and efficiencies is not a simple task for any investment staff or traditional consultant. It involves:

1. Gathering data on all cost components and benchmarking
2. Forensic analysis of hidden fees and transaction costs
3. Renegotiating non-competitive terms and eliminating discrepancies
4. Implementing ongoing monitoring to ensure sustained compliance and continuous improvement

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Traditional management fee metrics often overlook significant hidden costs. A TCO approach includes a thorough review of all direct and indirect cost elements, such as:

- All manager-related fee elements, including verification of performance fees and carried interest
- Explicit and implicit transaction and trading costs
- Foreign exchange and hedging costs
- Administrative and custody fees in segregated accounts and pooled vehicles
- Reporting costs and capabilities
- Clearing, collateral, and operational expenses including foreign tax reclamation
- Cash management and sweep fees

Compliance with fund legal documents (e.g., LPA, PPM) and bottom-up recalculation of fee structures is important to avoid overcharges. Common findings in optimization projects include non-market-compliant costs and processes, fee calculation discrepancies, inadequate cost allocations, and unfavorable contract terms. Examples that we have found include excessive transaction costs, uncompetitive management fees, omitted fee offsets, MFN clause violations, double-charging, and tax leakage due to inefficient structures.

Ultimately, adopting a rigorous TCO framework empowers public pension funds to uncover hidden inefficiencies, enhance governance, and drive meaningful, sustained improvements in net returns for beneficiaries.

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