



Keystone Market Update

An update on the current macro environment, private markets, and introducing Arctos' NOWCAST

November 2023

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Keystone Market Update Executive Summary

Analysis of the current private market dynamics has revealed several key themes for both GPs and LPs going forward.

GP Key Themes

- Lower liquidity will persist and distributions to LPs are paramount
- Skilled managers will differentiate during a challenging forward return environment
- M&A is expected to increase, but buyers must be prudent in their evaluation of platforms and how they finance a potential acquisition
- Get back to the basics and strengthen the core of your firm

LP Key Themes

- Private equity is likely overvalued relative to intrinsic value, creating denominator pressure and leading to difficult allocation decisions
- Given this dynamic, future allocation decisions are crucial and the marginal invested dollar should be directed to your best, long-term alpha generating managers

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Narratives Driving the Private Markets Environment

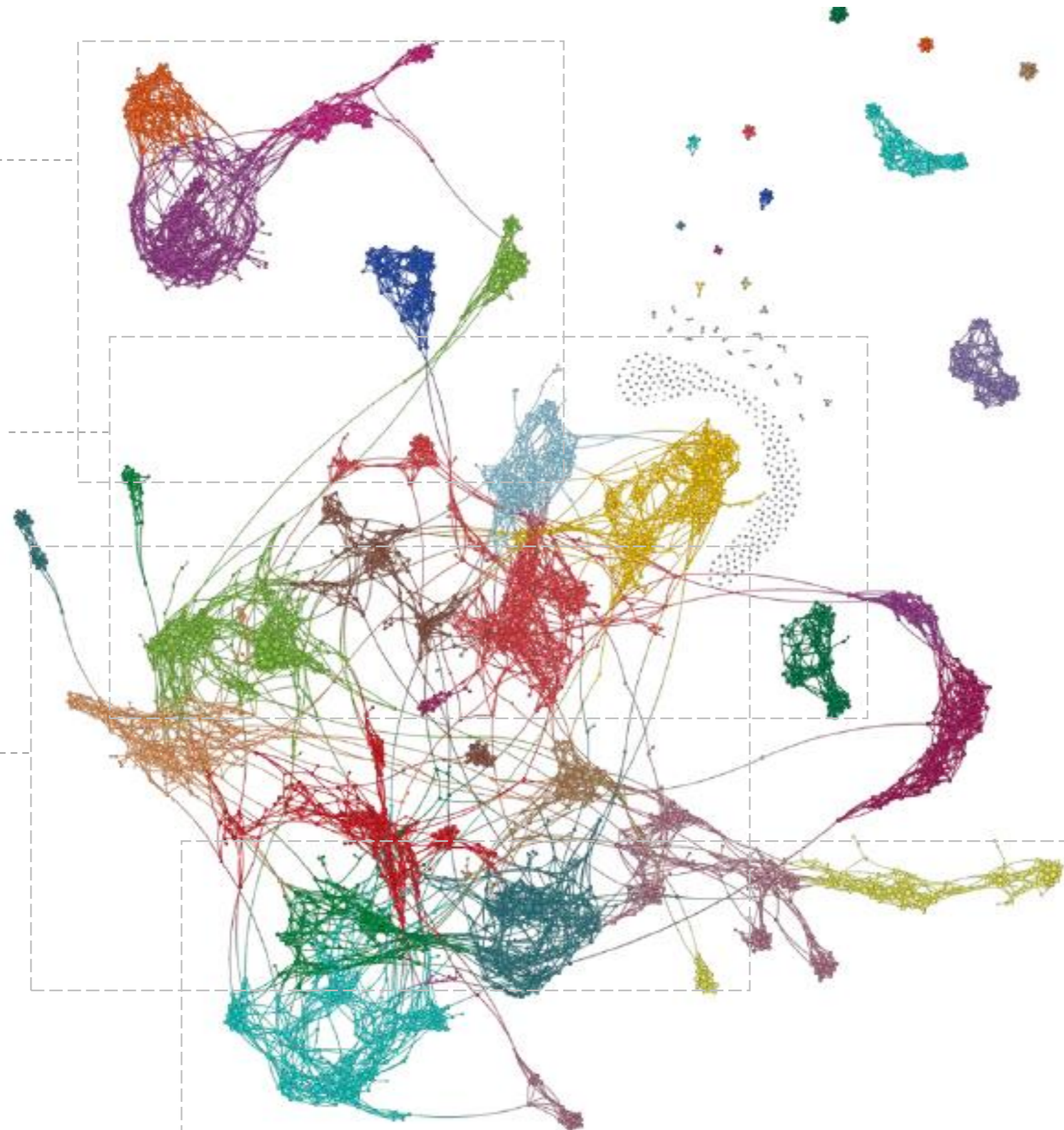
Using natural language processing models, these four themes are driving private markets in Q4 2023.

① Fundraising Challenges

② Private Equity Valuations

③ Distributions & Exit Activity

④ Private Equity / VC Returns



Dots: Individual business news articles
Clusters of colors: High linguistic similarity
Connecting lines: High linguistic similarity across different language clusters
Directions: Distance reflects linguistic similarity.

Private Markets Narratives

The overwhelmingly dominant narrative in private markets is the **negative feedback loop that has caused significant allocation issues** for institutional investors and suppressed deal activity. **Investors are concerned NAVs are overvalued and they are correct.** Private markets are overvalued, which is one of the reasons realizations have slowed dramatically. Debt markets are expensive, but not prohibitively expensive. **The problem is that growth prospects are, at best, average and valuations are too high, which means the unlevered ROA is too low.**

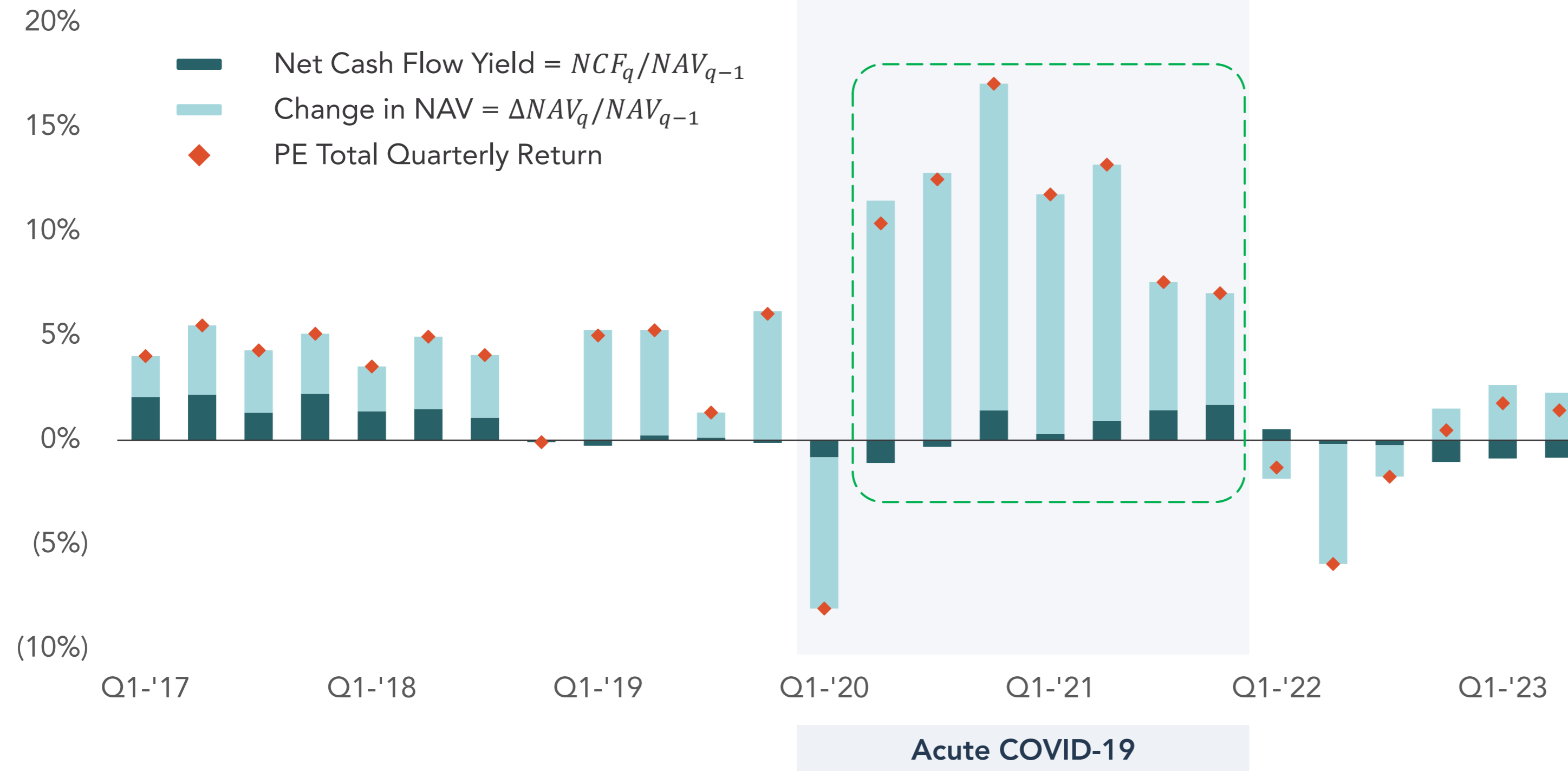
Levering a low ROA with a high cost of debt is a recipe for a challenging return environment. Until the growth narrative changes, valuations come down, debt gets cheaper and/or monetary policy becomes very accommodating, **private markets will be choppy.**

The Private Equity Boom of 2021

Before public stocks and bonds corrected sharply in 2022, private equity returns surged (>40% from 2020 – 2021), predominantly due to NAV growth. Actually, NAV-dominant returns began in Q1-2019, before the pandemic and returned in 2023 so far.

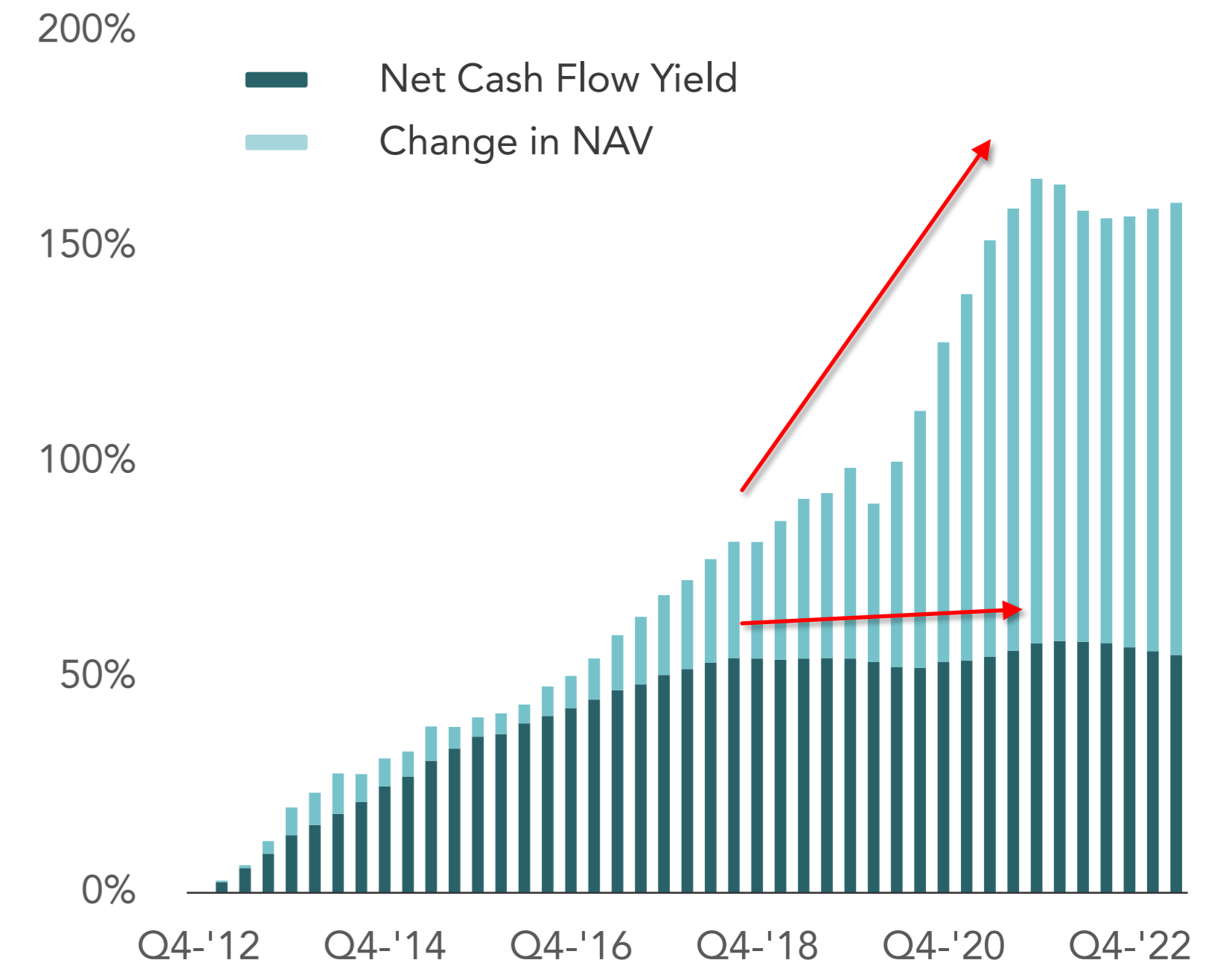
PE Returns Have Been Driven Almost Exclusively from NAV Growth Since 2018...

PE QoQ Time-Weighted Return Decomposition⁽¹⁾



...As Negative Net Cash Flow Persists

Cumulative Log Time-Weighted Returns

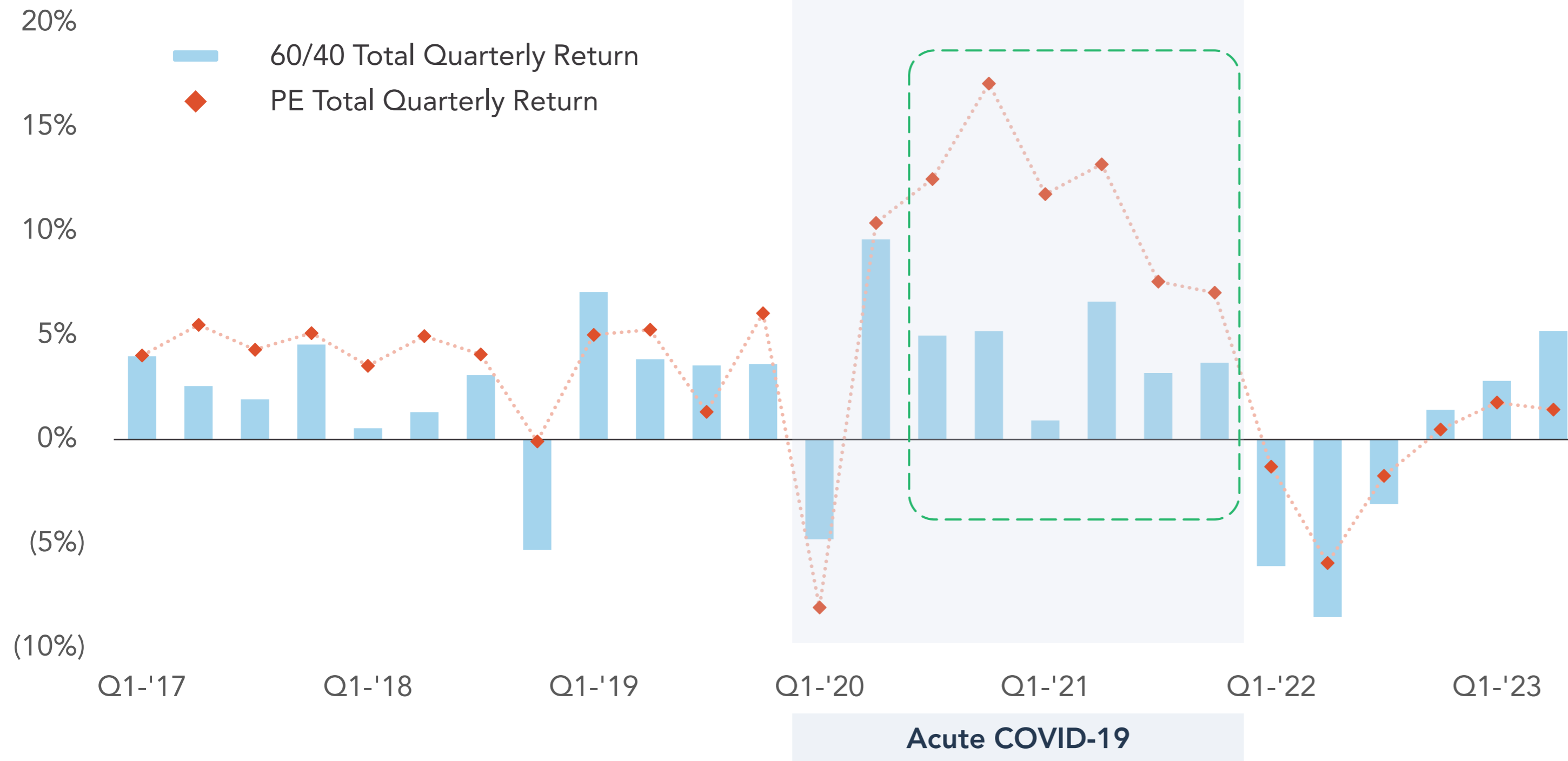


Private Equity Dramatically Outperformed

COVID-19 private equity returns dramatically outpaced public asset prices from Q3-'20 to Q4-'21, and there has been no equal-but-opposite negative underperformance since COVID ended, exacerbating allocation constraints.

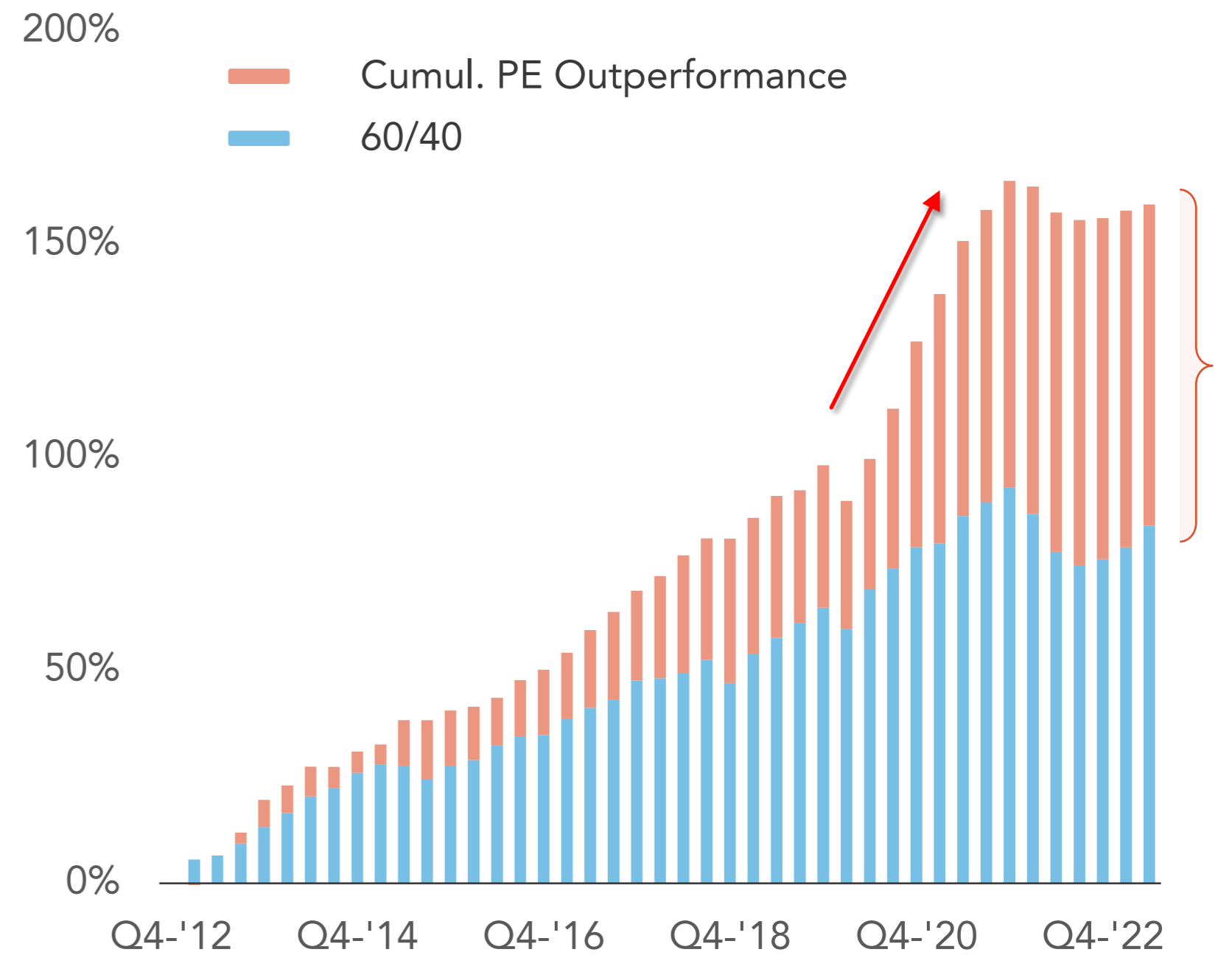
Private Equity Significantly Outperformed Public Assets Post-COVID

PE QoQ Time-Weighted Return vs. 60/40⁽¹⁾



Allocation Decisions Remain Hamstrung

Cumulative Log Time-Weighted Returns

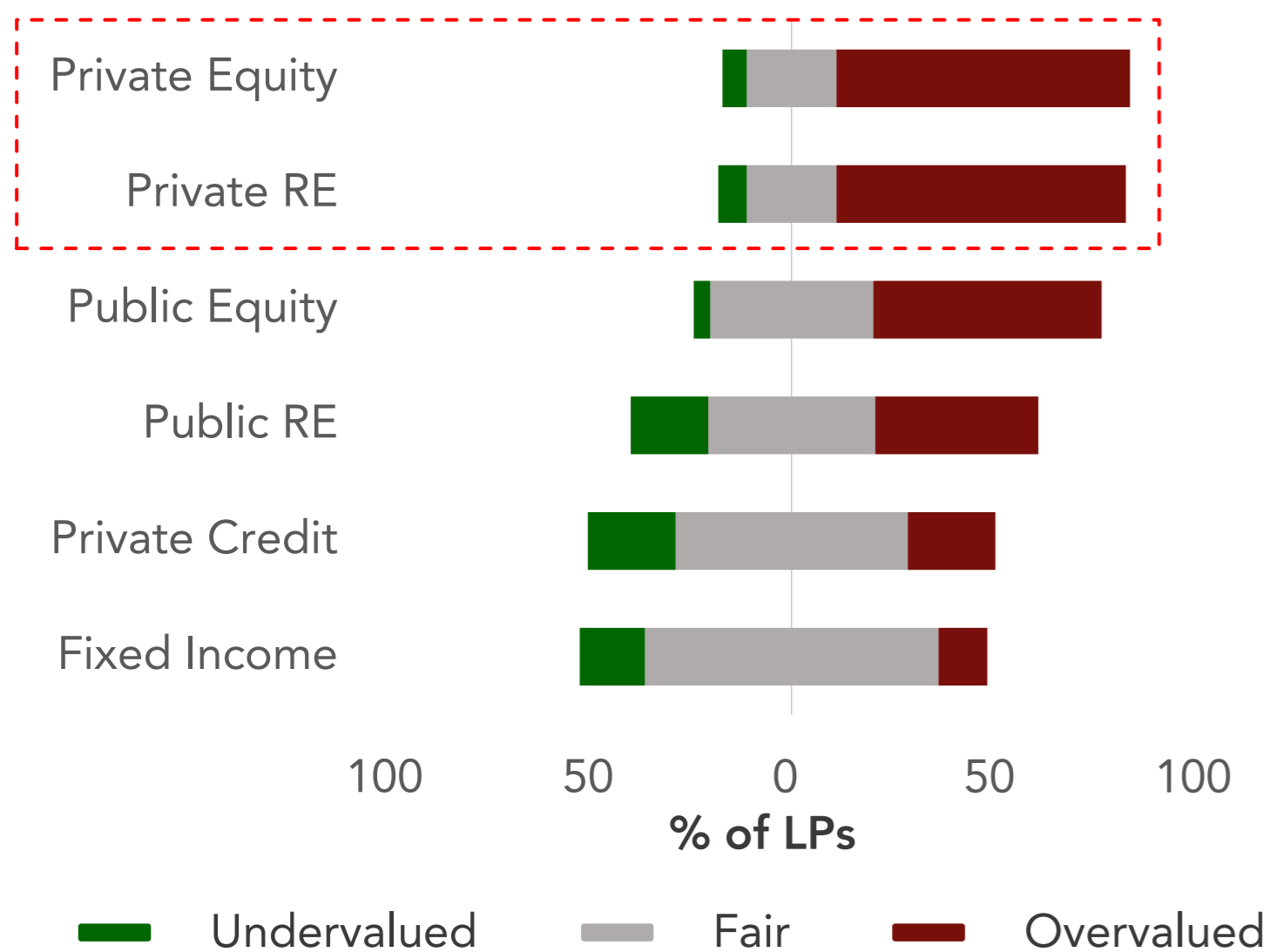


NAV Overvaluation Implied by Public Proxies Remains High...

Investors suspect their private assets are overvalued. They are correct. Private equity is likely overvalued by ~25%.

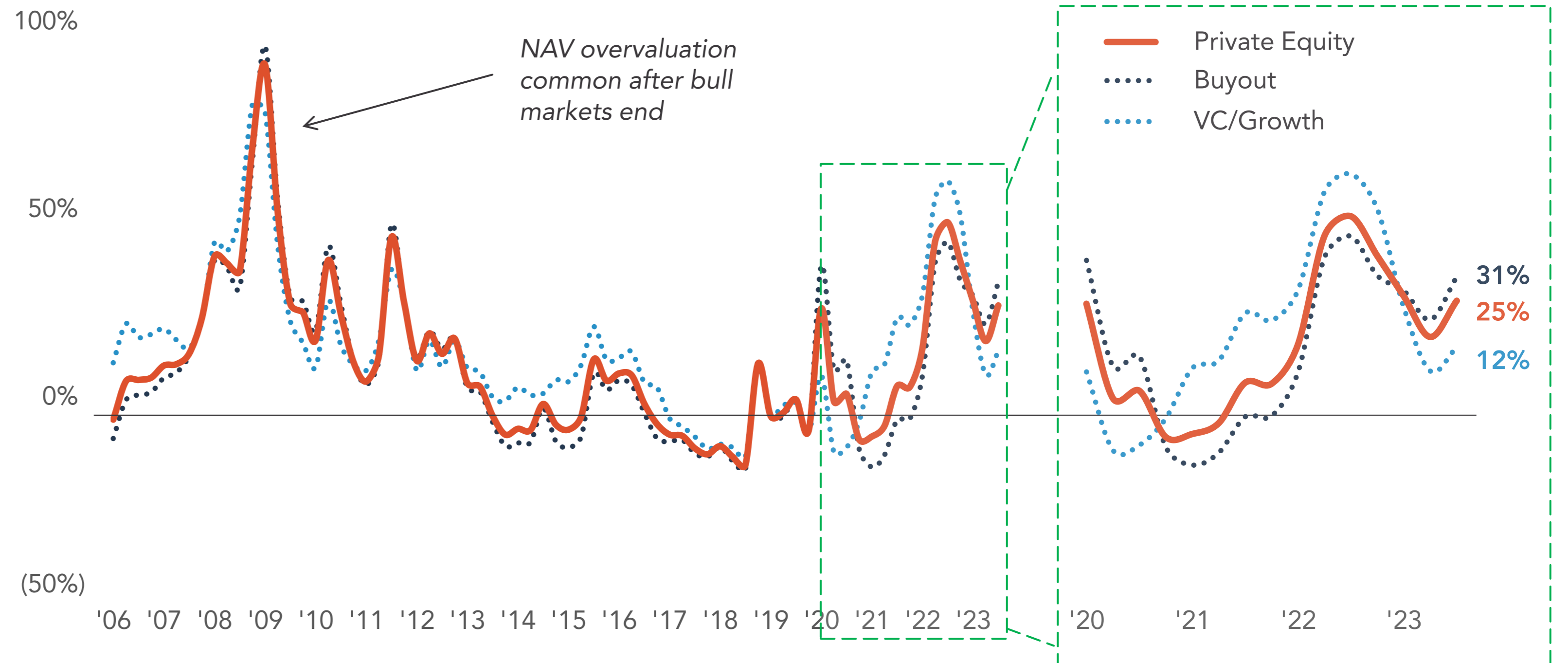
LPs Believe Private Assets Overvalued

HOW DO YOU BELIEVE THE FOLLOWING ASSET CLASSES ARE VALUED?⁽¹⁾



While Relative PE Valuations Have Come Down, the Asset Class is Likely Still Overvalued

Public-Private Proxy: North American Buyout and VC/Growth NAV Over- / (Under-) Valuation⁽²⁾

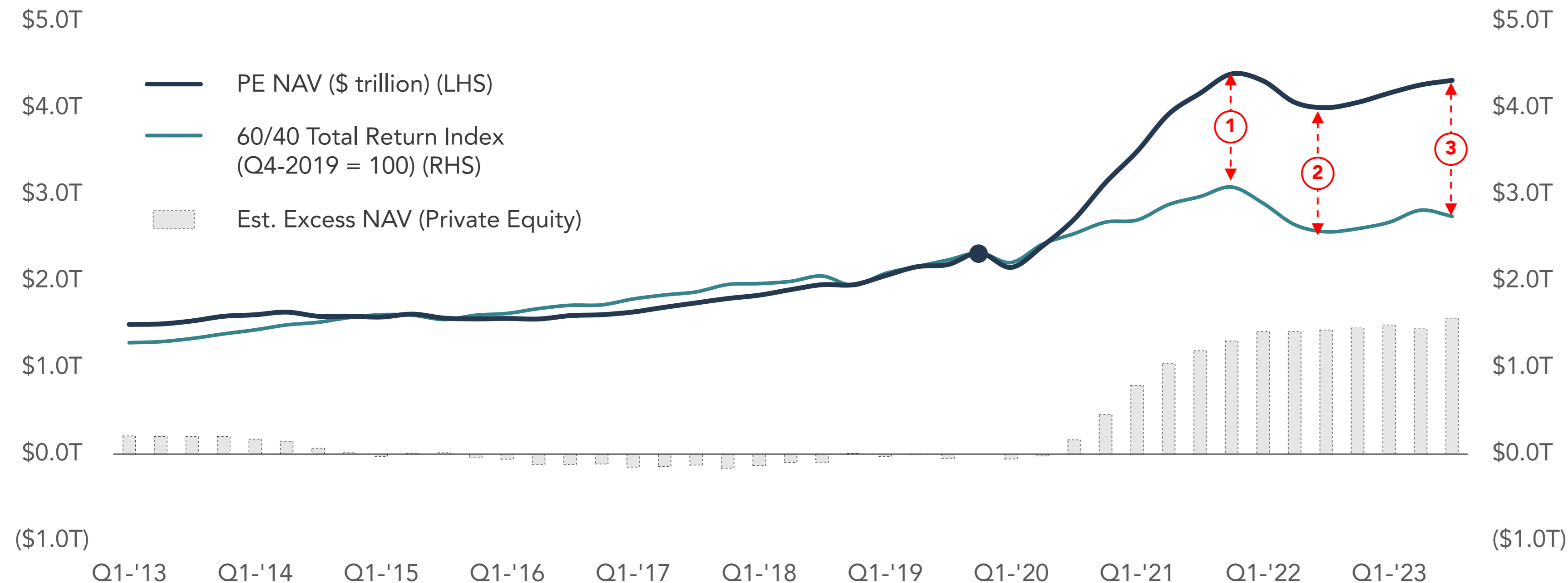


... Resulting in "Excess NAV"

This "denominator effect" is unlike the one that occurred during and after the GFC, which was largely the result of a surge in capital deployment vs. write-ups in NAV. We estimate Excess NAV today is >\$1.5 trillion.

Significant PE NAV Writeups Driving Over \$1.5T of Excess NAV Relative to Public Assets

Est. PE NAV ⁽¹⁾ vs. 60/40 Nominal Total Return (Matching 60/40 Level to Q4-'19)



Timeline

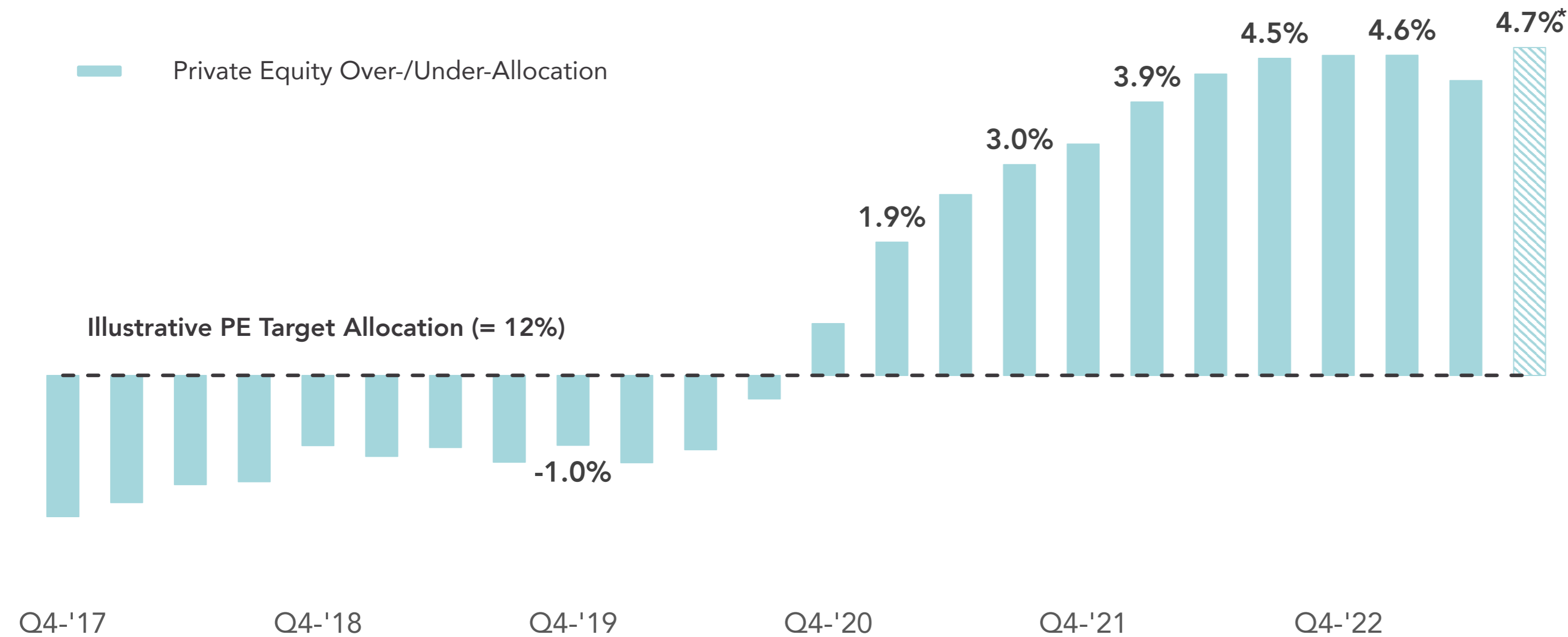
- ① Before 2021 correction, we had a problem.
- ② 2021 correction made it worse & spooked investors.
- ③ Where we are now.

How Do You Relieve Denominator Pressure?

Using rough estimates of average institutional investor allocations pre-COVID, we estimate that denominator pressure strongly persists. We think this signal is key to estimating the PE fundraising market cycle.

Average Institutional Investor Is 40% Overallocated to PE

Illustrative Pension Model: Assumes -1% Under Target Pre-COVID⁽¹⁾



To Rebalance the Ecosystem...

WE NEED A COMBINATION OF

- 1 60/40 Portfolio Rally
- 2 Material NAV Writedowns
- 3 Higher Exit Activity
- 4 Slower Deployment
- 5 Material Allocation Increases ("Capitulation")

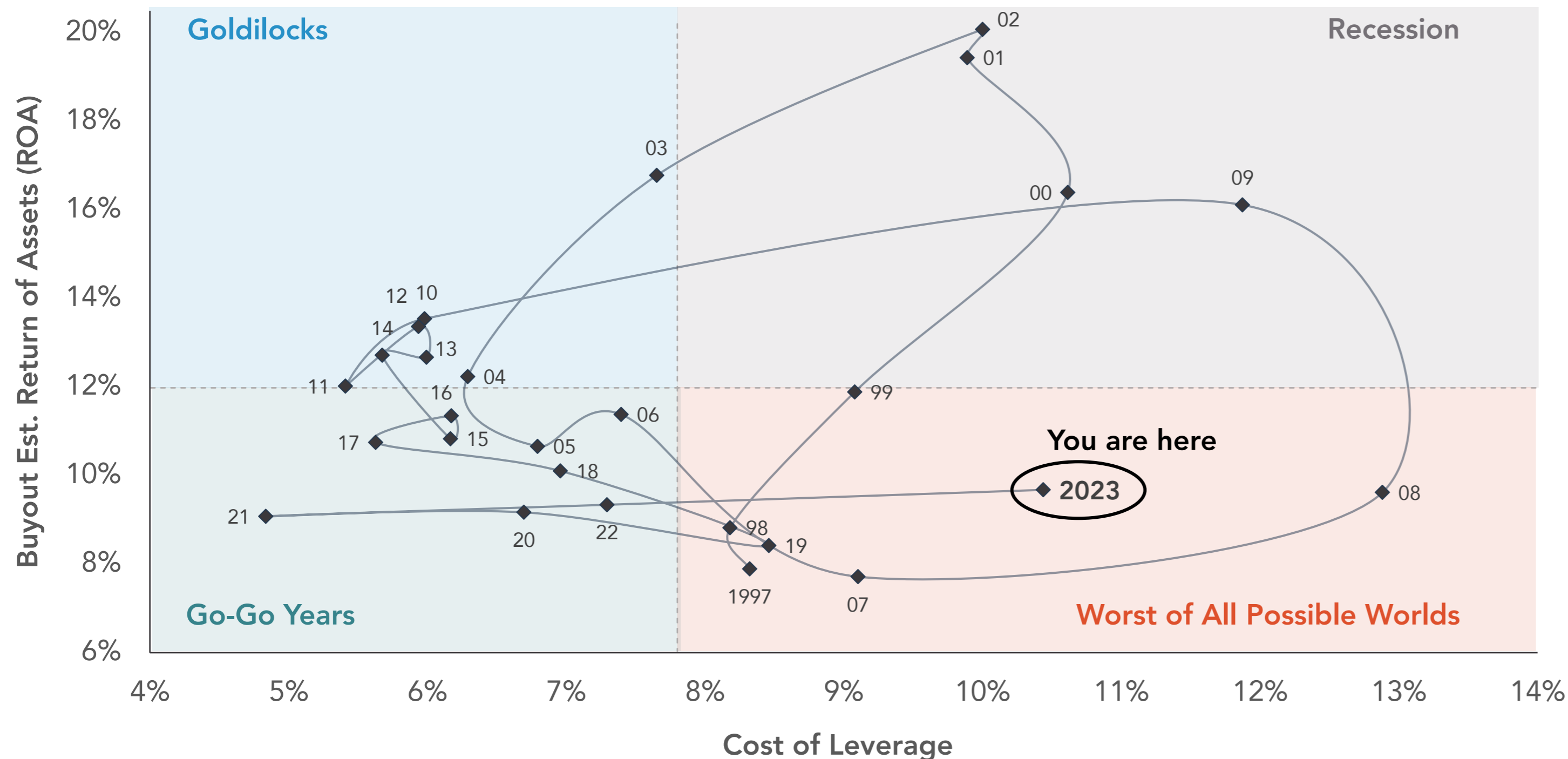
*Uses our nowcast est. of Private NAV for Q3-'23.

Current Indicators Suggest Low Future LBO Returns

At current asset prices and leverage levels, our models suggest this is a forward return environment consistent with 2007 – 2009 and 1997 – 1999. Be cautious.

Current Return Environment Profiles as Worst of All Possible Worlds

North American Buyout: Historical NAV ROA vs. Cost of Leverage Scenarios (Year = YY)



---- LT Average ('97+)

7-Year NAV Forecast Return Range of Only 6-10%

Buyout: Distribution of 7-yr Net Returns on NAV⁽¹⁾

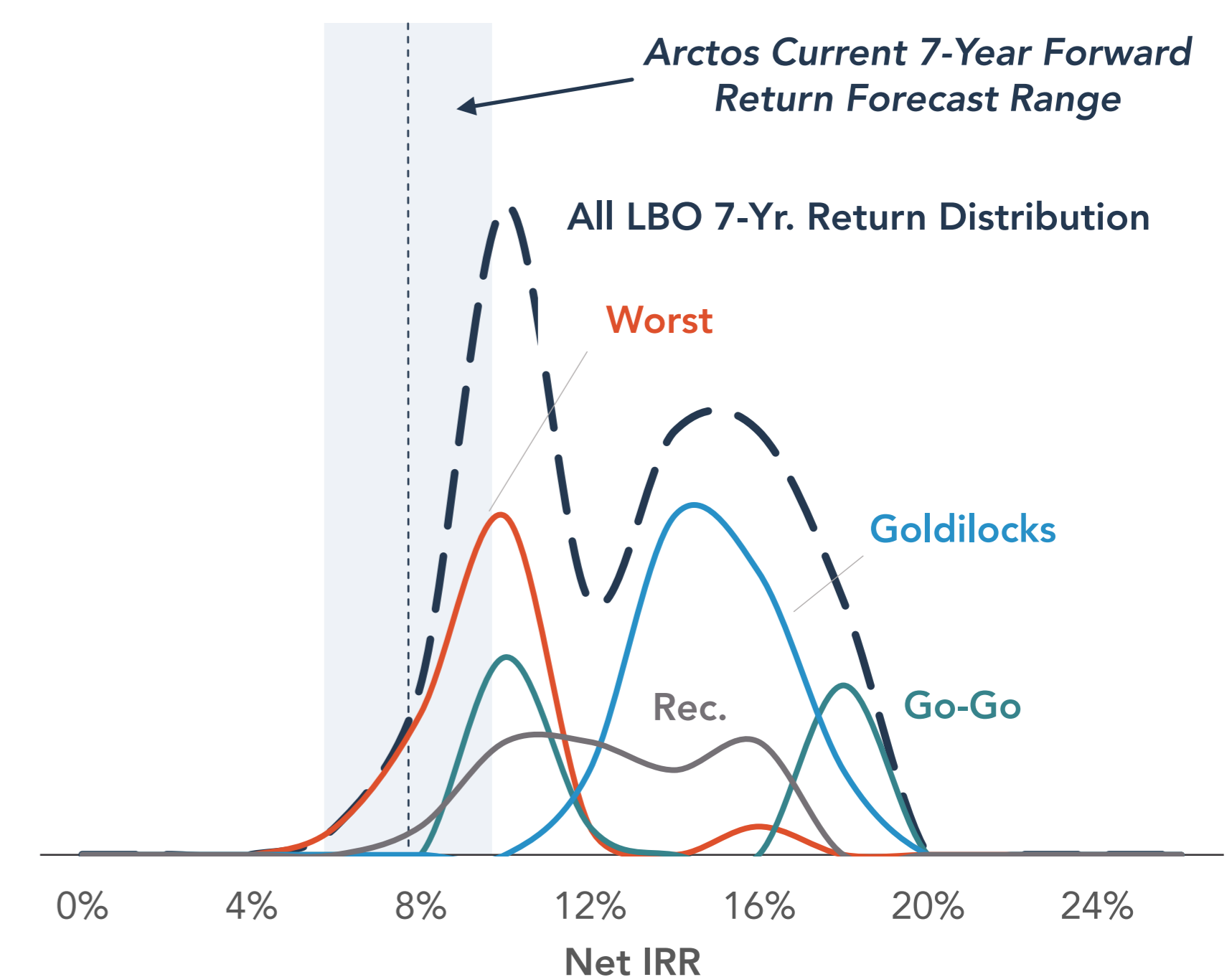


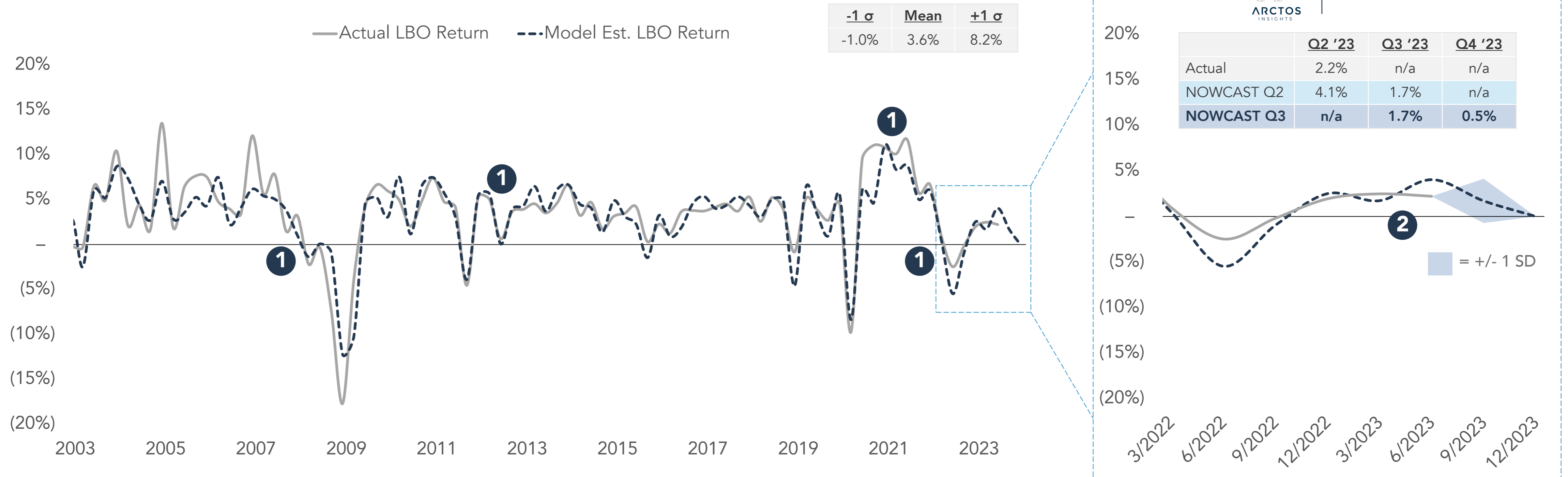
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Arctos NOWCAST Framework

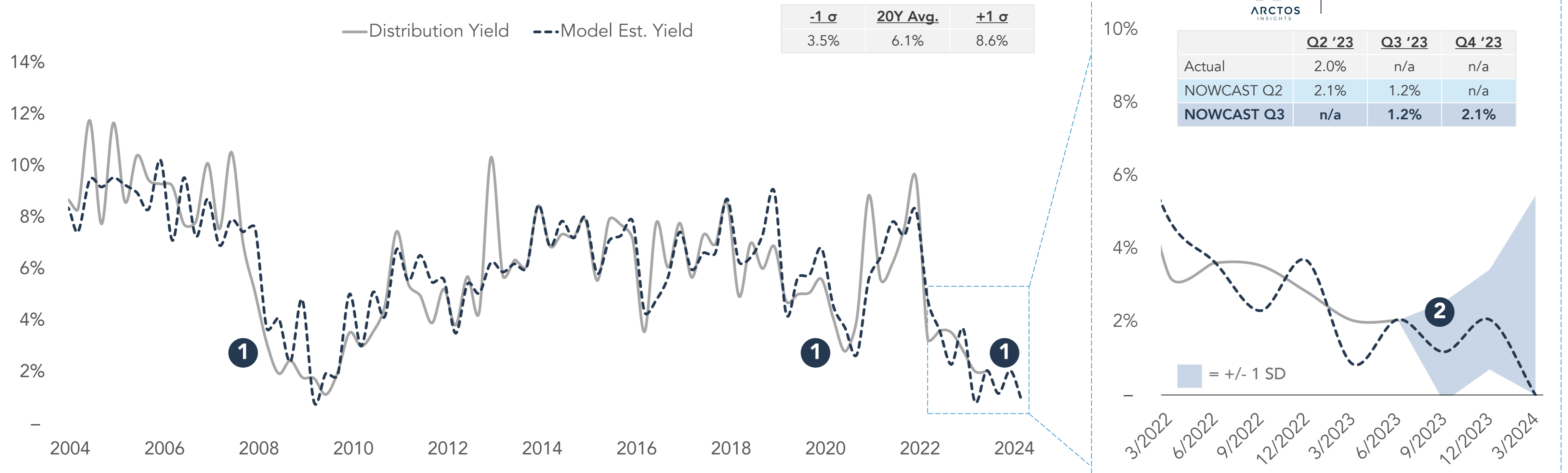
- We use historical data and time series forecasting models generate “nowcasts” – i.e., forecasts of current, and very near-term, activity for data that is released on a lag, as is common in private markets.
- Our proprietary models capture the interaction between past values of major macro, public market, and private market variables with current values of private market metrics we care about: NAV growth, contribution rates, distribution rates, cash flow activity, fundraising and secondary market value.
- Our goal is to build and regularly update an objective model of the present and near-future that we believe can help every investor and manager remain grounded and make better decisions, despite the “narrative noise” of the moment, which is often biased, momentum-driven, or influenced by a specific agenda.

ARCTOS NOWCAST: NAV Growth



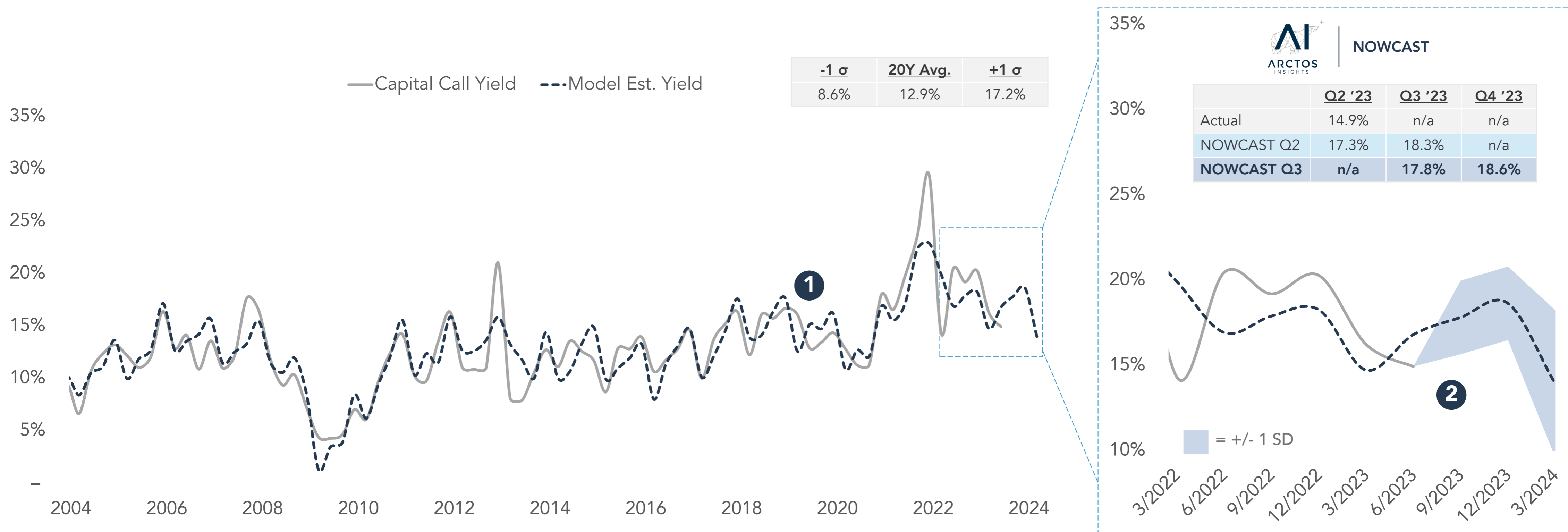
- ① Unrealized NAV declines are extremely unusual, see the GFC, Euro Debt Crisis, COVID, and the 2022 meltdown.
- ② Despite our intrinsic value models suggesting private equity is overvalued by 20-30%, we expect modest quarterly unrealized gains of 1.5-2.0% through year-end.

ARCTOS NOWCAST: Distribution Yield



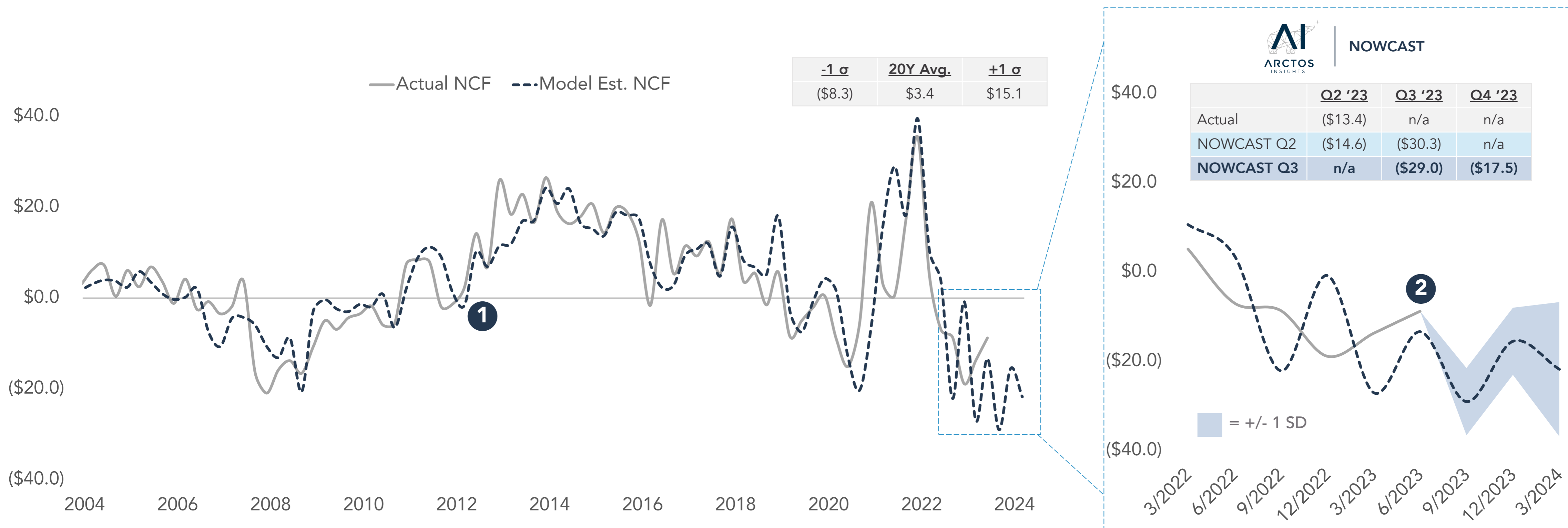
- 1 Quarterly distribution yield of 4-8% has been remarkably stable for two decades, except for one quarter in the depths of the pandemic, three years post GFC and right now. **The exit market is broken.**
- 2 We expect very weak distribution yield into early next year. The sheer scale of unrealized NAV (>\$4T) masks this with a historically “average” dollar distribution amount. Private equity is more illiquid than normal today.

ARCTOS NOWCAST: Contribution Yield



- 1 Weirily, quarterly contribution yield was stable during very active investment years (2016-21) but jumped to abnormal levels over the last 12 months, despite low deal activity. We suspect this is explained by fund line of credit utilization whipsaw, highlighted in our prior analyses [here](#) and [here](#).
- 2 Despite private asset overvaluation and debt market constraints, our models expect capital call activity to be above average through early 2024, funding add-ons, equity cures and new platforms with lower fund line-of-credit utilization.

ARCTOS NOWCAST: Net Cash Flow Forecast



- 1 After a decade of almost constant aggregate positive net cash flow, developed market private equity is entering a period of long-term liquidity consumption similar to 2007-2011.
- 2 A historically low NAV Distribution Yield combined with an above average Contribution Yield is expected to create negative aggregate cash flows for institutional investors, which doesn't help allocation constraints.

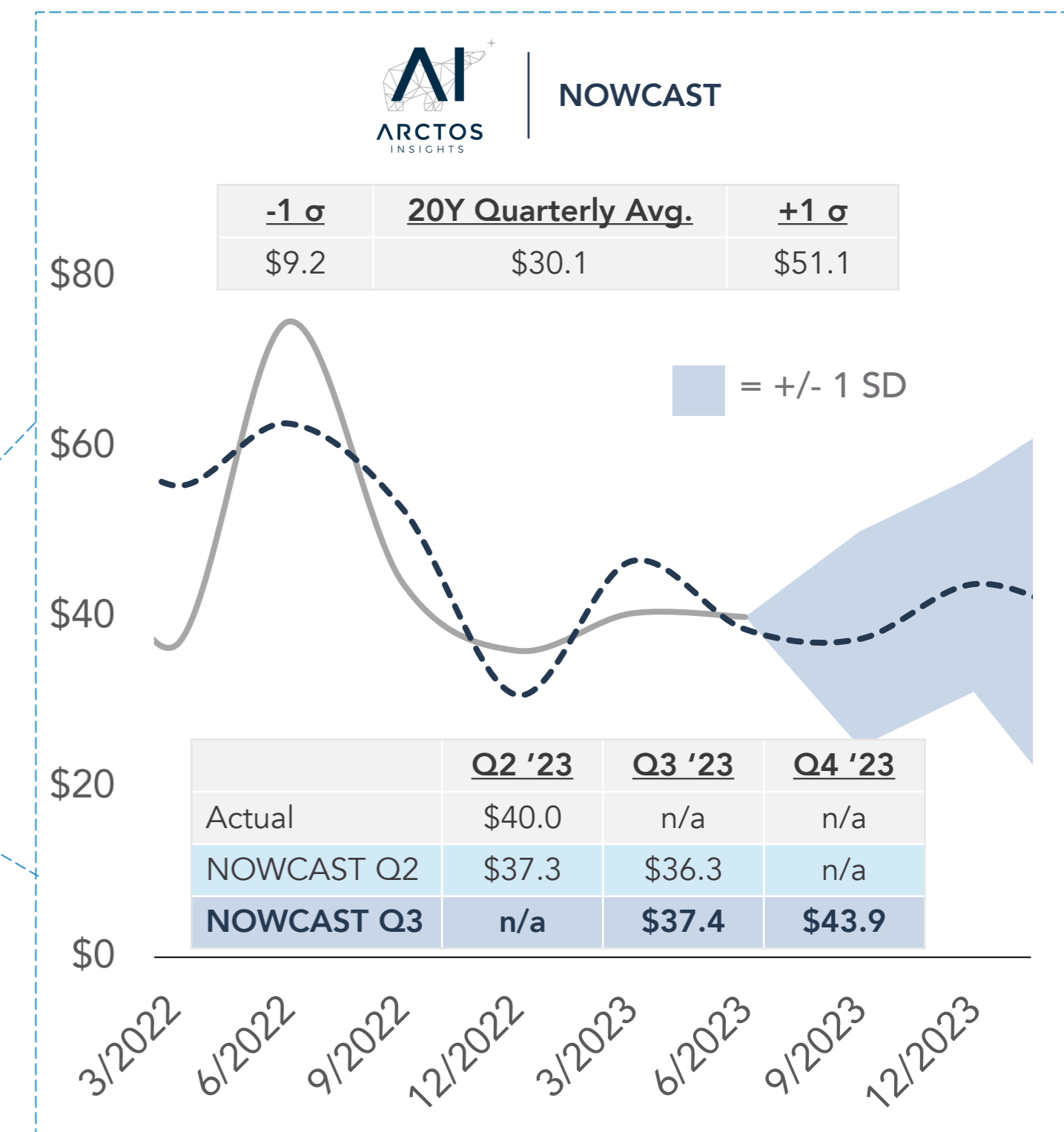
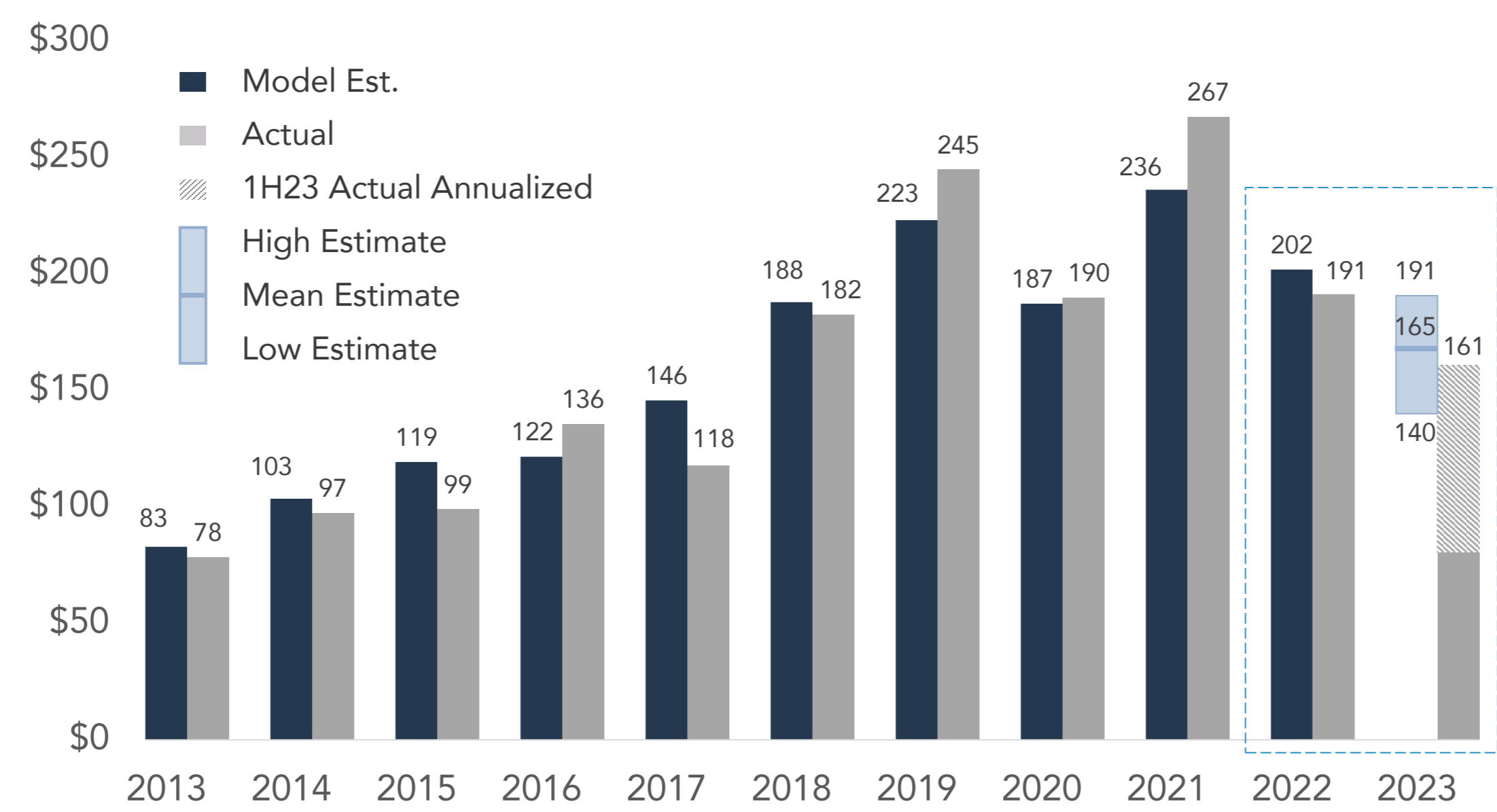
ARCTOS NOWCAST: Fundraising Projection

To Resume Fundraising Growth...

WE NEED A COMBINATION OF

- 1 60/40 Portfolio Rally
- 2 Material NAV Writedowns
- 3 Higher Exit Activity
- 4 Slower Deployment
- 5 Material Allocation Increases ("Capitulation")

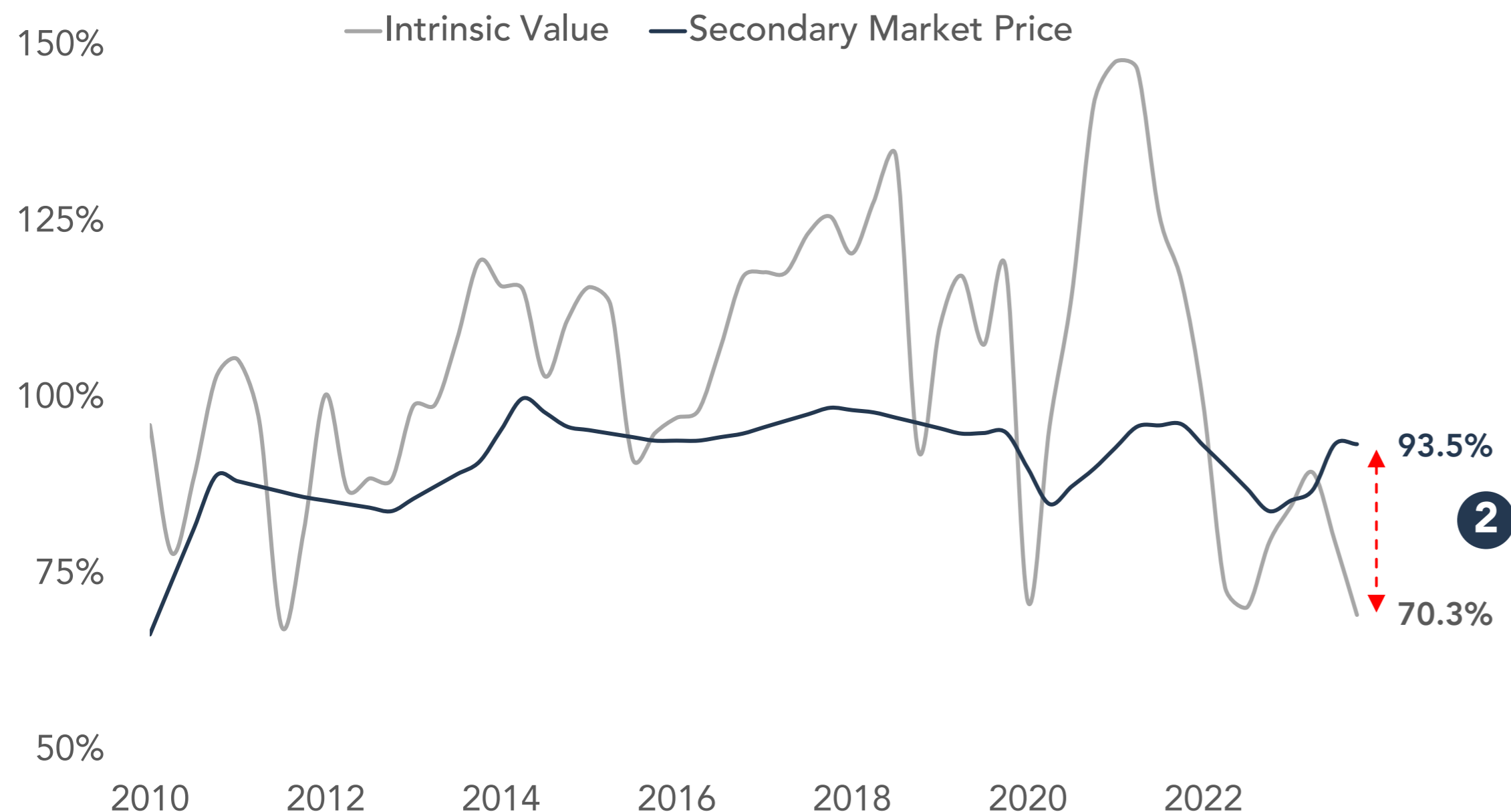
Annual North American LBO Fundraising (\$B)



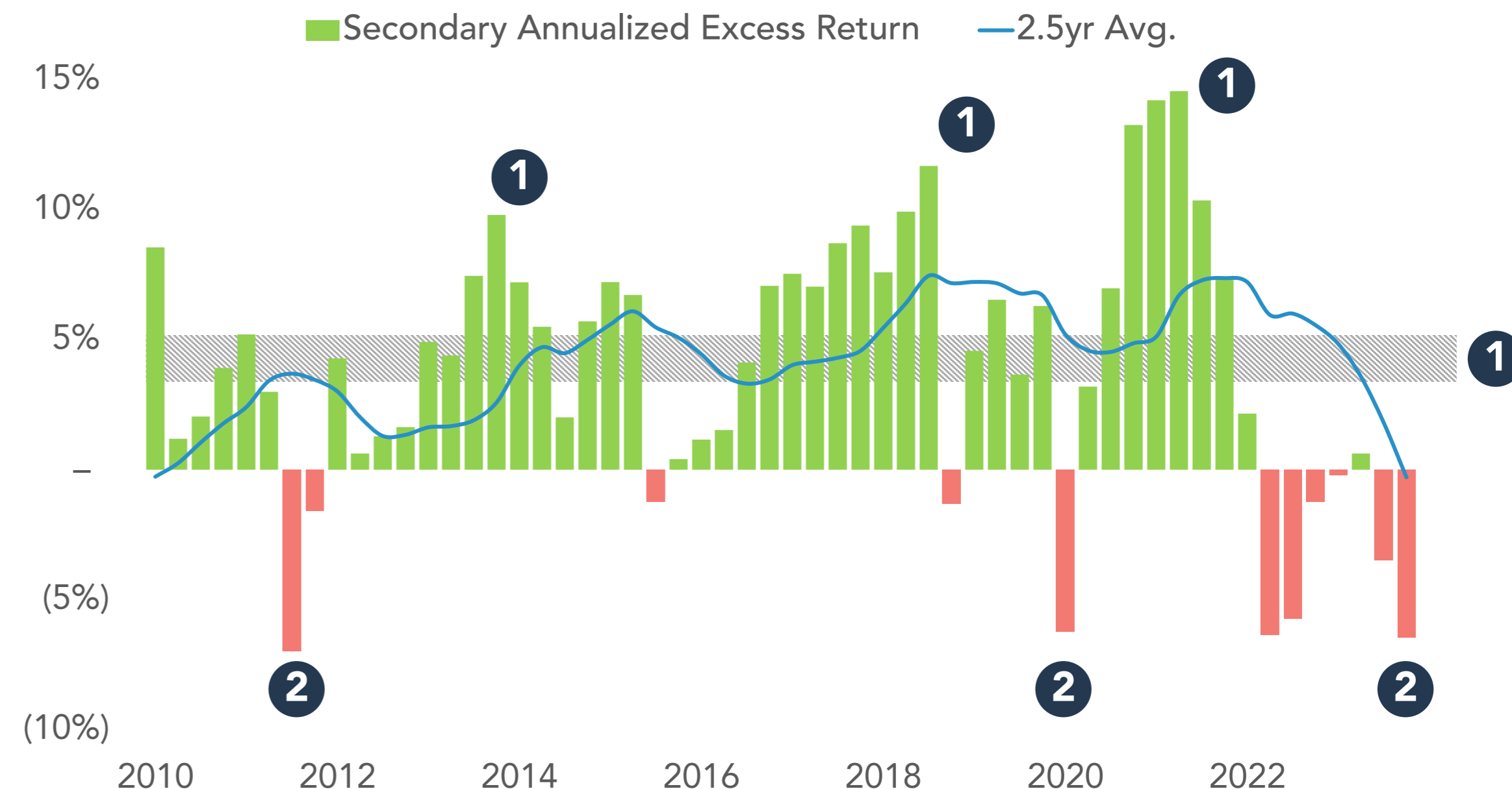
- 1 The first four factors that could reinvigorate fundraising are not happening. We have seen some evidence that investors are increasing their allocation targets, but not enough.
- 2 Until the excess overallocation abates, fundraising will continue its retrenchment. The absolute dollars of new capital are historically large, but not enough to meet GP hope and expectations.

ARCTOS NOWCAST: Secondary Return Environment

Annual North American LBO Intrinsic Value vs. Secondary Market Price (%)



Annual Secondary Market Alpha Harvest (%)



- 1 The secondary market can harvest excess return by purchasing assets below intrinsic value and then harvesting that arbitrage quickly via realizations. The alpha harvest needs to exceed 4-5% annually to offset secondary fund fee and carry.
- 2 Our models suggest the secondary market, on average, is overpaying for beta during a period with historically low liquidity – not a great formula for alpha harvest.

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Our Takeaways & Recommendations: GPs

Lower Liquidity Will Persist and Distributions are Paramount

- ✓ Continue to position the portfolio for durability and defense, as we expect that economic volatility and lower liquidity for longer will be a consistent feature of the next few years.
- ✓ Many of your investors are facing unique portfolio constraints and liquidity planning is challenging. Overcommunicate with them, especially on cash management. If you have a large capital call or distribution coming, give them advanced notice.
- ✓ The narrative on financial engineering is changing – continuation vehicles and NAV loans are starting to be dirty words. LPs don't like the breakdown in alignment and are starting to question GPs that rely on "shenanigans" to manufacture "fake distributions".
- ✓ Most of your LPs need liquidity, so distributions differentiate. Focus creativity on sourcing *exits* as well as deals. There are creative solutions available that can preserve upside for you and your LPs and give them capital relief today that do not generate misalignments

Skilled Managers Will Differentiate During Challenged Environment

- ✓ This environment creates a valuable opportunity for skilled managers to differentiate and deliver measurable alpha. In our view, LPs will increasingly focus on alpha-generation as the key GP performance metric. We have helped build and pioneer tools that can help you measure and assess your alpha generation capabilities.
- ✓ Our base case is a sluggish environment for some time, likely 3-5 years. It is important for internal budgeting, product roadmap, hiring, and M&A plans that this "new normal" be recognized. Is your firm's strategic plan realistic in this new world?

M&A Expected to Increase But Buyers Beware

- ✓ In response to these market conditions, we expect GP M&A activity to increase – as it would in any market under growth stress. But the number of acquiring platforms will likely be limited to only 20-30. If you want to buy, how are you going to finance those acquisitions?
- ✓ The temptation to grow by acquiring an *en vogue* platform (most prominently, private credit and secondaries) will be high. But do a careful right-to-win self-assessment first. Are you sure you are buying an alpha generating franchise?
- ✓ Zombie risk, i.e., the risk that a firm or team you acquire could struggle to re-raise, perhaps permanently, will remain high so long as we are in the new normal.

Get Back to the Basics

- ✓ "Strengthening the core" is a basic, foundational approach that all managers can lean into. What we mean:
 - Do a bottoms-up people assessment. Have you accurately identified your stars? Are they excited and motivated?
 - Maintain or strengthen the rigor and scrutiny in your investment process. (This is a time for strong "top-down" risk management.)
 - Spend time on your fundraising strategy and staffing model. This may even be an area to add resources.

Our Takeaways & Recommendations: LPs

Private Equity Is Likely Overvalued, Creating Significant Denominator Pressure and Straining Allocations

- ✓ Private equity is likely overvalued by at least 20 – 30% relative to public assets. Write-downs are unlikely to come soon enough or aggressively enough to clear the excess NAV.
- ✓ We need net cash flows to rise – i.e., we need exit activity to rebound above drawdown activity for an extended period – or a reflationary period for public assets relative to private assets, both of which are historically rare.
- ✓ For many plans, we think there will be capitulation, i.e., a shift upwards in target allocations to match a stubborn reality. For some plans, this may make sense to maintain deployment targets and vintage diversification. For others, this could strain illiquidity budgets and amount to “kicking the can”.
- ✓ Exploring traditional LP secondaries may be worthwhile, as the large, brokered market for LP portfolios is providing pricing in the mid-80s to low-90s, which appears to be higher than intrinsic value.

Future Allocation Decisions Are Crucial Given Current Constrains – Make Your Choices Wisely

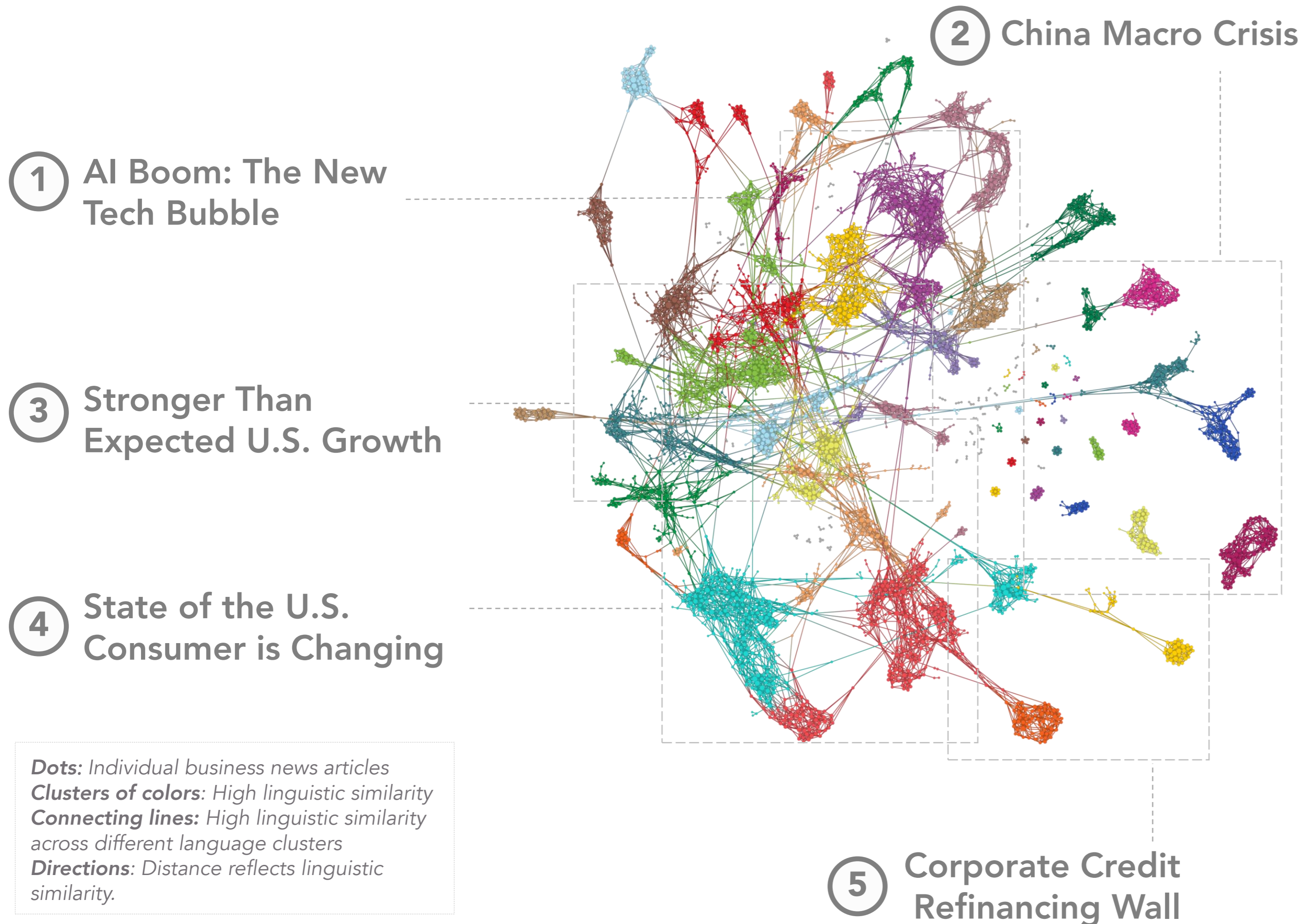
- ✓ If you aren't focusing your diligence on alpha-generation, it is time to start. Alpha is repeatable, IRR and quartiles are not, and we have helped build and pioneer tools that can help you measure and assess alpha generation.
- ✓ Ask your managers how they are modeling and assessing uncertainty. In our view, macroeconomic uncertainty has not been this high for at least a decade. Be skeptical of GPs that are confident they know how things are going to play out.
- ✓ Given secondary pricing appears to be higher than intrinsic value, we think investing in traditional LP secondaries strategies needs to be carefully assessed.
- ✓ Strategies dependent on autopilot asset price inflation (late-stage venture) or asset gathering (GP stakes) should face headwinds as the virtuous cycle of exits and redeployment / fundraising becomes unaccommodating.
- ✓ Finally, with the budget you do have, we recommend rethinking how the marginal dollar gets deployed. It is important to ensure your best long-term, alpha-generating relationships receive support. Furthermore, this may be a time to explore diversifying or downside protected strategies as well.

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Narratives Driving the Macro Environment

Using natural language processing models, these five themes are driving the macro narrative in Q4 2023.



Macro Narratives

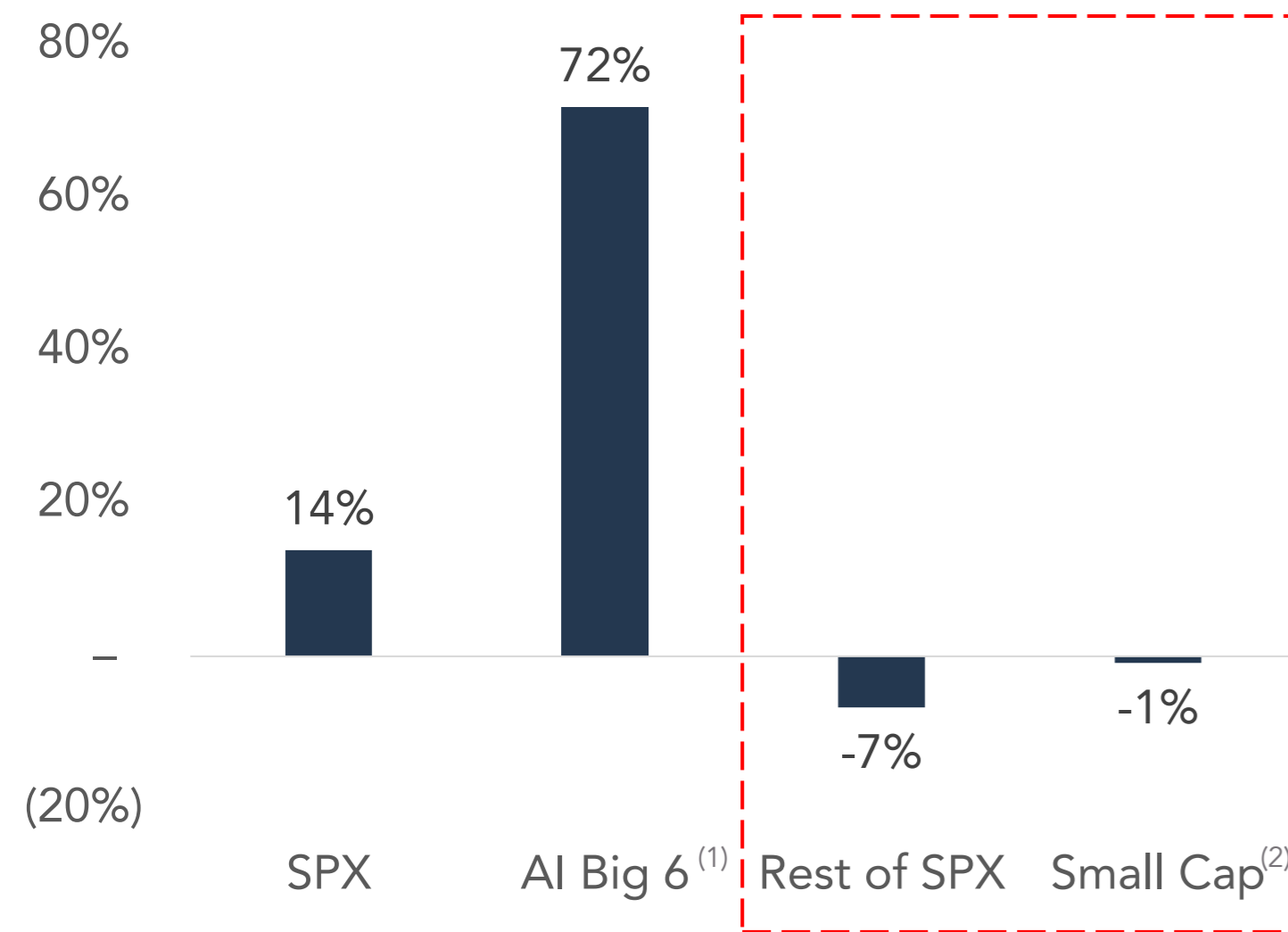
The U.S. market downturn began to reverse in November '22, **powered by AI hype/potential and the unexpected resiliency of the U.S. economy.** But after a robust start to the year, we believe the **market appears very fragile.** The AI bubble seems to be deflating. **The Chinese economy, which has driven global growth and liquidity for the last twenty years, faces significant challenges.** The U.S. economy continues to surprise to the upside, but **every leading indicator suggests a recession is on the horizon.** The U.S. consumer is struggling with **all-time high debt balances and historically high interest rates,** which are also pressuring more leveraged corporates.

Artificial Intelligence: The New, Concentrated Tech Bubble

Broader market weakness has been masked by the significant outperformance of select mega-cap AI companies.

Market Gains Driven by AI Companies

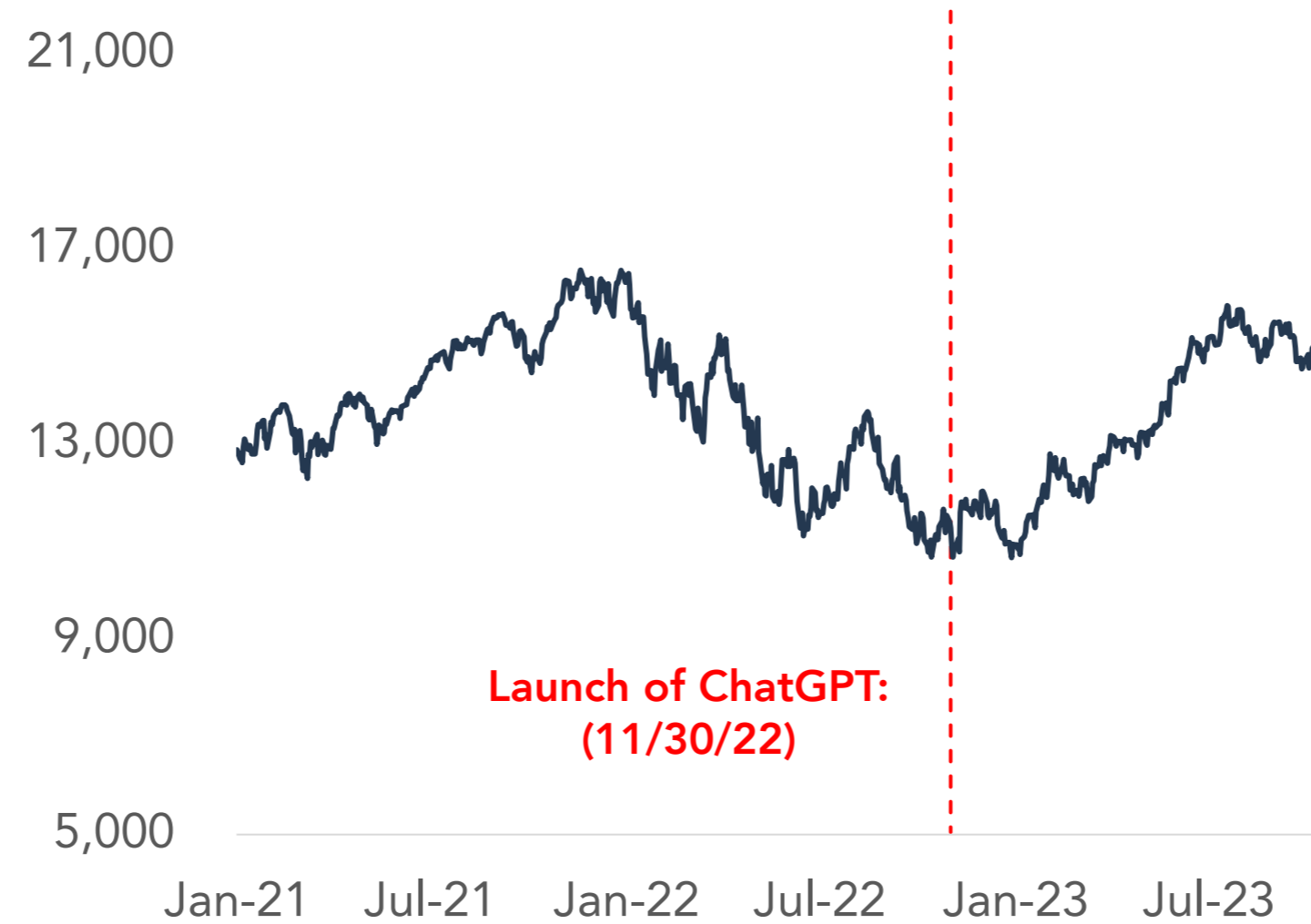
YTD Total Return: SPX, AI Constituents, All Others



The outperformance of six AI-related companies have driven the SPX YTD, but the rest of the SPX have an aggregate return of -7% YTD, in line with small caps

Tech Rebound Driven by AI Fervor

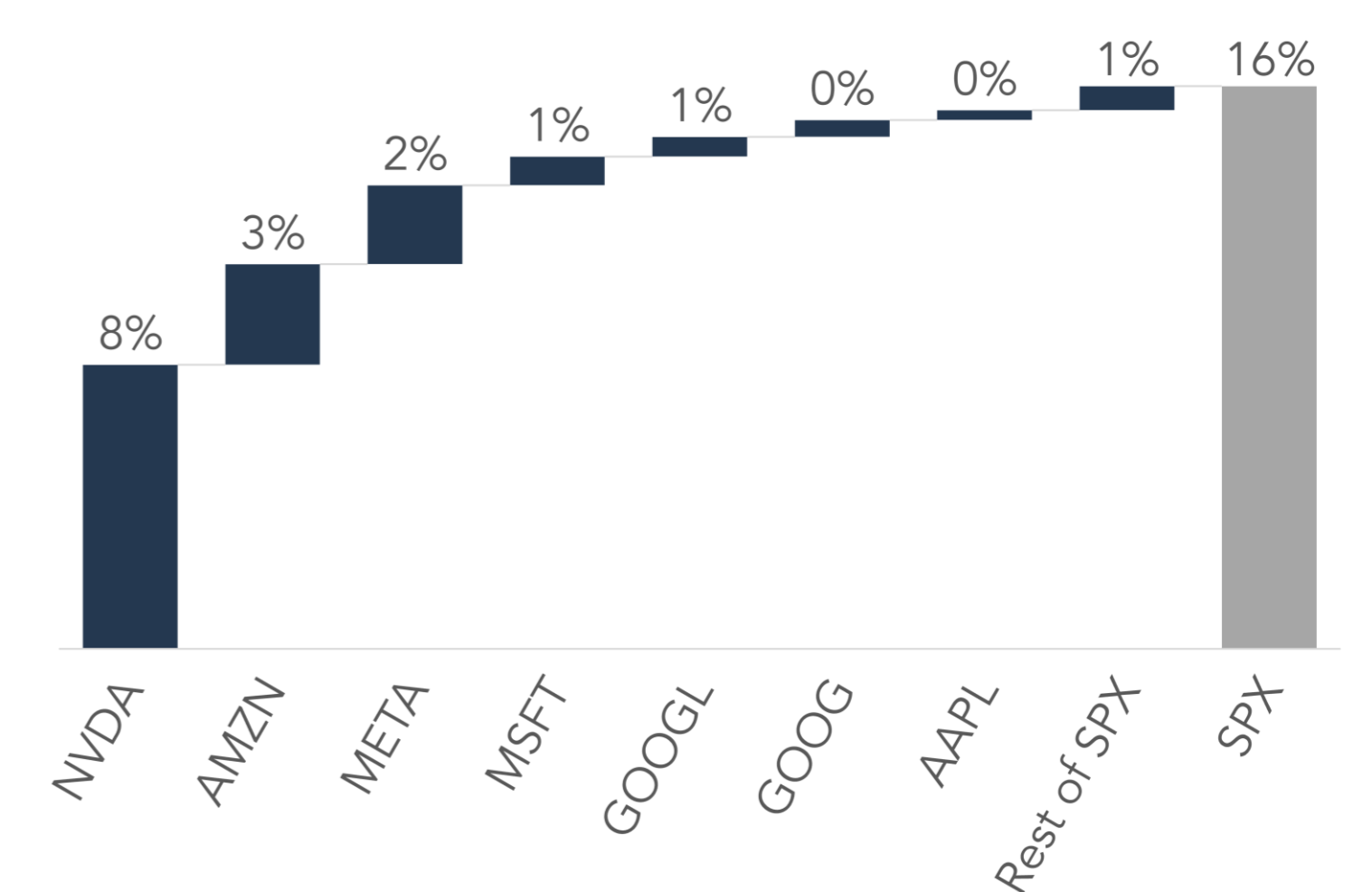
L5Y Index Price: NASDAQ 100



The launch of ChatGPT closely coincided with a local low for the NASDAQ, which also stimulated demand for Nvidia, the semiconductor company powering generative AI

Analysts Rush to Increase Estimates

YTD NTM EPS Estimate Growth: SPX, AI Constituents, All Others



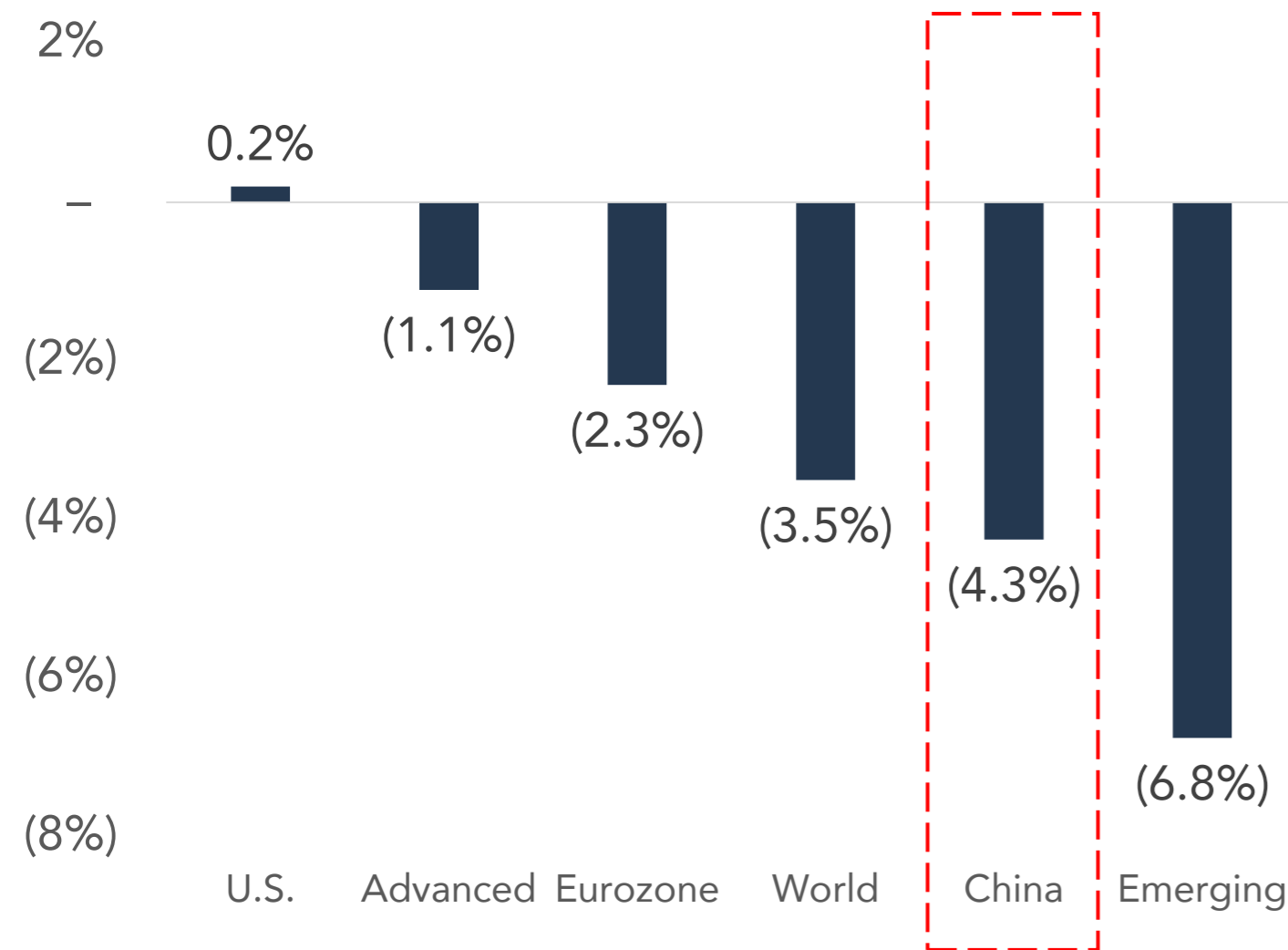
The S&P 500 NTM EPS estimate has increased 16% YTD, with the AI Big 6 contributing over 95% of the EPS estimate growth (Nvidia alone has contributed over 50%)

The Chinese Economy Is Dragging Down Global Growth

Chinese growth has slowed and capital is rapidly exiting the economy, leading to a global economic contraction.

China Growth Has Not Rebounded

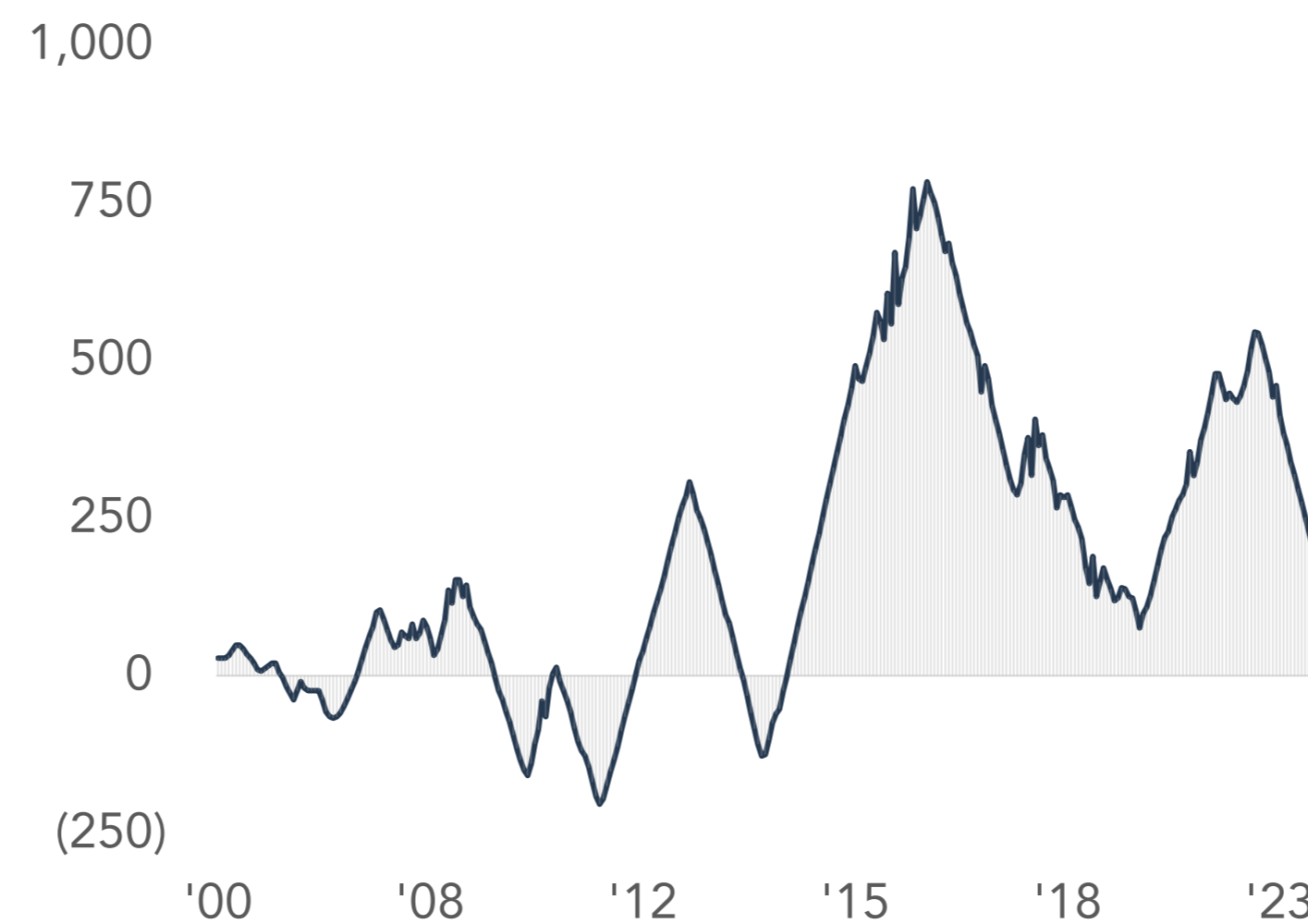
2023 Real GDP and IMF Pre-pandemic Projection Difference



The Chinese economy has not regained its pre-pandemic growth path, dramatically underperforming the U.S., Europe and other developed markets

Capital Continues to Leave China

Net Capital Outflows (\$ billion)



Capital has been exiting the Chinese economy as growth prospects have weakened and U.S. treasury yields become more attractive, pressuring the yuan

Driving Global PMI Contraction

IHS Markit Global Manufacturing PMI



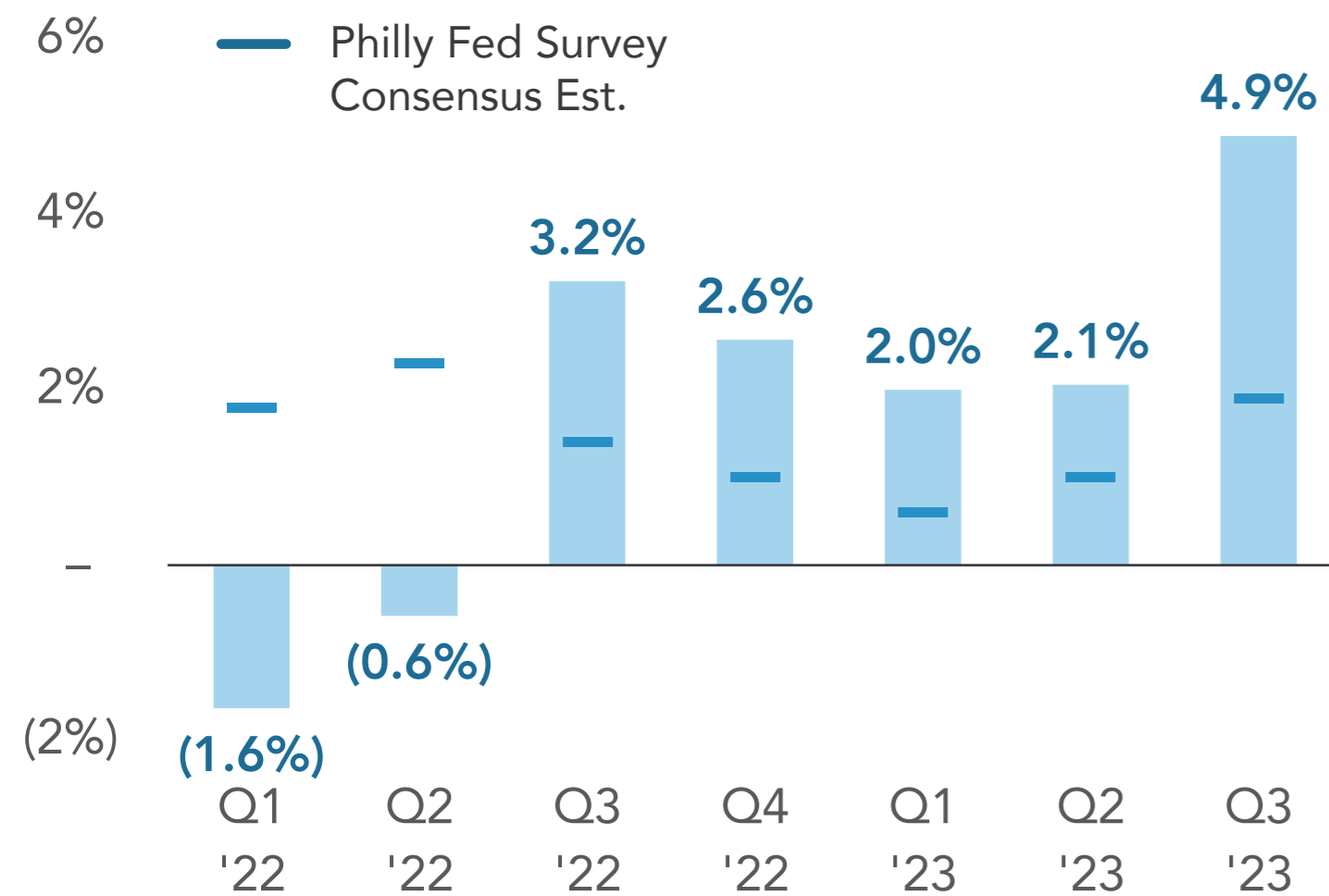
The Chinese economy is a canary for global economic activity. Global manufacturing activity has been contracting for almost a year, causing economic stress throughout Europe and Asia

Against the Odds, the U.S. Economy Keeps Growing

The U.S. consumer continues to drive real GDP growth above consensus expectations despite recession risks.

Stronger Than Expected U.S. Growth...

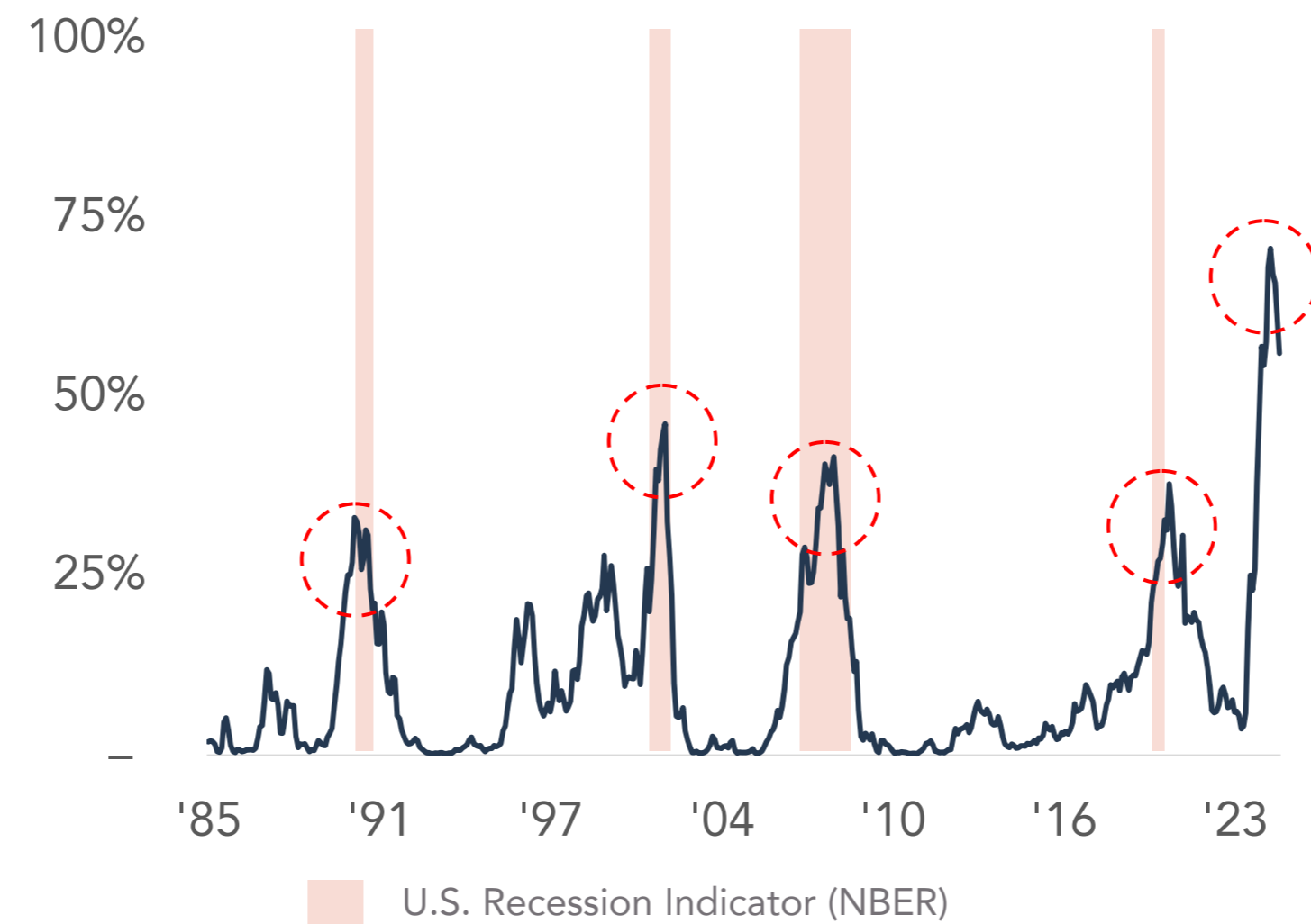
U.S. Qtrly Real GDP Growth (annualized)



U.S. GDP is growing remarkably fast despite high interest rates and global decoupling

...Yet Fed Predicts Recession...

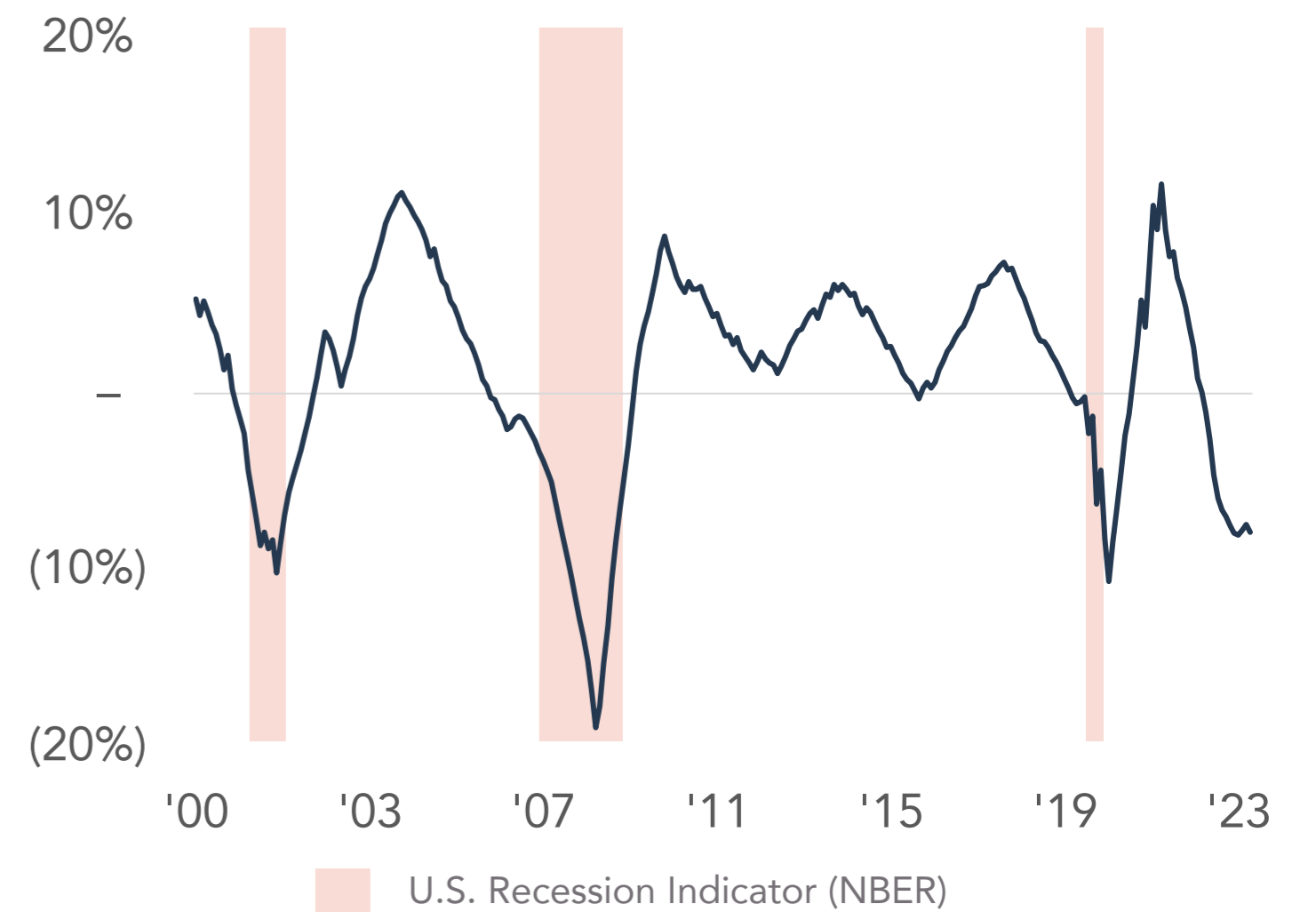
NY Fed Prob. of Recession in 12 Mo. Predicted by Treasury Spread



The NY Fed probability of recession has historically been an accurate leading indicator and is currently at a 40-year high

...As Do Leading Indicators

U.S. Leading Index Ten Economic Indicators YoY %

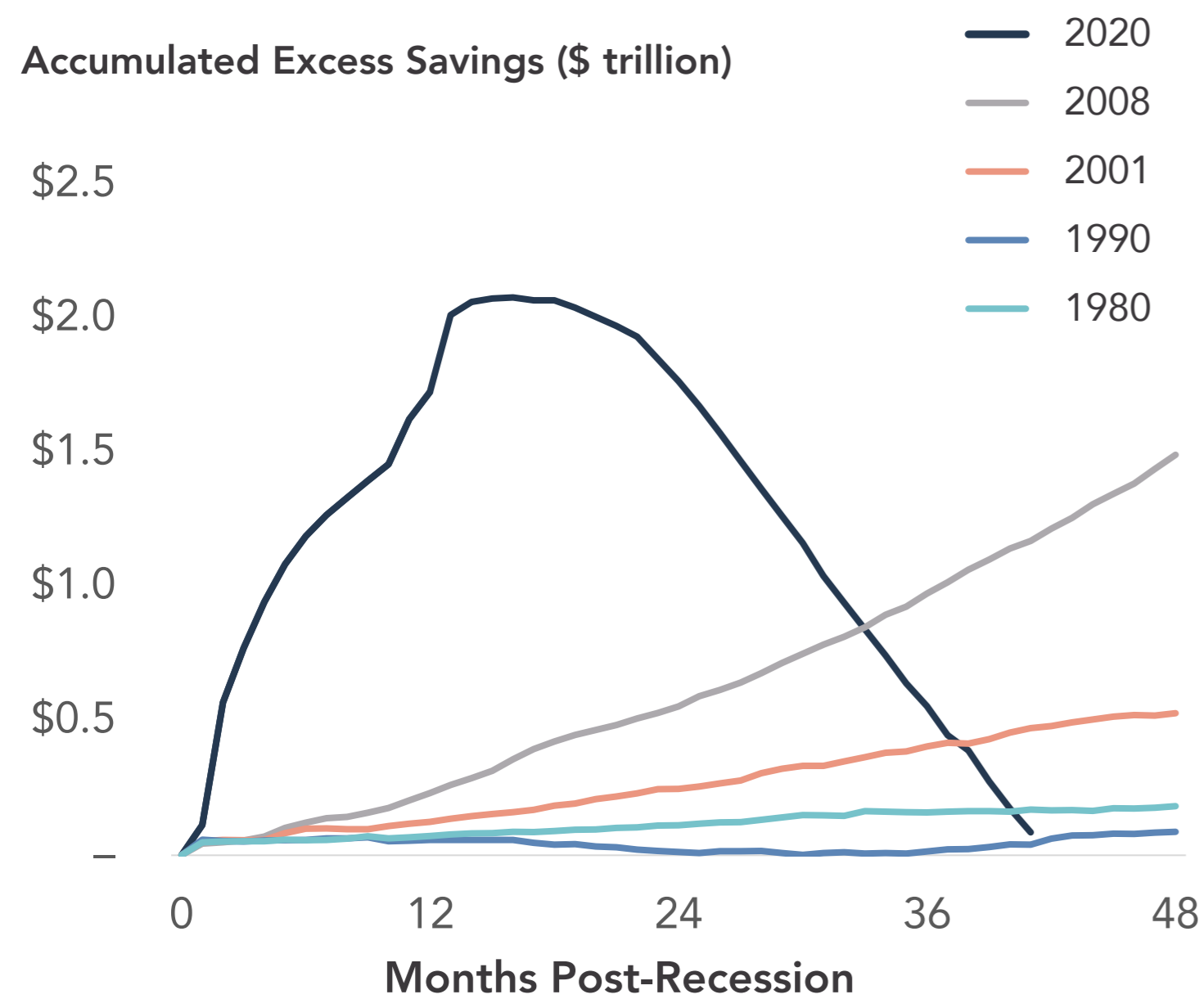


Similarly, leading economic indicators also point to a recession on the horizon

But the U.S. Consumer is Very Stretched

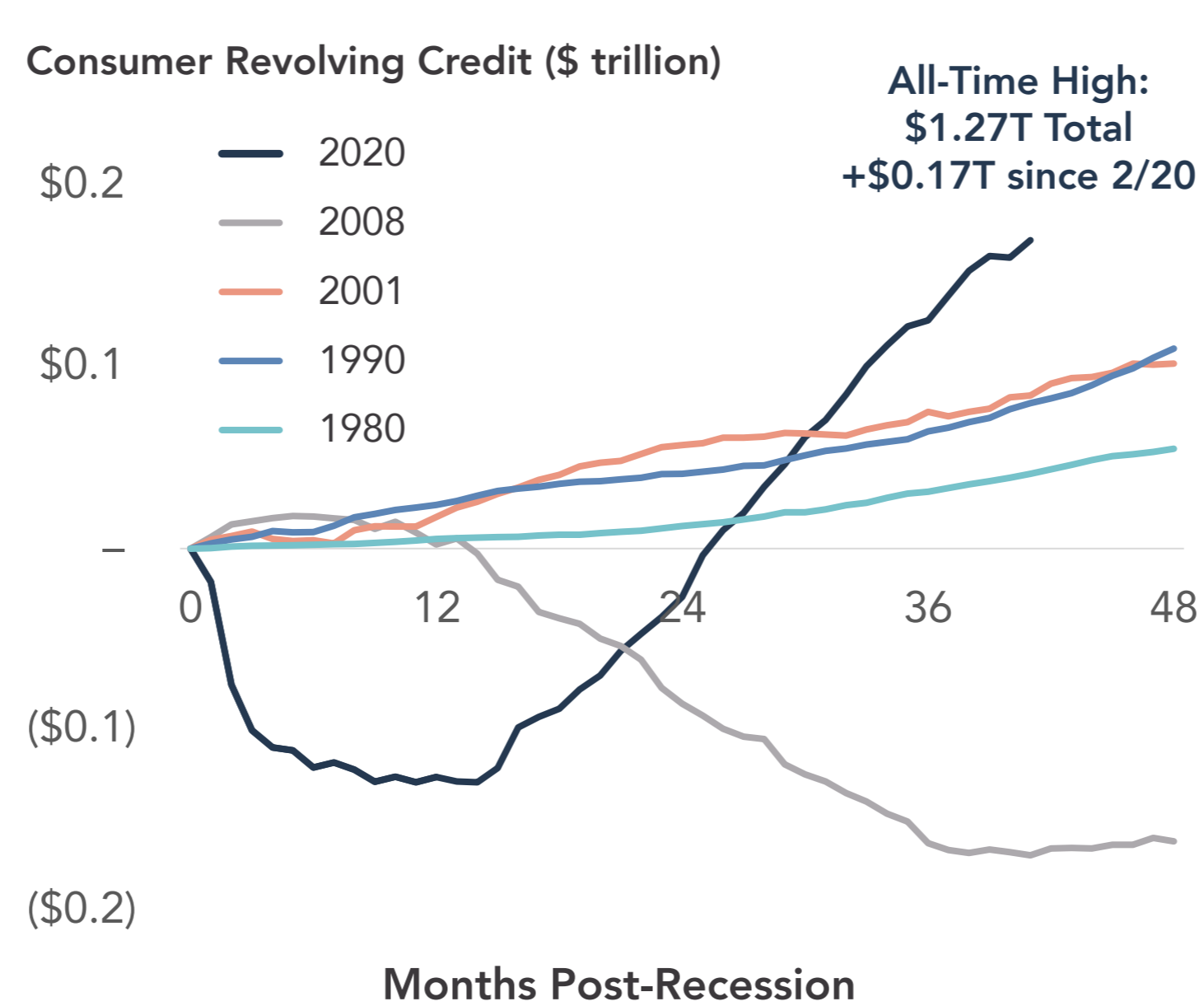
The U.S consumer has depleted all its pandemic-induced savings and is now using credit cards to fuel consumption.

Excess Savings Depletion



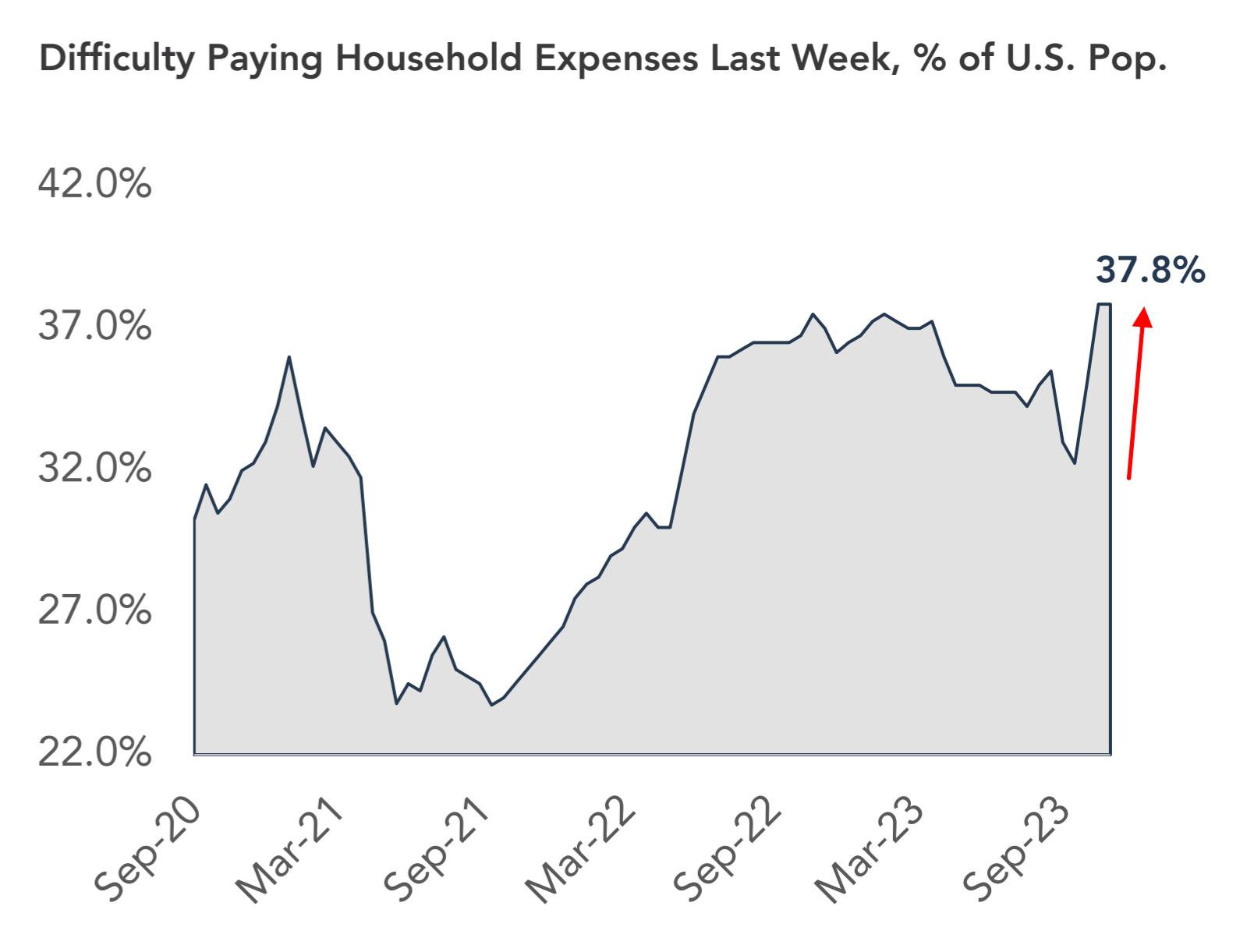
Consumers accumulated savings at a historic pace post-COVID, but, alarmingly, those savings have been depleted during the last two years

Spike in Revolving Credit Usage



With savings evaporated, consumer credit has exploded to an all-time high of \$1.3T

Households Struggling to Pay Expenses



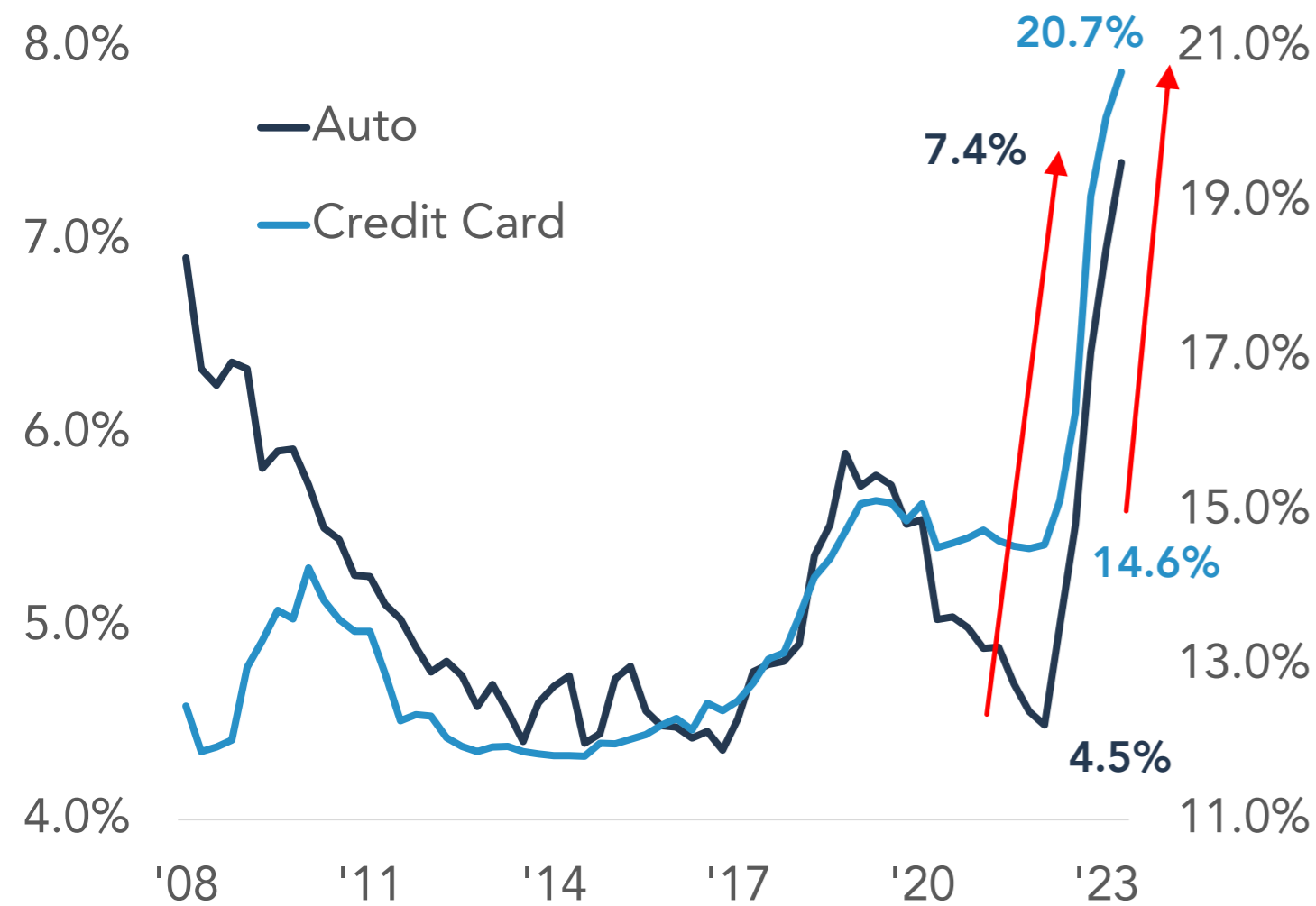
Record debt balances at higher rates are pressuring the consumer, with almost 40% of households reporting a difficult time paying for household expenses in October

Higher Rates Are Starting to Squeeze Consumers

Lending standards are tightening and delinquencies are starting to rise, especially for younger and less affluent consumers.

Rates are Rising

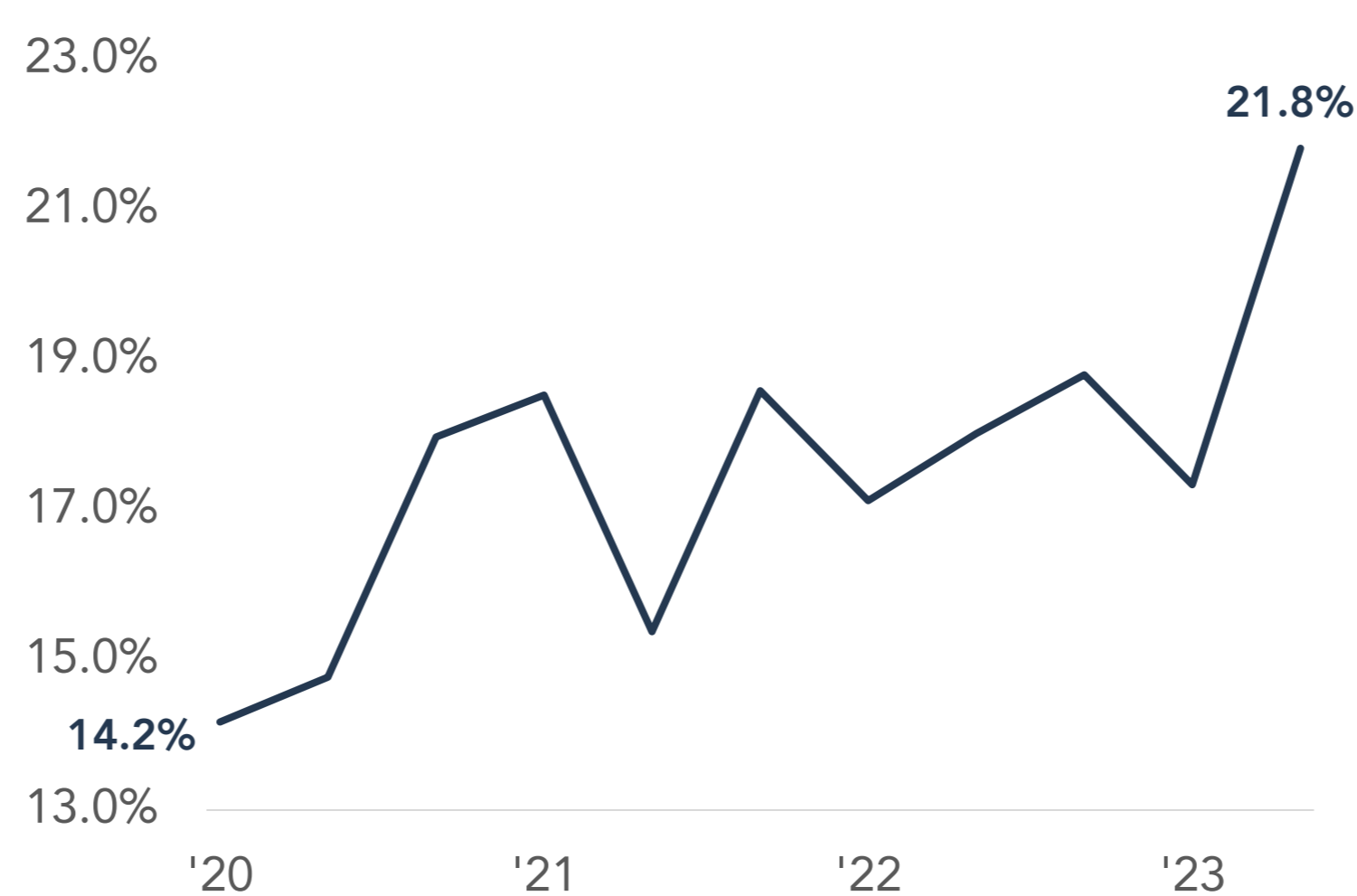
Auto and Credit Card Interest Rates



The rates on auto loans and credit cards have reached all-time highs since the Fed started hiking interest rates

Rejections are Up

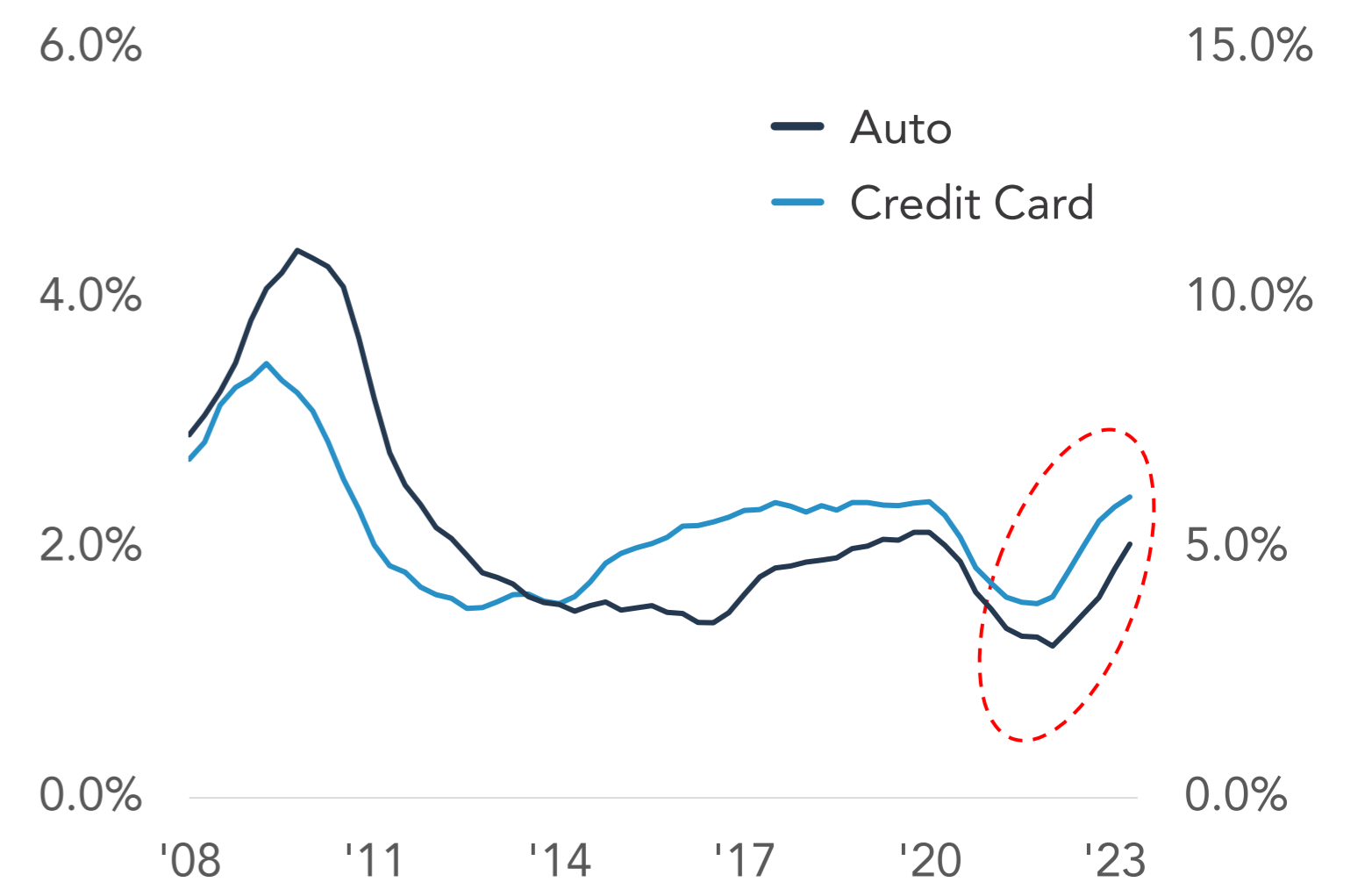
Consumer Credit Rejection Rates



In the face of historic gross debt balances, interest rates and a looming recession, lenders are tightening lending standards and pulling liquidity from the system

Delinquencies are Building

Quarterly Transition into Serious Delinquency (90+)



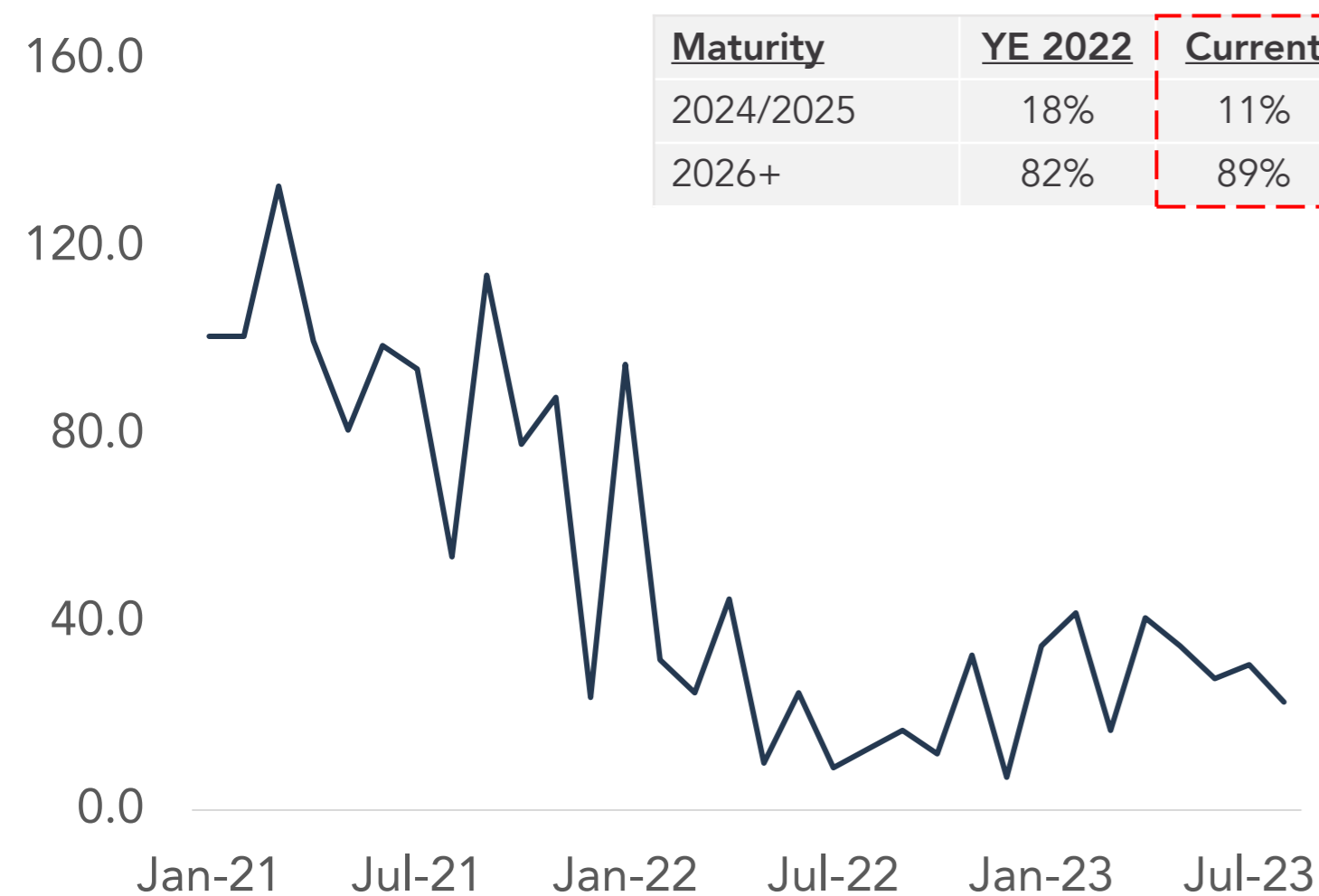
But it might be too late as delinquencies have been increasing since 2022, led by Americans aged 18-39

While Creating A Rising Wall of Worry in Leveraged Finance

Despite healthy companies extending their maturity profiles, cracks are emerging among highly leveraged borrowers as they are unable to refinance their near-term maturities.

Primary Debt Markets Reopening

High Yield and Leveraged Loan Issuance (\$B)



Healthy companies are taking advantage of the recovery in primary markets to amend-and-extend their maturity profile

Lower-Rated Names Struggling to ReFi

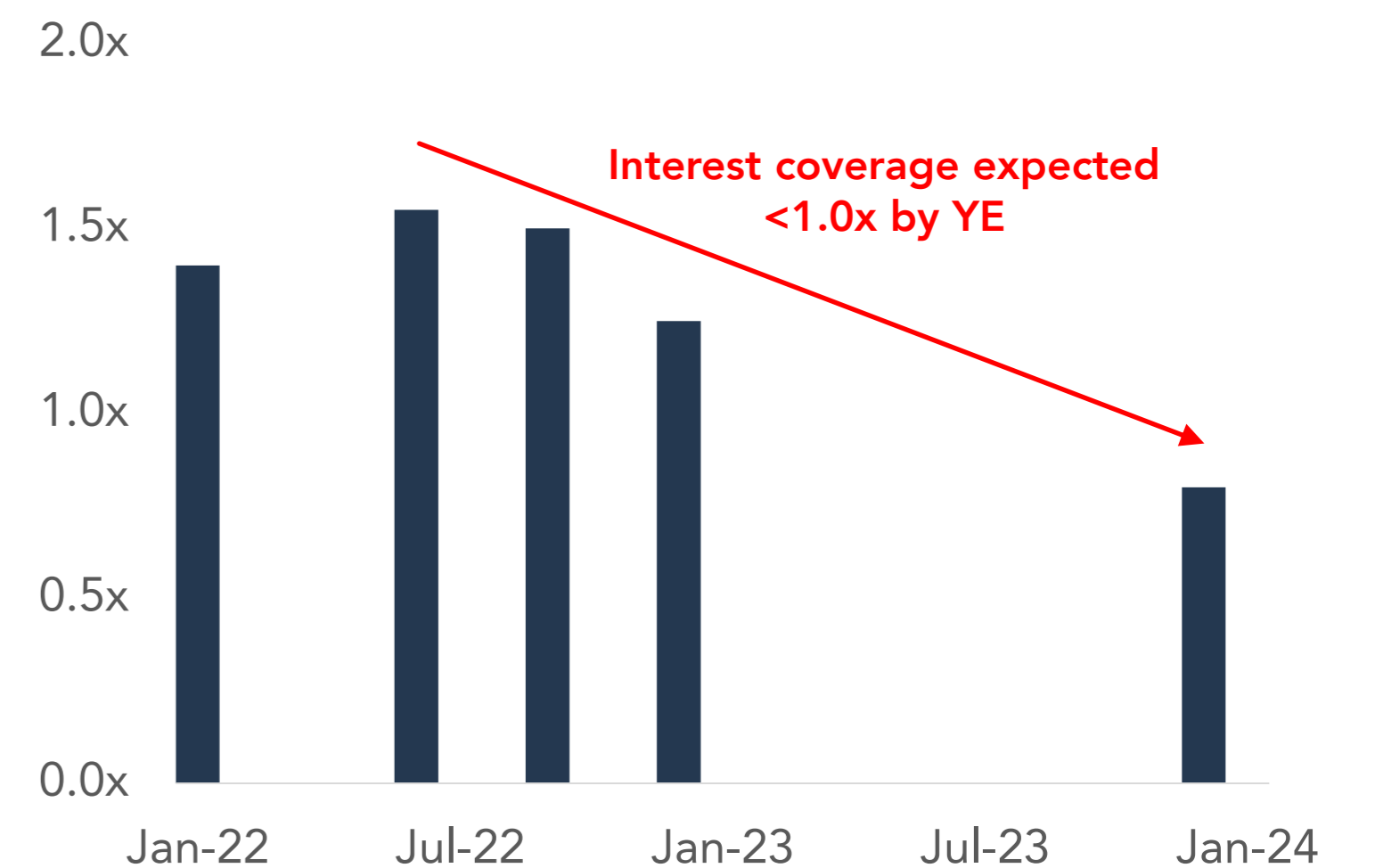
2024 / 2025 Loan Maturities by Rating



Lower-rated names are struggling to extend their maturity and creating refinancing risk in 2024 / 2025, with ~40% of the direct lending market maturing in ~24 months

Default Risk is Steadily Rising

Interest Coverage for B3-Rated Corporate Issuers



Lower rated names have seen a marked decrease in their interest coverage ratios since the beginning of the year; Moody's expects this to fall below 1x by year end



If you would like to discuss any of the topics raised, please do not hesitate to reach out to us at info@arctospartners.com.

About Arctos Partners

Arctos Partners is a private investment firm that provides bespoke growth and liquidity solutions, differentiated thought partnership, and value creation advice to sports franchises (Arctos Sports) and alternative asset managers, their funds, and portfolio companies (Arctos Keystone).

Founded in 2019, Arctos serves as a catalyst for innovation and business transformation for its portfolio companies and its markets. The firm's proprietary approach is anchored by its unique quantitative research and data science platform, Arctos Insights.

Arctos has a team of more than 40 investment and operational professionals with investment and operating expertise across industries, geographies and economic cycles. The firm is headquartered in Dallas, with office locations in New York and London. For more information, visit www.arctospartners.com or Arctos Partners' company page on [LinkedIn](#).