

KKR

# Insights

16.1

KKR Multi-Asset  
Strategies  
February 2026

# The Total Portfolio Approach

A Practical Framework

# Contents

---

## 3 Introduction

---

## 6 Section I: Total Portfolio Approach Overview

- 6 Differences Between SAA and TPA
  - 7 Where the Strategic Asset Allocation Approach Can Fall Short
  - 7 What Changes Under TPA
- 

## 8 Section II: Benefits for Private Markets Investors

- 8 Managing Liquidity Holistically
  - 8 Maintaining Flexibility Through Drawdowns and Denominator Effects
  - 9 Improving Vintage Diversification Through Steadier Pacing
  - 10 Capturing Relative Value Opportunities
- 

## 12 Section III: Allocating Through a TPA Lens

- 12 Step One: Defining the Investable Universe
  - 13 Step Two: Developing Strategy Views
  - 16 Step Three: Portfolio Optimization
  - 18 Step Four: Commitment and Liquidity Planning
- 

## 20 Section IV: Minimum Viable TPA

---

## 21 Section V: Conclusion



**Henry H. McVey**

Head of Global Macro  
& Asset Allocation,  
CIO of KKR Balance Sheet  
henry.mcvey@kk.com

---

**Dave McNellis**

Managing Director,  
Co-Head of Global Macro, and  
Head of Portfolio Construction  
and Multi-Asset Strategies for  
Private Markets  
david.mcnellis@kk.com

**Christian Olinger**

Director, KKR Multi-Asset  
Strategies  
christian.olinger@kk.com

Acknowledgments: Yifan Zhao

# The Total Portfolio Approach

## A Practical Framework

In our recent work on Capital Market Assumptions, we laid out our views on key portfolio construction inputs that we believe are essential for delivering on whole portfolio objectives in a less forgiving regime. Against that backdrop, we now explore the ‘total portfolio approach’, a discipline that has gained traction globally for aligning total-fund decisions with portfolio objectives, risk budgets, and liquidity constraints, and for enhancing the assessment of relative value opportunities, particularly in Private Markets. Rather than focusing on optimal allocations within individual fixed asset-class sleeves, this framework is designed to assess investment opportunities based on how each contributes to the portfolio as a whole, with a view towards allowing capital to be allocated more dynamically across the full opportunity set. In this piece we detail where we believe a total portfolio approach can add the most value, where we think trade-offs and limitations may emerge, and importantly, how investors can incorporate actionable elements of the approach in ways that enhance decision-making without requiring a wholesale disruption of long-standing governance structures.

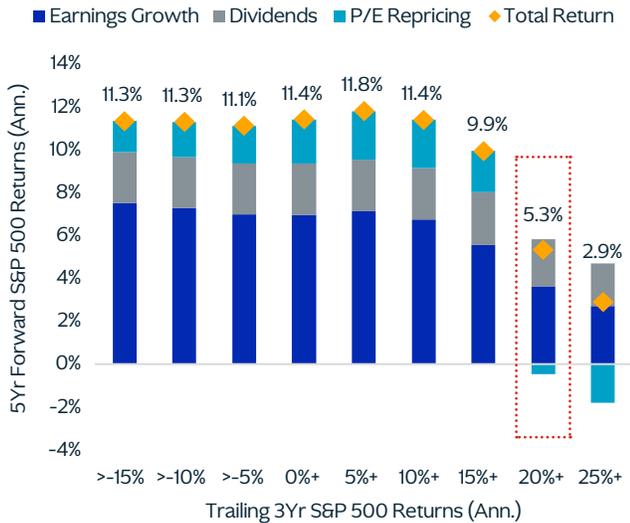
The winds and waves are always on the side of the ablest navigators.

— Edward Gibbon, Historian

For all long-term investors, the expected compression of forward-looking returns that we detail in *Exhibit 2* has an important message. Specifically, our research suggests that in the present environment, broad market exposure alone is less likely to deliver the outcomes it once did, when a favorable macro backdrop allowed many approaches to benefit from a ‘rising tide.’

**Exhibit 1: After Three Strong Years in the S&P 500, Future Public Equity Returns Tend to Lag**

**S&P 500 3-Year Trailing vs. Future Performance, Annualized, 1983-2025**



Data as at October 31, 2025. Source: Bloomberg, KKR Global Macro & Asset Allocation analysis.

As broad market exposure has become less reliable and long-term success increasingly depends on relative value, underwriting, and implementation discipline, CIOs have been looking for more ways to ‘win’.

**Exhibit 2: The Forward-Looking Expected Range of Outcomes Will Be Narrower, We Believe**

**Expected Return Range of Outcomes, %**



Data as at November 30, 2025. Source: KKR Global Macro & Asset Allocation analysis.

Consistent with this reality, we have had on-going discussions with a growing number of clients, both large and small, about how to improve the likelihood of achieving their portfolio objectives. Increasingly of late we have seen that the ‘total portfolio approach’ (TPA) has been intertwined in these client conversations.

That interest is not surprising, given recent volatility as well as the compression of forward-looking returns. However, before an investor can implement a total portfolio approach, we think it is essential to be explicit about the building blocks that drive better outcomes. So, in our most recent work on [Capital Market Assumptions](#), we laid out our views on key portfolio construction assumptions – expected returns, volatility, correlations, and manager dispersion – to highlight the importance of looking beyond just broad asset class exposures for value in a world of higher multiples, tighter spreads, and less reliable diversification from bonds. Those assumptions provide a natural bridge we believe to implementing a total portfolio approach, allowing CIOs and others to translate inputs and opportunities into whole portfolio decisions.

At core, the total portfolio approach is a whole-portfolio decision and governance framework that evaluates investment opportunities across Public and Private

Markets based on their contributions to total portfolio objectives, rather than within static asset-class sleeves. Not surprisingly, as broad market exposure has become less reliable and long-term success increasingly depends on relative value, underwriting, and implementation discipline, CIOs have been looking for more ways to ‘win’. KKR has long invested in an integrated platform that generates investment insights by leveraging our advantages across capital structures and geographies, alongside expanding proprietary origination that helps us ‘make our own luck’ in sourcing. We believe these capabilities can help investors operationalize a total portfolio approach, as perspectives from the balance sheets at both KKR and Global Atlantic deepen our understanding of how capital flows, liquidity conditions, and risk appetite evolve through market cycles.

TPA is most often contrasted with Strategic Asset Allocation (SAA), which for decades has served as the dominant organizing structure for institutional portfolios. In its strongest form, SAA provides discipline, asset-class diversification, and governance clarity. However, as portfolios have grown more complex, particularly with the expansion in Private Markets, rigid asset-class boundaries and infrequent policy resets have sometimes slowed decision-making, obscured underlying economic risks, and constrained the ability to re-underwrite swiftly where capital is best deployed.

Importantly, in our view, adopting a TPA framework does not require abandoning SAA wholesale. Indeed, in practice, many investors we have spoken with who have adopted the framework describe it as more moving along a continuum, retaining a strategic anchor for accountability while incorporating elements of total portfolio thinking. For investors with meaningful Private Markets exposure, that shift is often most visible in implementation, including improved liquidity management, steadier commitment pacing, better vintage diversification, and greater flexibility through drawdowns and denominator effects. Ultimately, the appropriate degree of adoption depends on investor objectives, constraints, resources, and organizational design. One practical on-ramp we think that warrants all investor attention is a ‘minimum viable TPA’. More details below, but this approach can include centralizing portfolio-level functions, strengthening in-house

portfolio construction and relative-value capabilities, refreshing views more frequently, and piloting TPA through a dedicated sleeve that has clear risk and liquidity guardrails.

In the sections that follow we offer:

- **An overview of TPA’s core mechanics and the ways it differs from the traditional SAA framework.**
- **A discussion of why TPA may be most relevant for Private Markets investors, particularly through liquidity management, pacing discipline, and cross-strategy relative value decision-making.**
- **An applied example of constructing a Private Markets program in a total portfolio context, including forming strategy views, mapping risk and return drivers, optimizing an allocation, and planning commitments and liquidity.**
- **Practical guidance on incorporating select TPA elements within an existing SAA framework.**

First, we believe TPA is a logical evolution of Strategic Asset Allocation, as it shifts the focus from “how did each asset class do versus its benchmark?” to whether the overall portfolio is delivering on objectives. We support this shift in mindset in response to the increasing complexity across global capital markets, and we view it as a useful catalyst for a more relative-value focus in Private Markets. That said, we do not think TPA is the only way to manage a portfolio or that it is a silver bullet solution to improve performance, as it is not a substitute for skill. The results investors experience will ultimately hinge, we believe, on the quality of forecasting, risk modeling, manager selection, and implementation discipline. In our view, the right approach for many institutions is grounded in practicality, and likely will incorporate elements of TPA, while recognizing the realities of organizational structures and the capacity for timely execution.

Importantly, in our view, adopting a TPA framework does not require abandoning SAA wholesale.

## SECTION I

# Total Portfolio Approach Overview

**Differences Between SAA and TPA:** Strategic Asset Allocation (SAA) emerged as the dominant organizing philosophy for institutional investing in the late twentieth century. Rooted in modern portfolio theory, it formalized the view that long-term policy weights across broad asset classes — Equities, Bonds, and Alternatives — largely determine portfolio outcomes. SAA took hold as an operating model in which boards set policy targets and risk posture, revisiting them periodically; investment teams were organized by asset classes and managed discrete sleeves against benchmarks; and success was evaluated through relative performance against those benchmarks. Strategic Asset Allocation remains a cornerstone of institutional portfolio construction for good reason: it provides a clear, long-term anchor, which helps boards and investment committees stay disciplined through market cycles. It also supports a governance-friendly approach for delegation and accountability, sets transparent benchmarks for measuring progress, and enables a repeatable cadence for rebalancing that can be especially valuable during periods of volatility. For many investors, it helps keep portfolios fully invested and focused on the long-term, which is particularly valuable when markets are noisy and decision-making is challenging.

The total portfolio approach represents an evolution of this framework, we believe, rather than a rejection of it. It accepts the need for the discipline, diversification, and clearly-articulated objectives that characterize SAA, but challenges the premise that asset-class buckets should remain the primary unit of analysis and accountability. Instead, it focuses on outcomes at the whole portfolio

level, measured against broad mission-level objectives, and, typically, delegates greater discretion to the CIO to manage exposures within the constraints of an overall portfolio risk budget set by the board.

In this paper, Strategic Asset Allocation refers to a specific institutional operating model. Many institutions, whether they formally practice SAA or not, maintain a strategic allocation anchor that defines baseline exposures and governance guardrails. This distinction matters because moving towards a total portfolio approach does not require abandoning a strategic allocation. In reality, we are seeing investors adopt TPA-like features while retaining their strategic anchor to preserve accountability and long-run discipline.

A total portfolio lens treats Private Markets as integrated sources of economic exposure and liquidity demand within the broader portfolio, rather than as discrete sleeves that must be maintained mechanically.

**Where the Strategic Asset Allocation Approach Can**

**Fall Short:** Advocates for the total portfolio approach often argue that although SAA provides discipline and broad diversification, its structure can hinder results in a world where investment opportunities have become increasingly complex. They point to:

- **Rigid categories:** Asset class labels that can make it difficult to identify and seize opportunities that cut across silos or do not fit neatly into any one predefined bucket.
- **Siloed teams:** Asset class-centric teams and incentives that can limit cross-collaboration, making it harder to coordinate portfolio-wide change or reallocate capital efficiently as relative value shifts.
- **Decision latency:** Lengthier approval cycles that can slow adaptation and discourage changes that could improve outcomes.
- **Inertia:** Stakeholders anchoring on the existing mix, favoring incremental adjustments rather than a fresh, whole portfolio re-underwriting of the best use of capital.
- **Masked risk drivers:** Portfolios that appear diversified by label but may still be concentrated in a small set of underlying risk factors — such as equity beta or duration — becoming less diversified precisely when it matters most.

**What Changes Under TPA:** A total portfolio approach aims to re-center governance, analytics, and implementation on whole-portfolio outcomes, including:

- **Whole-portfolio objectives:** Success is defined at the total portfolio level, not relative to asset-class benchmarks. For example, an endowment might define success as sustaining real purchasing power while supporting 5% annual spending (inflation-adjusted), whereas a pension may focus on closing its funding gap over time.
- **CIO-centric governance.** The board sets a reference portfolio (for instance, 70% Public Equity/30% Fixed Income) and risk appetite consistent with those objectives and delegates allocation authority to the CIO within a total portfolio risk budget.

- **Dynamic assessment.** Expected returns, risks, and correlations are reviewed continuously rather than at multi-year intervals, allowing portfolios to evolve as conditions change.
- **Unified team.** Asset-class silos give way to a single cross-functional team that sources, underwrites, and manages ideas across the investable universe.
- **A common analytical lens.** Investment decisions are driven by factor exposures, expected returns, volatility, correlations, and liquidity rather than by asset-class labels.
- **Competition for capital.** Without fixed buckets to fill, every opportunity competes on its potential to improve the whole portfolio's ability to meet its objectives.

**Table 1:** The distinctions between a traditional Strategic Asset framework and a TPA-oriented framework can be summarized across several core dimensions.

Dimension	Traditional SAA	Total Portfolio Approach
<b>Success</b>	Alpha vs. asset-class benchmarks	Total fund outcome vs. goal
<b>Philosophy</b>	Fixed asset-class targets; periodic rebalancing	Dynamic weights; continuous evaluation
<b>Governance</b>	Board sets target weights to asset classes	Board sets reference portfolio and risk appetite
<b>Organization</b>	Asset-class specialization; separate teams	Unified team; cross-functional collaboration
<b>Benchmarking</b>	Multiple asset-class benchmarks	Single reference portfolio and risk budget
<b>Diversification</b>	Through asset classes	Through risk factors
<b>Capital Allocation</b>	Fill predetermined asset-class buckets	Competition for capital; investments selected without regard to labels

Private Markets are often where the practical advantages of a total portfolio approach become most evident.

## SECTION II

# Benefits for Private Markets Investors

Private Markets are often where the practical advantages of a total portfolio approach become most evident. Relative to public markets, private investments are less continuously priced, more operationally complex, and tend to be funded through multi-year commitments and distribution cycles, features that can strain siloed allocation frameworks. A total portfolio lens treats Private Markets as integrated sources of economic exposure and liquidity demand within the broader portfolio, rather than as discrete sleeves that must be maintained mechanically. We have seen that this framing can materially improve decision-making around where to deploy illiquidity, how to pace commitments across cycles, and when to rotate between strategies as relative value shifts.

In practice, the first-order impact will likely be improved portfolio efficiency from deploying one's illiquidity budget where it is most valuable, thus reducing the risk of cash drag or forced selling, and preserving flexibility to act when markets dislocate. This can ultimately translate into stronger returns. Indeed, the advantages of this approach are mutually reinforcing and may provide greater capacity to act on cross-asset relative value when it is needed.

**Managing Liquidity Holistically:** Managing the portfolio as a unified whole is a hallmark of TPA, extending beyond investment decisions to operational discipline such as liquidity management. Private Markets commitments make this discipline more consequential because capital calls and distributions are uncertain in timing and magnitude, while unfunded commitments are contractual. This mismatch can create periods where liquid resources are strained and siloed frameworks break down (or excess cash is held 'just in case', which can also be

suboptimal). A total portfolio view allows investors to map all sources of liquidity demand and constraint, including lockups and redemption terms, capital call schedules, margin and collateral needs, and unfunded commitments, and then thoughtfully decide where scarce illiquidity budgets should be deployed.

This framing also forces a clearer trade-off between where to take illiquidity. Rather than accepting lockups in public vehicles to access a manager or fee structure, TPA encourages investors to ask whether that same illiquidity budget is better reserved for Private Markets, where harvesting an illiquidity premium may be more feasible given opportunity for value creation through selection and structuring, as well as wider manager dispersion.

At the implementation level, TPA can also reduce the opportunity cost of funding private commitments. Pre-funding with cash can create meaningful drag, yet rigid SAA frameworks often make it hard to coordinate funding across sleeves. A total portfolio approach allows investors to fund capital calls from across liquid public assets and to rely on those assets as a backstop in stress scenarios. This can help keep the portfolio fully invested, reduce cash drag, and lower the risk of forced private-asset sales to meet obligations.

**Maintaining Flexibility Through Drawdowns and Denominator Effects:** A distinct advantage of TPA is how it helps investors maintain flexibility through drawdowns, when governance constraints and policy ranges often become most restrictive. Sharp public market declines can mechanically increase the reported weight of private assets, the "denominator effect", because private

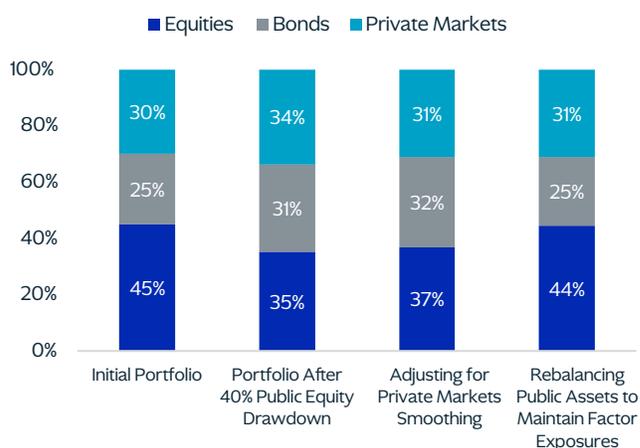
valuations are typically lagged and slower to reprice. Under traditional SAA, this can push private exposures above policy ranges at precisely the wrong time, creating pressure to pause commitments or sell illiquid assets to rebalance, which can be value destructive.

TPA can help investors avoid reacting mechanically to reported weights. Rather than treating Private Markets exposure as a fixed percentage that must be managed and rebalanced based on lagged marks, investors can look through reported allocations to underlying economic exposures and manage adjustments through liquid public positions. This can keep capital available for new commitments and rebalancing into dislocations as relative value changes, while reducing the likelihood of pro-cyclical actions such as selling illiquid assets or cutting commitments during periods of market stress. Over time, this flexibility supports steadier pacing and better vintage diversification, as governance becomes less pro-cyclical and investors are better positioned to stay engaged when liquidity is most scarce. *Exhibit 3* illustrates how a sharp decline in public equity markets, such as a hypothetical 40% drawdown, combined with slower repricing in Private Markets, can result in an apparent overweight to private assets, known as the denominator effect. Through a TPA lens, investors can look through smoothed valuations to the underlying economic value and adjust liquid public market exposures to maintain consistent factor exposure relative to the reference portfolio.

TPA can help investors avoid reacting mechanically to reported weights.

**Exhibit 3: Under TPA, Investors Can Look Through Smoothed Valuations to the Underlying Economic Value of Holdings and Adjust the Liquid Public Market Positions to Counter the Private Markets Denominator Effect During Dislocations**

### Portfolio Weights Following Drawdown and TPA-Driven Adjustments

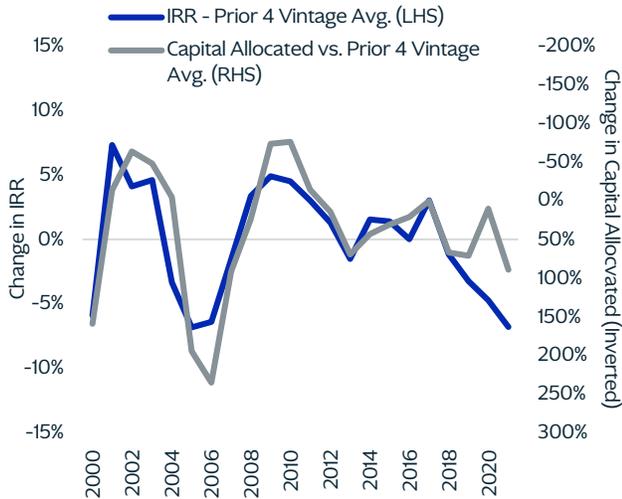


Assumes Bonds have a beta of 0.15 to Equities and Private Markets have betas of 0.35 and 0.60 to Equities on a reported and unsmoothed basis, respectively. Data as at January 31, 2026. Source: KKR Global Macro & Asset Allocation analysis.

**Improving Vintage Diversification Through Steadier Pacing:** One practical limitation of a traditional Strategic Asset Allocation approach is the difficulty of maintaining target exposures through time in the presence of governance and decision-making frictions. Because most Private Markets exposure is delivered through drawdown funds, capital is continuously returned, and allocations will naturally drift lower unless distributions are recycled into new commitments. Under many SAA frameworks, each new fund commitment requires explicit board approval. As a result, approvals can be batched, sometimes occurring only every few years, leading to uneven deployment and weaker vintage-year diversification. This inconsistent pacing also risks increasing commitments after periods of strong public market performance, potentially resulting in higher allocations late in the cycle when prospective returns are lower (the opposite of the denominator effect).

**Exhibit 4: Private Equity Fundraising and Subsequent Returns Are Inversely Related, as Periods of Heavy Capital Formation Tend to Coincide With Lower Prospective Vintage Returns**

**Change in IRR vs. Change in Capital Allocated, by Vintage Year**



Private Equity reflects global exposure across buyouts, growth equity, and venture capital. IRR uses pooled vintage-year returns. Sample includes 2000-2021 vintages. Data as at January 31, 2026. Source: Cambridge Associates, KKR Global Macro & Asset Allocation analysis.

A total portfolio approach typically clarifies decision rights by empowering the CIO to act within board-approved objectives and risk limits, enabling more timely, integrated portfolio decisions. This can support more consistent deployment, improved vintage diversification, and reduced cyclical in commitments. Importantly, the same liquidity toolkit described earlier – using liquid public assets as a backstop while keeping the portfolio fully invested – allows investors to maintain the steadier pacing without holding excess cash balances.

A total portfolio approach typically clarifies decision rights by empowering the CIO.

We note that, for those investors who are unable to move meaningfully towards a TPA governance model, newer Private Markets structures can partially address these challenges. Evergreen strategies, for example, can provide more continuous exposure by automatically recycling capital into new investments while offering periodic liquidity. While not a substitute for total portfolio governance, this can help mitigate pacing and vintage concentration risks within a more traditional allocation framework.

**Capturing Relative Value Opportunities:** Because a total portfolio approach is not constrained by traditional asset-class buckets, it can give practitioners greater flexibility in pursuing relative value opportunities across Private Markets by responding to changing market conditions in ‘real time’. This can include earlier engagement with emerging themes, participation in finite-lived or episodic opportunities, and the ability to underwrite investments that sit between conventional asset-class definitions. The holistic liquidity planning, flexibility through drawdowns, and steadier commitment pacing – and insights – supported by a total portfolio approach can create the deployable capital and governance bandwidth to capitalize on relative value rather than merely observe it.

In the current environment, several Private Markets areas align particularly well with this framework.

- **Within Private Credit, Asset-Based Finance (ABF) stands out.** We continue to believe the economy is operating with a higher ‘resting heart rate’ for inflation, which increases the appeal of collateral-based cash flows tied more directly to nominal GDP growth. Relative to other segments of Private Credit, such as Direct Lending, ABF offers access to a broader investable universe and a more diversified collateral base, supported by structural capital demand as companies increasingly adopt capital-light business models.
- **Private Equity, corporate carve-outs in particular, remains an attractive source of relative value.** As companies streamline portfolios and divest capital-intensive or lower-return businesses to refocus on higher-margin platforms, carve-outs can provide compelling entry points. Transaction complexity often limits competition and the transition to standalone

operations can unlock value through clearer accountability, better-aligned incentives, and improved cost and capital discipline.

- **We also see opportunity in Capital Solutions, where a growing number of companies are seeking non-dilutive private financing alternatives to Public Equity issuance.** This has expanded the universe of bespoke, partnership-oriented structures that often sit between traditional Private Equity and Private Credit categories and can be underrepresented in static allocations. In many cases, these investments benefit from favorable supply-demand dynamics while offering contractual return profiles with the potential for equity-like outcomes.
- **Finally, within Real Assets, we continue to see relative value in Opportunistic Infrastructure linked to electrification and digitalization.** Demand is being pulled forward by data center buildout and rising power, cooling, and connectivity requirements. The opportunity set spans enabling ‘picks-and-shovels’ assets across cooling, electrical equipment, networking, and power generation and transmission. Selectivity remains critical given pockets of exuberance, and underwriting should emphasize unit economics, bottlenecks, and contracted or essential-service cash flows rather than headline growth alone.

We also see opportunity in Capital Solutions, where a growing number of companies are seeking non-dilutive private financing alternatives to Public Equity issuance. This has expanded the universe of bespoke, partnership-oriented structures that often sit between traditional Private Equity and private Credit categories and can be underrepresented in static allocations.

## SECTION III

# Allocating Through a TPA Lens

The example that follows illustrates how a Private Markets portfolio can be constructed in a manner that is consistent with a total portfolio approach. Rather than allocating capital within traditional asset class buckets, the framework seeks to direct capital towards the most attractive opportunities across a range of return profiles and underlying exposures. The objective is not to prescribe a static policy mix for Private Markets, but to identify how private strategies can most effectively improve total portfolio outcomes given prevailing market conditions and constraints.

For clarity, we organize the portfolio construction exercise into four steps. First, we define the investable universe in economic rather than product terms. Second, we develop forward-looking strategy views, including expected returns, manager dispersion, volatility, and correlations, to enable meaningful comparisons across opportunities. Third, we optimize the Private Markets allocation in the context of the total portfolio, with a reference portfolio anchor. Finally, we translate target allocations into a commitment and liquidity plan that is robust across market cycles. While presented sequentially, these steps should be iterative and evolve as assumptions and opportunity sets change.

In practice, the process typically begins by defining an investor's objectives and constraints to ground the portfolio construction process. In this example, we assume a reference portfolio has already been selected to maximize the likelihood of achieving those objectives and therefore serves as the anchor for the analysis that follows.

### ● STEP 1

## Defining the Investable Universe

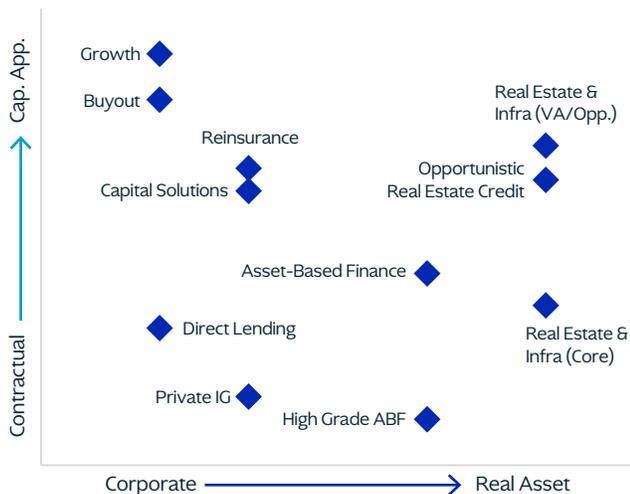
Under a total portfolio approach, defining the investable universe begins with economic exposures, not product labels. The goal is to identify the underlying sources of risk and return the investor seeks to access and then map those exposures to strategies and implementation vehicles that can be realistically funded at scale. The resulting universe should be broad enough to capture meaningful opportunity, sufficiently granular to support forecasting and portfolio construction, and practical given governance, resources, and operational constraints.

While there are many potential ways to frame this universe, a useful approach is to organize it along two intuitive dimensions. The first is asset exposure, distinguishing between strategies linked primarily to operating businesses and corporate cash flows, and those tied to Real Assets, where cash flows are often connected to physical assets and, in some cases, inflation-linked revenue. The second dimension is return profile, reflecting the extent to which returns are contractual versus driven by capital appreciation. At one end there are more contractual strategies that emphasize stable income and downside protection through seniority, collateral, or structural features. At the other end there are more appreciation-driven strategies, where outcomes depend primarily on growth, operational improvement, and value creation. Between these poles sit hybrid strategies that combine income with upside participation.

This two-axis map (*Exhibit 5*) makes clear what TPA is optimizing across: what you are exposed to economically and whether returns are primarily contractual or driven by appreciation. You do not need to include every strategy to implement a TPA investment process, but you do need the universe to reflect the true decision set of opportunities you can fund at scale.

**Exhibit 5: The Opportunity Set Spans a Wide Spectrum of Strategies Across a Spectrum of Economic Exposures and Return Drivers**

**Illustrative Investment Universe**



For illustrative purposes only. Data as at January 31, 2026. Source: KKR Global Macro & Asset Allocation analysis.

Because many investors allocate to Private Markets in part to access skillful active management, expected returns should also incorporate views on manager dispersion.

**STEP 2**

**Developing Strategy Views**

Implementing a total portfolio approach, whether fully or through a limited pilot, requires a common language and a set of consistent strategy-level views that can be applied across the entire portfolio. The objective is to describe each strategy’s underlying economic exposures using a comparable set of forward-looking inputs, e.g., expected return, volatility, correlations, and factor exposures, thus allowing private investments to be evaluated alongside one another in the context of the broader portfolio (*Exhibit 7*).

**Expected Returns**

At KKR, our forward-looking return views are informed by a combination of **top-down** and **bottom-up** insights, focusing on relative value across Public and Private Markets to identify the most efficient use of capital at the total portfolio level.

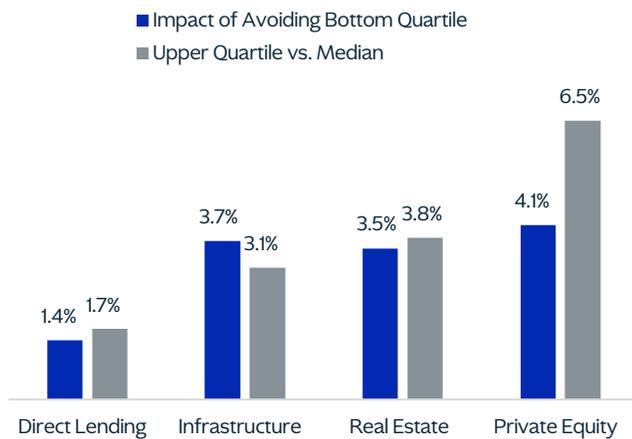
**Top-down, we pair forward-looking macro views with asset class fundamentals to develop expected return assumptions.** These views are grounded in underlying return drivers such as capitalization rates, purchase price multiples, financing costs, earnings growth, and other key inputs, and reflect how we expect macro conditions and asset-class dynamics to evolve through time. The resulting estimates are intended to represent broad, benchmark-like exposures and are expressed on a net-of-fees, time-weighted basis to reflect implementable investor experience and improve comparability across Public and Private Markets. While not directly investable, these views provide a useful reference point for the outcomes associated with a diversified, median-manager experience and allow for consistent comparisons across opportunity sets.

**Because many investors allocate to Private Markets in part to access skillful active management, expected returns should also incorporate views on manager dispersion.** We therefore develop strategy-level assessments informed by historical fund performance, considering both upside potential and downside risk. While top-quartile outcomes receive considerable attention, we place particular emphasis on the value of

avoiding poor managers. In a diversified Private Markets program, the expected uplift from steering clear of bottom-quartile outcomes is often a more consistently achievable source of excess return and can translate into meaningful outperformance relative to broad market exposures.

**Exhibit 6: Manager Selection Is a Key Driver of Private Market Outcomes, and a Meaningful Source of Portfolio Value Add**

**Historic Manager Dispersion in Private Markets**



Based on global benchmarks and average IRRs of 2017-2021 vintage years. Upper Quartile vs. Median is the average difference between the top quartile IRR and median IRR. Impact of Avoiding Bottom Quartile is the difference between the average pooled equally weighted IRR for the top three quartiles and the broad universe of managers. Direct Lending is represented by Private Debt: Senior. Data as at January 31, 2026. Source: Cambridge Associates, KKR Global Macro & Asset Allocation analysis.

**A limitation of relying exclusively on top-down analysis is that the highest-quality data tends to exist only for large, well-established segments of the market.**

Emerging, niche, or rapidly evolving strategies often lack sufficient history to support robust inference from market-level data alone. To address this, we supplement our top-down framework with underwriting-informed return estimates from investment teams that explicitly incorporate assumptions around losses, downside cases, and structural risks.

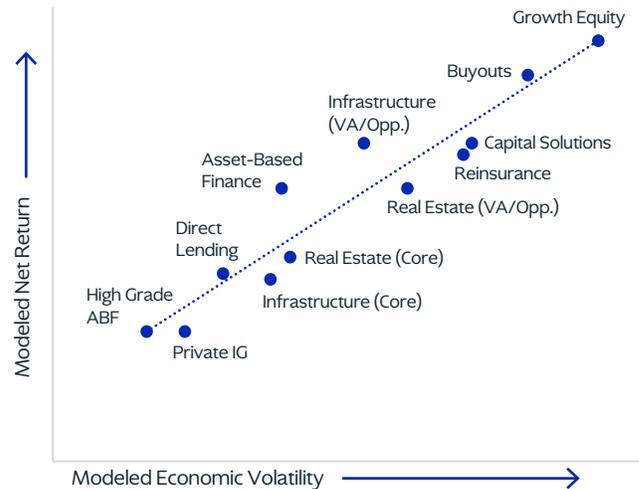
We integrate bottom-up underwriting with our top-down views by cross-checking key assumptions and reconciling differences. Top-down estimates provide a baseline, while underwriting informs adjustments where market data

is limited or where structure and downside protection materially affect outcomes.

**The result is a set of strategy-level expected returns that is internally consistent with macro assumptions, asset-class fundamentals, and opportunity-level underwriting, and that is suitable for portfolio construction within a total portfolio approach framework.**

**Exhibit 7: Strategy-Level Views On Return and Volatility Are a Key Input to Portfolio Construction and Help Inform Relative Value**

**Return vs. Volatility Across the Investable Universe**



Data as at December 2025. Source: Cambridge Associates, Burgiss, NCREIF, Bloomberg, KKR Global Macro & Asset Allocation.

The expected uplift from steering clear of bottom-quartile outcomes is often a more consistently achievable source of excess return and can translate into meaningful outperformance relative to broad market exposures.

### Expected Volatility and Correlations

When allocating to Private Markets, we place greater weight on risk estimates that reflect underlying economic reality rather than relying solely on reported returns derived from periodic appraisals and smoothed valuations. This approach can improve comparability with public markets and supports a more coherent assessment of total portfolio risk within a TPA framework.

That said, reported measures of volatility still have relevance in certain governance contexts. Endowment spending rules based on trailing portfolio values or pension contribution policies tied to funded status are often driven by reported outcomes rather than economic mark-to-market risk. In those settings, appraisal-based volatility, while understating true economic risk, can nonetheless be decision-relevant.

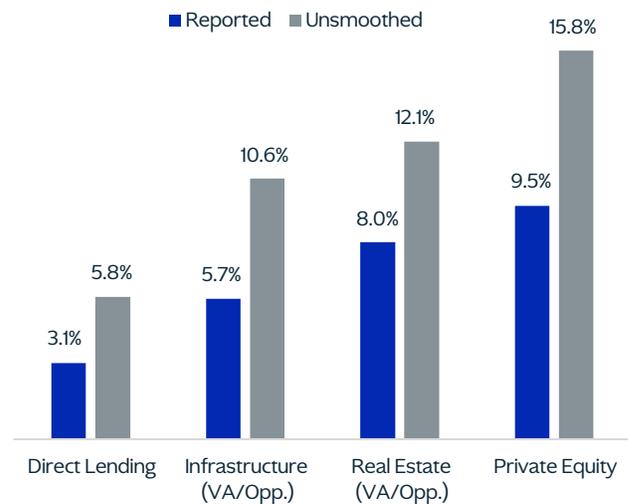
**Table 2:** Investors commonly rely on two approaches to estimate economic volatility and correlations: public proxies and unsmoothed Private Market returns.

Approach	Pros	Cons
<b>Public Proxies</b>	<ul style="list-style-type: none"> <li>• Accessible, generally high-quality data</li> <li>• Flexible for emerging or niche strategies</li> </ul>	<ul style="list-style-type: none"> <li>• Requires building and maintaining proxies</li> <li>• Adjusting for leverage and capital structure can be research-intensive</li> </ul>
<b>Unsmoothed Private Market Returns</b>	<ul style="list-style-type: none"> <li>• More representative of underlying economic exposures</li> </ul>	<ul style="list-style-type: none"> <li>• Traditional unsmoothing (often in returns space) can produce unintuitive results</li> <li>• Data can be limited for emerging and niche strategies</li> </ul>

Historically we preferred the use of public market proxies, particularly for modelling niche or emerging Private Markets strategies, given their flexibility and the depth and consistency of available data. As Private Markets data quality has improved and methods have advanced to address limitations of common unsmoothing techniques, led internally at KKR by our colleague Yifan Zhao, we think both approaches are potentially valid for portfolio construction and investors should weigh the tradeoffs in the context on their own unique circumstances.

**Exhibit 8:** Estimating Private Markets Volatility From Unsmoothed Returns Allows for a Consistent Like-for-Like Comparison With Public Market Exposures and Better Represents the Underlying Economic Risks of Investments

### Reported vs. Unsmoothed Volatility Across Major Strategies



Unsmoothed volatility is based on a proprietary approach developed by KKR inspired by D. Geltner, 1993. "Estimating Market Values from Appraised Values without Assuming an Efficient Market." Data as at December 31, 2025. Source: Cambridge Associates, Burgiss, KKR Global Macro & Asset Allocation analysis.

When allocating to Private Markets, we place greater weight on risk estimates that reflect underlying economic reality rather than relying solely on reported returns derived from periodic appraisals and smoothed valuations.

## Risk Factor Modeling

A core requirement of TPA is a consistent framework for translating each investment strategy into the underlying economic risk factors that drive total portfolio outcomes. This enables an apples-to-apples comparison of opportunities across Public and Private Markets and allows allocations to be evaluated explicitly against the reference portfolio's intended factor posture.

Investors generally rely on one of two approaches to estimate factor exposures.

- **The first is the use of off-the-shelf multi-asset risk models.** Many commercial frameworks provide systematic estimates of factor betas, correlations, and risk decomposition across asset classes. These tools can serve as efficient starting points, particularly for public assets and broad Private Markets benchmarks, provided that factor definitions, data frequency, and the treatment of Private Markets smoothing are well understood and aligned with how risk is governed.
- **The second approach is to build factor models internally.** For investors pursuing this path, a practical method is to estimate private strategy risk factor exposures using unsmoothed Private Markets returns as the dependent variable in regressions against selected factor time series.

**For the worked example that follows, we intentionally use a simple two-factor model — Public Equities and Public Fixed Income — because these are the same building blocks that define the reference portfolio anchoring portfolio construction.** This alignment can be a useful feature in a total portfolio approach. When the factor set mirrors the reference portfolio's degrees of freedom, it becomes easier to diagnose how Private Markets allocations alter total fund exposures and to design overlays or rebalancing actions that keep the portfolio aligned with its intended risk posture.

In our view, implementation is where a total portfolio approach either proves durable or breaks down.

## STEP 3

## Portfolio Optimization

**After defining the investable universe and developing strategy-level views across the opportunity set, the next step is to optimize the Private Markets allocation in the context of the total portfolio.** While there are multiple ways to approach this exercise, a unifying principle should be an explicit and transparent link to the reference portfolio. In this section, we assume the reference portfolio has been established separately as the appropriate risk posture to maximize the likelihood of achieving the desired portfolio outcome.

Under a total portfolio approach, the objective is typically not to maximize Sharpe ratio in isolation, but to improve expected outcomes relative to a reference portfolio, subject to the investor's constraints and risk budget. This is typically achieved by either increasing expected return for a given level of total portfolio risk or reducing risk for a given expected return, while staying within explicit guardrails. These guardrails commonly include limits on total portfolio volatility, drawdown sensitivity, and tracking error or factor deviations relative to the reference portfolio.

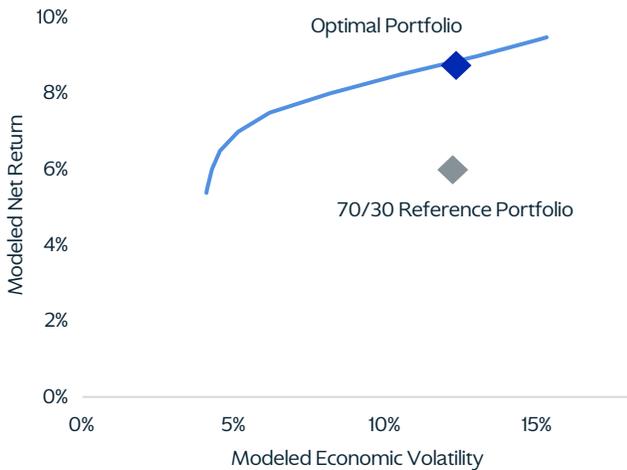
**Importantly, optimization under TPA should be viewed as a point-in-time mapping from current assumptions and opportunity sets to a target allocation.** As expected returns, risks, and relative value evolve, the analysis should be refreshed periodically to track how the optimal mix changes and to provide a 'north star' for portfolio direction. This does not imply continuously rebalancing back to an optimizer output. In practice, portfolios can move towards the target gradually as distributions are recycled into new commitments and incremental capital is deployed.

In this example, we optimize a mean-variance efficient frontier and select the portfolio that matches the factor exposures of a 70% Equities/30% Bonds reference portfolio (*Exhibit 9*). The optimization allows for up to 30% of total portfolio capital to be allocated to Private Markets and permits up to 10% total portfolio leverage to facilitate implementation. In this example, we optimize a mean-variance efficient frontier and select the portfolio

that matches the factor exposures of a 70% Equities/30% Bonds reference portfolio (Exhibit 9). The optimization allows for up to 30% of total portfolio capital to be allocated to Private Markets and permits up to 10% total portfolio leverage to facilitate implementation. Leverage can help manage total portfolio factor exposures because Private Markets strategies may introduce idiosyncratic risks that differ from the reference portfolio’s factor targets. Allocating to these strategies can displace desired broad exposures unless the portfolio can ‘top up’ through a liquid overlay.

**Exhibit 9:** Allowing Up to 30% In Private Markets and 10% Leverage Can Materially Improve Risk-Adjusted Return Relative to the 70/30 Reference Portfolio

**Total Portfolio Efficient Frontier**

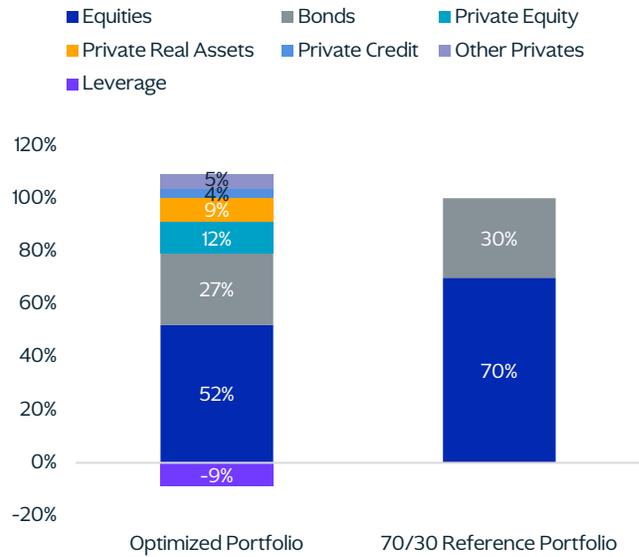


The efficient frontier allows up to 10% whole portfolio funded leverage from cash. Leverage does not include embedded strategy or fund leverage. Data as at December 31, 2025. Source: KKR Global Macro & Asset Allocation analysis.

The resulting optimal portfolio is diversified across a broad set of private market exposures, which we present using traditional asset class labels for ease of interpretation in Exhibit 10 and with greater strategy-level detail in Exhibit 11. Relative to the 70/30 reference portfolio, the allocation delivers a materially higher expected return while maintaining comparable volatility and similar factor exposures.

**Exhibit 10:** The Optimized Portfolio Allocates to a Diverse Set of Private Market Exposures, Including Strategies That Don’t Fit Cleanly Within Traditional Asset Class Buckets

**Optimized Portfolio vs. 70/30 Reference Portfolio**

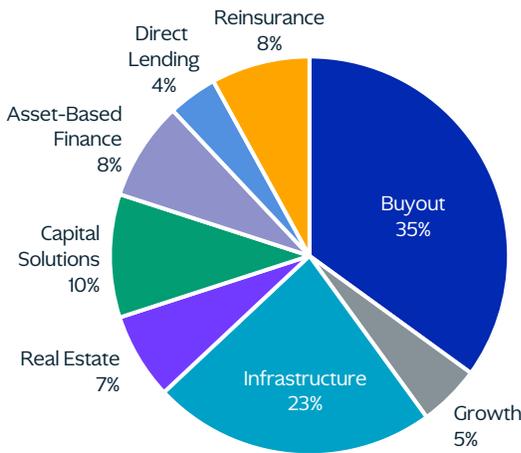


For illustration purposes only. Data as at December 31, 2025. Source: KKR Global Macro & Asset Allocation analysis.

Leverage can help manage total portfolio factor exposures because Private Markets strategies may introduce idiosyncratic risks that differ from the reference portfolio’s factor targets.

**Exhibit 11:** The Private Markets Allocation Within the Optimized Portfolio Contains Allocations to Standard Asset Class Categories — Private Equity, Real Assets, Private Credit — As Well As Other Strategies That Don't Fit Cleanly Into Buckets, Such As Capital Solutions and Reinsurance

**Private Markets Allocation Within an Optimized Portfolio, %**

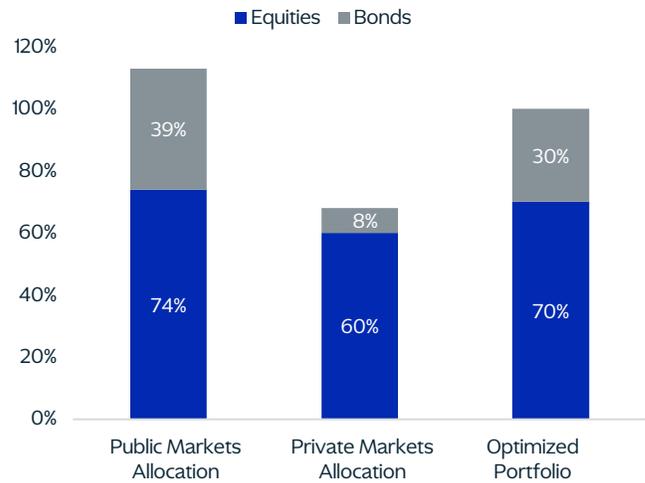


For illustration purposes only. Data as at January 31, 2026. Source: KKR Global Macro & Asset Allocation analysis.

Under TPA, targets serve as a continuously reviewed portfolio anchor. As assumptions, opportunity sets, and relative value evolve, the implied optimal mix can shift, even as implementation adjusts more gradually due to pacing, governance, and transaction cost considerations.

**Exhibit 12:** Leverage Implemented at the Total Portfolio Level Allows the Optimal Portfolio to Maintain the Same Factor Exposures (Equities and Bonds) as the 70/30 Reference Portfolio

**Exposures to Broad Risk Factors (Equities & Bonds)**



For illustration purposes only. Equities is represented by MSCI ACWI and Bonds is represented by Bloomberg U.S. Aggregate. Data as at 31, 2025. Source: Cambridge Associates, Burgiss, NCREIF, Bloomberg, KKR Global Macro & Asset Allocation analysis.

**STEP 4**

**Commitment and Liquidity Planning**

In our view, implementation is where a total portfolio approach either proves durable or breaks down. Optimization translates today's assumptions and opportunity set into portfolio target allocations. However, in Private Markets those target allocations are achieved indirectly through commitments, capital calls, and distributions that can unfold over multiple years. Under TPA, targets serve as a continuously reviewed portfolio anchor. As assumptions, opportunity sets, and relative value evolve, the optimal mix can shift, even as implementation adjusts more gradually due to pacing, governance, and transaction cost considerations. This requires understanding how far the portfolio has drifted from target, why that gap exists, and which actions are warranted, whether through pacing adjustments, secondary activity, overlays, or rebalancing. A well-

designed operating plan translates portfolio targets into strategy-level commitment pacing, sizes liquidity buffers appropriately, and establishes clear decision rules that allow the program to remain consistent through drawdowns rather than reactive to short-term market movements:

**Translates targets into commitment pacing.** Private Markets allocations are expressed as a percentage of total portfolio NAV, but in practice investors control commitments, not NAV. Commitment pacing must therefore be calibrated to deliver desired steady-state exposures over time, taking into account expected capital call patterns and distribution profiles in addition to NAV growth.

**Reflects strategy-specific cash-flow profiles.** Private Markets strategies differ meaningfully in their pacing and liquidity characteristics. Buyout and Growth Equity, for example, often involve uncertain and long-dated distributions, while Private Credit tends to generate more predictable income and earlier capital return. Real Asset strategies can vary widely depending on core versus value-add profiles. Commitment planning should explicitly reflect these differences rather than rely on a single, generic Private Markets cash flow assumption.

**Builds in robustness to cycle risk (the denominator effect).** Public market drawdowns can mechanically increase Private Markets weights even in the absence of new commitments. A TPA-aligned implementation plan anticipates this dynamic by establishing clear decision rules for pacing adjustments and, where appropriate, for overlays, rebalancing, and secondary activity during periods of stress.

**Links commitments to portfolio level cash flows and liquidity.** Commitment pacing should be explicitly linked to total portfolio sources and uses of liquidity, including spending or contribution requirements and expected Private Markets distributions. Generally, this requires maintaining a buffer of liquid public market assets sized to meet projected cash-flow needs in both normal environments and periods of stress.

**Monitors and adjusts using clear implementation metrics.** Commitment plans should be governed through a concise set of measurable indicators, such as unfunded commitments relative to NAV, projected near-term capital calls versus available liquid assets, and distance to allocation bands under different public market scenarios. These metrics should support a disciplined feedback loop that updates pacing based on realized capital calls and distributions, portfolio drift, and prevailing liquidity conditions, ensuring the plan remains responsive to actual portfolio outcomes rather than static assumptions.

Public market drawdowns can mechanically increase Private Markets weights even in the absence of new commitments. A TPA-aligned implementation plan anticipates this dynamic by establishing clear decision rules for pacing adjustments and, where appropriate, for overlays, rebalancing, and secondary activity during periods of stress.

## SECTION IV

# Minimum Viable TPA

Acknowledging the practical difficulty of fully implementing TPA for many organizations, we think a ‘minimum viable total portfolio approach’ can deliver meaningful practical benefits without requiring investors to abandon their existing strategic asset allocation frameworks. While a fully implemented TPA entails board-level governance changes, such as expanded CIO discretion and shorter decision cycles, these shifts may be out of scope for many organizations. Instead, asset owners can integrate TPA principles gradually, retaining a strategic allocation anchor while progressively adopting a more holistic, total portfolio decision-making process.

### Four pragmatic steps can help investors adopt elements of a total portfolio approach within a traditional operating model:

- **Centralize truly portfolio-level functions.** Functions that do not require asset-class silos, most notably asset allocation, risk management, and liquidity management, can be centralized to improve decision-making.
- **Strengthen portfolio construction and relative-value capabilities.** Building or enhancing in-house portfolio construction tools and a forward-looking, relative-value framework enables opportunities to be evaluated consistently across strategies and geographies.
- **Increase the frequency of allocation review.** Even if implementation occurs gradually, running an internal asset allocation and relative-value process on a shorter cadence than a traditional multi-year cycle helps to better ensure decisions reflect current relative value, market conditions, and portfolio objectives than stale policy assumptions.
- **Pilot TPA through a defined sleeve.** Investors can test a total portfolio framework by carving out a discrete allocation, such as a core-satellite structure, a Private

Markets sleeve, or a discretionary “opportunistic” allocation with explicit risk and liquidity guardrails.

Over time, these elements can evolve from an overlay on an SAA structure into a more fully integrated total portfolio approach, better aligning governance, implementation, and capital deployment with overarching portfolio objectives.

**Potential cautions and trade-offs.** While implementing a total portfolio framework can enhance flexibility and improve cross-asset capital allocation, it also shifts where structure and accountability reside. By design, it grants greater discretion to the CIO, which can reduce decision latency, but may also make decision-making less formal and less readily documented than a board-driven SAA process. Governance routines and reporting can be structured to offset this risk.

Relatedly, traditional strategic asset allocation frameworks often offer a clearer snapshot of portfolio positioning, as tight guardrails allow stakeholders to reasonably approximate the portfolio’s exposures from the long-term policy mix. A TPA-oriented framework, by contrast, puts more weight on timely position-level data and factor-based measurement to maintain a shared understanding of what the portfolio owns and how its risk posture compares to the reference portfolio. However, without solid data infrastructure and reporting discipline, it can be difficult to communicate the portfolio’s positioning and exposures with confidence.

Finally, organizational expertise, sourcing networks, and manager oversight are often built around asset classes, and those labels can provide the practical scaffolding for implementation and monitoring. Without some ‘category structure’, there is a risk that portfolios are constructed purely bottom-up, with unintended factor concentrations only becoming apparent after the fact — resulting in a collection of investments that lacks coherence at the total portfolio level.

## SECTION V

# Conclusion

We believe that the total portfolio approach is best understood as an evolution of strategic asset allocation, with one important twist. Specifically, TPA shifts accountability from asset class performance versus benchmarks to outcomes at the total portfolio level.

Like SAA, it does retain a clear anchor, typically a reference portfolio and risk budget rather than a static policy mix, but it does reallocate decision-making from discrete asset class buckets to a more integrated, whole-portfolio perspective.

For investors with meaningful Private Market exposure, this shift can have tangible benefits: a more holistic view of liquidity, greater flexibility to manage through stressed environments and denominator effects, steadier pacing across vintages, and an improved ability to reallocate capital as relative value changes. Investors can incorporate selected TPA elements through a 'minimum viable' overlay to their existing SAA frameworks by strengthening total portfolio analytics, increasing decision cadence, and piloting a discretionary sleeve.

Just as importantly, we think, a total portfolio approach can reframe the decision-making process to better connect long-term objectives with short-term portfolio actions. Rather than relying on infrequent policy resets, a board or equivalent body can define clear objectives and guardrails — such as a reference portfolio and risk appetite — and delegate greater discretion to the CIO to manage exposures within a total portfolio risk budget. When paired with a common analytical lens spanning expected returns, risk, correlations, factor exposures, and liquidity, this structure can reduce decision latency, limit mechanical rebalancing pressure during drawdowns, and preserve the capacity to deploy capital when markets dislocate. Operationally, this could entail centralizing portfolio-level functions, strengthening in-house

portfolio construction and relative-value capabilities, and running an internal allocation and review cycle more frequently than traditional policy resets, even as implementation adjusts more gradually.

However, we emphasize that a 'total portfolio approach' is not a substitute for skill. Its effectiveness ultimately depends, in our view, on the quality of forecasting, risk modelling, manager selection, and most critically, implementation discipline. When those inputs are strong, a total portfolio framework has the potential to impact how capital is allocated across the investable universe and help investors build portfolios that are more resilient, cycle-aware, and more strongly aligned with mission-level objectives.

TPA shifts accountability from asset-class performance versus benchmarks to outcomes at the total portfolio level.

---

## Important Information

References to “we”, “us,” and “our” refer to Mr. McVey and/or KKR’s Global Macro and Asset Allocation team, as context requires, and not of KKR. The views expressed reflect the current views of Mr. McVey as of the date hereof and neither Mr. McVey nor KKR undertakes to advise you of any changes in the views expressed herein. Opinions or statements regarding financial market trends are based on current market conditions and are subject to change without notice. References to a target portfolio and allocations of such a portfolio refer to a hypothetical allocation of assets and not an actual portfolio. The views expressed herein and discussion of any target portfolio or allocations may not be reflected in the strategies and products that KKR offers or invests, including strategies and products to which Mr. McVey provides investment advice to or on behalf of KKR. It should not be assumed that Mr. McVey has made or will make investment recommendations in the future that are consistent with the views expressed herein, or use any or all of the techniques or methods of analysis described herein in managing client or proprietary accounts. Further, Mr. McVey may make investment recommendations and KKR and its affiliates may have positions (long or short) or engage in securities transactions that are not consistent with the information and views expressed in this document.

The views expressed in this publication are the personal views of Henry H. McVey of Kohlberg Kravis Roberts & Co. L.P. (together with its affiliates, “KKR”) and do not necessarily reflect the views of KKR itself or any investment professional at KKR. This document is not research and should not be treated as research. This document does not represent valuation judgments with respect to any financial instrument, issuer, security or sector that may be described or referenced herein and does not represent a formal or official view of KKR. This document is not intended to, and does not, relate specifically to any investment strategy or product that KKR offers. It is being provided merely to provide a framework to assist in the implementation of an investor’s own analysis and an investor’s own views on the topic discussed herein.

This publication has been prepared solely for informational purposes. The information contained herein is only as current as of the date indicated, and may be superseded by subsequent market events or for other reasons. Charts and graphs provided herein are for illustrative purposes only. The information in this document has been developed internally and/or obtained from sources believed to be reliable; however, neither KKR nor Mr. McVey guarantees the accuracy, adequacy or completeness of such information. Nothing contained herein constitutes investment, legal, tax or other advice nor is it to be relied on in making an investment or other decision.

There can be no assurance that an investment strategy will be successful. Historic market trends are not reliable indicators of actual future market behavior or future performance of any particular investment which may differ materially, and should not be relied upon as such. Target allocations contained herein are subject to change. There is no assurance that the target allocations will be achieved, and actual allocations may be significantly different than that shown here. This publication should not be viewed as a current or past recommendation or a solicitation of an offer to buy or sell any securities or to adopt any investment strategy.

The information in this publication may contain projections or other forward-looking statements regarding future events, targets, forecasts or expectations regarding the strategies described herein, and is only current as of the date indicated. There is no assurance that such events or targets will be achieved, and may be significantly different from that shown here. The information in this document, including statements concerning financial market trends, is based on current market conditions, which will fluctuate and may be superseded by subsequent market events or for other reasons. Performance of all cited indices is calculated on a total return basis with dividends reinvested. The indices do not include any expenses, fees or charges and are unmanaged and should not be considered investments.

The investment strategy and themes discussed herein may be unsuitable for investors depending on their specific investment objectives and financial situation. Please note that changes in the rate of exchange of a currency may affect the value, price or income of an investment adversely.

Neither KKR nor Mr. McVey assumes any duty to, nor undertakes to update forward-looking statements. No representation or warranty, express or implied, is made or given by or on behalf of KKR, Mr. McVey or any other person as to the accuracy and completeness or fairness of the information contained in this publication and no responsibility or liability is accepted for any such information. By accepting this document, the recipient acknowledges their understanding and acceptance of the foregoing statement.

The MSCI sourced information in this document is the exclusive property of MSCI Inc. (MSCI). MSCI makes no express or implied warranties or representations and shall have no liability whatsoever with respect to any MSCI data contained herein. The MSCI data may not be further redistributed or used as a basis for other indices or any securities or financial products. This report is not approved, reviewed or produced by MSCI.

© 2025 Kohlberg Kravis Roberts & Co. L.P.



**Kohlberg Kravis Roberts & Co. L.P.**

30 Hudson Yards  
New York, New York 10001  
+1 (212) 750.8300  
[www.kkr.com](http://www.kkr.com)