

**INSIGHTS**  
GLOBAL MACRO TRENDS

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**The Times They Are  
A-Changin'**



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## KKR GLOBAL MACRO & ASSET ALLOCATION TEAM



**Henry H. McVey**

Head of Global Macro & Asset Allocation and CIO of the KKR balance sheet

henry.mcvey@kkr.com

+1 212 519 1628

**Rebecca Ramsey**  
Director, Global Macro & Asset Allocation  
rebecca.ramsey@kkr.com

**Ezra Max**  
Associate, Global Macro & Asset Allocation  
ezra.max@kkr.com

---

## KKR CLIENT AND PARTNER GROUP

**Bhavit Patel**  
Managing Director, Client and Partner Group  
bhavit.patel@kkr.com

**Matt Magill**  
Director, Client & Partner Group  
matt.magill@kkr.com

**Giuseppe Guerriero**  
Principal, Client & Partner Group  
giuseppe.guerriero@kkr.com

**Samantha Trent**  
Associate, Client & Partner Group  
samantha.trent@kkr.com

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## SPECIAL THANKS TO:

Ken Mehlman, Frances Lim, Vance Serchuk, Racim Allouani, Thibaud Monmirel

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## MAIN OFFICE

Kohlberg Kravis Roberts & Co. L.P.  
30 Hudson Yards  
New York, New York 10001  
+1 212 750 8300

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## COMPANY LOCATIONS

New York, San Francisco, Menlo Park, Houston, London, Paris, Dublin, Madrid, Luxembourg, Frankfurt, Hong Kong, Beijing, Shanghai, Singapore, Dubai, Riyadh, Tokyo, Mumbai, Seoul, Stockholm, Sydney

# The Times They Are A-Changin'

**During an overall great run for financial assets in recent years, the Endowment and Foundation community – by almost all measures**

– **exceeded expectations.** All told, our recent survey of top E&F CIOs revealed that, through a combination of strong performance and increased inflows, many of these organizations are now overseeing two times (or more) the assets under management that they did just a few years ago. This growth is great news for the important causes that the endowment and foundation community support. However, if these entities are to maintain the superior investment performance their boards desire and constituents need, especially given their new heft and scale, we believe that CIOs will need to consider a new approach, including a potential overhaul of their business footprint. This need for change is occurring at a unique moment, as we are now entering a potential macroeconomic and geopolitical regime change that likely warrants a new approach to asset allocation, including shorter duration and greater exposure to Real Assets, we believe. We also see a greater need for these organizations to consider placing a more holistic emphasis on portfolio construction, technological prowess, and risk management. Importantly, in recent years earlier stage, higher Beta, longer duration equity investments led to much of the outsized asset growth in the E&F community; however, it now feels to us that the E&F community is over allocated to this area at a time when both performance and realizations are poised to slow. So, this positioning could prove tricky, as we enter an environment where the traditional relationship between stocks and bonds, and in particular growth stocks, has changed. To this end, now is the time for all of us with ties to the E&F community to take a step back and recognize that, ‘the times they are a-changin’.

**I think of a hero as someone who understands the degree of responsibility that comes with his freedom.**

—Bob Dylan, American singer-songwriter

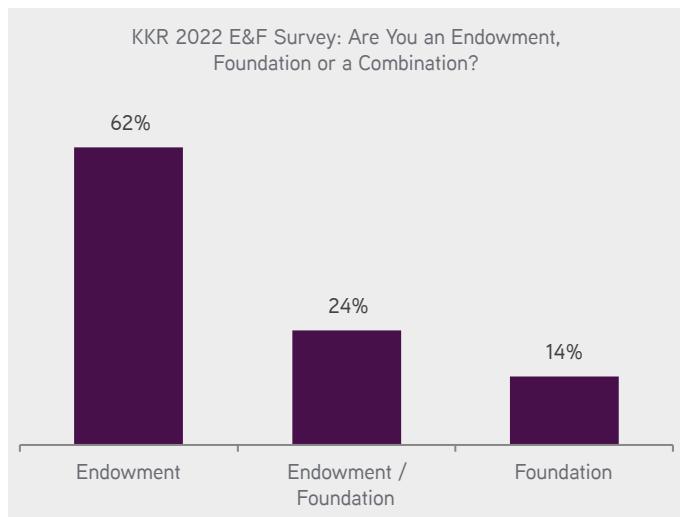
## As the son of a life-long educator who was committed to expanding access to top tier education for all types of students

irrespective of financial resources – I have seen how foundations and endowments work to expand opportunity and create greater mobility across our society. Moreover, a deeper understanding of what an incremental dollar of return could do to improve a person's trajectory in life has certainly shaped the way I think about asset allocation, risk management, and portfolio construction today. Over the past three decades, I have also had the good fortune to serve on many leading endowment and foundation boards and investment committees as well as to learn from some of the best and brightest CIOs in this segment of the business.

So, after years of *informal* conversations with many of my peers in the endowment and foundation community, I recently decided to tap into our E&F clients and prospects to *formally* learn more about how they are approaching their jobs in today's complicated macroeconomic environment. All told, we surveyed more than 30 CIOs of endowments and foundations representing hundreds of billions in assets under management as well as conducted many calls, zooms, and face to face meetings with some of the industry's leading thinkers to drill down on key issues.

### Exhibit 1

#### Our Survey Participants Were Mainly from the Endowment Community



What did we learn along the way? Well, as Bob Dylan famously sang, 'the times they are a-changin'. See below for full details, but we note the following:

### 1

#### Strong performance and increased inflows have led to substantial asset growth in recent years. More investment 'infrastructure' is likely required to sustain this new base, we believe.

Many organizations with whom we spoke are now overseeing at least two times more in assets under management (AUM) than they did just a few years ago. Not surprisingly, this growth is straining the system, including investment staff, IT, and various support functions. While 70% of our respondents indicated that they did not need to add more personnel or to make other changes, we respectfully would disagree. Specifically, we think there is a need to add staff to accommodate the significant increase in AUM, in particular staff with deeper product knowledge of new areas of finance, greater specialization across asset classes, and experience growing co-investment programs. Overall, we see the need to move to a more top-down emphasis on portfolio construction/asset allocation. At the same time, we fully acknowledge that there is now greater scrutiny of the average E&F organization, including of rising compensation levels as well as alignment to mission (i.e., should endowments pay taxes if payout ratios are going down towards zero as at some of the larger plans?) In our humble opinion, the status quo is actually leading to slower than expected growth in staff, which we view as an increasing long-term risk for the industry. As a stop-gap measure,

many CIOs are consolidating relationships and concentrating their assets with some of their best managers. We support these efficiency gains. Ultimately, though, we believe that gains in AUM require more scaling of headcount if organizations are to retain superior investment performance, particularly at the large plan level, as well as cover new asset classes.

**2** Higher Beta, more growth-oriented investments, have carried performance and led to outsized asset growth in recent years. However, it now feels to us that the E&F community is over-allocated to this area at a time of falling expected future returns. Of all the groups with whom we interact, we think that E&F managers likely allocated the most to VC, Growth, and high-Beta Public Equities during the post-COVID run-up. For some, there is definitely a bit of buyer's remorse, as – unfortunately – many GPs in these areas called a lot of capital during the peak run-up in 2021, and there is a 'hangover' effect that many endowments and foundations are now feeling. This is exacerbated by the fact that, when markets sell off these days, both stocks, especially growth stocks, and bonds go down together. This portfolio construction headwind is consistent with our KKR regime change thesis. (For a more detailed discussion see *Walk, Don't Run: Mid-Year Update 2022* and *Regime Change: Enhancing the 'Traditional' Portfolio*). There is also the reality that the dramatic slowdown in realizations from many of these investments is now front and center with both CIOs and their boards, particularly given how many non-profits have started to issue bonds that are rated by agencies for their cash flow generation prowess. The lack of capital being returned is also adversely affecting CIOs' ability to reposition their portfolios in many instances. Finally, our research shows that only a select group of E&F managers are typically getting access to the best managers *at the right time in the cycle*. This somewhat subtle reality, which calls into question whether VC is a scalable asset, is leading to sub-optimal outcomes: our work shows (see *Exhibits 31 and 32*) that only the top handful of VC managers outperform so meaningfully that the increase in volatility is warranted.

**3** After the recent downturn in Equities, many CIOs want their GPs to 'stay in their lanes'. Indeed, one clear conclusion from our study is that CIOs felt somewhat blindsided of late by long/short hedge funds that ended up with not only weak performance but also sizeable illiquid positions that can't be redeemed for the foreseeable future. At the same time, there were several Venture Capital managers that held on too long to their public positions after 2021's IPO bonanza. The net result, we believe, is that CIOs will increasingly migrate towards managers who, as one CIO put it, "stay in their lanes so we know how to better measure our liquidity and volatility metrics, particularly in choppy markets."

**4** CIOs acknowledged that much of their excess performance in recent years has come from astute manager selection. By comparison, asset allocation has added little to no value during this period. We think this 'mismatch' of alpha generation may need to change on a go-forward basis. Many CIOs tell us that recent attribution trends make sense, given their heavy focus on bottom-up manager selection as a long-term, core competency. Importantly, however, we think that, as organizations scale in this space, CIOs should consider adding more top-down guard rails to ensure that their teams are sizing positions properly, creating the right sector and thematic tilts, and tightening up risk management practices, including factor analyses (i.e., what bets have you really made with the portfolio?) Boards may not like the additional infrastructure costs, but we believe that the next generation of successful E&F offices will need this tool in the toolkit to retain their pre-eminence, as the competitive landscape becomes more intense. Already, we are seeing large family offices bulking up their resources in an attempt to gain mindshare and wallet share, including adding more co-investments with GPs in a post-pandemic world.

**5** Despite having already extended portfolio duration by owning more investments that are not likely to be realized in the near-term (either through lack of realizations or through rolling quality assets into continuation funds), CIOs want to increase their exposure to illiquid investments even

**further.** In fact, today the average CIO holds 52% in illiquid-type investments compared to 48% before COVID. Many continue to own hedge funds (average hedge fund allocation is 15% in our survey), but the mix shift is clearly away from long/short and more towards diversifiers, including absolute return funds. We do, however, want to acknowledge that our group of respondents is – in general – much more heavily weighted to illiquid investments, compared to a more broad-based peer group. Specifically, our survey results indicated that CIOs intend to boost illiquid investments to fully 55% of total plan assets within three years, compared to ‘just’ 34% for many of the benchmark E&F industry studies we reviewed.

**6** **However, there is now a growing focus on illiquid investments that provide more upfront yield.**  
To offset the aforementioned trend of reduced realizations and more volatility in the equity books (especially given that significant multiple expansion led to outsized performance relative to history; see *Exhibit 4* for details), many of the endowment and foundation managers we spoke with are planning to invest more dollars in Private Credit, Real Estate, Infrastructure, and select Private Equity. This response was noteworthy because, as we discuss in more detail below, most CIOs in this space tend to be much more growth-oriented.

**7** **This transition towards more Real Assets, including more collateral-based cash flows, definitely dovetails with our macro thinking.**  
All told, 80% of our survey participants actually think that inflation will become embedded, creating a regime change for investing (shifting to a high inflation, lower real growth environment). As part of this change, CIOs are laser focused on not over-paying for investments and understanding true exposures and valuations. To this end, many are now considering meaningfully growing their Real Assets portfolio, albeit from a historically low base. This backdrop is actually somewhat of a conundrum, as many organizations just recently swore off natural resources in their portfolios as part of their ESG initiatives and in response to internal/external constituency pressures. As a result, they are now digging to find new ‘cleaner’

opportunities across Infrastructure, Real Estate, and climate change. Finally, several CIOs, as we detail later, are starting to use some of their excess Cash to buy higher yield Core Infrastructure as a substitute for energy’s inflation-hedging capabilities when liquidity is not a prerequisite.

**8** **Geopolitics is also top of mind, including both Russia’s invasion of Ukraine as well as tensions around U.S.-China relations. Portfolios are now being adjusted to reflect these growing concerns, with the U.S. being a net capital inflow ‘winner.’** Many CIOs are bracing for an era of de-globalization, which likely means potential limits on exposure to these ‘hot spots’. Our discussions led us to believe that many are now capping direct exposure to China at around 10% or less, while direct exposure to Russia will remain negligible. Maybe more important, most CIOs with whom we spoke agree that the change in the geopolitical landscape will lead to the growth we laid out in our ‘security of everything’ thesis, including in energy, data, transportation, and communications. Several also mentioned investing in funds that benefit from geopolitical dislocations, particularly those that can leverage the bullish fundamentals/volatility in asset classes such as commodities and currencies.

**9** **ESG remains a key area of focus, but the approach in the endowment and foundation community is different from what we see from other allocators of capital.** All told, 70% of CIOs acknowledged ESG concerns were impacting their current and future investments. Yet, 50% had no plan assets directly committed to ESG funds. Why is there a disconnect? For starters, this community likely has been spending too much time on where not to invest (e.g., oil, coal, etc.). Second, CIOs are less focused on specific ESG funds and more focused on incorporating ESG into all aspects of their overall plan. To that end, CIOs are trying to deeply understand all ESG issues and then manage them as critical business issues that can also help drive change. *The issues that garnered the most attention in our survey responses were the global energy transition, supply chain resiliency, and workforce development.* In our view, these key areas will create significant investment opportunities for both specific funds

and large asset classes such as Private Equity and Real Estate. However, there is a clear mandate to partner with 'like-minded' GPs who want to run their organizations in a more socially conscious and environmentally-friendly way.

**10** Thematically speaking, our survey respondents still believe that we are in an era of innovation. We agree. However, we all acknowledge that the definition of innovation is expanding and changing. To this end, key high conviction themes include AI efficiency, automation, cyber, biotechnology, and crypto/block chain (e.g., 65% of CIOs have invested in crypto/block chain through a trusted VC manager). By comparison, 'old' technology such as social media, semiconductors, and streaming media appear both over-owned and higher risk to many CIOs.

**11** In terms of macroeconomic worries, inflation ranked as the number one concern amongst CIOs surveyed. One can see this in *Exhibit 2*. This viewpoint is also supportive of the growing shift in asset allocation towards Real Assets that we heard during our interviews. The slowdown in economic growth amidst higher interest rates was also among the top three concerns highlighted in our survey. Importantly, though, as one CIO noted: "these concerns are somewhat of a circular argument as higher inflation means more Fed tightening, likely followed by slower growth." That said, despite growing conviction that inflation is becoming more embedded, our CIOs thought, on average, that the U.S.-10 year would be at just three percent in 2023 (*Exhibit 24*) below our estimate of 3.5%.

**There is now also a growing focus on illiquid investments that provide more upfront yield in several instances.**

### Exhibit 2

**E&F CIOs Are Primarily Concerned About Inflation, Growth, Interest Rates, and Geopolitics...**



Data as at August 31, 2022. Source: KKR Global Macro & Asset Allocation analysis.

### Exhibit 3

**...And Are Leaning Into Alternatives at the Expense of Public Equities**

Average	Pre-Pandemic	Now	Next Three Years	
Total Public Equities	40%	36%	35%	⬇️
Private Equity	12%	15%	16%	⬆️
Growth	3%	3%	3%	
Venture Capital	7%	9%	8%	⬇️
Hedge Funds	17%	15%	16%	⬆️
Liquid Credit	7%	7%	7%	
Private Credit	2%	3%	4%	⬆️
Infrastructure	2%	2%	3%	⬆️
Real Estate	5%	5%	6%	⬆️
Cash	5%	5%	3%	⬇️
Total	100%	100%	100%	

Data as at August 31, 2022. Source: KKR Global Macro & Asset Allocation analysis.

#### Exhibit 4

**Recent Returns Across Many of the Asset Classes Endowments and Foundations Allocated to Have Easily Bested Their Historical Averages. Going Forward, We Expect Some Mean Reversion in Higher Beta Areas Such as VC and Growth**



Data as at August 31st, 2022. Source: Bloomberg, Greenstreet, Cambridge Associates, KKR Global Macro & Asset Allocation analysis.

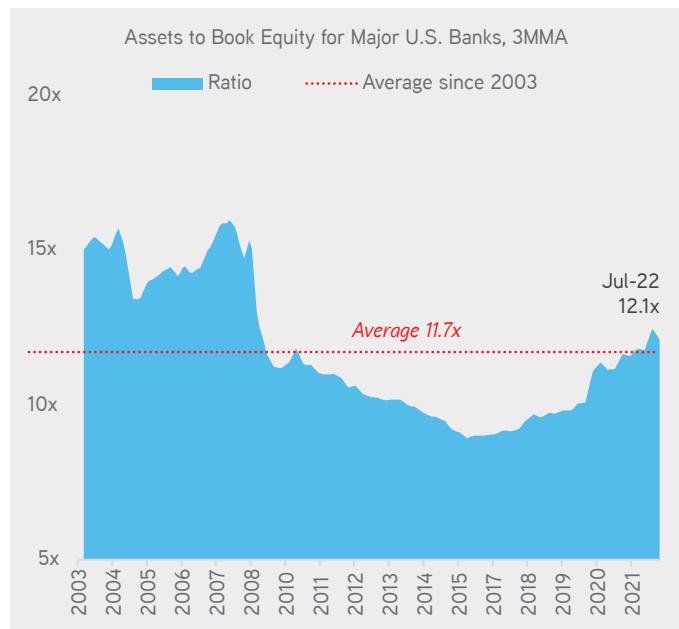
Looking at the big picture, the endowment and foundation community should be celebrated for the incredible run of performance that it has achieved in recent years. In particular, they have largely been invested in the right asset classes at the right time during the most recent bull-run in risk assets. However, as our survey indicated, there is a growing concern regarding both cyclical and secular forces that must be considered by this top notch group of CIOs. On the cyclical side, we concur with many investors that economic growth, particularly in Europe, is going to be quite severely challenged in 2023. This backdrop is clearly going to lead to more volatility in the near-term that E&F executives will need to integrate into their positioning. We also see currency stresses as an emerging issue where investors need to pay attention, given diverging fiscal and monetary policies around the world.

That said, we don't see a 2008-type event for the global economy. There are three issues to consider. First, as we show in *Exhibit 5*, banks do not need to massively de-leverage into this slowdown. Second, we think that housing is poised to slow, but not collapse. We also don't see the excesses associated with mortgage underwriting that we saw at the onset of the Great Recession. Third, while we expect unemployment to go up, we are not forecasting substantial layoffs. If we are right about these moderate tailwinds, then dislocation should be bought, not sold. Said differently, we

envision more of a 2001-type slowdown than a 2008-type contraction in the United States.

#### Exhibit 5

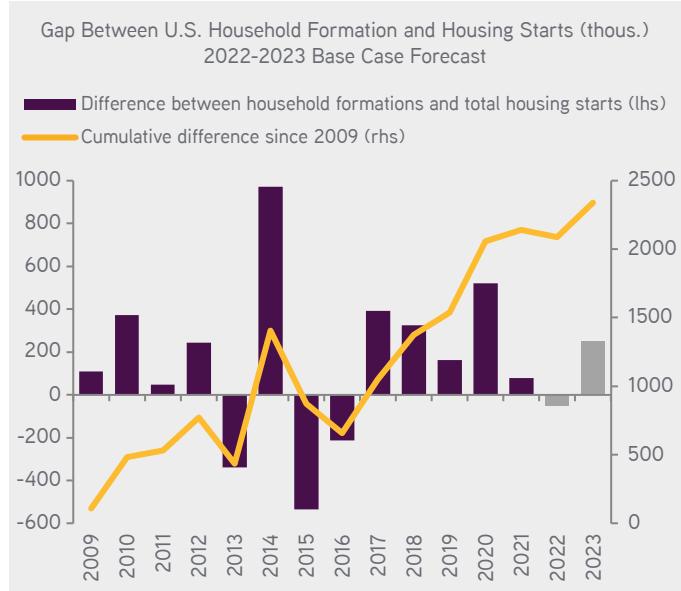
**Bank Leverage Today Is Much Lower Than It Was Heading Into the Financial Crisis**



Data as at July 31, 2022. Source: Bloomberg.

## Exhibit 6

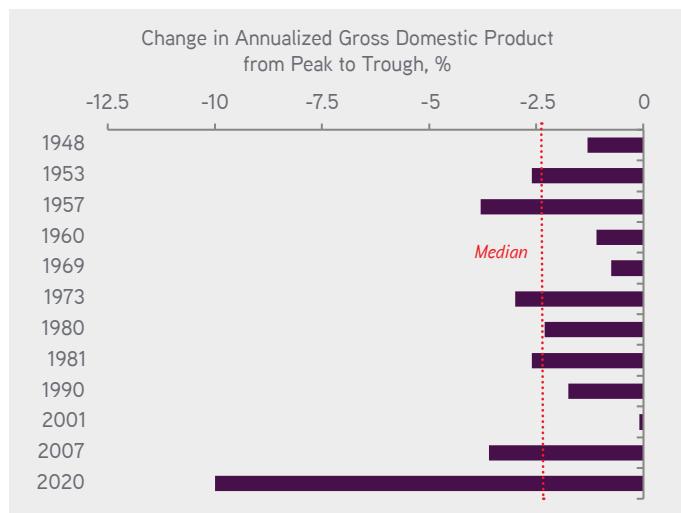
### Housing Supply Shortages Remain High as Demand Far Exceeds Supply



Data as at August 31, 2022. Source: U.S. Bureau of Labor Statistics, Haver Analytics, KKR CREM estimates.

## Exhibit 7

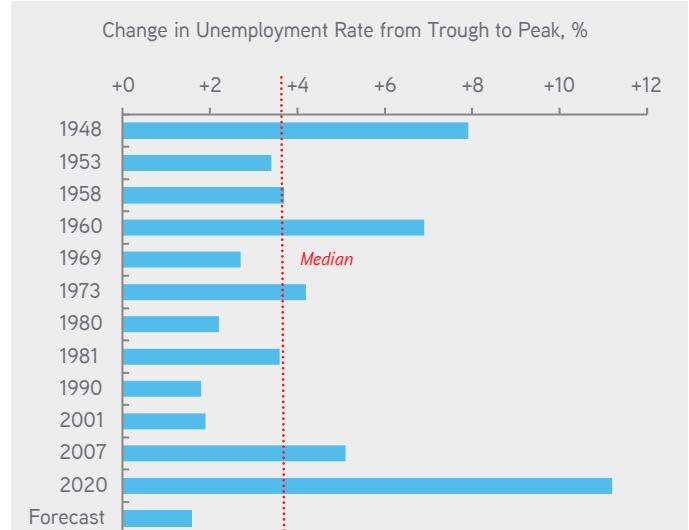
### We See GDP Slowing, Not Collapsing



Data as at July 3, 2022. Source: WSJ, Bureau of Economic Analysis, Bureau of Labor Statistics.

## Exhibit 8

### We See Net Unemployment Increasing by +1.6ppt, Less Than the Median Recession Increase of +3.7ppt



Data as at July 3, 2022. Source: WSJ, Bureau of Economic Analysis, Bureau of Labor Statistics.

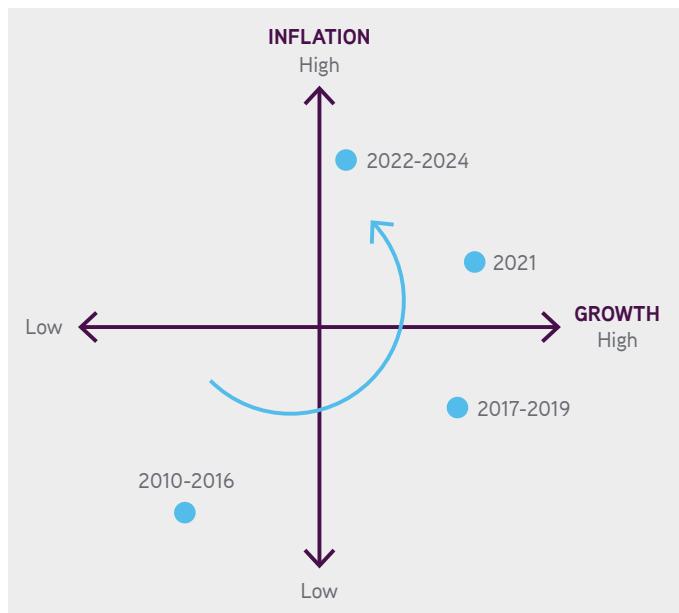
Outside the United States, however, the situation is more complex when it comes to cyclical forces at work. Recent trips to London and Paris reinforce our view that Russia's invasion of Ukraine will likely leave deeper economic scars. The good news, though, is that the 'Authorities' in Europe are spending fiscally to cushion the blow. This support is in direct contrast to the austerity approach that the EU implemented throughout the sovereign debt crisis in 2011. Finally, in Asia, ongoing softness in Chinese housing as well as a continuation of zero-COVID policy from President Xi Jinping likely means that growth remains subpar in the near-term.

Meanwhile, on the secular side, we think that CIOs need to appreciate that the fundamentals of asset allocation are changing. Specifically, we believe that the relationship between stocks and bonds is shifting, as the correlation goes from negative to positive. One can see this in *Exhibit 10*. We think this change is a big deal for all investors, including the E&F community. While most endowments and foundations don't directly own a lot of government bonds,

many of the asset classes in which they invest price off the risk free rate. As such, the need to find true diversifiers that can perform when stocks and bonds go down in concert will become much more important. Cash too could become a more important holding if our Fed projections play out. Previously, by comparison, long duration bonds and growth equities typically outperformed when most risk assets came under pressure, while Cash has – until recently – yielded essentially nothing. If we are right, then CIOs may need to revisit the composition of their benchmarks as well as consider how their current portfolios will perform in the new environment we are envisioning to deliver truly differentiated *real* returns.

### Exhibit 9

#### A Regime Change Is Occurring



Data as at March 9, 2022. Source: KKR Global Macro & Asset Allocation analysis.

**This transition towards more Real Assets, including more collateral-based cash flows, definitely dovetails with our macro thinking.**

### Exhibit 10

#### The Relationship Between Stocks and Bonds Is Changing in This Inflationary Environment. This Shift Has Major Implications for All Asset Allocators



Rolling 24 months correlations calculated using monthly total returns. Data as at August 31, 2022. Source: S&P 500, Barclays U.S. Aggregate Index.

### Section I: Findings from the Survey

In the following section we detail from whom we learned, what we learned, and how we might approach current market conditions differently.

#### Who participated in our survey?

Through the second half of the summer and into the fall, we sent out surveys and spoke with many of the E&F industry's leading CIOs. As *Exhibit 1* indicates, 62% of those who received surveys were endowments, while 14% came from the foundation community. The other 24% were a combination of both. Almost three quarters of our respondents oversee one billion to five billion in assets, while 20% have more than \$5 billion in assets under management. Beyond the survey, we also hosted numerous zooms, coffees, and lunches to dig deeper on key trends.

Without question, this group is long-term focused and willing to absorb some volatility along the way. In fact, about 75% of our survey respondents indicated that they could withstand an annual loss of 20-25%. These plans also tend to have compensation structures that are tied to 3-year performance numbers relative to their respective benchmarks and peer groups, though many CIOs would welcome the ability to extend this to five or even seven years in an effort to encourage more long-term thinking. Bonuses vary by performance and are capped as a multiple of base salary in many instances.

Beyond robust performance, inflows too have been strong of late. All told, the average asset pool in our survey grew 15% on a 1-year basis and 39% on a 3-year basis, respectively. Not surprisingly, many endowments and foundations have seen their payout ratios start to decline, given that the denominator has grown so much of late. In fact, rather than the target of 5-6% mentioned above, many plans' actual payouts have likely been closer to 4-4.5% in recent periods. Beyond a larger asset base from which to pay, many organizations in the E&F world have also benefitted from stronger financial support, including increased donations from wealthy alumni, philanthropic entrepreneurs, etc.

### **How are endowments and foundations dealing with larger pools of assets under management?**

Despite the growth in AUM, many CIOs indicated that they do not intend to add much headcount. One can see this in *Exhibit 13*, which shows that fully 71% are going to keep staffing largely as is. Intensifying scrutiny on compensation for investors at not-for-profits, fees charged on assets under management, and rising regulatory pressures on the non-profit investment management universe are all leading to slower than expected hiring. Also, similar to other industries, attracting and retaining good talent has become materially more difficult – and expensive – in today's market. The reality is that family offices and hedge funds are increasingly becoming destinations for E&F staff that want to maximize income.

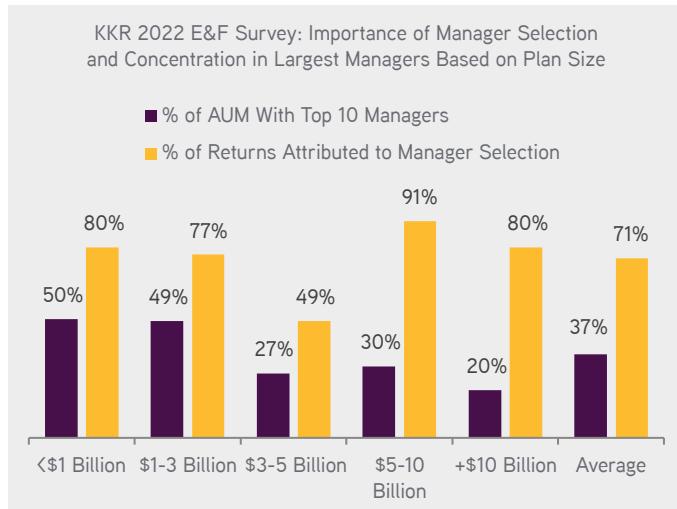
While we understand the rationale for minimal hiring, we are more concerned that E&Fs are under-staffed on a go-forward basis if their boards are expecting them to maintain the same high level of performance. In particular, as asset pools grow above \$5 billion, we tend to favor greater specialization across products, and we also – not surprisingly – believe that there is merit in having some type of centralized risk, portfolio construction, data analytics, and/or asset allocation effort.

Growing co-investment efforts also require more staffing, especially for organizations that want to use co-investments to expand their private portfolios and/or thematic/macro tilts. As one CIO mentioned, when done thoughtfully, "concentration in best ideas is a way to increase alpha; also, no fee/no carry is attractive." However, running a successful co-investment program requires sufficient staffing to source, diligence, and monitor investments. Interestingly, 60% of the organizations we surveyed already have a co-invest program; but many of them are subscale, we believe. Not surprisingly, those that don't participate in co-investments cited resource constraints as a key factor, which reinforces our earlier point that more staffing is likely required.

On the performance front, many endowment and foundation CIOs were quick to point out that their competitive advantage has been built up over time through superior manager selection – not necessarily asset allocation. One can see this in *Exhibit 11*. This focus on manager selection runs somewhat contrary to what we see in other parts of the asset allocation business. For our nickel, we believe that – to draw on our earlier point – the scaling of assets, which is what is definitely happening in this industry, requires more emphasis on asset allocation too, including position sizing (i.e., even if an individual investment does well, will it move the needle on the overall plan, given its new heft?), thematic and macro tilts, and factor biases, to maintain superior results. Indeed, with overall absolute returns likely to fall in the coming years, we think CIOs could benefit tomorrow by implementing more of a top-down framework today that meshes well with the bottom-up approach that has defined this industry for the past few decades.

## Exhibit 11

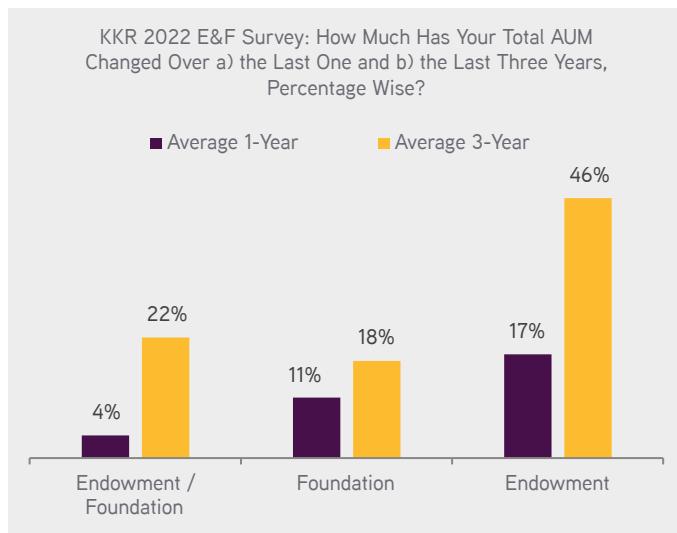
### Most CIOs Recognize the Importance of Manager Selection, But We Think That Correct Position Sizing Has Not Necessarily Always Scaled with AUM



Data as at August 31, 2022. Source: KKR Global Macro & Asset Allocation analysis.

## Exhibit 12

### AUMs Have Skyrocketed in Recent Years, Driven Primarily by Superior Public Equity Performance

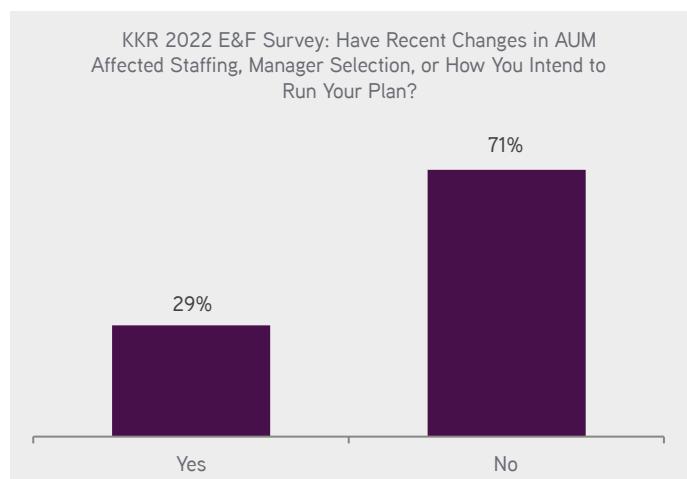


Data as at August 31, 2022. Source: KKR Global Macro & Asset Allocation analysis.

The good news is that we sense a transition is under way. For example, more and more CIOs with whom we spoke are now embracing sophisticated factor analyses and data analytics in their everyday thinking, so they are able to better understand both the opportunity and risks of making explicit tilts in their portfolios. This work is also allowing them to concentrate more capital in their best ideas (*Exhibit 11*). In years past, some of the industry's best ideas were just sized too small to move the dial at a large endowment or foundation. Finally, the trend towards better synthesizing one's micro bets to enhance understanding of macro tilts is also allowing CIOs to overweight high conviction views, such as when they have unique insights on inflation, central bank posturing, and/or liquidity. To this end, we noticed that many of the E&F players who did not give back huge gains in fiscal year ending June 30, 2022 had increased their Real Assets exposure at the beginning of the calendar year in an effort to protect against the inflation problem they saw emerging.

## Exhibit 13

### Despite Larger AUMs, Most CIOs Are Not Planning to Increase Headcount



Data as at August 31, 2022. Source: KKR Global Macro & Asset Allocation analysis.

**More investment 'infrastructure' is likely required to sustain this growth in assets.**

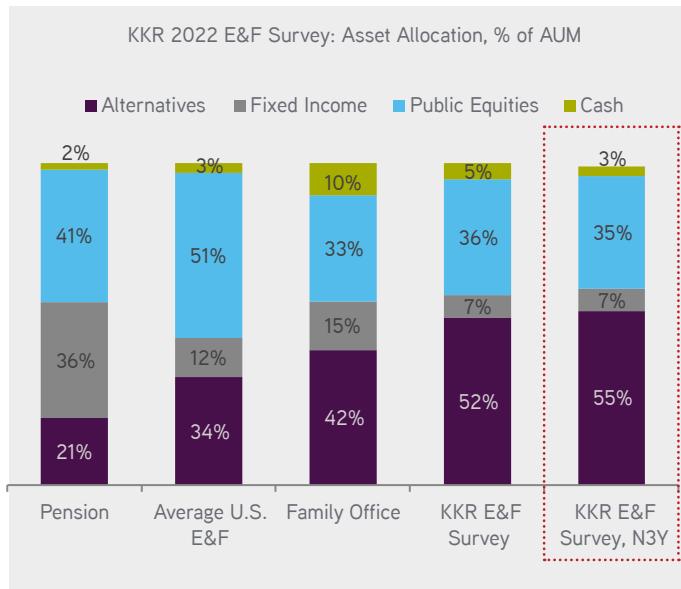
## How are CIOs thinking about asset allocation?

In terms of asset allocation, the CIOs with whom we spoke tended to be more heavily weighted towards Alternatives compared to other pools of capital, including more ‘typical’ endowments and foundations. One can see this in *Exhibit 14*, which shows that our universe is closer to 52% Alternatives, compared to 42% for Family Offices, 21% for Pensions, and 34% for the broader universe of Endowments and Foundations that are tracked by other industry sources.

This larger allocation makes sense to us given the nature of our client base at KKR, which has traditionally skewed more towards private market asset classes than the typical allocator.

### Exhibit 14

#### Our Survey Respondents Lean Into Alternatives, Including Hedge Funds, Venture Capital, and Growth, More Heavily Than the Typical E&F

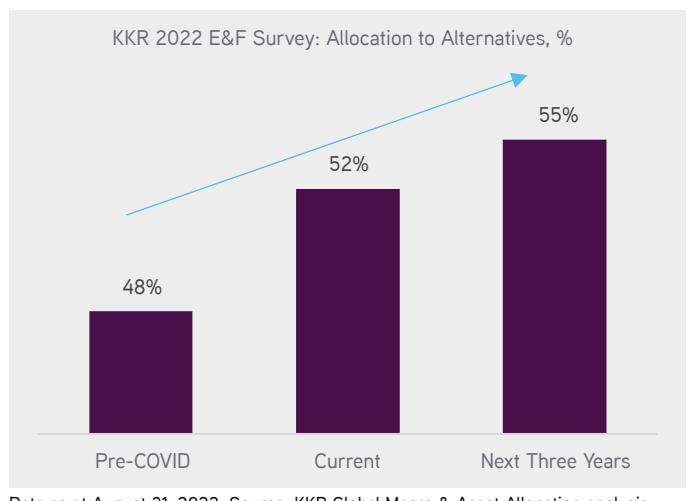


Note: Alternatives includes Private Equity, Growth, Venture Capital, Hedge Funds, and Private Credit. Data as at August 31, 2022. Source: JP Morgan, WTW, KKR Global Macro & Asset Allocation analysis.

Importantly, our survey work suggests that endowments and foundations’ allocations towards Alternatives will likely grow even further in coming years. On average, the participants in our survey plan to increase their allocation to Alternatives to 55% of total assets, compared to 52% today and 48% prior to the pandemic. In fact, more than two thirds of survey respondents suggested that the duration of their illiquid investments will increase further by 2025.

### Exhibit 15

#### The Importance of Alternatives Continues to Grow in the E&F Community We Surveyed



Data as at August 31, 2022. Source: KKR Global Macro & Asset Allocation analysis.

On average, the participants in our survey plan to increase their allocation to Alternatives to 55% of total assets, compared to 52% today and 48% prior to the pandemic. In fact, more than two thirds of survey respondents suggested that the duration of their illiquid investments will increase further by 2025.

## Exhibit 16

### Both Cyclical and Secular Forces Are Driving CIOs to Believe that the Duration of Their Illiquid Investments Will Grow



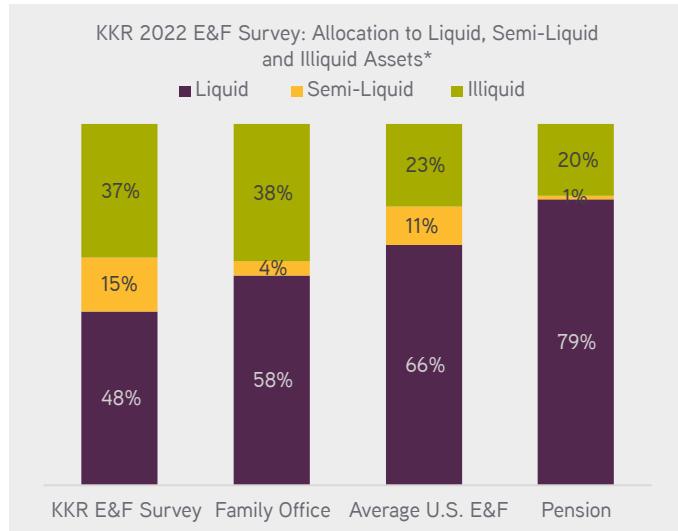
Data as at August 31, 2022. Source: KKR Global Macro & Asset Allocation analysis.

As we showed earlier in *Exhibit 3*, in terms of specific shifts, CIOs indicated to us that they intend to boost their Private Equity allocation on average to 16% of total AUM over the next several years, compared to 15% today and 12% pre-pandemic. Another likely net winner is Private Credit, which is expected to move to four percentage points of plan assets versus three percent previously. To be honest, given their longer-term focus and limited near-term cost of capital, we were somewhat surprised by this potential increase.

Meanwhile, Real Estate and Infrastructure too are expected to increase to six percent from five percent and to three percent from two percent respectively, according to our survey respondents. As mentioned earlier, this allocation increase makes sense to us, given the ongoing shifts we see in the macroeconomic environment. Also, more CIOs are finding growth parts of Infrastructure to own (e.g., fiber), while there is a class bias in Real Estate to own more Real Estate Credit at the moment, given the reality that spreads in this area have widened more than equity cap rates.

## Exhibit 17

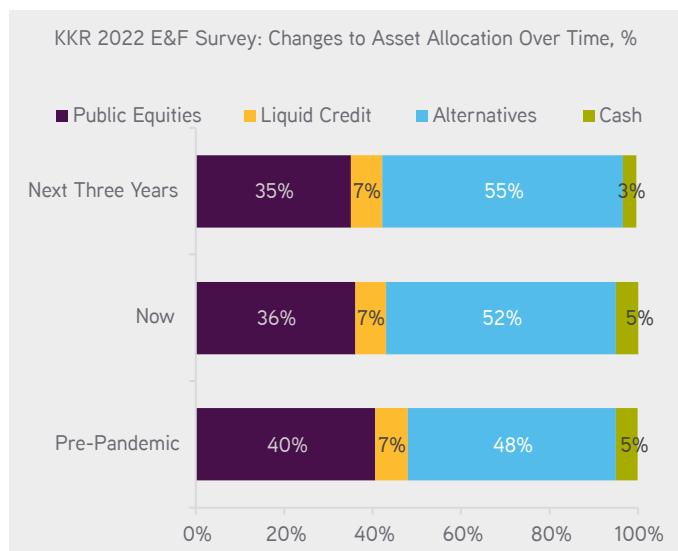
### Our E&F CIOs Are Overweight a Combination of Illiquid and Semi-Illiquid Investments



\*Semi-Liquid Assets here include Hedge Funds, given shorter lock-up period. Data as at August 31, 2022. Source: UBS, Preqin, CommonFund, WTW, KKR Global Macro & Asset Allocation analysis.

## Exhibit 18

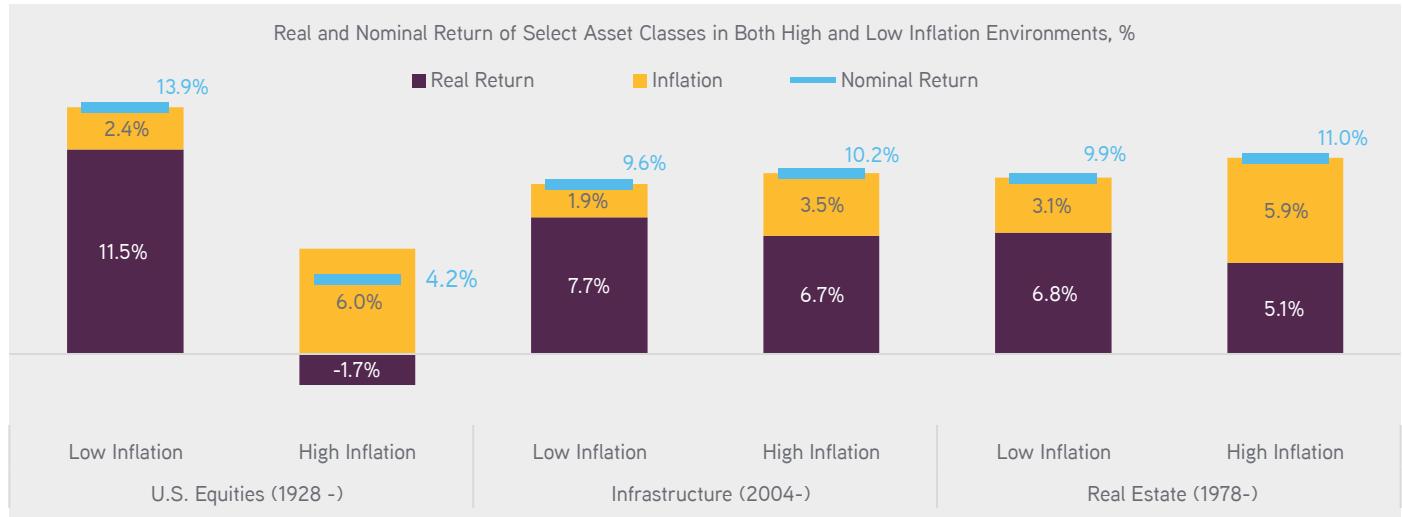
### Our Survey Shows That Alternatives Will Continue to Gain Share at the Expense of Cash and Public Equities



Data as at August 31, 2022. Source: KKR Global Macro & Asset Allocation analysis.

## Exhibit 19

### Our Higher Resting Heart Rate Thesis for Inflation Likely Portends a Shift in Asset Allocation Priorities



There are two drivers for the increase in Real Assets, according to those we interviewed. First, with central banks tightening around the world to curb inflation, CIOs are looking for investments that are less sensitive to persistent rate increases – and what that implies for valuations. So, not surprisingly, after the huge run-up in Growth, VC, and Public Equities, several CIOs mentioned the increasing attractiveness of Core Infra and Real Estate as income-producing investments that can serve as inflation hedging alternatives in a rising rate environment. Also, some CIOs were barred from investing in traditional energy and energy related assets heading into the most recent spike in commodity prices, and as such, were structurally underweight one of the best performing asset classes during a highly inflationary period. However, that was not true for all E&F players. In fact, as the CIO of one strongly performing plan in both 2021 and 2022 told us, “when boards are mandating that my competitors exit any asset class, irrespective of price and fundamentals, we are more than happy to be on the other side of that equation as a liquidity provider.”

Second, there is growing concern about stagflation and lack of growth and what it means for funding requests over time, particularly as realizations from some long-duration strategies have slowed. One CIO described a concern felt by others: “While we think inflation will settle below current levels, we believe it will end up at levels sustainably higher than most investors have seen in a while (i.e., it will be well above the two percent target). Relatedly, we also think that investors will be faced with interest rate levels above what they have seen over the past decade if not longer.”

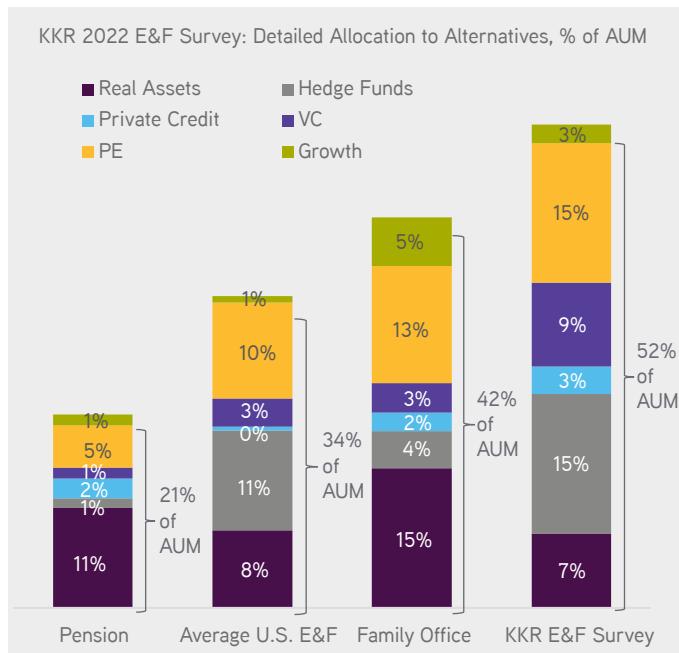
If this macroeconomic viewpoint is right, we believe it could be a major turning point in the asset allocation priorities of most endowments and foundations. So far, the reality has been that most CIOs in the E&F space tend not to want to allocate to Real Assets. Consider that Real Assets account for about eight percent of typical endowment and foundations’ alternatives allocation, compared to about 11% for the standard pension and 15% for the standard family office. There are multiple influences to consider. For

starters, some just dislike the natural resource component that falls under the Real Assets umbrella, while others don't think that there is enough total return in the equation across Infrastructure, Real Estate, and/or Energy.

We tend to have a more optimistic view about the asset class (*Exhibit 21*), as KKR has spent more of its infrastructure dollars of late on key growth markets like fiber, towers, data centers, transportation, and logistics. Combating the impacts of climate change via green infrastructure too has been a large focus for us. Meanwhile, we also see the definition of infrastructure expanding to include a broader array of industries as well as the potential for more operational improvement within the investment. Our 'security of everything' thesis is also an important component of critical technology and digitalization enhancements in the sector. Cyberattacks, data security, and climate change will only accelerate this growing investment need, we believe.

## Exhibit 20

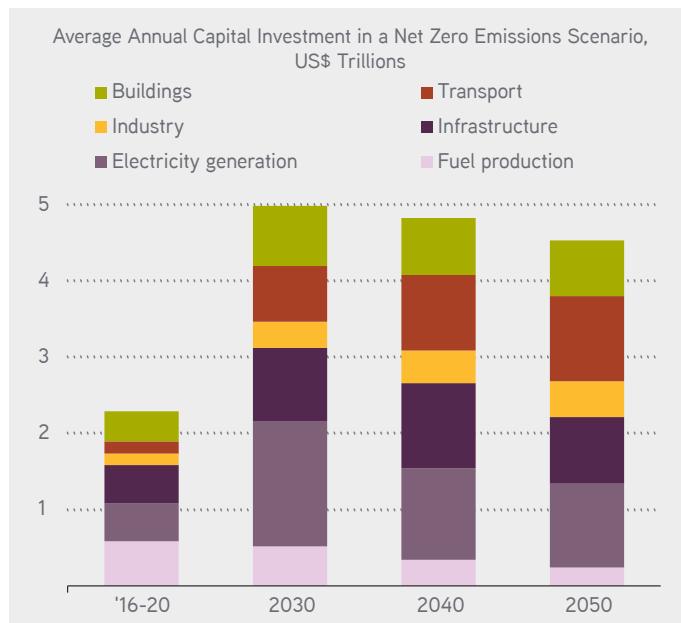
### E&F Managers Have Been Overweight Growth and VC at the Expense of Real Assets



Data as at August 31, 2022. Source, UBS, Preqin, CommonFund, WTW, KKR Global Macro & Asset Allocation analysis.

## Exhibit 21

### Traditional Infrastructure Spending Is Only One Part of the Move Towards Net Zero

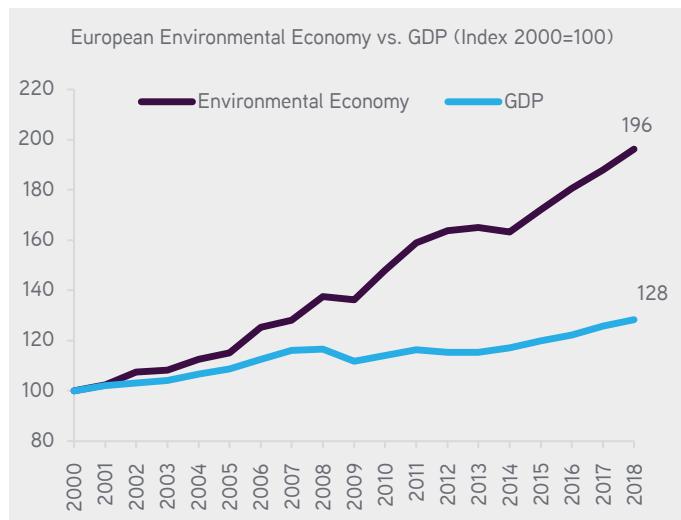


Data as at May 2021. Source: International Energy Agency (2021), Net Zero by 2050, IEA, Paris: Net Zero by 2050 Scenario - Data product - IEA. License: Creative Commons Attribution CC BY-NC-SA 3.0 IGO.

**With central banks tightening around the world to curb inflation, CIOs are looking for investments that are less sensitive to persistent rate increases – and what that implies for valuations. So, not surprisingly, after the huge run-up in Growth, VC, and Public Equities, several CIOs mentioned the increasing attractiveness of Core Infra and Real Estate as income producing investments that can serve as inflation hedging alternatives.**

## Exhibit 22

### The Synchronized Global Investment Behind Climate Change Will Continue to Boost Infrastructure Demand



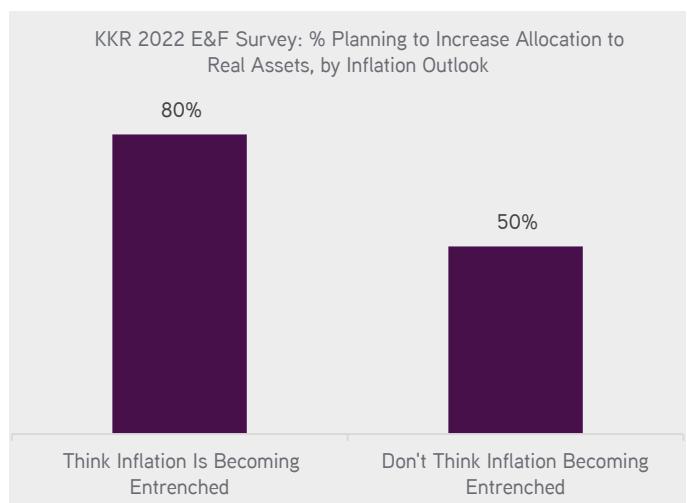
Note: The 'environmental economy' is an EU statistical concept that includes goods and services such as renewable energy, electric vehicles, organically grown fruits and vegetables, sewerage and waste treatment services or the rehabilitation of mining sites. Data as at September 30, 2021. Source: Statistical Office of the European Communities

If we at KKR are correct that inflation going forward will have a higher resting heart rate, then many foundations and endowments may still not have enough exposure to Real Assets. Current allocations, including Infrastructure and Real Estate, stand at about seven percent of total AUM on average. However, the survey responses did suggest that there will be a shift to nine percent over the next three years. By comparison, the KKR balance sheet now holds nearly 25% of its assets in these types of investments, given our bullish view on owning collateral-based cash flow, pricing power, and upfront yield, compared to just 16% at the start of 2019.

**Meanwhile, from a regional perspective, our conversations led us to believe that the U.S. will clearly emerge as an inflow 'winner'.**

## Exhibit 23

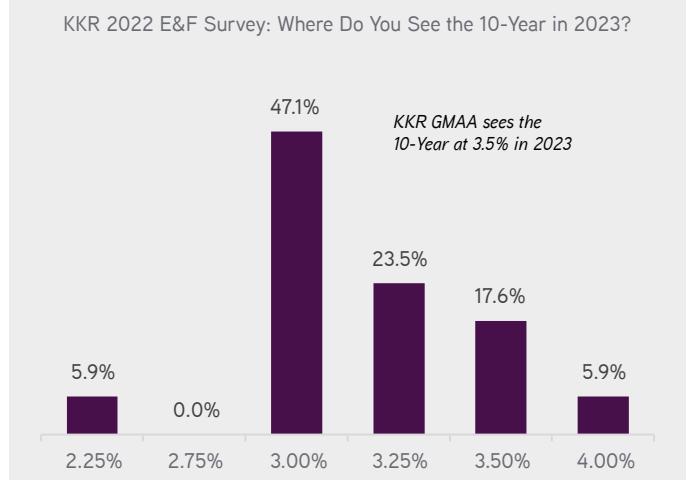
### Even CIOs Who Don't Believe in the Permanence of Inflation Are Planning to Increase Allocations to Real Assets



Data as at August 31, 2022. Source: KKR Global Macro & Asset Allocation analysis.

## Exhibit 24

### More Than Half of All CIOs Think the 10-Year Will Be At or Below 3.0% in 2023



Data as at August 31, 2022. Source: KKR Global Macro & Asset Allocation analysis.

Meanwhile, from a regional perspective, our conversations led us to believe that the U.S. will clearly emerge as an inflow ‘winner’. Many CIOs indicated that they are comfortable being underweight Europe, but the survey did surface more interest in owning Private Equity in Europe versus Public Equities. This viewpoint makes sense to us, as we think the public markets are too exposed to underperforming multinational banks. Finally, in Asia, as we detail later, China allocations are likely going down across the board, but there is still considerable interest in the region at large, including Asia Private Credit, Japanese Private Equity, and Indian Private Equity.

To ‘pay’ for these shifts towards Real Assets, Private Equity, and Private Credit, chief investment officers intend to reduce – amongst other things – Public Equities by one percentage point, Venture Capital by one percentage point, and Cash by two percentage points. We also think that long/short funds will be sold. Too many of them own illiquid investments, and so when the market turned down, parts of the Hedge Fund allocation moved quickly to illiquid from semi-illiquid. This conundrum also raised questions about who should decide what goes in the illiquid book. Most CIOs thought that decision should be the LPs, not the GPs.

## Section II: Key Investing Themes/Other

Similar to how we have evolved our investment model at KKR, many leading CIOs have become more thematic in nature. To this end, we note four areas where endowments and foundations are spending extra time these days.

**Theme #1: Embracing ESG in a more holistic way, but still more work to be done.** All told, 70% of respondents indicated that ESG considerations are impacting their current and future investment strategies; but 50% say they have committed zero assets to ESG-focused strategies. We think that many endowments and foundations have found it difficult to prosecute on ESG mandates, with most of the participants in our survey having committed less than 10% of total AUM towards ESG-focused strategies (*Exhibit*

26). We think that this trend reflects, in part, the challenge endowments and foundations have encountered in sourcing clear opportunities that align with expected returns. Indeed, to the extent that the CIOs we surveyed mentioned ESG impacting their asset allocation, it was often in the context of identifying sectors and companies in which they would *not* invest.

We think this approach could be a mistake for several reasons. First, as the energy transition, supply chain resiliency, and workforce development are increasingly embraced as critical policy, corporate, and consumer driven objectives, there will be significant investment opportunities in funds and companies whose core business models focus on these themes. Further, companies offering solutions to these structural challenges are likely to have significant macro tailwinds. The recent U.S. climate law is a good example of policymakers focusing on increasing demand for green energy, energy efficiency, carbon capture and other objectives; this differs from past efforts more focused on restricting supply. The European Green Deal also includes incentives for more green energy, which will likely lead to investment opportunities behind businesses that address this growing demand. Moreover, a real and sustainable transition will require across the board change in operations of all companies in a world where 80% of energy is still from fossil fuels. Helping traditional emitters to transition their operations and supply chains will be key.

While tight conservatorship over where dollars are being allocated is important, the rejection of *any* traditional fossil fuel investment could be a problematic approach. Our view at KKR has long been that in order to meet 2050 energy transition goals, a greater acceptance and support by investors for the transition of existing assets from brown to green is required. We view this opportunity, similar to what we have long said about corporate carve-outs, as a buy complexity, sell simplicity investment. All told, some investors think – over time – that there could be an 800–1,000 basis point difference in the cost of capital between the two types of investments, a substantial gap for

alternative managers with strong operational capabilities to consider.

As we mentioned earlier, many of the endowments and foundations we surveyed are approaching ESG via manager selection, rather than purely through asset allocation. Consistent with this view, we have been encouraged to see a growing number of CIOs and boards take this more ‘holistic’ approach, as we think it offers a few benefits. First, and most importantly, we have always approached ESG through a materiality lens wherein ESG issues are critical business issues—important to reduce risks and create value in companies. In our view, managers without such an ESG investing filter could miss critical questions that impact bottom lines. Also, it is essential that all investors partner with managers whose priorities align with their own. One CIO relayed that he tended to “focus more on the extent to which our managers are aligned with our organization’s values across a variety of metrics including their own organization and underlying investments. These metrics tend to be more focused [on] racial and social justice metrics and diversity, equity and inclusion.”

Second, we think that in many cases picking the right manager has actually given certain endowments and foundations more firepower when it comes to pursuing their overall ESG mandates. Specifically, these managers have not only helped source opportunities to invest in ‘good’ companies, but through their scope and insights have helped improve current investments (e.g., turbocharging support of brown to green in portfolio companies or increasing the representation of historically under-represented groups at the board and C-suite level). We think that this broader approach towards ESG will become a more important part of the conversation going forward, as it helps ensure greater alignment among stakeholders, including investors, managers, portfolio companies, and employees.

Overall, given all that is taking place globally around energy shortages and weather events, we think that ESG is speeding up, not slowing down, which means that there are

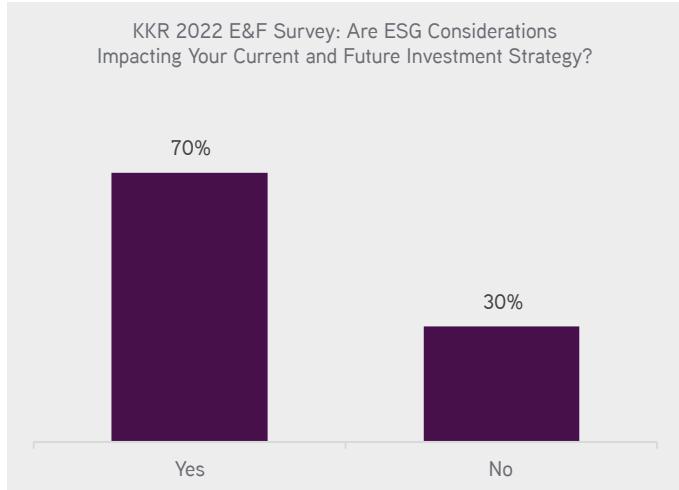
an increasing number of emerging opportunities to invest behind this theme in private markets. Of particular focus to us are inputs necessary for the green transition and improvements to grids and existing buildings. We also think that opportunities to help countries and industries harden themselves against climate change will proliferate, given the way that disturbing events in Europe this summer (forest fires in Greece, melting airport runways outside of London, and power shortages/rolling blackouts) and in North America (drought in the western U.S., red tide and algae blooms impacting water systems, etc.) are re-centering the ESG conversation on the physical harm being caused by climate change.

As a firm, we have invested significantly behind this theme, focusing on water quality, green infrastructure and land remediation and resiliency. Workforce development, lifelong learning and vocational training are additional critical threads within the ESG theme that will be needed to address worker shortages and changing skill requirements. On the consumer side of things, we think that lasting changes in consumer behavior from COVID as well as other recent social disruptions have led households to prioritize spending on brands that align with their social values, with opportunities for brands emphasizing elements of diversity, equity and inclusion to excel. These shifts should make ESG-focused strategies more viable for more investors.

**Most importantly, we have always approached ESG through a materiality lens wherein ESG issues are critical business issues—important to reduce risks and create value in companies. In our view, managers without such an ESG investing filter could miss critical questions that impact bottom lines.**

## Exhibit 25

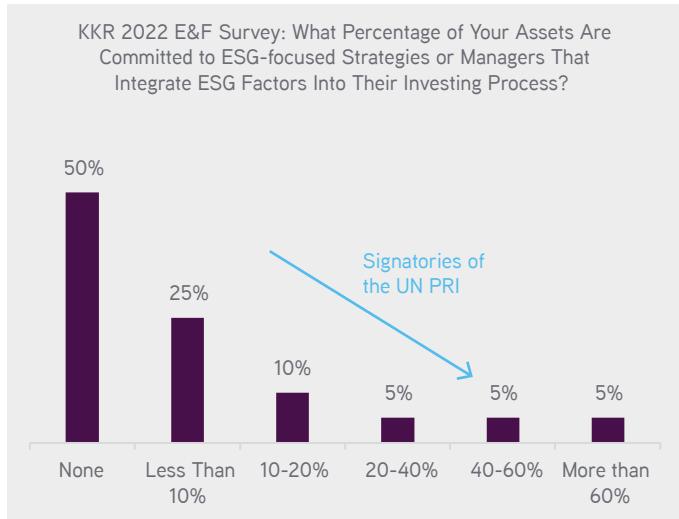
### ESG Is an Important and Growing Focus for E&F CIOs...



Data as at August 31, 2022. Source: KKR Global Macro & Asset Allocation analysis.

## Exhibit 26

### ...But Actual Implementation Is Leading to a More Broad-Based Approach to ESG Across Portfolios Versus Just Specific Fund Allocations

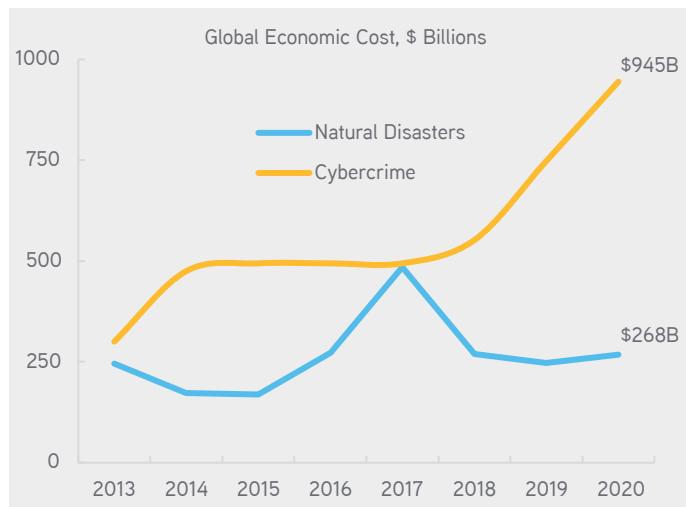


Data as at August 31, 2022. Source: KKR Global Macro & Asset Allocation analysis.

**Theme #2: Investing in new technology: Focus on AI, automation, digitalization, and biotechnology.** Even post the 2022 market selloff, what was apparent from the many conversations we had with CIOs was just how committed to the Technology sector many remained. However, what has changed is that they are taking a different approach towards investing in this space relative to the past. As we highlighted above, there is a general recognition among the CIOs that – unfortunately – many plans have too much exposure to VC and Growth. While survey respondents indicated they are working to trim their allocation towards these strategies, many remain quite bullish on technology's transformative power on economies and societies. So, they are placing more disciplined bets – such as on specific sub-themes around technological transformation – and pulling back a bit on their broader VC and growth exposure. They are also concentrating AUM with a select group of trusted managers, rather than taking smaller bites of a larger number of opportunities. The most experienced VC investors also think that in today's environment, earlier seed stage investments are really the path forward in navigating venture capital's complexity.

## Exhibit 27

### Digitalization Means – Unfortunately – That More Investment Is Required to Protect Digital Resources



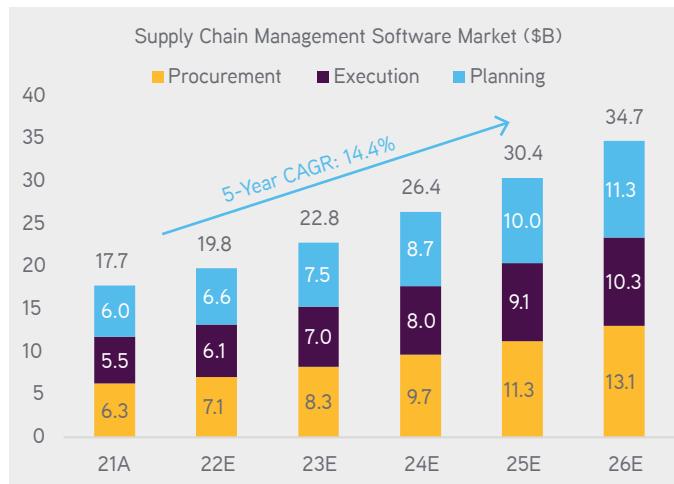
Data as at May 22, 2022. Source: Accenture, AON, HP Wolf Security, Australian Cyber Growth Network.

Particular themes we heard emphasized were automation, digitalization, biotechnology, and AI; by comparison, there is much more caution towards social media companies, which now constitute a large share of the Tech sector within the public markets. We tend to agree with these preferences.

Many CIOs also believe as do we that cybersecurity and supply-chain software will be integral parts of the ‘security of everything’ theme we have seen emerging (*Exhibit 28*). In addition, many CIOs with whom we spoke cited automation as a potential solution to staffing challenges, including the war for talent. We agree, and are generally bullish on all parts of productivity-enhancing technology, which should outperform given the lasting worker shortage we expect in the United States and other developed economies. Finally, CIOs continue to look out for emerging technologies that can help resolve pressing environmental concerns. Consider that meeting net-zero goals and fully abating carbon emissions is heavily dependent on the development of new technology, which offers an important chance to align ESG goals with longer-term investing mandates.

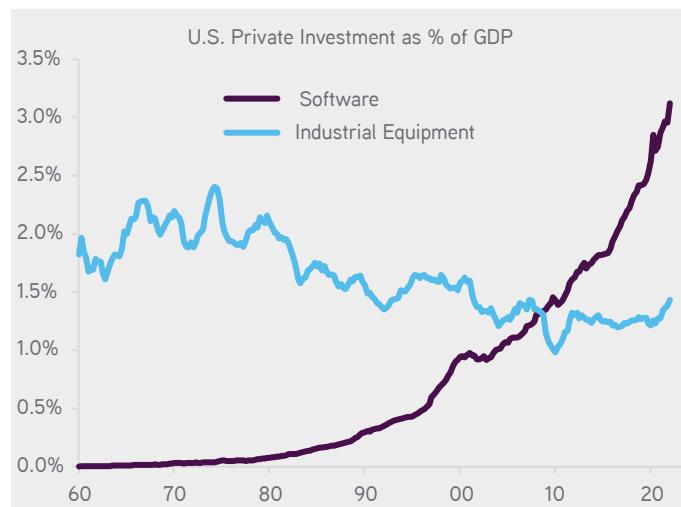
### Exhibit 28

#### Supply-Chain Resilience and Redundancy Will Require the Adoption of New Software



### Exhibit 29

#### The Proportion of Private Investment Going to Software Has Surpassed That Going to Industrial Equipment for Over a Decade in the U.S.

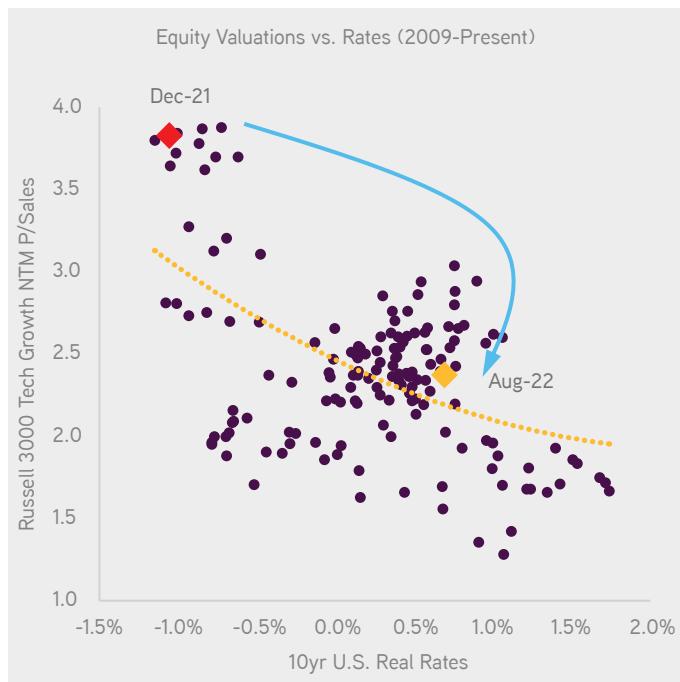


The good news is that, after the huge spike in price-to-earnings multiples in 2021, tech valuations feel more reasonable today than they did at the start of the year, even given the context of higher real rates. One can see this in *Exhibit 30*.

**Particular themes we heard emphasized were automation, digitalization, biotechnology, and AI; by comparison, there is much more caution towards social media companies, many of which now constitute a large share of the Tech sector within the public markets.**

## Exhibit 30

### Tech Valuations Now Feel More Reasonable, Even When Accounting for Higher Real Rates



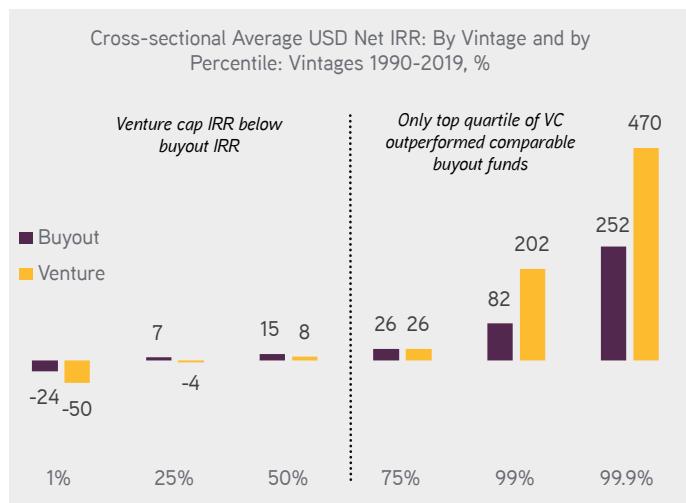
Note: Real Rates Refers to nominal rate less 10y breakeven inflation. Data as at May 31, 2022. Source: KKR Global Macro & Asset Allocation analysis, Bloomberg.

Looking at the bigger picture, we continue to view Venture Capital with a fair amount of trepidation for many CIOs across a variety of asset pools. For starters, access to top managers in this space is not always easy and - in fact - can be somewhat difficult. We do not make this statement lightly, but, *our research on Venture Capital reinforces our view that it is a truly superb asset class only if one can gain access to the best managers*. Otherwise, its overall Sharpe ratio is actually not that compelling for most investors relative to Private Equity and even Public Equities. One can see the details of our logic in *Exhibits 31 and 32*, respectively. The reality is that only the best managers deliver significant absolute and relative performance, and even when they do perform well, it is usually a high volatility ride along the way. Crypto is a good example, as – to date – it was really only the very early adopters in the space that did well. By comparison, in 2022,

many others piled in just as supply of capital was beginning to overwhelm the number of good ideas, and at a time when valuations had become much more expensive. Also, as one CIO stated, “many venture firms today are scaling their reputations to grow assets; I am not yet convinced, though, that they can scale returns at the same pace, given the way the industry works.”

## Exhibit 31

### Top Tier Venture Capital Firms Have Performed Exceptionally Well, But the Average VC Firm Has Underperformed Versus Buyouts...

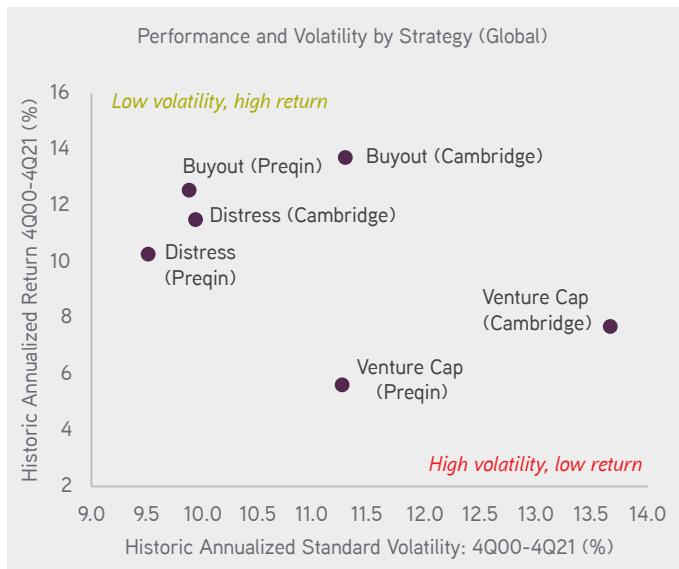


Data as at June 30th, 2022. Source: Preqin, Cambridge Associates, KKR Global Macro & Asset Allocation analysis.

**Our research on Venture Capital reinforces our view that it is a truly superb asset class only if one can gain access to the best managers. Otherwise, its overall Sharpe ratio is actually not that compelling for most investors relative to Private Equity and even Public Equities.**

### Exhibit 32

...Especially on a Risk Adjusted Basis



Data as at December 31st, 2021. Source: Preqin, Cambridge Associates, KKR Global Macro & Asset Allocation analysis.

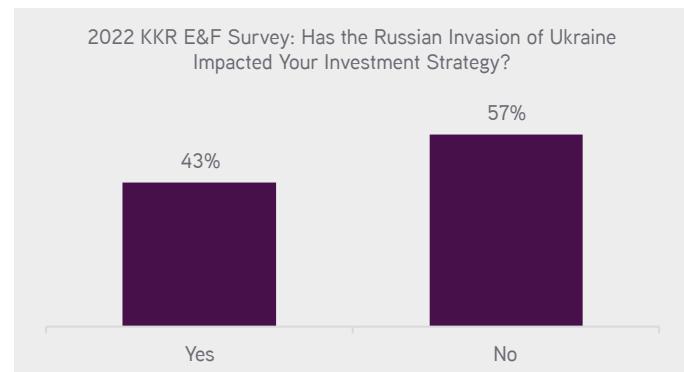
**Theme #3: Concerns about geopolitical risks have increased and CIOs are now actively adjusting their portfolios.** Let's start with China, a country that now accounts for about one third of global growth. Sentiment has clearly shifted. In fact, several CIOs now are being asked to include a China 'risk' scorecard report for discussion with their boards at each quarterly/semi-annual meeting. So, about half of the CIOs we surveyed were already thinking differently about their China exposures in the wake of COVID. Now, increasing geopolitical competition around previously less controversial supply chains, technology questions, and association with state surveillance are becoming national security and human rights issues on a global basis (*Exhibit 34*). Interestingly, these more cautious survey respondents tended to represent larger-than-average AUMs and, not surprisingly, tended to have a lower-than-average loss tolerance (about 15%, vs. 20-25% for the broader group surveyed).

Now, with geopolitical tensions flaring around Taiwan, we think that an even larger number of CIOs and boards – some

of whom have historically been quite comfortable investing in China – are re-evaluating their approach, including putting specific caps on their China exposure. Based on our discussions, typical China exposure for an endowment or foundation ranges from about 3% to over 20% (i.e., a wide range.) Looking ahead, however, we think that plans' China exposure will coalesce in the 5-10% range (despite China being almost 20% of global GDP), with a much heavier bias towards private versus public markets. Chinese convertible bonds and venture capital in China, which tends to skew towards the high risk/reward spectrum, were cited as attractive ways to play China relative to public securities, which tend to suffer from increased government oversight.

### Exhibit 33

The Invasion of Ukraine Has Caused Some to Reconsider Direct and Indirect Exposure to Russia...

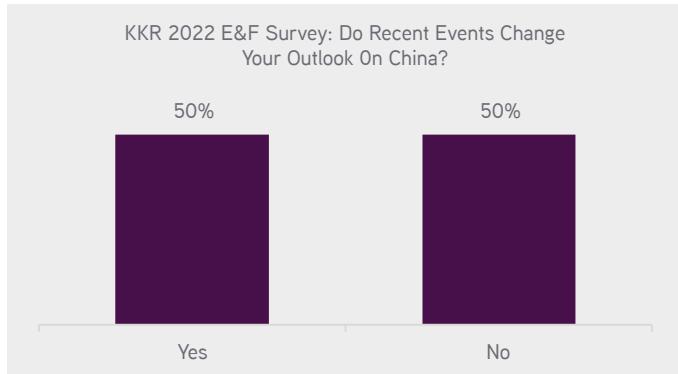


Data as at August 31, 2022. Source: KKR Global Macro & Asset Allocation analysis.

**Looking ahead, however, we think that plans' China exposure will coalesce in the 5-10% range (despite China being almost 20% of global GDP), with a much heavier bias towards private versus public markets.**

### Exhibit 34

#### ...While China Increasingly Is Seen by Many as a Risk When Investing in Asia



Data as at August 31, 2022. Source: KKR Global Macro & Asset Allocation analysis.

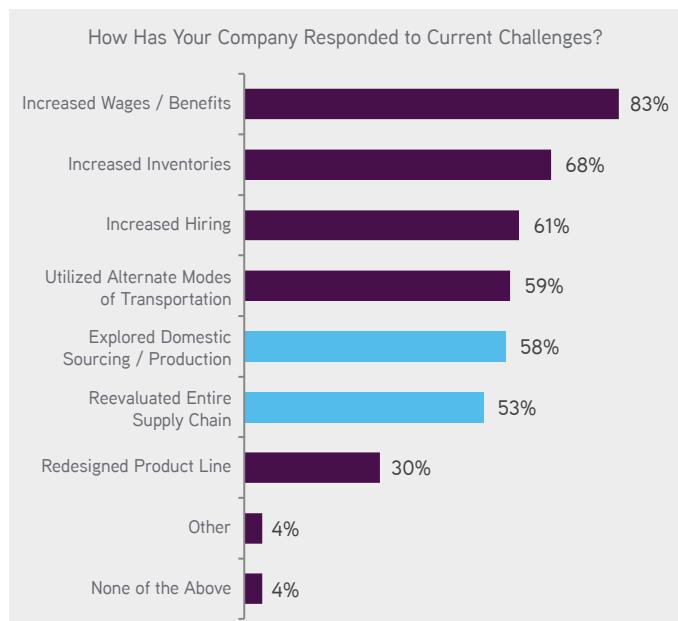
Why do we think that most endowments and foundations will need to keep China in their portfolios? Despite significant risks, the opportunity set presented by a country that drives around one third of global growth is simply too large for many investors to ignore. As one CIO succinctly put it: "While geopolitical and regulatory risks are higher, (and) valuations are much lower, innovation continues and the economy is growing faster than most of the rest of the world." So, although geopolitics will be a larger consideration for the way E&F plans engage with China going forward, it is unlikely to be the sole consideration.

**The CIOs we surveyed are concerned about what the Russian invasion means for heightened geopolitical tensions over the coming years.** In fact, nearly half of the CIOs we polled said that they had rethought their overall investment strategy in the wake of Russia's invasion of Ukraine, despite not having much direct exposure to the country. As one CIO put it to us, while it has not directly impacted how his fund invests, "it emphasized/supports our focus on knowing what we own and staying on top of our underlying exposures. It has also led us to spend more time looking at downside/worst case scenarios for potentially related risks, including investments in China and energy, among others." We agree fully; our base view at KKR has been that risks around de-globalization are becoming more important for practically all allocators of capital.

Our bigger picture view is that the world is transitioning from a period of benign globalization to a new era of 'great power competition'. So far, most CIOs are responding to this transition by limiting their exposure to 'hot spots' when feasible. That is prudent. However, it is our view that CIOs may need to go further as de-globalization – just like globalization – will ultimately reverberate across markets and impact every asset class, sector, and geography. We at KKR favor a more comprehensive approach when it comes to positioning for this shift, which includes investing behind security in sectors like energy, communications, healthcare, and data. We think that the 'security of everything' will likely emerge as one of the key mega trends over the next five to 10 years, as additional capex is required to build out redundant capacity in a growing number of 'strategic' industries.

### Exhibit 35

#### It Is Not Just CIOs Who Are Worried About De-Globalization. CEOs Are, Too, as They Are Actively Exploring Domestic Sourcing and Production



Data as at April 22, 2022. Source: National Association of Manufacturers, Melius Research.

### Exhibit 36

#### COVID, War, and Other Geopolitical Tensions Are Leading Multinationals to Rethink Their Global Supply Chains



Data as at June 30, 2021. Source: Statista, U.S.-China Business Council, Brown Advisory.

**Theme #4: There is a need for more upfront yield.** Endowments and foundations generally need to pay out a fixed percentage of their AUM each year. So, access to liquidity and cash flow matters. At the same time, most survey participants continue to look favorably on the illiquidity premium, and as we mentioned before, CIOs intend to boost their allocation towards illiquid strategies over the coming years. The problem, however, is that a larger share of most plans' illiquid portfolios is now invested in Growth and VC strategies where realizations have slowed dramatically. As a result, nearly two-thirds of the endowment and foundation managers we surveyed acknowledged that the duration of their illiquid investments will increase going forward, which puts more pressure on these organizations' funding requirements.

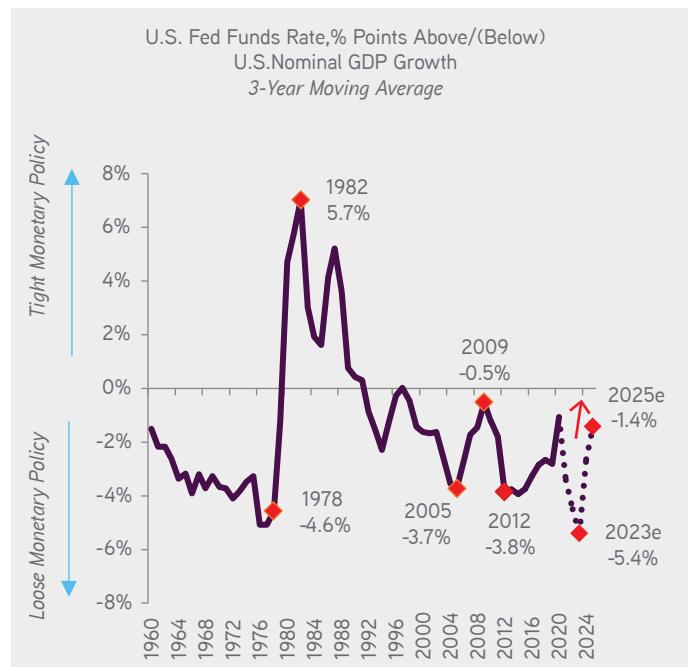
So, to help offset this trend, many CIOs are tilting their illiquid portfolios towards private market investments that

offer more upfront cash yield than in the past, including Real Estate, Infrastructure, and Private Credit. They are 'paying for it' in part by modestly pulling back on their allocation towards longer-duration growth and VC strategies (where duration is, in many cases, still extending as realizations slow).

We tend to agree with their assessment of current opportunities. As we have discussed for several years now, our macro viewpoint is that this cycle will be different. Specifically, we see uneven supply constraints, higher levels of interest rates, and heightened geopolitical risks against a backdrop of slower real economic growth and sticky inflation. Also, as we show in *Exhibit 37*, governments have been holding nominal interest rates down relative to nominal GDP for likely too long a period.

### Exhibit 37

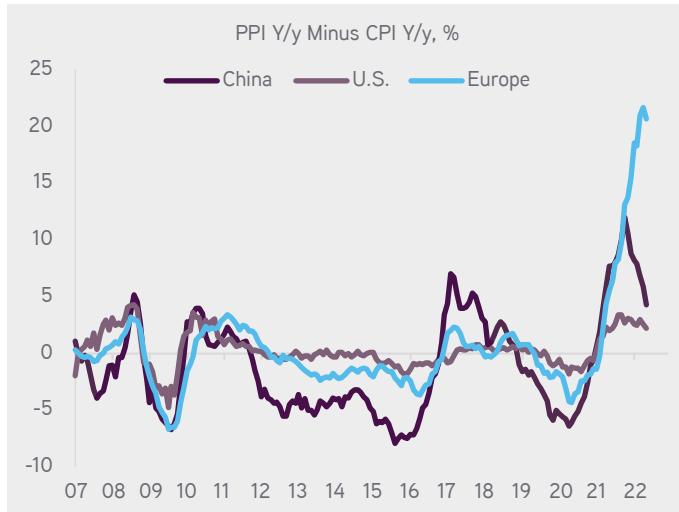
#### By Holding Nominal Interest Rates Below Nominal GDP, Central Bankers Have Re-ignited Sticky Inflation



Data as at September 18, 2022. Source: Bloomberg, KKR Global Macro & Asset Allocation analysis.

### Exhibit 38

**Input Costs Are Rising Faster Than Output Costs, Underscoring Our Preference for Pricing Power Stories**



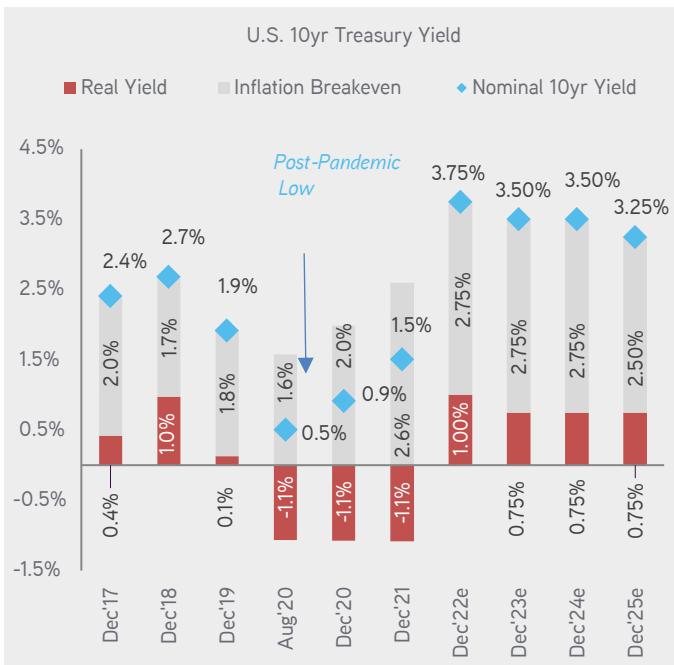
Data as at August 31, 2022. Source: Bloomberg.

Overall, we believe that we have entered a regime change, where structural forces now warrant a different approach to portfolio construction. What is so challenging today for macro investors and allocators of capital alike is that the traditional relationship between stocks and bonds – where bond prices rise when stock prices fall – has broken down. If we are right, then more upfront yield, more collateral-based cash flows, and more pricing power across a more diverse base of assets are all needed to navigate this new macroeconomic environment we are envisioning.

**What is so challenging today for macro investors and allocators of capital alike is that the traditional relationship between stocks and bonds – where bond prices rise when stock prices fall – has broken down.**

### Exhibit 39

**Real Rates Are Likely to Stay Lower For Longer, Which We Think Will Lead CIOs to Allocate More to Real Assets This Cycle**



Data as at September 12, 2022. Source: Bloomberg, KKR Global Macro & Asset Allocation estimates.

### Section III: Conclusion

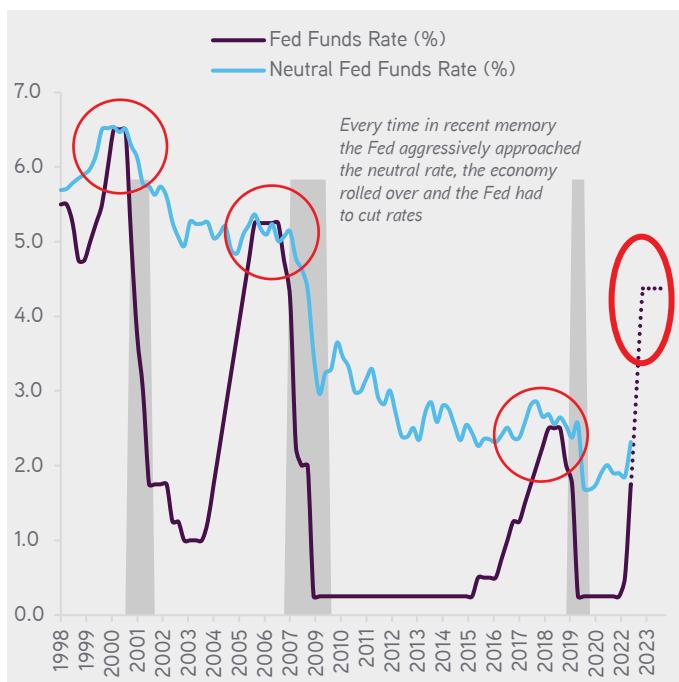
As our endowment and foundation survey illustrates, CIOs have done an excellent job of leveraging high quality managers to deliver stellar returns across a variety of asset classes. The question now is: What's next? Both our objective findings and our subjective discussions point towards an inflection point where the E&F model needs to evolve. Specifically, we see the need for more headcount, greater use of top-down tools to assess returns/risks, and more expertise within and across new asset classes. We also see the need for more diversification across these portfolios, as it is not clear to us that what worked last cycle will again work during the next five to 10 years. At the same time, however, we also expect more regulatory scrutiny, given rising compensation, sizeable funding excesses in some

situations, and the government's need for more taxes. So, this next chapter will be more complicated.

Meanwhile, central bank policy, including inflation control, will likely lead to more volatility. As we show in *Exhibits 40* and *41*, both finding the 'right' neutral rate and historical comparisons like the 1970s, should make us all acknowledge that Sharpe ratios are poised to fall. It also likely means that Cash too is fast becoming a more interesting asset class, with both an attractive yield and true diversifying attributes.

#### Exhibit 40

##### Raising Fed Funds Towards the Neutral Rate Can Often Lead to Bumpy Outcomes



Note: Dotted line represents KKR Global Macro & Asset Allocation estimates. Data as at September 18, 2022. Source: Piper Sandler Research, KKR GMAA analysis.

The good news is that this group of CIOs is largely prepared and very skilled and the business model(s) fundamentally sound. We finished our survey highly confident that they can navigate what appears to be an increasingly tricky environment for investing. They also have stellar staff who help

them identify new trends faster than many other segments of the macro and asset allocation community. Also, one of the benefits of the endowment and foundation model is that such entities are often linked to centers of learning. These linkages allow them to be nimbler around harnessing early shifts in global innovation (e.g., biotechnology, blockchain technology, and AI). To this end, we think the movement towards a greener environment and towards thoughtful approaches to social and governance issues will likely dominate the E&F landscape across all asset classes and regions in coming years.

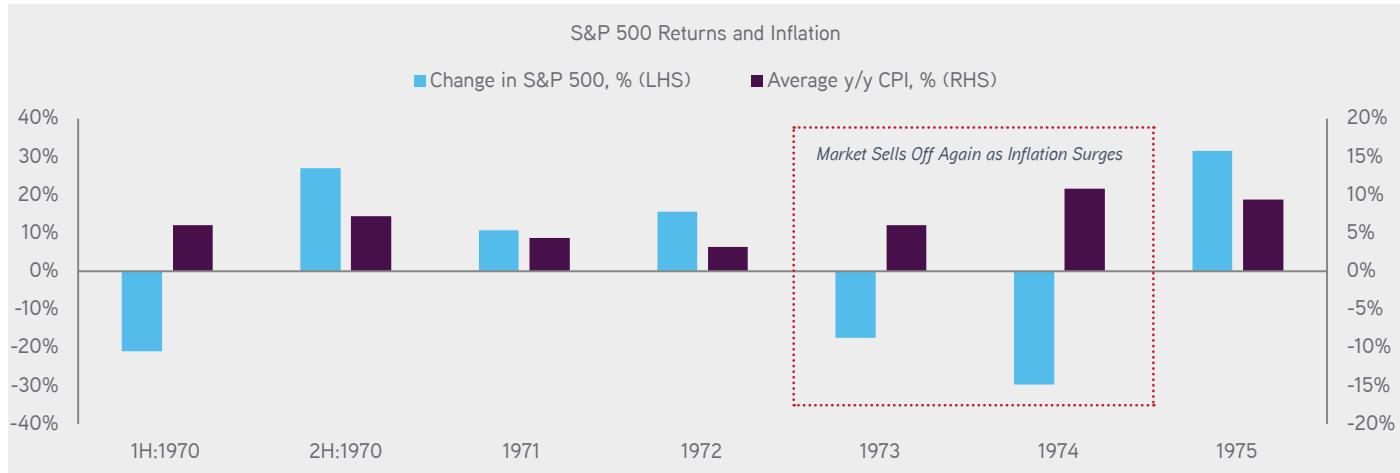
So, while we must all acknowledge that 'the times they are a-changin', the opportunity set still remains compelling. Moreover, the potential to compound capital in an efficient way to increase opportunities for the constituents served by the E&F community is significant. It is also inspiring. Indeed, many of the CIOs with whom we spoke oversee huge pools of capital that account for significant parts – up to 100% in certain instances – of operating budgets in key areas such as education, worker retraining, and youth development.

Hence, we conclude this latest formal study of the endowment and foundation landscape with guarded optimism that the impact of their efforts will only grow in importance in a world increasingly filled with outsized geopolitical, macroeconomic, and social crosscurrents that are likely to gain momentum in the coming years.

**Specifically, we see the need for more headcount, greater use of top-down tools to assess returns/risks, and more expertise within and across new asset classes. We also see the need for more diversification across these portfolios, as it is not clear to us that what worked last cycle will again work during the next five to 10 years.**

## Exhibit 41

The Lesson from the 1970s Is That Diversification Matters, Especially Given Inflation's Uneven Patterns.



Data as at May 31, 2022. Source: Census Bureau, Haver Analytics, KKR Global Macro & Asset Allocation analysis.

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**Kohlberg Kravis Robert & Co. L.P.**  
30 Hudson Yards  
New York, New York 10001  
+ 1 (212) 750.8300  
[www.kkr.com](http://www.kkr.com)