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Dream Big

KKR
GLOBAL INSTITUTE

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Dream Big

It is extraordinary — and to some degree unnerving — to reflect on how much the world has changed since we published our last insurance survey in 2018. The pandemic has truly affected so many lives — in ways that most would suggest were previously unimaginable. Without question, the insurance industry and the lion's share of the policyholders it dutifully serves will never be the same. Yet, at the same time, there are also other structural forces at work, including demographics, digitalization, and consolidation, that too are playing a major role in reshaping what the new normal looks like in this dynamic segment of the global financial services industry. Consistent with this viewpoint, we believe that KKR's latest proprietary global insurance survey, which incorporates detailed responses from more than 50 CIOs who oversee nearly $7 trillion in assets under management, is illuminating for not only what has happened over the last three years, but also — and maybe more importantly — what is likely to come next. In particular, in light of the negative real interest rate environment that we believe will continue well into 2023, both our survey results and our conversations with leading CIOs confirm our thinking that a more innovative approach is required to meet policy holder promises and sustain attractive returns on capital. As part of the industry's ongoing evolution, we see an important, structural convergence amongst three critical prerequisites of success within the global insurance industry: investment management, portfolio construction, and technological prowess that favors scale players with both sourcing and operating efficiencies as well as strong risk management capabilities. To this end, we strongly believe that now is the time for CIOs to *Dream Big*, including considering new ways of thinking about asset allocation, security selection, and competitive positioning in the macroeconomic environment that we envision unfolding over the next five to 10 years.

How did things ever get so far?

—Don Vito Corleone, The Godfather

When we completed our first insurance survey in 2018,

we titled the report *New World Order*. It reflected our strong belief that in a lower rate world, CIOs were going to have to rethink their traditional asset allocation processes. Specifically, we argued that they would need to think more creatively, including embracing more complexity, to generate returns sufficient to match their liabilities as interest rates kept trending down. At the time of our first survey, it seemed quite likely that non-traditional investments, including Alternatives, would become a bigger part of the asset allocation mix, and in doing so, there would be potential to generate significant upside differentiation. Whether we were lucky or good, our assessment of the macroeconomic landscape — and where it was headed — proved to be an accurate one. All told (and as we describe in more detail below), our most recent survey work shows that non-traditional investments, including Real Estate Credit, Structured Credit, and Infrastructure Debt and Equity, have surged to nearly one-third of total portfolios today, up substantially from about 20% in 2017.

In hindsight, however, we believe that there were several other areas where we should have had even greater conviction to lean in. Specifically, as many insurers found higher returning assets by moving out the liquidity spectrum as spreads tightened and competition increased, interest rates ultimately fell further than we were expecting. Meanwhile, the decrease in traditional public credit as a share of insurance companies' overall investment portfolios was even faster than we had anticipated.

There is also the pandemic's impact to consider. Beyond the substantial human toll this disease has had on society at large, COVID has served as a major catalyst to accelerate several important trends already in motion from the executive offices of insurance CIOs, including a faster shift to non-traditional investments, a more robust *Yearn for Yield*, improved risk management, and a further acceleration towards digitalization across most aspects of their businesses.

So, although in 2018 we discussed how enamored we were of the business and we did capture many of the upcoming changes, we feel we did not fully stretch ourselves as much as we could have. Said differently, we didn't *Dream Big* enough. In particular, we did not *fully* anticipate how beneficial the addition of core competencies in insurance strategies, including origination, investment management, and portfolio construction, would be to KKR's growth trajectory as a firm. For readers who don't know how the story ultimately played out, in 2020 KKR ended up buying a majority stake in Global Atlantic, an extremely well-run retirement and life insurance company. That transaction has only intensified our passion for this business.

Fast forward to 2021: As we worked with our fellow insurance CIOs to complete the 2021 survey, it definitely felt like even more of a collaboration than in 2018 as we now share many of the same ups and downs of being an owner/operator in this dynamic space. Said differently, we now have a deeper understanding of what managing insurance risk entails and the type of investment solutions needed to protect both policyholders and share-holders. Through KKR's expanded insurance team

effort as well as the strategic capital support that KKR's balance sheet provides, we have also strengthened our own internal capabilities to create as well as participate in differentiated, value-added offerings alongside our industry peers.

For me personally, I also can't help but reflect how, as I mentioned in the 2018 note, I have truly come full circle in my career, one that began in earnest for me when I worked as an insurance analyst at Morgan Stanley in the early 1990s. To again quote Michael Corleone in Godfather III, "Just when I thought I was out, they pull me back in."

As we look ahead today towards tomorrow, we remain quite excited about the future. However, there are headwinds to consider too. Indeed, with rates at record lows, fiscal deficits ballooning, and geopolitical tensions rising, we must all ask — to again steal a quote from The Godfather trilogy for this year's survey — "How did things ever get so far?" To be sure, the pandemic encouraged politicians and central bankers to stretch further, but the 'Authorities' have been experimenting with new policies, including negative rates, that for quite some time have been significantly disadvantaging savers. In fact, one of the reasons that the economic snapback has been so strong is because this time, in contrast to during the Global Financial Crisis (GFC), global central bankers have embraced strategies that are now even more punitive to the saving community.

Not surprisingly, against this backdrop, leading CIOs from some of the world's most profitable and innovative insurance companies, many of whom operate across a wide variety of geographies and products, are looking for new ways to generate better risk-adjusted returns in today's low rate environment — an environment we envision persisting for quite some time. As we detail below, many insurers have adopted distinct deployment and risk management strategies, including simultaneously moving up the quality curve in barbell fashion across *both* public and private markets, to compensate for today's difficult investing environment. To this end, we highlight the following conclusions from this year's survey of more than 50 of the leading global CIOs with whom KKR engages:

Six Big Ideas On Which to Focus:

1 The Yearn for Yield has only intensified since COVID-19

2 Expect an ongoing move up the quality curve across both public and private allocations

3 The shift towards non-traditional, illiquid investments is far from over

4 The impact from outsized monetary and fiscal policy is the worrisome macro risk factor

5 Expertise in asset allocation, portfolio construction, and technology are now perquisites for success

6 Further consolidation is likely, favoring scale players who can *Dream Big*

Key conclusions from our survey of more than 50 of the leading global CIOs with whom KKR engages:

1. Interest Rate pressure has intensified

Interest Rate pressure on portfolios has intensified mightily (especially in Europe where many *nominal* risk free rates are still negative), a stark reality that we believe can persist for some time. See *Exhibit 1* for details, but our Property and Casualty survey participants have seen their average investment yield slip to 2.7% from 3.0% last year and 3.9% in 2017. Within Life and Annuity, yields slipped more modestly to 4.0%, flat versus 2020 but down from 4.2% in 2017. As we show in *Exhibit 39*, we see rates gradually backing up over the next few years, but not getting unglued the way some inflation bears are predicting. This viewpoint is generally shared by our CIOs, many of whom now predict overall investment yields on their portfolios bottoming by the start of 2023. This outlook makes sense to us, as 2023 is when we expect the Fed to begin raising rates, and also when we think 10-year yields could potentially edge north of two percent.

2. The Yearn for Yield continues

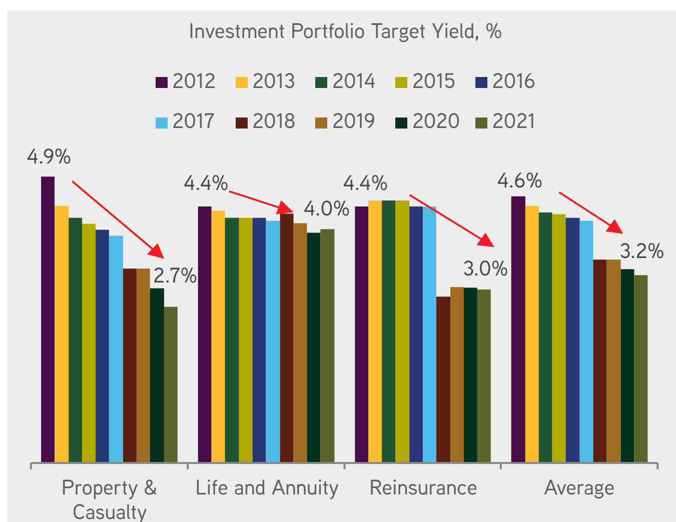
However, in the near-term, the technicals linked to our *Yearn for Yield* thesis — many of which were reinforced during this survey work — encourage us to lower our 10-year interest rate forecast. See below for more details, but we reduce our 2021 U.S. 10-year interest rate forecast to 1.50% from 1.75%. Our 2022 forecast goes to 1.75% from 2.00%. We make these changes, despite no change to our long-term reflation thesis (see our midyear report *Same As It Ever Was?*) Said differently, we believe that one of the anomalies of this recovery will be both stronger nominal GDP growth *but also* lower real rates versus the past one.

3. CIOs have made structural shifts to asset allocations

To compensate for the ongoing pressure on interest rates, CIOs participating in our survey have made substantive, structural shifts in their asset allocations. Why did they make this transition? We believe that CIOs are embracing complexity and the thoughtful use of illiquidity, as public market assets roll off and excess cash builds up. Improved asset-liability matching and more robust risk management have also helped, we believe. Reflective of these shifts, non-traditional investments, including Real Estate Credit and Structured Credit, collectively experienced almost a 1,200 basis point increase in market share. *As a result, total*

Exhibit 1

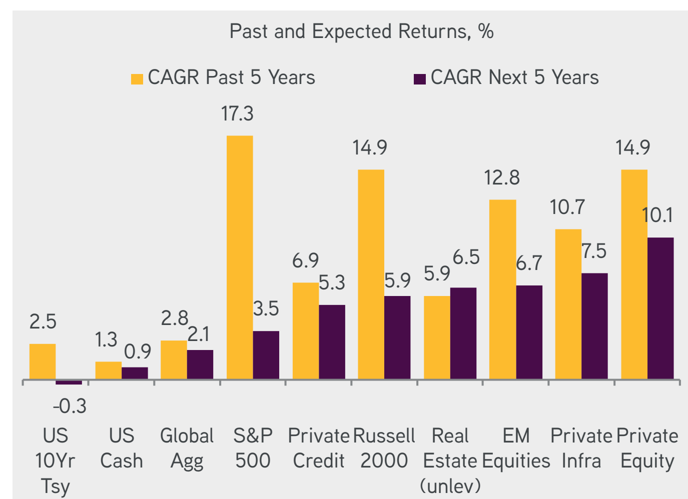
The Pandemic Has Only Intensified the Yearn for Yield, as QE Has Further Starved Savers



Data as at August 31, 2021. Source: KKR Global Macro & Asset Allocation analysis.

Exhibit 2

With High Multiples and Low Rates, We Expect Lower Returns Ahead



Cambridge historical data as at 3Q2020, NCREIF historical as at 4Q2020. Data as at April 16, 2021. Source: KKR Global Macro & Asset Allocation analysis.

non-traditional investments now account for 31.8% of total portfolios surveyed, compared to 20.3% in 2017. As we detail below and in *Exhibit 21*, our work shows that 100% of the gain came at the expense of traditional public credit, which fell to 48.5% of portfolios surveyed, compared to 60.7% in 2017. Meanwhile, the allocation to Liquid Equities (predominantly by Property & Casualty and Reinsurers that typically favor Public Equities for liquidity) slipped to 5.5% from 9.1% over the same period. *Cash as a percentage of assets is now at 4.9%, which is almost double the level it was the last time we did the survey*. See below for full details on this increase but we think high cash balances are fueling thoughtful moves into longer duration assets. However, there is obviously more work to be done, as the supply of yielding, long-term assets remains limited.

4. Asset allocation shifts should help and even enhance returns

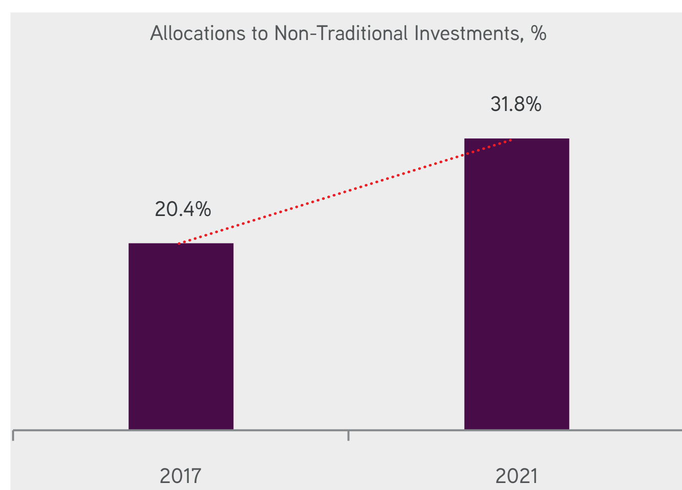
These shifts in asset allocation should help and even enhance returns, despite lower forward assumptions guidance. As we show in *Exhibit 2*, we are now using more conservative expected returns for the next five years. This reality makes sense, given high multiples, low rates, and robust margins — the three major inputs to our models. The good news, though, is that aggressive changes in target asset allocations by insurance CIOs towards higher returning products has more than offset the decline in returns we are forecasting across most asset classes. In fact, we now expect the average insurance company surveyed to return 2.9% over the next five years, compared to 2.6% if they had not altered their 2017 allocations. One can see this in *Exhibit 67*. However, as *Exhibit 66* shows, we should not lose sight of how far traditional asset class returns have fallen since 2017 (i.e., note the 5-year trailing returns through 2017).

5. A need for more strategic and thoughtful risk taking

Consistent with these asset allocation changes, and as we noted above, our survey recipients overwhelmingly cited a greater comfort level with and need for the addition of more strategic and thoughtful risk taking strategies. In fact, fully 80% of all respondents stated that due to interest rates being so low, they have compensated for the downward pressure on investment yields by 'increasing allocations to

Exhibit 3

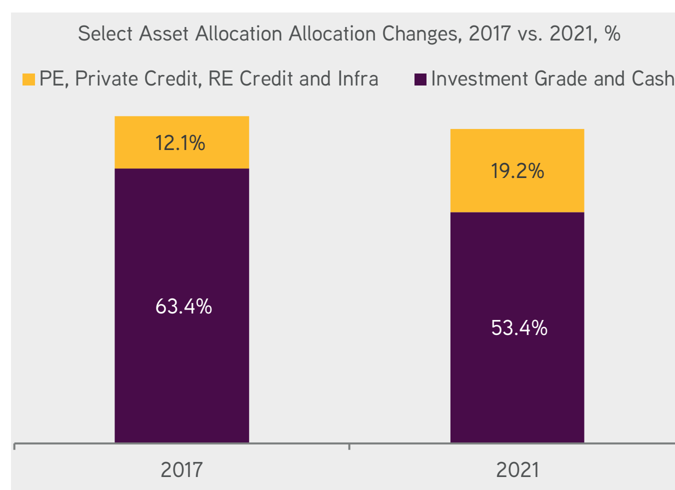
Insurers Have Had to Shift Their Asset Allocations in Recent Years to Protect Returns...



Data as at August 31, 2021. Source: KKR Global Macro & Asset Allocation analysis.

Exhibit 4

...With Private Credit, Real Estate Credit, Infrastructure, and Private Equity Benefitting Mightily



Data as at August 31, 2021. Source: KKR Global Macro & Asset Allocation analysis.

illiquid products', 'high dividend stocks, private market fixed income, (and) curve extension', 'adding to Private Credit', engaging in 'opportunistic risk taking around the edge,' and leaning into 'real estate assets more than before.' Post the GFC, embracing risk initially involved embracing simplicity, transitioning from corporates to assets further down the rating spectrum, then from liquid markets to privates. Today, as the comments above suggest, embracing risk involves adding layers of complexity mostly via non-traditional asset classes. Have insurers done enough with their portfolios to offset the seismic shift downward in rates? The answer is apparently no, as 97% of survey respondents are planning to increase, or at least maintain, complexity/risk levels over the next 12 months, supported by the strength of their current liquidity profiles. In fact, many of our survey respondents actually have too much cash on their balance sheets, they believe.

6. The shift towards Alternatives is far from over

Even against this backdrop of significant change, the shift towards Alternatives is far from over. Given that many CIOs are still playing catch-up in their allocations and finding that Alternative returns are exceeding the capital charges incurred *and* forward return expectations across asset classes are coming down, appetite for semi-illiquid and illiquid investments should continue to accelerate, we believe. Just consider that a net[1] 48% of CIOs intend to increase their Private Equity allocation, while a net 60% intend to boost allocations to Infrastructure. Private Credit too should benefit, with a net 48% of chief investment officers indicating an intent to bolster allocations. By comparison, the asset class with the greatest potential diminution of market share is traditional public credit, with fully 44% of respondents planning to reduce allocations.

7. Life and Annuity and Reinsurers are the most hungry for Alternatives

When we delve deeper into the data, it is the Life and Annuity companies and Reinsurers that are most likely to increase their exposure to non-traditional products. For example, a net 63% of Life and Annuity companies intend to increase their exposures to Private Equity. By comparison, net 40% of Reinsurers have a similar opinion, while Property & Casualty are more agnostic on the asset class, with no participants planning to move allocations upward on a net basis. Meanwhile, on the Infrastructure front, Life and Annuity companies are equally as constructive, with a robust net 69% poised to increase their exposure to the asset class. For P&C companies, the percentage of CIOs intending to increase exposure is actually even higher at a net 75%, though with a heavier tilt towards Infrastructure fixed income. At present, there is more activity in the Infrastructure Equities arena, as there is simply greater opportunity to transact. In our view, to invest successfully in Infra Debt requires aligning with partners who provide expertise across both the equity and debt spectrum and are viewed as a resource up and down the capital structure. Finally, a net 56% of Life and Annuity CIOs planned to increase Private Credit allocations. Similarly, given the ongoing need for yield enhancement, a solid net 50% of Property & Casualty insurers intend to lean into this asset class in 2022. Interestingly, though, intentions in the Reinsurance arena were a more modest 20%.

8. Inflation and deflation are the most worrisome macro risk factors

In terms of macro risks and disruptions, Inflation/Deflation was cited by two-thirds of our respondents as their most worrisome macro risk factor. The issue, according to almost all of our survey respondents (particularly those in the United States) is that there is "now too much money in the system chasing returns." However, that is where agreement on what the future holds ends. On the one hand, our conversations led us to believe that deflation is the biggest threat to Life and Annuity companies, given that rising rates, if done by central bankers in a predictable way amidst strong economic growth, are generally good for this industry (particularly for those with adept portfolio rebalancing skills). On the other hand, P&C company executives are increasingly concerned about inflation and whether they are earning enough income *and* raising prices fast enough to offset the surge in things like auto and housing values (think impacting replacement costs), as well as the ongoing threat from cyberattacks. Another big issue on all investors' minds is supply chains. All told, more

1 Net responses measured as % intending to increase allocations minus % intending to decrease allocations.

than 60% of respondents believe that supply chain issues will be an ongoing problem through the second half of 2022 *or later.* As such, CIOs are trying to develop frameworks and understanding around what this disruption means for global growth, inflation, pricing, and market volatility. Finally, geopolitical risks were also mentioned by many CIOs, and in our view, there is a clear linkage between geopolitics and supply chain issues.

9. A thematic approach is required for tomorrow's winners

Dream Big: There are three legs to our Dream Big 'stool.' First, as one CIO suggested, acquisition-driven growth is 'truly the only way to scale,' particularly in an environment where 'the insurance industry hasn't seen rising rates for ten years.' We also repeatedly heard about leveraging scale to create efficiencies, including operational expertise, as a path towards differentiation. To this end, we think insurers, including CIOs, CEOs, and CFOs, need a clear vision on where the industry is going, including the importance of acquisitions for growth, as a prerequisite for success. In terms of the bigger picture, we strongly believe there is about to be a robust convergence amongst three factors — investment management/asset allocation expertise, technology prowess, and robust portfolio construction analytics — that favor scale players that can embrace complexity. This theme is a big one, and it is likely to accelerate its pace in the coming quarters, we believe. The second leg of the Dream Big 'stool' centers on innovation, including digital finance, technological automation, and blockchain technology. The final leg of the Dream Big 'stool' centers on investing behind mega-themes like ESG, the global energy transition, and unpacking complexity (i.e., buy complexity/sell simplicity). In a world that is overwhelmed with excess liquidity, being able to invest large swaths of capital behind secular themes where there are significant macroeconomic tailwinds will become a differentiator, we believe. Control also plays a meaningful role in the complexity theme, as several of our CIOs opined that the ability to restructure investments was a meaningful way to create value and harness yield in a world of increasing competition and tight spreads.

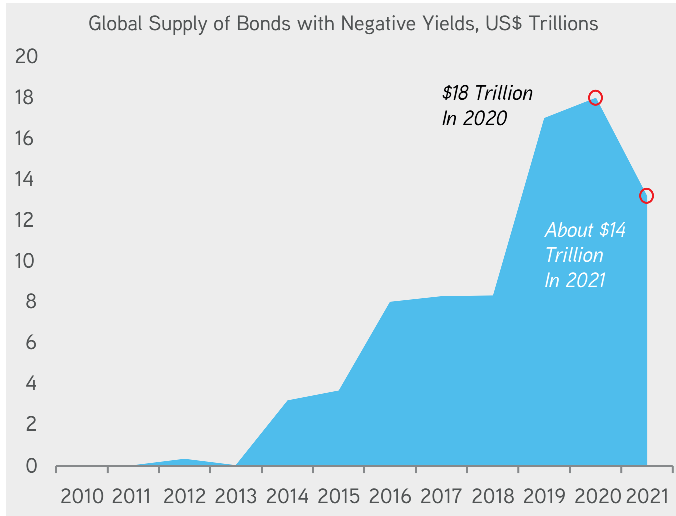
10. Insurers own equity felt cheap relative to debt

Bet On Yourself While we did not include any questions about buybacks in our survey, a lot of CIOs talked about how their equity felt 'cheap' relative to their debt. Said differently, we finished the survey thinking that there is a potentially large arbitrage between where the prices of debt versus equity of many insurance companies are now trading. For example, the earnings yields (i.e., E/P instead of P/E) on some of the publicly traded companies participating in our survey are now in the high single digits. Yet, at the same time, the debt of these companies is bouncing off record high prices and record low yields. In our humble opinion, CIOs should potentially talk to their CEOs and CFOs about buying back stock at current levels. For the scaled players that want to dominate, buybacks, coupled with some strategic acquisitions, could help to improve the price-to-earnings multiples of this sector more than the sell-side community currently thinks, we believe. To be sure, this theme is not a new one (as many insurance companies have retired a lot of shares in recent years), but we do think that its speed of implementation should be poised to accelerate.

Looking at the big picture, the results of our insurance survey again underscore two mega-trends that we see across most of the global asset allocation portfolios we review. First, while there are economic benefits to quantitative easing (QE) in the form of easier financial conditions, *it does have the long-term effect of unduly punishing current retirees by reducing interest rates to levels below where they otherwise would be*. Besides earning less on their current investments, it also immediately increases the value of the liability stream for the insurance companies that serve as investment intermediaries for the millions of individual savers they represent. This duration extension is a big deal, and as we describe below, it increasingly influences the asset allocation decisions of the CIOs with whom we spoke. Against this backdrop, the industry has no choice but to diversify towards investments that harness the illiquidity premium and/or drive cash flows that are in excess of more traditional fixed income returns. Not surprisingly, the sharp drop in rates following the onset of the pandemic has only accelerated this phenomenon.

Exhibit 5

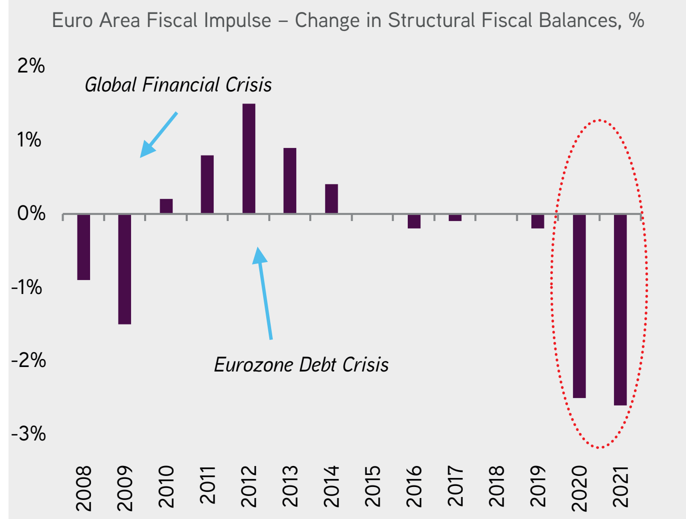
There Is Still $14 Trillion in Negative Rate Fixed Income Securities That Are Adversely Affecting Savers



Data as at September 17, 2021. Source: Bloomberg.

Exhibit 6

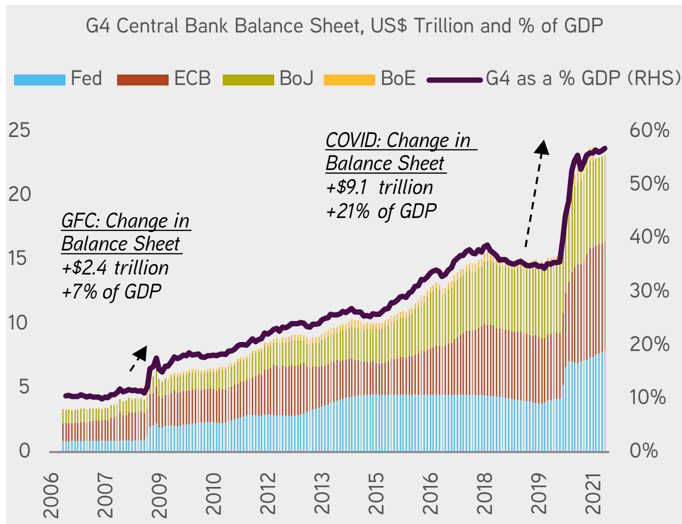
This Cycle Is About Accommodation, Not Austerity



Note: Based on EC Spring Forecast. Data as at June 28, 2021. Source: European Commission.

Exhibit 7

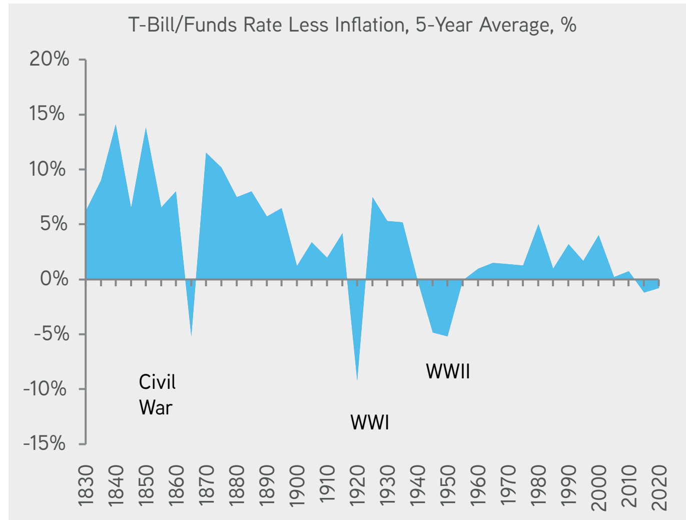
Even Though the Rate of Change Is Slowing, There Is Still a Huge Amount of Stimulus in the System



Data as at June 30, 2021. Source: Bloomberg.

Exhibit 8

Today's Environment Has the Lowest Real Yields On Cash, Other Than Wartime Instances, Since the 1830's



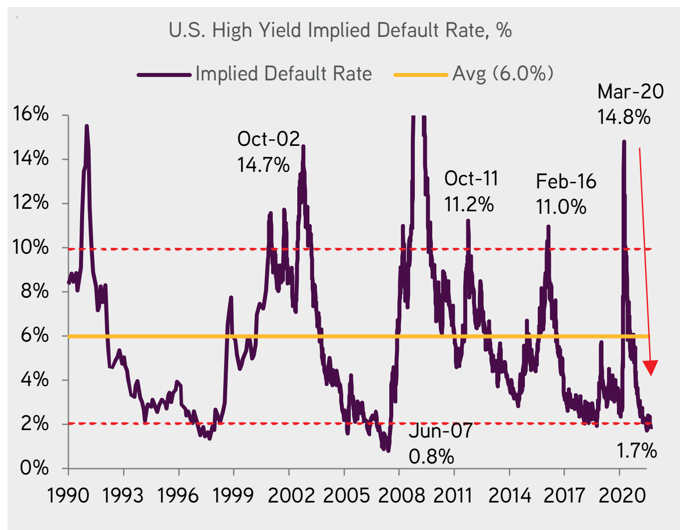
Data as at December 31, 2020. Source: FRB, Robert Schiller, JP Morgan.

Second, *global QE perpetuates and in many instances accelerates the ongoing yearn for yield by investors*. Just consider that the G4 countries alone have increased their central bank balance sheets by $9 trillion, or 21% of their collective GDP, since the pandemic started. For this reason, we believe that insurance companies must seek out new, often more efficient — and sometimes more complex — investment strategies to generate the cash required to meet both their existing and future obligations. As our survey responses again underscore, Alternative products can clearly help bridge the wide gap in income generation that has accumulated via lower rates since the Global Financial Crisis, a trend that has only accelerated since the onset of the COVID-19. However, as we detail below, the punch line from our community is not to compensate for lower rates by just taking more risk. Rather, it is about further professionalizing the investment management, structuring, and operations of the industry to drive better returns for policyholders.

So, our bottom line is that now is the time for insurance executives to *Dream Big*. The opportunity to create scale advantages in sourcing, portfolio construction, and risk management can accrue outsized economic 'rents' that should offset ongoing spread and rate pressures, we believe. Moreover, by improving diversification and driving innovation, CIOs can create portfolio construction benefits to help weather potential macro and geopolitical shocks that might not be fully priced into today's robust capital markets (*Exhibit 10*). As we describe in more detail below, thoughtful asset allocation, including bigger thematic investing tilts, will become key differentiators in a world of excess savings amidst lower expected returns, in our view. Finally, as *Exhibits 9* and *10* show, now may be the time for insurance CIOs and CEOs to consider the balance of risks and returns presented by their own capital structures, including the relative mix of debt and equity as risk-absorbing capital buffers underneath policyholder liabilities. From our vantage point, insurers' equity appears attractively priced relative to their debt.

Exhibit 9

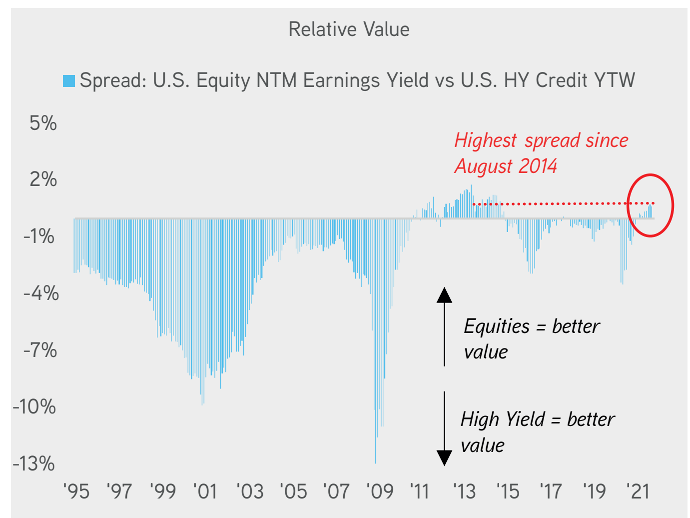
Our U.S. High Yield Default Monitor Is One Full Standard Deviation Below the Long Term Average…



Data as at September 17, 2021. Source: Bloomberg, ICE-BofAML Bond Indices.

Exhibit 10

…Which Dovetails With Our Asset Allocation Model That Shows the Earnings Yield on Equities Is At Its Widest Level Relative to High Yield Since August 2014



Data as at August 31, 2021. Source: Bloomberg.

DETAILS

In the following sections we offer a deeper dive into what we gleaned through our proprietary survey and from our discussions with leading CIOs.

With Whom Did We Speak?

Similar to our last survey, we were able to engage a broad swath of insurance companies. All told, our survey respondents oversee more than $6.7 trillion in assets, representing roughly 20% of the total global insurance industry and double the size of investable assets represented in our 2018 survey. While there are many similarities and overlaps between 2018 and 2021 in terms of survey participants, there are also some notable differences. Importantly, the output of this survey is more global than the prior one. In 2021, U.S. companies represented 47% of total participants (*Exhibit 12*), compared to more than 75% in 2018. Meanwhile, Asian and European companies represented 36% of participants, compared to just a handful last time in 2018.

Exhibit 11

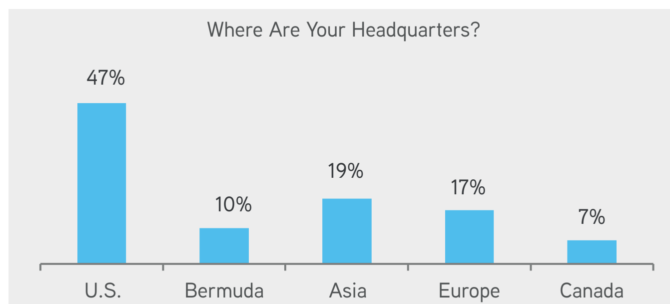
We Surveyed Insurers Managing Nearly $7 Trillion in Assets, Which Represents About 20% of the Entire Insurance Industry

Data as at August 31, 2021. Source: KKR Global Macro & Asset Allocation analysis.

In terms of size, the asset expansion of the survey participants was quite startling, as the total amount of investable assets under management for each CIO has grown meaningfully since our last survey (more than doubling for many executives). Acquisitions, organic growth, and robust capital markets all played a part in the hefty increase in scale of our insurance relationships. All told, the average CIO with whom we spoke oversees north of $100 billion in assets.

Exhibit 12

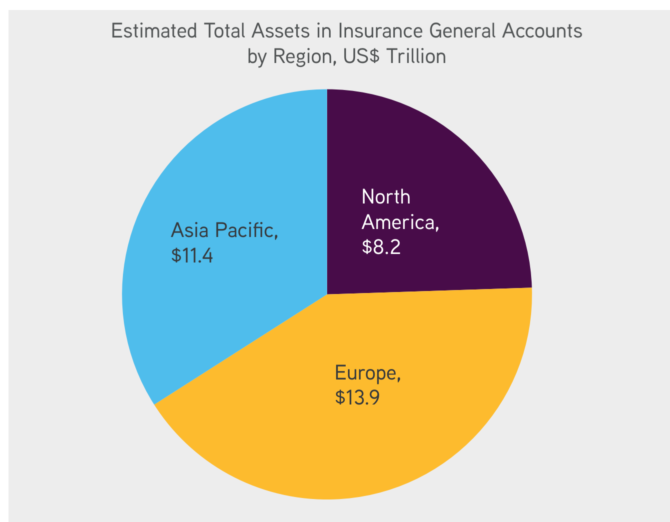
Our Survey in 2021 Is Much More Global



Data as at August 31, 2021. Source: KKR Global Macro & Asset Allocation analysis.

Exhibit 13

Globally, There Are Now More Than $33 Trillion in Insurance Assets…



Data as at December 31, 2020. Source PWC Asset and Wealth Management Revolution, KKR Global Macro & Asset Allocation analysis.

Exhibit 14

...With an Estimated $1.6 Trillion Outside of Traditional Liquid and Fixed Income Investments

Asset Type	US$ Trillions	% of Total
Bonds & Debt Instruments	$25.7	76.6%
Equities	3.9	11.5%
Real Estate	0.7	2.2%
Cash & Short-Term Investments	1.6	4.9%
Other: Alternatives, Tax Credit Funds, Investment Trusts	1.6	4.9%
Total	$33.5	100%

Data as at December 31, 2020. Source: KKR Global Macro & Asset Allocation estimates.

What else can we tell you about our survey respondents? We will get into specific asset allocation strategies later, but we did want to highlight some stats around duration to help set the table. As one can see in *Exhibit 15*, our survey respondents, on average, have increased the duration of their liabilities. We think that this tilt is reflective of overall industry trends, including taking on more longer-dated life policies in a low rate environment as well as a greater focus on asset-liability matching in an environment that favors illiquidity. In terms of what we gleaned from our follow-up calls, CIOs are indeed hoping to tilt their assets towards longer dated investments, including Private Equity and Infrastructure, which can earn above average economic 'rents' relative to these liabilities. Interestingly, cash balances remain quite elevated due to increased realizations and strong operating profits, which may now require them to be more aggressive in formalizing deployment schedules. On the other hand, as *Exhibit 15* also shows, Property & Casualty companies have moved in the other direction (i.e., shortening duration), reflecting both new survey respondents and a shifting business mix.

Exhibit 15

Life and Annuity Companies Have Extended Their Liabilities Meaningfully; By Comparison, Property and Casualty Companies Have Shifted Duration the Other Way

KKR Survey Respondents Liability Duration, %								
	0–4 years		4–7 years		7–10 years		Over 10 years	
	2017	2021	2017	2021	2017	2021	2017	2021
Life and Annuity	0.0%	0.0%	12.5%	5.0%	43.8%	21.0%	37.5%	74.0%
Property & Casualty	70.0%	100.0%	20.0%	0.0%	10.0%	0.0%	0.0%	0.0%
Other	28.6%	50.0%	14.3%	33.0%	28.6%	0.0%	28.6%	17.0%

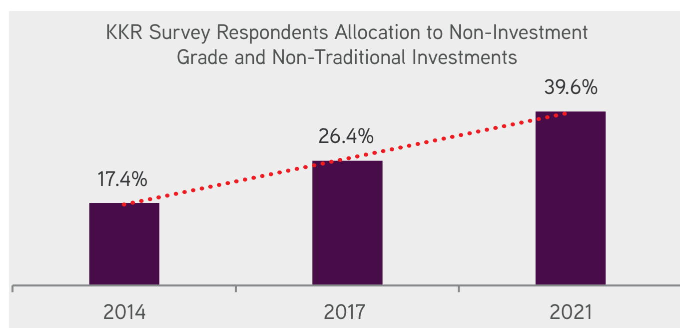
Data as at August 31, 2021. Source: KKR Global Macro & Asset Allocation.

Meanwhile, in terms of regional nuances, we want to flag that we surveyed more Life and Annuity CIOs in Asia (versus P&C), given the growth that business segment has experienced in recent years. In Europe our survey respondents were more balanced amongst Life, P&C and Reinsurance companies. Consistent with these tilts, our Asia respondents leaned more towards longer duration (i.e., over 10 years), while European responses were more barbell in nature, predominantly split between 0-4 years and over 10 years.

Finally, as one might guess — given that the lion's share of our respondents do business with KKR — there is likely a bias towards users of sophisticated alternatives offerings, including illiquid and complex products *(Exhibit 16)* and more outsourcing of investment management mandates *(Exhibit 18)*.

Exhibit 16

The Trend Across the Insurance Industry Has Clearly Been to Find More Return per Unit of Capital Invested in Recent Years



Data as at August 31, 2021. Source: KKR Global Macro & Asset Allocation.

Exhibit 17

Historically, Infra Has Exhibited Lower Correlations to Traditional Alternative Strategies Including PE, Real Estate and Private Credit

	Buyout	Growth Equity	Real Estate	Private Credit	Infra
Buyout	1.00				
Growth Equity	0.92	1.00			
Real Estate	0.73	0.61	1.00		
Private Credit	0.59	0.65	0.54	1.00	
Infra	0.70	0.66	0.57	0.55	1.00

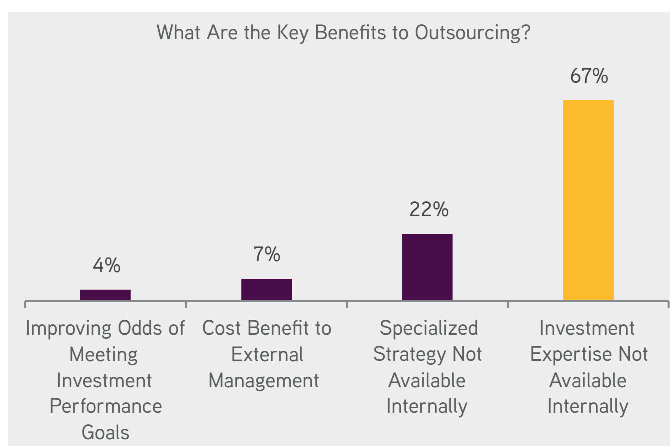
Data as at August 31, 2021. Source: KKR Global Macro & Asset Allocation.

The value in today's market is in complexity rather than just illiquidity."

Anupam Agarwal,
CIO of Global Atlantic

Exhibit 18

Insurance Companies Are Outsourcing More Complex Investment Mandates in Order to Gain Exposure to These Asset Classes



Data as at August 31, 2021. Source: KKR Global Macro & Asset Allocation.

Exhibit 19

However, This Comes With Major Obstacles, Particularly in Regard to Capital Requirements and Illiquidity Concerns

Data as at August 31, 2021. Source: KKR Global Macro & Asset Allocation.

Did Our Survey Respondents Do What They Said They Were Going to Do?

They always say time changes things, but you actually have to change them yourself Andy Warhol

One of the highlights of my high school years was an internship with a lawyer named Eddie Hayes when he represented the Andy Warhol Foundation following the artist's death in February of 1987. Not surprisingly, after this experience I became a steadfast admirer of both the artist's work and his acute observations of the world. One quote that continues to resonate with me — and apparently our CIOs as well — is that implementing change is necessary to adapt to different environments. To review, in an attempt to capture forward-looking guidance during our 2018 survey period, we created a proprietary diffusion index to show intended asset allocation changes. One can see some of the results from that survey in *Exhibit 20*. At the time, this index suggested that on net fully 36.4% of our respondents planned to increase allocations to Real Estate Credit, followed by Private Credit (+29.5%), and Private Equity (+27.3%). Fast forward to today, and the data suggests CIOs definitely leaned into their top picks. One can see this in *Exhibit 21*, which details what changes were actually implemented. All told, Real Estate Credit allocations increased 220 basis points to 5.9% in 2021 from 3.7% in 2017, while Private Credit increased 210 basis points (7.7% vs. 5.6%). Meanwhile, Private Equity increased 80 basis points from 3.2% to 2.4%. In 2017, 16.0% of respondents cited their intentions to increase commitments to Real Estate Equity, which increased 120 basis points to 2.7% from 1.5%.

If there was a product area that we missed in terms of potential upside, it was clearly the huge surge in momentum towards Structured Credit, which increased 340 basis points to 9.2% in 2021 from 5.9% in 2017. Why such a dramatic change? As we discussed in the 2018 survey note, the larger current income component of Structured Credit has become even more valuable in a low interest rate environment. We also link some of this upside growth to insurance companies' willingness to thoughtfully explore new products. In particular, structured securities, which offer attractive risk/reward profiles through downside protections and tranching of exposures, and separately managed accounts that help to boost overall returns in today's low rate environment, are just some of the more creative outcomes we have seen CIOs embrace in recent years. Rated asset-backed securities too have grown in popularity.

Exhibit 20

In Our 2018 Survey, Real Estate Credit, Private Credit, and Private Equity Were the Highest Conviction Asset Classes

Net % of Survey Respondents in 2017 Planning to Increase/ (Decrease) Allocations to Various Asset Classes in the Next Calendar Year	
Real Estate Credit	36.4%
Private Credit	29.5%
Private Equity	27.3%
Non-IG (Bank Loans & High Yield)	18.2%
Real Estate Equity	16.0%
Infrastructure	13.6%
Investment Grade	(2.3%)
Domestic Equities	(20.5%)
Cash	(22.7%)

Note: Net responses measured as % intending to increase allocations minus % intending to decrease allocations. Data as at May 2018. Source: KKR Global Macro & Asset Allocation.

It's also worth noting the sea change in regard to Infrastructure. Back in 2017, the average allocation to the asset class was a miniscule 0.4%. Today, that allocation has increased 200 basis points to 2.4%; however, as we detail in the next section, this percentage is likely to move even higher in the coming quarters. In our view, CIOs are gravitating to this space due to its attractiveness as a longer dated, yield enhancing asset class with less spread correlation to traditional credit. There is also the potential that the public sector creates benefits, including tax favorability, which could make returns even more compelling. Interestingly, survey respondents suggested that *both* infrastructure debt and equity were attractive given the portfolio construction and diversification benefits but that infrastructure debt was more challenging to do in scale.

Concerns around rising inflation and the need for protection likely has also played a factor. Meanwhile, Core Infrastructure, with its more immediate access to cash distributions and a focus on downside protection, has also gained traction with insurers.

Interestingly, back in 2018, our heavily U.S.-centric survey responses cited illiquidity concerns as the number one external obstacle to investing in Alternatives. Today, capital requirements are the obstacle most cited *(Exhibit 19).* Looking at the data by region yields some interesting variances as less than 19% of the U.S. CIOs named this as an investing obstacle. In Europe, this percentage was actually *zero.* Consistent with this view, when asked about current levels of portfolio liquidity, 62% of U.S. and 100% of European insurers indicated they had *too much* liquidity. However, the response from Asia was more measured, with 50% of CIOs viewing liquidity as an obstacle for private markets investing. Yet, overall, 100% of Asian insurers felt their liquidity levels were appropriate. By type of insurer, 100% of Reinsurers and 50% of Property & Casualty respondents suggested that they had too much liquidity.

On Infrastructure, which ranked as the most sought after asset class on a go-forward basis in this year's survey, CIOs have been heeding our call to increase exposure to collateral-based cash flows with income generation and pricing power. All told, a sizeable 60% of CIOs plan to add to Infrastructure in 2022, which was by far our highest shift in asset allocation.

Exhibit 21

Non-Traditional Investments Have Gained Market Share in Recent Years

Asset Allocation, 2017 vs. 2021			
	2017	**2021**	**Change +/-**
Total Liquid Equities	**9.1%**	**5.5%**	**-3.6%**
Domestic Equities	7.2%	4.2%	-3.0%
International Equities	1.9%	1.4%	-0.5%
Total Liquid Fixed Income	**66.8%**	**56.3%**	**-10.5%**
IG Fixed Income	60.7%	48.5%	-12.2%
Non-IG Fix Inc (Bank Loans & HY)	6.1%	7.8%	1.7%
Total Non-Traditional Investments	**20.3%**	**31.8%**	**11.4%**
Structured Credit (CLO, CBO, etc.)	5.9%	9.2%	3.4%
Private Credit	5.6%	7.7%	2.1%
Private Equity	2.4%	3.2%	0.8%
Hedge Funds	0.5%	0.5%	0.0%
Real Estate Equity	1.5%	2.7%	1.2%
Real Estate Credit	3.7%	5.9%	2.2%
Commodities/Energy	0.4%	0.1%	-0.3%
Infrastructure	0.4%	2.4%	2.0%
Total Cash/Other	**3.8%**	**6.4%**	**2.6%**
Cash	2.7%	4.9%	2.2%
Other	1.1%	1.5%	0.4%

Note: May not equal 100 due to rounding. Data as at August 31, 2021. Source: KKR Global Macro & Asset Allocation.

And More Importantly, Where Are We Headed?

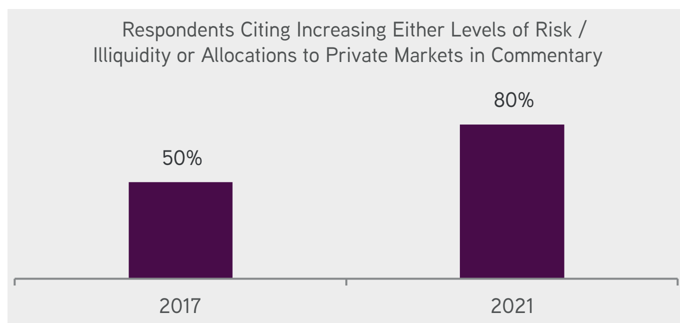
If there was a theme emerging around where we are headed in regard to asset allocation, it is clear that there has been a conscious effort by CIOs to increase the amount of complexity in their portfolios via alternative products. The reality is that the shift in the Fed's policy to Average Inflation Targeting as well as similar programs developed by central banks around the globe have forced many CIOs to implement processes and procedures to be more thoughtful in the use of illiquidity to capture higher returns. Better regulator communication, more involvement from ratings agencies, and steady growth

in the securitization market of these assets also have all helped (albeit less in Europe where many types of securitization receive punitive treatment under Solvency II).

Consistent with this view, we note that *survey recipients overwhelmingly cited a greater comfort level with the addition of strategic and thoughtful risk taking by doing more in private investments, particularly in today's reflationary environment*. All told, as *Exhibit 22* shows, a full 80% of respondents suggested they were comfortable moving out the curve (to quote a few) by 'increasing allocations to illiquid products' and 'we're now willing to allocate more into alternative assets such as inflation protected Real Assets and Private Equity.' An important offset, however, is that they are also moving up the quality curve in public securities. So, as Randy Brown, CIO of Sun Life commented, "We're not increasing overall portfolio risk; rather, we are actually using a barbell approach to asset allocation. What we are doing is actually transferring risk amongst asset classes, including more to high quality public securities and more to high quality non-traditional investments."

Exhibit 22

CIOs Are Adapting Investment Strategies by Thoughtful Risk Taking in Private Markets



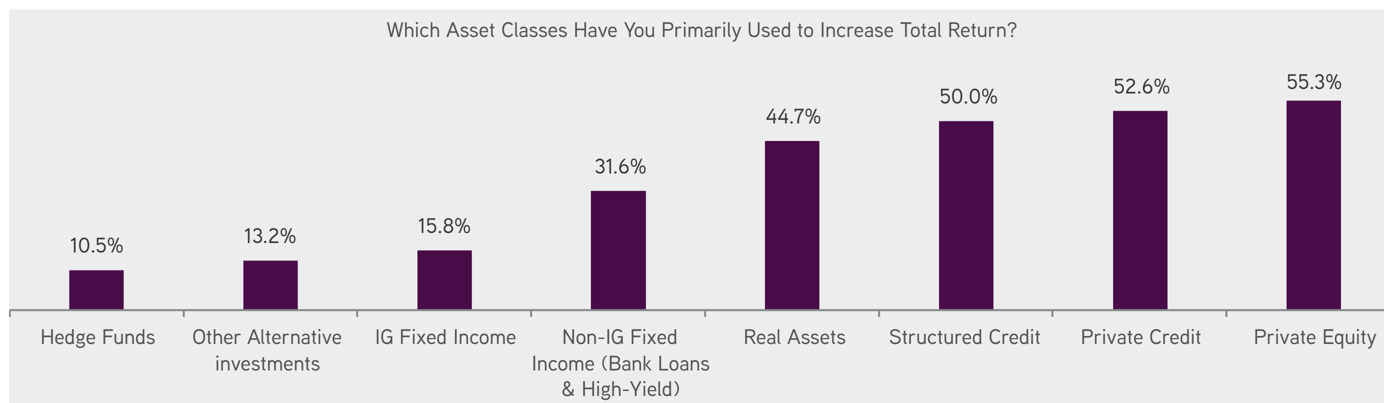
Data as at August 31, 2021. Source: KKR Global Macro & Asset Allocation.

On Infrastructure, which ranked as the most sought after asset class on a go-forward basis in this year's survey (*Exhibit 28*), CIOs have been heeding our call to increase exposure to collateral-based cash flows with income generation and pricing power. All told, a sizeable 60% of CIOs plan to add to Infrastructure in 2022, which was by far our highest shift in asset allocation. In 2017, by comparison, this percentage was just shy of 14% (*Exhibit 20*). From our vantage point, we can't pound the table harder on the Infrastructure call, especially given the crosscurrents of existing low rates coupled with a surge in the global money supply. We are maximum bullish on assets linked to nominal GDP growth with upfront cash flow. Amidst heavy fiscal spending and monetary policy that essentially equates to yield curve control, historical precedent reinforces that now is the time to overweight these assets in one's portfolio. Indeed, if inflation never materializes, the value of the upfront cash flow will become even more important, relative to a world of $14 trillion of negative yielding securities (many of which are on central bank balance sheets). However, if inflation does surprise to the upside during the next 12–24 months, then the value of the collateral should provide an important buffer to faster nominal GDP growth. Importantly, while we are not inflation bulls, forward expectations for inflationary trends appear too low, in our view. We continue to see potential for further spending focused on pandemic recovery, including infrastructure and supply chain strengthening initiatives.

Many insurers have adopted distinct deployment and risk management strategies, including simultaneously moving up the quality curve in barbell fashion across both public and private markets, to compensate for today's difficult investing environment.

Exhibit 23

When CIOs Now Talk About Increasing Yield, They Are Implicitly Talking About Using More Alternatives to Increase the Overall Total Return Amidst Record Low Interest Rates



Data as at August 31, 2021. Source: KKR Global Macro & Asset Allocation.

Interestingly, Private Equity, which generally provides little to no current income, ranked first as the investment vehicle most preferred to increase total return amongst CIOs. This response supports our view that — given where the absolute level of interest rates are — the *Yearn for Yield* has driven CIOs to consider total return as a more realistic benchmark. Consistent with this view, our conversations with select CIOs suggest that the strong absolute returns of Private Equity in recent years have been more than enough to offset increased capital charges associated with these positions. The notable and quantifiable covariance benefits of Private Equity as an asset class also helps meaningfully. Many CIOs also indicated that the competition in many parts of the Credit markets, coupled with very narrow spreads, made the decision to allocate more capital towards Private Equity an easier one than in years past. In particular, many cited the upside skew that equity today provides relative to debt.

Regarding the aforementioned capital charges, it is surely important to note how much regulatory capital is top of mind for many insurers in 2021, given the model changes, which involve updates to the Fixed Income and Real Estate risk factors. The long-awaited proposal by the NAIC to expand Fixed Income asset risk factors was finally approved for Life insurers in 2021 *(Exhibits 24* and *25)*. These changes provide greater granularity within rating cohorts for Fixed Income. The end result will likely be a modest decline of RBC ratios, though uneven in impact given distinctions in portfolio size and credit ratings concentration, across the U.S. Life industry, we believe.

Under this change, asset risk factors are largely higher for IG Fixed Income, particularly for the lowest notch ratings. Historically, under the NAIC's 6-factor framework, insurers were motivated to invest in A- (in the AAA through A- category) and BBB- (in the BBB+ through BBB- category) bonds to maximize their return on required capital. Going forward, we believe a more thoughtful approach will be required as this trade is no longer the most capital efficient.

Relative value opportunities may also exist across certain asset classes such as **1)** High Yield, where factors are much reduced at the highest ratings notch and return on required capital for BB+ and B+ is, in turn, much improved; **2)** Commercial Mortgage Loans, where the cost of required capital versus A or BBB rated credit is improved under the 20 factor framework; and **3)** Private Credit, where lower downgrade risk versus publics may help to lessen escalating required capital charges due to ratings migration *(Exhibit 27).*

Overall, we do not expect any large-scale portfolio repositioning to occur in response to this model change as limitations on turnover, embedded book yields, gain/loss and other considerations are likely to diminish any immediate market response by insurers. Conversely, we do expect that a thoughtful shift in investment strategy will occur for many insurers through cash flow reinvestment and/or the investment of new money.

Exhibit 24

Given the Heavy Capital Charges That Insurers Face in Non-Traditional Products...

Investment Grade Fixed Income: A-BBB Snapshot			
Rating	**Current Factor (Pre-Tax)**	**New Factor (Pre-Tax)**	**Factor Change**
NAIC 1	**0.39%**		
A+	0.39%	0.66%	+0.27%
A	0.39%	0.82%	+0.43%
A-	0.39%	1.02%	+0.63%
NAIC 2	**1.26%**		
BBB+	1.26%	1.26%	+0.00%
BBB	1.26%	1.52%	+0.26%
BBB-	1.26%	2.17%	+0.91%

Data as at August 31, 2021. Source: NAIC, KKR Insurance Strategies.

Investing in Private Equity is much more personal as goals, values and approach to investing are all prerequisites for success."

Tim Boroughs, CIO of Chubb

Exhibit 25

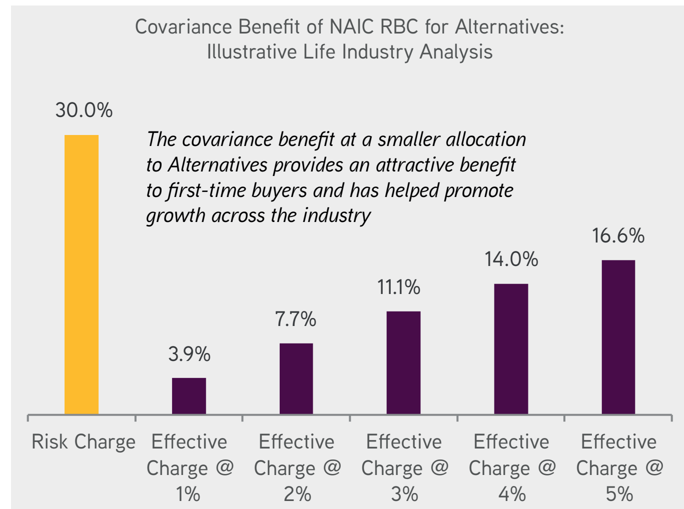
...Many Have Increasingly Focused On More Capital Efficient Structures Whenever Possible

High Yield Fixed Income: BB-B Snapshot			
Rating	**Current Factor (Pre-Tax)**	**New Factor (Pre-Tax)**	**Factor Change**
NAIC 3	**4.46%**		
BB+	4.46%	3.15%	-1.31%
BB	4.46%	4.54%	+0.08%
BB-	4.46%	6.02%	+1.56%
NAIC 4	**9.70%**		
B+	9.70%	7.39%	-2.31%
B	9.70%	9.53%	-0.17%
B-	9.70%	12.43%	+2.73%

Data as at August 31, 2021. Source: NAIC, KKR Insurance Strategies.

Exhibit 26

The Covariance Nature of the RBC Formula Provides for a Diversification Benefit From Alternatives



Note: Effective factors are estimated based on 2020 Life Industry aggregated RBC, holding all non-asset risks and Total Adjusted Capital constant. Actual effective factors will depend on a given insurers RBC and their distribution of risk both investment and otherwise. Data as at September 28, 2021. Source: KKR Insurances Strategies.

Exhibit 27

All Investment Yields Are Not Created Equal, Particularly When Downgrade Risk, Default Experience and Recovery Rates Are Considered

Hypothetical Capital Adjusted Return Framework for a Life and Annuity Insurer, Relative Value of HY Corporates and HY Bank Loans vs. BBB-Rate Corporates

	BBB IG Corps	BB HY Corps	BB Bank Loans
(A) Investment Yield (Yield to Worst)	1.60%	2.87%	3.80%
(B) Loss Adjustment	0.25%	0.82%	0.23%
(C) Cost of Required Capital	0.34%	1.22%	1.22%
(A-B-C) Capital Adjusted Return	1.01%	0..83%	2.35%

Note: Assumes U.S. Life insurer target RBC of 40% and WACC of 10%. Data as at August 31, 2021. Source: NAIC, KKR Insurance Strategies.

We also have noted that many insurance CIOs are migrating towards customized PE programs that can help minimize the J-curve effect, amongst other objectives. Saleena Goel, who runs Customized Portfolio Solutions for KKR (a group that specializes in these types of mandates), notes that since the start of 2020, her group has more than doubled the number of insurance clients. This acceleration makes sense to us, given how heavily our survey results tilt towards finding new ways to enhance total returns *and* not sit on more excess Cash.

However, like marriage, investing in Private Equity is not to be entered into lightly. Indeed, in our CIO conversations, many noted the wide dispersion of performance between top quartile and bottom quartile managers within the PE space and how the importance of manager selection remained key. Tim Boroughs, who serves as CIO at Chubb, put it even more straightforwardly: “Investing in Private Equity is much more personal as goals, values and approach to investing are all prerequisites for success.”

Meanwhile, Private Credit, has risen in importance, particularly post-pandemic. Asset allocations went to 7.7% in 2021 from 5.6% in 2017. We expect these market share gains to continue as nearly 52% of CIOs expressed a desire to increase allocations to this area in 2022. Without question, the message we heard during our follow-up survey work is that many CIOs, Life and Annuity ones in particular, want to use their long-dated capital to earn above average economic ‘rents’ in areas that have been abandoned by the banking sector in recent years. CIOs also prefer the sizeable current income that Private Credit provides as well as the product’s more limited duration in many instances relative to traditional public credit.

However, some CIOs did express concern that the illiquidity premium in Private Credit had gotten too tight of late. They cited increased competition, which has driven yields more towards liquid market levels in recent months. Consistent with this view, one CIO with whom we spoke suggested that the wall of money provided by global central bankers is now leading many insurance companies to get increasingly priced out of a market that they need to help baby boomers save for retirement.

You have to think creatively in today’s market. In too many instances, a rigid strategic asset allocation fails to look at gray areas across capital structures and sectors where a real opportunity might not fit neatly.”

Tod Nasser, CIO of Pacific Life

Exhibit 28

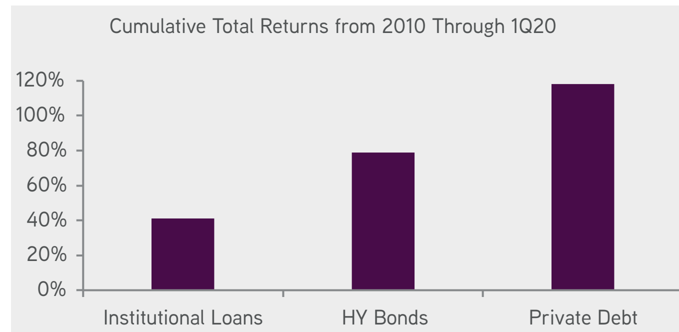
Infra, Private Equity and Private Credit Were the Asset Classes Most Cited by CIOs As Areas of Potential Increase

What Asset Classes Do You Anticipate to Increase or Decrease in 2022?	Increase	Decrease	Net	Keep the Same
Total Liquid Equities	**8%**	**10%**	**-2%**	**82%**
Domestic Equities	12%	16%	**-4%**	72%
International Equities	4%	4%	**0%**	92%
Total Liquid Fixed Income	**16%**	**30%**	**-14%**	**54%**
Investment Grade Fixed Income	4%	48%	**-44%**	48%
Non-Investment Grade Fixed Income (Bank Loans & High-Yield)	28%	12%	**16%**	60%
Total Non-Traditional Investments	**33%**	**8%**	**25%**	**60%**
Structured Credit (CLO, CBO, etc.)	28%	24%	**4%**	48%
Private Credit	52%	4%	**48%**	44%
Private Equity	56%	8%	**48%**	36%
Hedge Funds	8%	0%	**8%**	92%
Real Estate Equity	24%	16%	**8%**	60%
Real Estate Credit	24%	8%	**16%**	68%
Commodities/Energy	8%	0%	**8%**	92%
Infrastructure	60%	0%	**60%**	40%
Total Cash/Other	**8%**	**10%**	**-2%**	**82%**
Cash	4%	20%	**-16%**	76%
Other	12%	0%	**12%**	88%

Note: Net responses measured as % intending to increase allocations minus % intending to decrease allocations. Data as at August 31, 2021. Source: KKR Global Macro & Asset Allocation.

Exhibit 29

As CIOs Investments Shift From Public to Private to Capture Increased Returns, the Private Debt Arena Should Benefit



Data as at October 27, 2020. Source: S&P LCD, Prequin, KE Data Indices, LLC.

We have also seen an increase in demand by insurers for higher yielding forms of RE Credit that extend well beyond the traditional low leverage, fixed rate, and stabilized insurance loans that one typically associates with this business. The most notable forms have come through two types of transitional lending:

- Direct — insurance originations for 'light' transitional (floating rate) lending
- Indirect — through financing transitional lenders (i.e., financing a REIT) or investing in CRE, CLOs, private lending funds, and risk retention funds

There also seems to be a pattern where CIOs were inclined to switch out of B/BB corporate bonds and into Real Estate Credit. The appeal, according to some, is that there is a similar capital charge, but you are getting more collateral and increased yield in today's low rate, tight spread environment.

On the structured product front, we are seeing similar behavior patterns where, as one CIO mentioned, CIOs want to own 'alternative-light' products. In particular, there has been an uptick in insurance companies accessing the lower portions of the CMBS capital structures where certain

regulatory 'risk retention' rules create inefficiencies that can be captured to earn higher risk-adjusted returns. In addition, some portions of this CMBS B-piece market have historical loss experiences comparable to traditional investment grade corporates. (i.e., BBB/BB versus AAA/AA/A historically). In addition (and consistent with the survey results), we are now seeing insurance companies participating more in CMBS B-pieces through a variety of innovative structures. Other hard assets including Commercial Mortgages Whole Loans were mentioned as part of this growing wave of securitization holdings by insurers. This is not surprising as there are hard assets pledged against these investments. We believe that this has helped to broaden both adoption and penetration per insurer in these newer areas of the market.

By comparison, CIOs intend to both lower their allocations to traditional public credit and to Cash. Not surprisingly, our analytical work now shows that traditional public credit (e.g., Investment Grade Credit) often times earns a spread-to-liability cost that produces a return below an insurer's cost of actuarially required regulatory capital, particularly in today's environment. So, this asset class — now more than ever — acts as a return drag that must be overcome by more assets being allocated to more complex and/or illiquid investments with higher return profiles.

Meanwhile, on the Cash front, our discussions with CIOs reveal that many insurers both sold assets and raised cash during the pandemic. However, because the market disruption that occurred in 2020 was so short and abrupt, they have struggled to get fully reinvested. Moreover, industry-wide, prepayments have accelerated, which in recent quarters has further compounded excess cash positions. Finally, because many of the insurers are performing well, internal cash flow generation from operations too has ballooned. All told, Cash as a percentage of total assets is hovering at 4.9%, compared to 2.7% in 2017. Against this type of backdrop, most CIOs with whom we spoke are hoping for a period of market dislocation so they can lean in, with an ultimate goal of getting Cash well below four percent.

Some of the more interesting divergences in the data to highlight occur by region. We note the following:

- In Europe, there were three tilts to note. First, fully 75% of European survey respondents are planning to increase their allocations to Infrastructure in 2022. The European Solvency II rules, designed to mobilize capital behind infrastructure and other long-term sustainable projects, have incentivized insurance companies (via an amendment of the rules on how much capital needs to be held by insurance companies) to pursue infrastructure related investments. Second, European companies and investors were also heavily focused on decarbonization. Boards and shareholders are also being proactive in demanding greater consideration of clean energy and environmentally-efficient technology when deciding investments and partnerships. This desire will drive allocations across both private and liquid securities in the coming years. Finally, low rates are influencing behavior. In fact, Structured Credit, Private Credit and Non-IG are likely to be major beneficiaries of rebalancing by European CIOs of between one-half and two-thirds of all respondents, according to our survey.

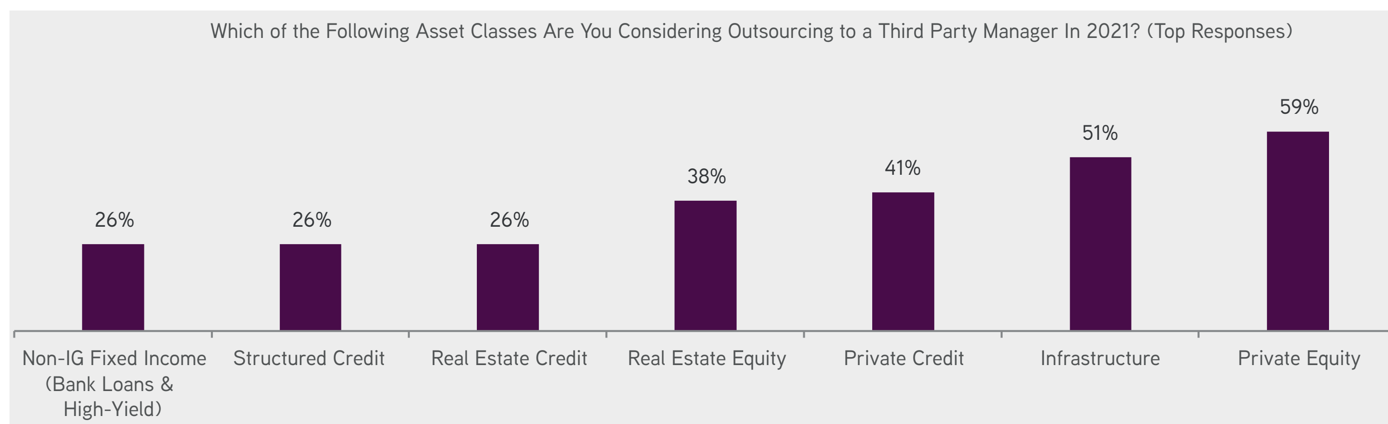
- In Asia, our diffusion index suggests that 40% of net survey respondents were planning to increase allocations to Private Equity in 2022, followed by 20% each citing Infrastructure, Private Credit, Real Estate Equity, and Real Estate Credit. Importantly, we should expect an evolution, not a revolution, as 76% suggested they were planning to maintain or decrease risk in the coming year (which is obviously much lower than the aggregate posture for our survey responses). We link some of the hesitancy to geopolitical tensions in the region as well as recent upticks in the Delta variant. Finally, regarding investment risk, CIOs in Asia's were most concerned about the potential for asset-liability mismatches, followed by duration and interest rate risks.

- In the U.S., it is worth highlighting how concerned respondents were about overly aggressive policy leading

to either inflation or deflation. All told, nearly 80% of all respondents in the United States cited this risk as their number one risk factor. By comparison, these concerns were much more muted in Asia and Europe, as half of all respondents were worried about inflation/deflation while end of cycle recession was cited by 33% and 25% of respondents, respectively. Not surprisingly, reflationary products such as asset-based collateral were quite popular with U.S. CIOs.

Exhibit 30

Private Equity, Infra and Private Credit Are the Asset Classes Most Often Cited As Outsourcing Candidates



Data as at August 31, 2021. Source: KKR Global Macro & Asset Allocation.

What Keeps Folks Up at Night?

When we surveyed our CIOs, we broke down the conversation about concerns into a discussion of business risks as well as overall macro risks. On insurance-specific business risks, one can see the output from both 2017 and 2021 in *Exhibits 31* and *32*, respectively. The bottom line is that not that much has changed, except that liquidity risk has become more diminished. This output makes sense to us, given that many insurance companies are performing well (i.e., generating a lot of free cash flow), credit losses are down, and prepayments are up. Also, more CIOs in this year's survey are clearly comfortable increasing levels of illiquid investments, including Private Equity, Infrastructure, and Private Credit.

Exhibit 31

In 2017, Duration and Interest Rate Risk Was Cited by All Survey Participants…

Cited As a Top 3 Concern in 2017	%
Duration/Interest Rate Risk	100%
Credit Risk	92%
Asset / Liability Mismatch	36%
Liquidity Issues	36%
Inflation / Deflation	12%
Uncertain Monetary Policy	24%
Other	12%

Data as at August 31, 2021. Source: KKR Global Macro & Asset Allocation.

Exhibit 32

…In 2021, This Is Still a Heightened Concern But So Are Asset / Liability Mismatches

Cited As a Top 3 Concern in 2021	%
Duration / Interest Rate Risk	72%
Asset / Liability Mismatch	50%
Credit Default Risk	47%
Credit Migration Risk	41%
Equity Risk	41%
Credit Spread Risk	40%
Real Estate Risk	22%

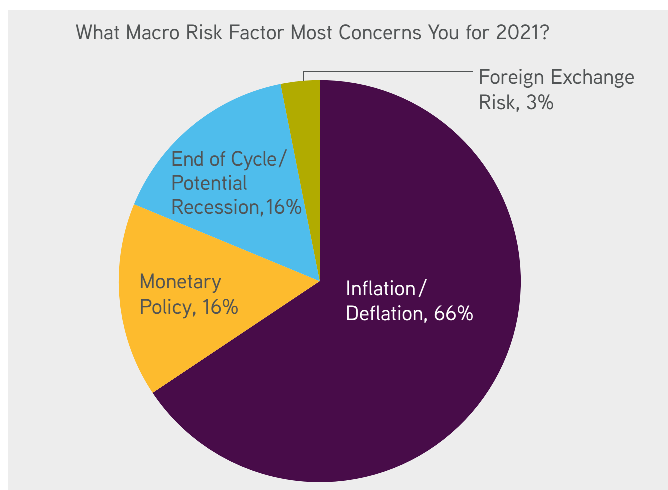
Data as at August 31, 2021. Source: KKR Global Macro & Asset Allocation.

However, on the macro risk front, concerns surrounding inflation and deflation was the top concern cited by two-thirds of all respondents *(Exhibit 33)*. As we mentioned in our introduction, the risk of some form of 'flation' — either deflation or inflation — is actually widely bifurcated. On the one hand, the survey responses are telling us that for Life and Annuity companies, lower for longer would be the most painful to them. Indeed, many CIOs participating in our survey now have asset durations of beyond 10-years in the hopes that reflation, coupled with sound portfolio management, including the use of more Core Private Equity, Infrastructure, and Core Real Estate, will allow them to enhance their returns on a longer term basis. As such, any downward movement on nominal rates from current levels would act as a significant headwind to overall profitability.

On the other hand, CIOs within the Property and Casualty complex are working hand-in-hand with their underwriters and appraisers to make sure that the current bout of 'transitory' inflation does not compromise profitability. Truth be told, one of the reasons that we are so bullish on collateral-based cash flows is that the replacement value of the hard assets provides a great hedge against inflation. Unfortunately, for P&C companies that underwrite the safety of these types of assets, it can prove costly when input costs are rising so quickly.

Exhibit 33

Inflation or Deflation, Depending on Your Mandate, Is the Most Worrisome Risk for Insurers for 2021



Data as at August 31, 2021. Source: KKR Global Macro & Asset Allocation.

Separately, in terms of risks we are watching, we do think that the forward leaning risk profile of many of our CIOs

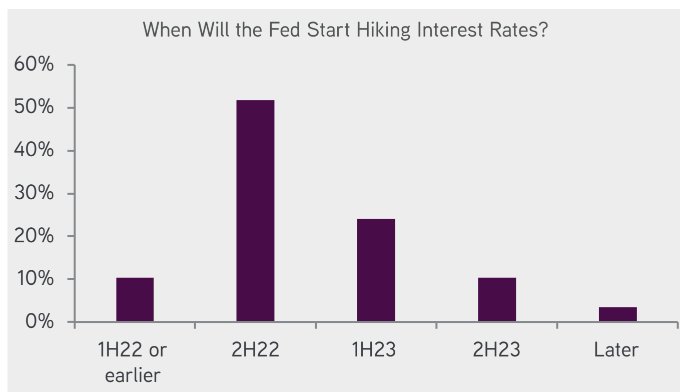
We're not increasing overall portfolio risk; rather, we are actually using a barbell approach to asset allocation. What we are doing is actually transferring risk amongst asset classes, including more to high quality public securities and more to high quality non-traditional investments."

Randy Brown, CIO of Sun Life

warrants some attention. As we show in *Exhibit 34*, 62% of respondents believe that the Fed will start hiking rates before the end of 2022. If that is correct, then we believe financial conditions are likely to tighten. Yet, 97% of our respondents want to either maintain or increase risk. Further, 68% of survey respondents said that they did not anticipate altering these risk levels in the near future. If there is good news, we do take comfort that many insurers are overweight Cash *(Exhibit 36)*, so there is likely some wiggle room to deploy into any market dislocation.

Exhibit 34

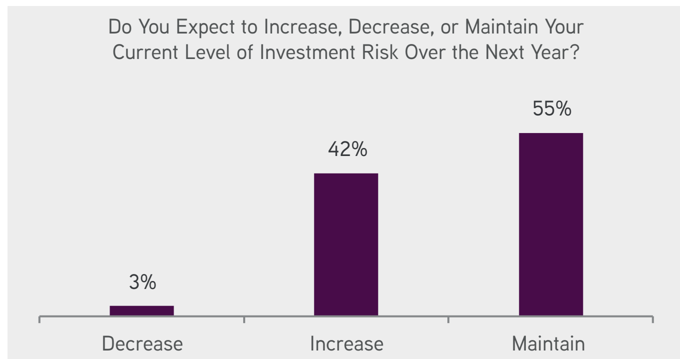
62% of Our Survey Respondents Believe the Fed Will Begin Hiking Before the End of 2022...



Data as at August 31, 2021. Source: KKR Global Macro & Asset Allocation.

Exhibit 35

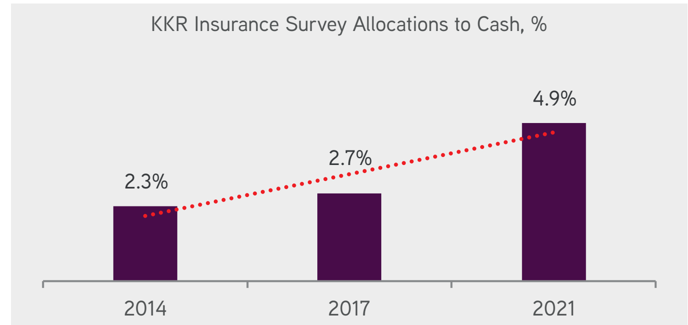
...Yet No One Wants to Decrease Risk



Data as at August 31, 2021. Source: KKR Global Macro & Asset Allocation.

Exhibit 36

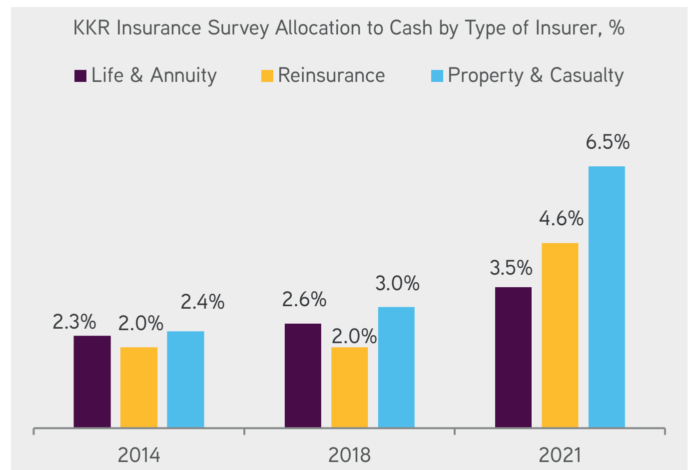
Insurers Likely Have Wiggle Room to Deploy Into Future Downturns...



Data as at August 31, 2021. Source: KKR Global Macro & Asset Allocation.

Exhibit 37

...As Cash Reserves Amongst All Type of Insurers Have Risen Post Pandemic



Data as at August 31, 2021. Source: KKR Global Macro & Asset Allocation.

How Are Investors, Including KKR, Thinking About Yields and the Current Rate Environment?

As we suggested at the beginning of this note, downward pressure on rates has been extraordinarily painful for the fiduciaries and financial intermediaries that represent savers in recent years. To be sure, there are benefits to quantitative

easing, but at its core, QE represents a transfer of wealth from those who are trying to save to those who are being encouraged to re-stimulate growth.

Insurers have certainly not been immune to the headwind of lower rates in recent years. One can see this in *Exhibit 38,* which shows the steady downward trend in return that insurance portfolios have been able to generate. Property & Casualty companies have been especially hard hit, with yields on their portfolio falling to just 2.7% in 2021 from 4.9% in 2012, a sizeable 45% decline.

Not surprisingly and in concert with our clients and deal teams, we have spent a considerable amount of time pressure testing our traditional interest rate framework to make sure we are best positioned to forecast this important variable. One can see this in *Exhibit 39*, which shows our base, bull, and bear case scenarios for the relationship between U.S. nominal interest rates and U.S. nominal GDP. We also looked at some technical factors, including supply and demand, which support our view that U.S. 10-year yields are not on the verge of an unraveling melt-up. All the models we reviewed suggested higher rates, but they did not foreshadow a surge in either near-term or long-term rates the way some bond bears were growling. Softening demographic growth trends, technological efficiencies, and higher savings by wealthy consumers with less propensity to spend all remain significant structural factors that suggest a lower resting spot for interest rates. In fact, despite all the stimulus in the system right now, **we recently lowered our near-term 10-year yield forecast targets to 1.5% for 2021 (from 1.75% previously) and to 1.75% for 2022 (from 2.0%)**. As mentioned earlier in this report, we do expect rate of change in the global economy to slow in the near-term, which could also keep longer-term interest rates in check until the Fed reconfirms strong growth by actually increasing short-term interest rates. There are also greater technical forces at work, many of which were highlighted by the CIOs with whom we spoke who encouraged us to take a more conservative stance on near-term interest rates.

Our strong view is that there is about to be a robust convergence amongst three factors — investment management/asset allocation expertise, technology prowess, and robust portfolio construction analytics — that favor scale players that can embrace complexity.

Exhibit 38

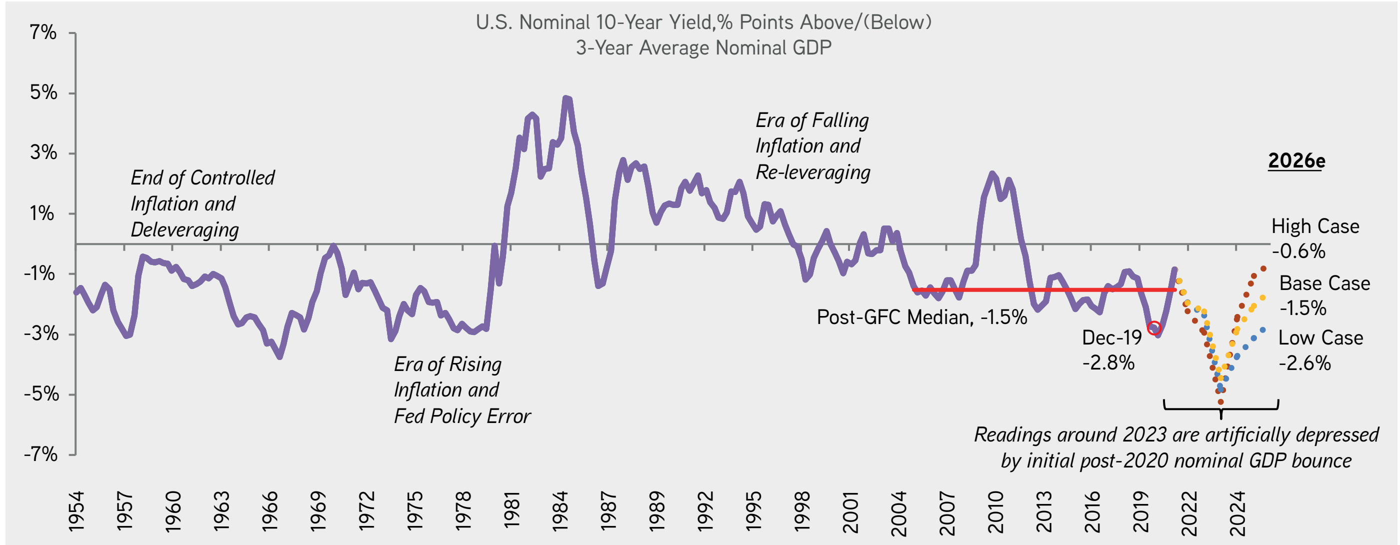
Property and Casualty Companies Have Faced the Greatest Pressure on Yields

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Property & Casualty	4.9%	4.4%	4.2%	4.1%	4.0%	3.9%	3.3%	3.3%	3.0%	2.7%
Life and Annuity	4.4%	4.3%	4.2%	4.2%	4.2%	4.2%	4.3%	4.1%	4.0%	4.0%
Reinsurance	4.0%	3.4%	3.4%	3.3%	3.2%	3.0%	2.9%	3.0%	3.0%	3.0%
Average	4.4%	4.0%	3.9%	3.9%	3.8%	3.7%	3.5%	3.5%	3.3%	3.2%

Data as at August 31, 2021. Source: KKR Global Macro & Asset Allocation analysis.

Exhibit 39

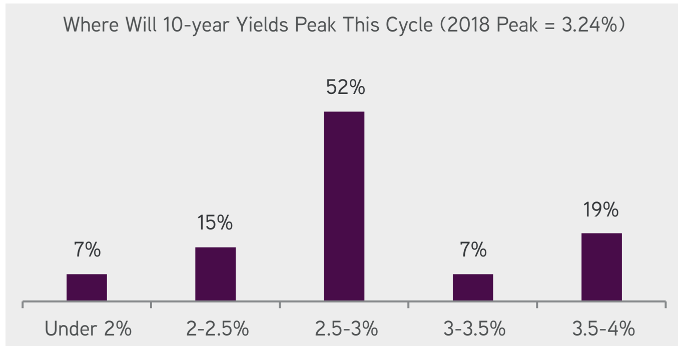
We Continue to Use Scenario Planning to Attack a Complex Outlook for Interest Rates. The Good News Is That We Are Not Making Any Material Changes to Our Prior Forecasts



e = KKR GMAA estimates. Data as at April 18, 2021. Source: Bureau of Economic Analysis, Federal Reserve, Haver Analytics, KKR Global Macro & Asset Allocation analysis.

Exhibit 40

Our Survey Respondents Largely Align With Our Base Case Forecast of Long Rates at 2.5%



Data as at August 31, 2021. Source: KKR Global Macro & Asset Allocation.

Exhibit 41

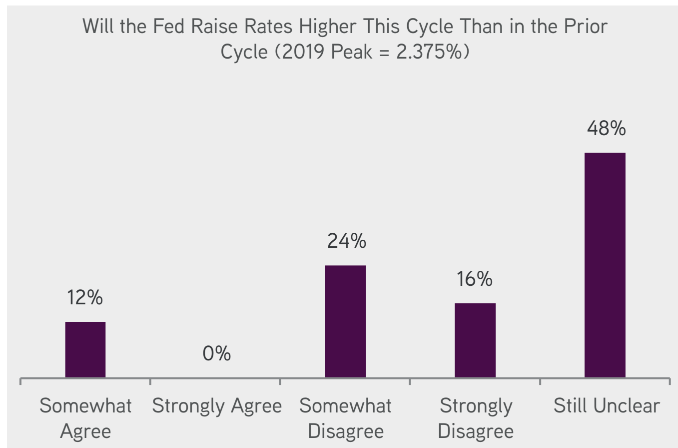
We Think the Fed Moves Short Rates in 2023. Meanwhile, Our Base View Is That the Long-End of the Curve Gradually Increases

	KKR GMAA Base Case	
	Fed Funds	U.S. 10-Year Yield
2020	0.09%	0.91%
2021e	0.13%	1.50%
2022e	0.13%	1.75%
2023e	0.63%	2.25%
2024e	1.38%	2.50%
2025e	2.13%	2.50%
2026e	2.13%	2.50%
Average 2020-2026	**0.94%**	**1.99%**

Data as at September 15, 2021. Source: Bloomberg, KKR Global Macro & Asset Allocation analysis.

Exhibit 42

Our Survey Respondents Are Still Unsure of What Will Be the Resting Level for Interest Rates



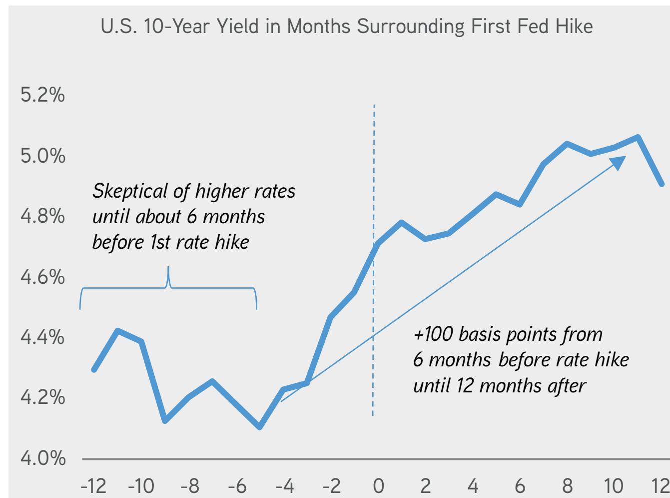
Data as at August 31, 2021. Source: KKR Global Macro & Asset Allocation.

That said, we do ultimately see rates moving higher. As we show in *Exhibit 43*, it usually takes investors a little time to actually gain confidence the Fed is going to raise rates. However, once they do, the long-end begins to back up. Specifically, our work shows that 10-year rates usually make their most pronounced increases starting from about six months, on average, before the Fed increases rates. Translating that to the current cycle, we expect the first Fed hike in 2023, which would imply long-term rates do not gain significant traction to the upside until around the beginning of 2023. This viewpoint has been an important contributor to our thinking that 10-year rates remain pinned in the mid one percent range over coming quarters.

That said, we do ultimately see rates moving higher. It usually takes investors a little time to actually gain confidence the Fed is going to raise rates. However, once they do, the long-end begins to back up.

Exhibit 43

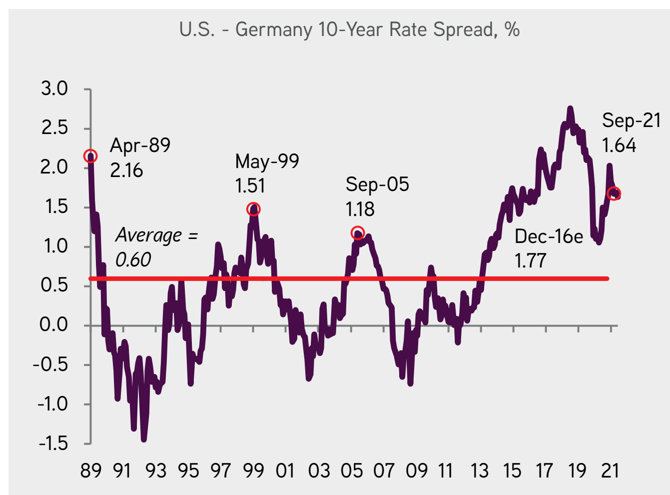
The Market Tends to Remain Skeptical of Fed Tightening Until About Six Months Before the First Hike



Average of 10-year yields in months surrounding first Fed hikes in February 1994, June 1999, June 2004, and December 2015. Data as at June 28, 2021. Source: Bloomberg.

Exhibit 44

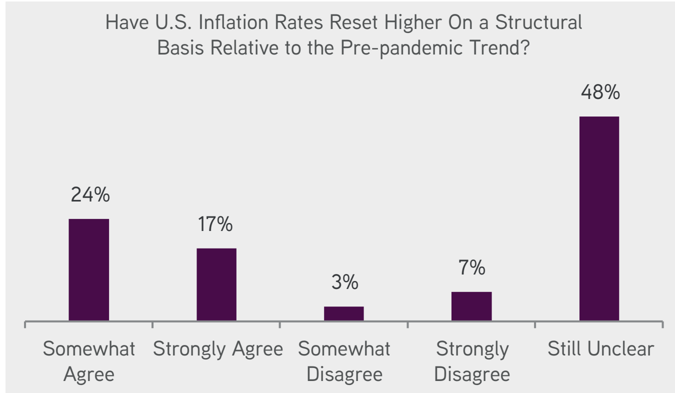
U.S. Yields Remain About 170 Basis Points Above German Bund Yields and Rarely Reach the 250 Basis Point Level



Data as at September 22, 2021. Source: Bloomberg.

Exhibit 45

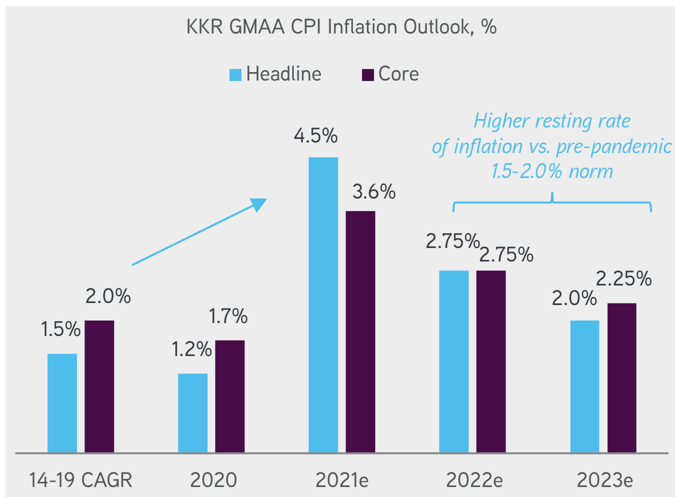
Respondents Do Not Have Strong Conviction on Where Inflation Will Eventually Settle



Data as at August 31, 2021. Source: KKR Global Macro & Asset Allocation.

Exhibit 46

We Forecast Inflation to Roll Over From Recent Uncomfortably High Levels by Early 2022, But to Run at a Higher 'Resting Rate' Relative to the Pre-Pandemic Norm



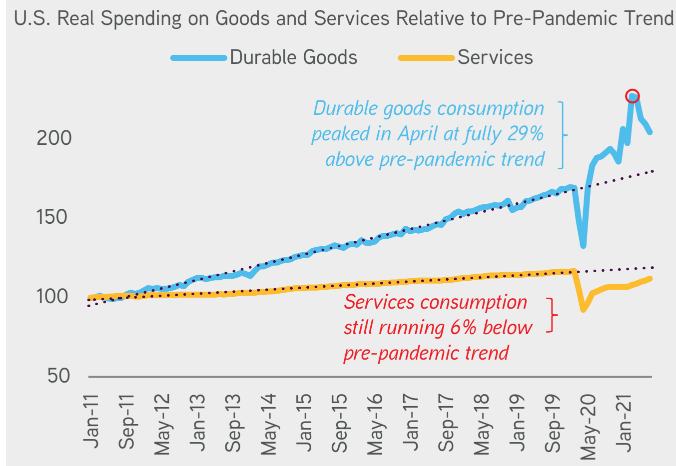
Data as at August 31, 2021. Source: KKR Global Macro & Asset Allocation.

Where we probably differ most with bond bears is in our view of inflation. Specifically, we think the recent string of massive inflation surprises has largely been the result of a spike in goods demand that will prove transitory — albeit it will last longer and be more problematic than the Fed is currently willing to acknowledge. However, we do not see structural inflation ungluing the bond market the way some folks do. Just consider when thinking about inflation that durable goods consumption — including big-ticket items such as autos, furniture, and home electronics — recently peaked at a massive 29% surplus to the post-GFC trend *(Exhibit 47).* Stimulus dollars flowed disproportionately into goods spending, as the pandemic constrained consumers' ability to spend on services categories such as travel and leisure. Meanwhile, goods supply chains have been unable to keep up with the demand, as one can surmise from the fact that manufacturing employment is still four percent below pre-pandemic levels, despite the unprecedented levels of demand *(Exhibit 48)*. This supply-demand mismatch has pushed product inventories to extraordinarily low levels, and price is now acting as a crude rationing mechanism. That is the bad news, and *this backdrop is likely to persist well into 2022*, we believe. Ultimately, however, we view the situation as an anomaly that will correct and drive goods inflation back down towards trend, which will likely ease year-over-year comparisons by mid- to late 2022.

While there are economic benefits to QE in the form of easier financial conditions, it does have the long-term effect of unduly punishing retirees by reducing interest rates to levels below where they otherwise would be. Besides earning less on their current investments, it also immediately increases the value of the liability stream for the insurance companies that serve as investment intermediaries for the millions of individual savers they represent.

Exhibit 47

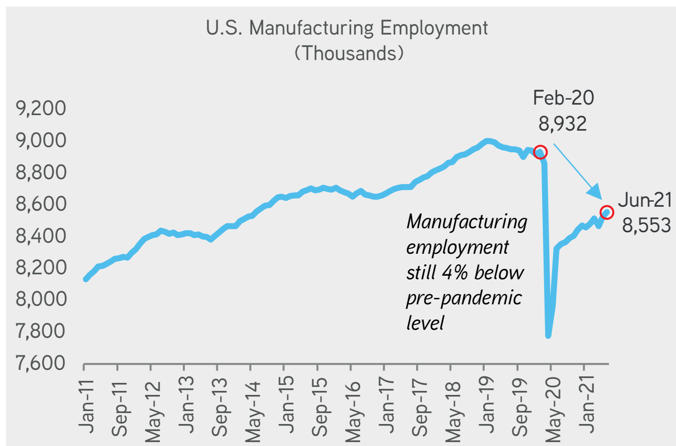
The Pandemic Catalyzed a Shift Into Goods Over Services Consumption, Which Has Yet to Normalize



Data as at September 5, 2021. Source: BEA, BLS, Federal Reserve, Haver, KKR Global Macro & Asset Allocation analysis.

Exhibit 48

Even Amidst Heated Goods Demand, Manufacturing Employment Remains Far Below the Pre-Pandemic Trend



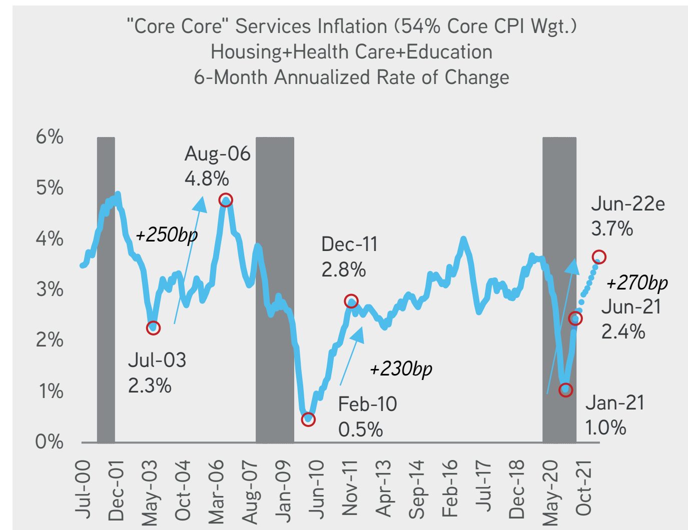
Data as at July 13, 2021. Source: BEA, BLS, Federal Reserve, Haver, KKR Global Macro & Asset Allocation analysis.

While we expect goods inflation pressures to subside eventually, we do see inflationary pressure bubbling up in other areas. Specifically, we look for potential for increases in core *services* inflation, including items such as rents, healthcare, and education. One can see this in *Exhibit 49*. All told, these three categories account for more than half of the overall U.S. CPI basket, and have remained surprisingly tame across most key categories — thus far — in 2021. However, when we forecast these inputs in 2022, they are all poised to increase materially, with household rents leading the way.

So, when we pull all the pieces together (i.e., goods inflation subsides over time, but is largely offset by a more sustained increase in services), we do not expect runaway inflation, but rather a higher 'resting rate' relative to the pre-pandemic norm. Said differently, we expect U.S. CPI to decelerate meaningfully on a year-over-year basis starting in 2022 from its currently robust levels of four percent or more. Longer term, though, we look for 2.0-2.5% trend core inflation in the U.S. (and with upside volatility), or materially higher than the 1.5-2.0% we enjoyed last cycle *(Exhibit 46)*.

Exhibit 49

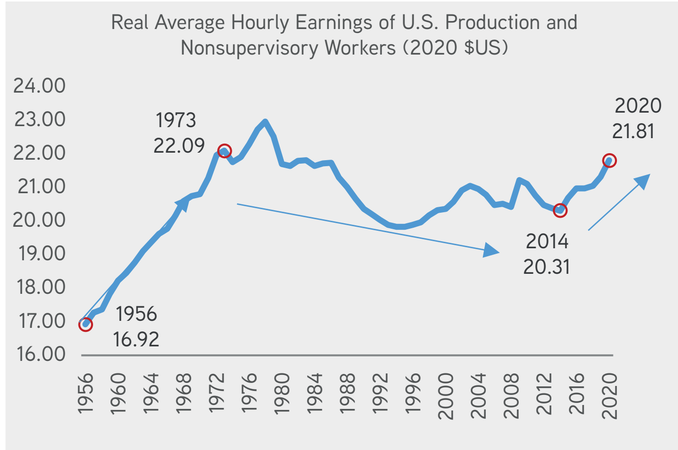
Core Services Inflation, Which Accounts for More Than 50% of Core CPI, Has Only Just Begun Creeping Higher



Data as at July 19, 2021. Source: Bureau of Labor Statistics, Haver, KKR Global Macro & Asset Allocation analysis.

Exhibit 50

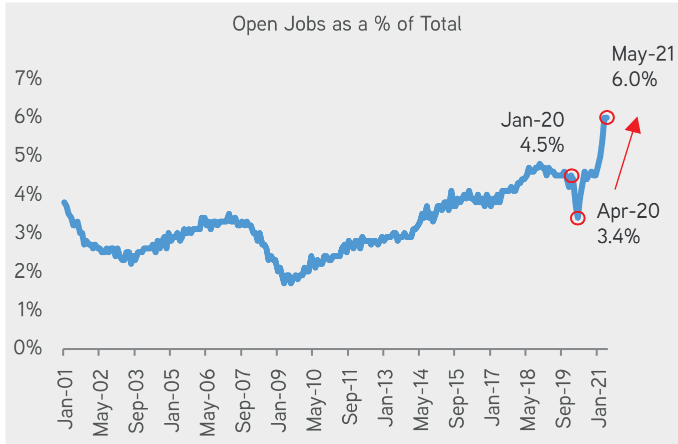
U.S. Real Wages Have Been Rising on a Structural Basis Since 2014...



Latest data as at July 19, 2021. Source: Bureau of Labor Statistics, KKR Global Macro & Asset Allocation analysis.

Exhibit 51

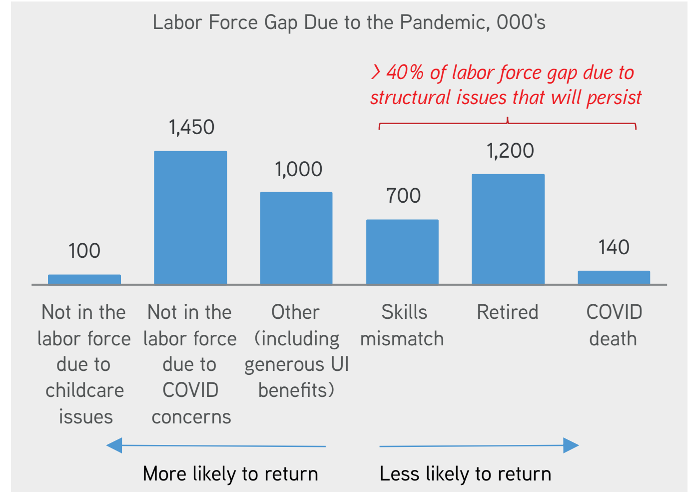
...A Trend That We Think Will Be Amplified by the Current Unprecedented Level of Unfilled Job Openings



Latest data as at July 19, 2021. Source: Bureau of Labor Statistics, KKR Global Macro & Asset Allocation analysis.

Exhibit 52

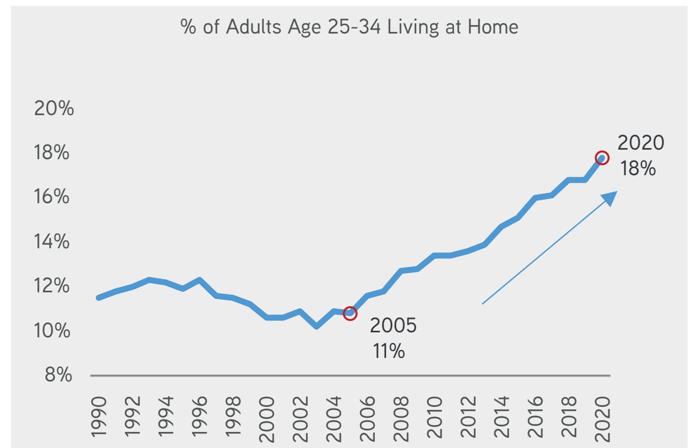
More Than 40% of the Remaining Labor Force Gap Is Due to Structural Issues That Will Persist



Data as at March 31, 2021. Source: BofAML Global Research, Bureau of Labor Statistics.

Exhibit 53

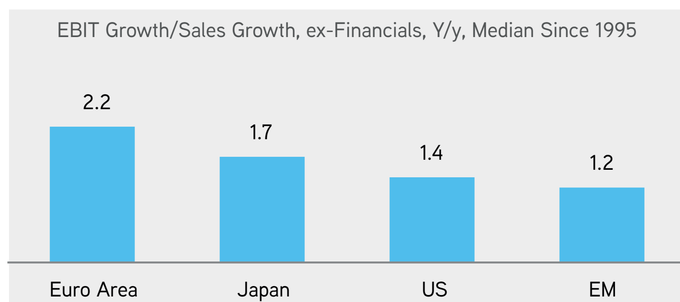
Rising Cost of Living Is an Issue That Carries Increasing Social and Political Resonance



Data as at March 31, 2021. Source: BofAML Global Research, Bureau of Labor Statistics.

Exhibit 54

When Nominal GDP Accelerates, Europe Typically Has the Most Operational Upside



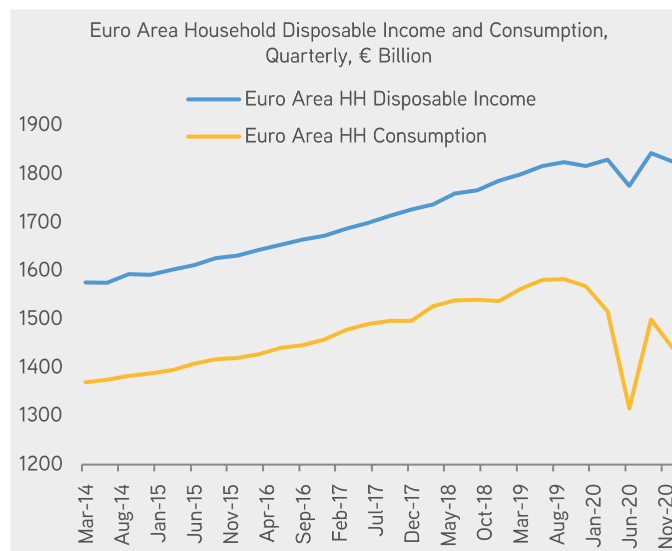
Data as at March 31, 2021. Source: Haver Analytics, Bloomberg, KKR Global Macro & Asset Allocation estimates.

Meanwhile in Europe, the economic recovery is gathering pace, and Aidan Corcoran maintains a positive outlook. In fact, he is now forecasting that Europe grows 40 basis points faster than the United States in 2022. Consistent with this forecast, we advocate for selectively leaning into cyclicality as we enter into a faster nominal growth regime, particularly given the operating leverage embedded in the European economy/markets during periods of reflation. In particular, we see upside in the consumer discretionary sector given the existence of significant pent-up demand.

Even for those investors who don't want to invest in the ESG movement, we think understanding trends in this area is necessary to better grasp the direction of the global capital markets, including the level of interest rates.

Exhibit 55

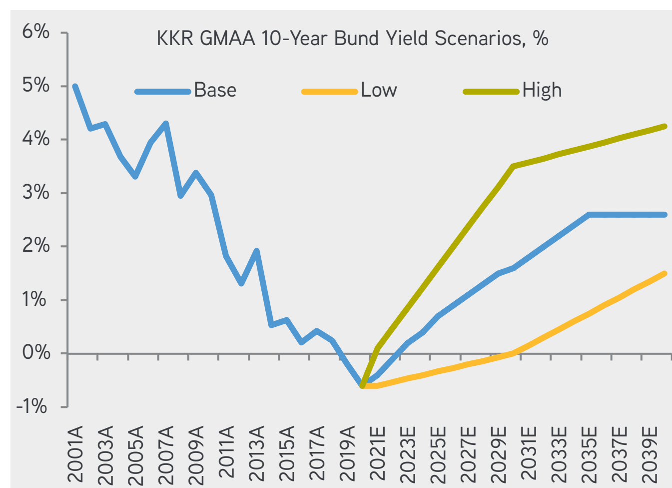
We See Scope for the Gap Between Household Consumption and Disposable Income to Narrow



Data as at December 31, 2020. Source: Eurostat.

Exhibit 56

We Look for a Gradual Return to Normal From German Bund Yields



Data as at June 30, 2021. Source: Bloomberg, KKR Global Macro & Asset Allocation analysis.

Against this backdrop, Aidan sees the German bund yield finally moving up. One can see his forecast in *Exhibit 56*. However, his base case calls for only a gradual move up in rates, with the 10-year bund yield struggling to get sustainably above one percent by 2025 in his base case. Key to this view is that the underlying core inflationary dynamics in the Eurozone remain weak, ruling out a rapid withdrawal of monetary policy stimulus. Aidan continues to believe that the long-run neutral bund yield for the Eurozone is around 2.6%, but that we still remain a decade away from it sustainably reaching this level. If this view proves to be wrong on the downside (i.e., yields move up faster than expected), it will be because wage inflation has finally taken off in the Eurozone. Indeed, this risk — while not in our base case — is the key one to watch, we believe, particularly as many Eurozone countries are now proposing additional increases in minimum wages in order to offset the rapid increases in energy costs we are seeing today.

Key Themes Identified by Our CIOs

Never in our lifetimes, it seems, has there been greater uncertainty about the future — and greater ignorance of the past. — Niall Ferguson

In his latest book, *Doom*, Niall Ferguson outlines many of the 'misses' that occurred at the onset of the pandemic. His commentary is a strong statement on how we all need to find techniques for improving our processes as it relates to both the knowable as well as the unknowable. Importantly, both his suggestions and critiques extend beyond the pandemic to certain, more mundane aspects of life.

From our perch at KKR, we are increasingly spending time on thematic investing, because in relation to macroeconomic and geopolitical risks, the 'uncertainty' around the 'unknowable' has never been higher. Therefore, we are working harder — in concert with our peers and clients — to try to get on the right side of major themes that should allow us to deploy a larger quantum of capital in a more thoughtful, risk-adjusted way. We are not alone, though, as many of the CIOs with whom we spoke are adopting a similar approach. Remember the average CIOs participating in our survey oversees $100 billion or more in assets.

In terms of key investment themes, there were several major ones that bubbled up from our survey work and follow-on conversations. We detail them below, including **1)** ESG and the Energy Transition; **2)** Buy Complexity/Sell Simplicity; and **3)** the Digitalization of Everything.

Opportunity #1 — ESG and the Energy Transition:

Without question, doing more to advance Environmental, Social, and Governance issues (ESG) is top of mind. As one CIO mentioned to us, "I am a long-time supporter; ESG is good for the world, and it is good for alpha generation." As a team, we too have spent a lot of time of late around the energy transition that is unfolding. This movement is quite large and progressing very quickly. One only has to look at the responses of CIOs between 2018 and 2021 to understand the momentum behind this initiative. All told, today less than 10% of CIOs indicated that they do not view ESG as important to their investment process. By comparison, in our last survey, this percentage was 60% (i.e., most CIOs in the 2018 survey did not view ESG as a central consideration in their investment process).

Consistent with this heightened emphasis, one CIO, when asked about his firm's efforts, said ESG factors "are directly integral to our investment decision-making framework. An important objective of our approach to ESG, which spans across all asset types, is an understanding of the transmission of ESG factors into a company's risk profile, financial performance, and ultimately investment performance." In Asia, CIOs suggested that ESG concerns and impact on the 'market is growing' and is also increasing at the 'firm' level. Meanwhile, European CIOs suggested that most insurers are more focused on carbon neutrality as it is more measurable than the 'S' and 'G' factors of ESG.

At KKR, we view ESG overlays and carbon management strategies as critically important to our investing effort. We have established a dedicated Global Impact team, initially funded by our balance sheet, and have also acquired an environmental consulting firm as part of our Core investing effort. Most importantly, though, we scrutinize every investment across all of our various funds to see how we can improve our footprint so that we 'do well by doing good.'

Without question, the stakes are incredibly high, but the good news is that a deeper understanding of the situation is fueling further gains in momentum. In fact, we now estimate that countries accounting for over 70% of world GDP and greenhouse gases now have formalized targets for net-zero emissions, typically by 2050. We believe that the annual spend to achieve these net-zero emissions targets could surprise many investors. Although estimates are all over the map, our research suggests that the energy transition space is an approximate $1.5–2 trillion per year growth opportunity, with a cumulative total of nearly $80 trillion over the next few decades. If we are right, then there will be multiple ways for the insurance industry to invest billions of dollars behind this effort during the next decade and beyond.

Exhibit 57

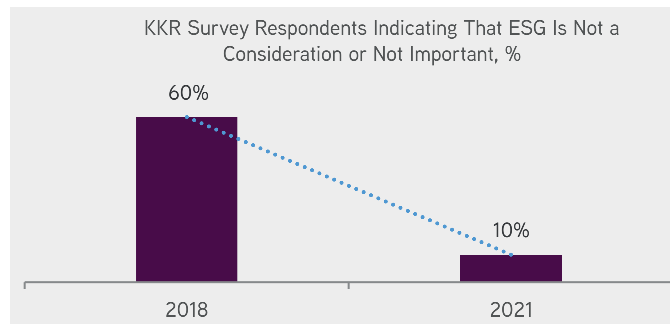
The EU Green Deal Will Likely Be the Standard for Other Decarbonization Plans Globally

Main Implications of the EU Green Deal
Transform Energy Production
Drive a Significant Upgrade in the Power Grids
Major Refurbishment of Real Estate
Introduce Clean Hydrogen
Revolutionize Transport
Develop Ancillary Infrastructure

Data as at January 30, 2021. Source: Goldman Sachs.

Exhibit 58

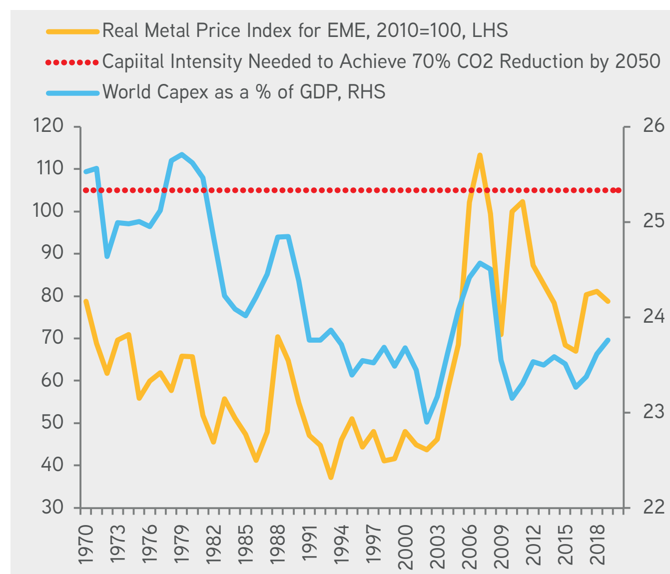
The Recognition of the Rising Importance of ESG for the Insurance Industry Has Jumped Significantly



Data as at August 31, 2021. Source: KKR Global Macro & Asset Allocation.

Exhibit 59

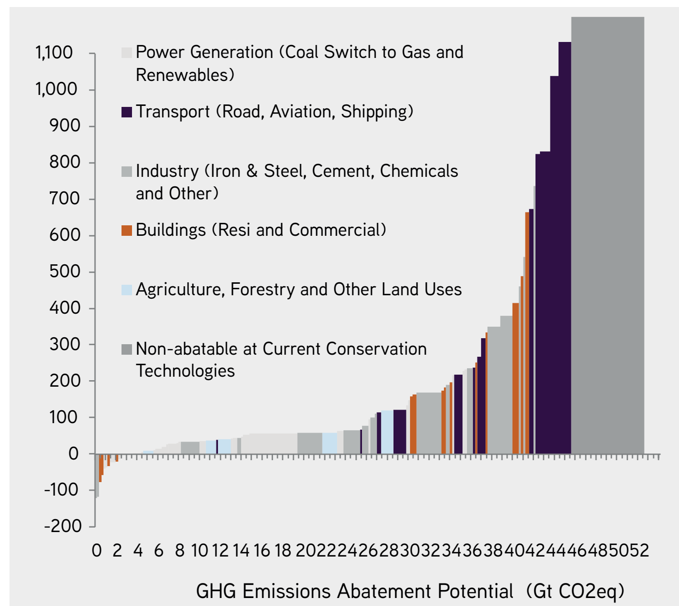
Environmental Policies Could Drive a Capex Boom on Par With the 1970s and 2000s, We Believe



Data as at December 30, 2020. Source: World Bank, Goldman Sachs, Haver Analytics.

Exhibit 60

50% De-Carbonization Will Be Far Easier Than Net Zero, Which Will Cost More, Take Longer, and Is Heavily Dependent on the Development of New Technologies



Data as at April 2021. Source: Goldman Sachs Global Investment Research, HIS Global Insight.

Even for those investors who don't want to invest in the ESG movement, we think understanding trends in this area is necessary to better grasp the direction of the global capital markets, including the level of interest rates. Somewhat ironically (and concerning), *the shift towards more environmentally friendly energy production is actually inflationary, we believe, which could ultimately put upward pressure on rate forecasts over time*. Simply stated, there has not been enough investment in some of the key inputs to make the energy transition a reality. Also, because old economy sectors, including oil and natural gas, have seen their capital expenditures slashed, prices of these commodities are likely to further appreciate more than the consensus may think, we believe.

So, against this backdrop, we see inflation being more persistent for longer than the consensus now thinks. Maybe more important, though, is that there is now likely to be more volatility around monthly inflation reports, given the aforementioned considerations around the global energy transition. As a result, we continue to advocate a significant overweight to asset-based collateral that can generate upfront cash flows with pricing power.

Opportunity #2 — Buy Complexity / Sell Simplicity:

In past years, we have argued that corporate carve-outs are amongst the most attractive ways to find devalued and underappreciated companies in bifurcated markets — markets that seem to eschew complexity in favor of simplicity at almost all costs. Importantly, we still believe the opportunity set to acquire high quality carve-outs across PE, Infrastructure, and Energy remains outsized. We are expanding upon this idea to focus beyond just undervalued 'diamonds in the rough' to include the occasional 'hidden gem' trading at a fraction of its intrinsic value. In particular, although consumers crave 'things' these days, we still believe that there is an opportunity to own 'experiences', particularly companies that were hit hard by the pandemic and may need capital to de-lever and/or reinvest in their businesses.

We also see a lot of ongoing 'last mile' financings in key markets like Infrastructure and Real Estate where core buyers are not willing to deploy capital until a project is fully developed. As such, for investors who are willing to take some small development/financing risks, there is the potential to earn outsized returns relative to when the story becomes more simplified in the public markets. Further,

Given how tight spreads are these days, the complexity discount may actually be more attractive than the illiquidity discount that insurance CIOs are seeing across many parts of the private markets arena at this point in the cycle.

markets such as Europe provide inducements for investing in asset classes like Infrastructure.

In general, we left encouraged by the appetite of the CIOs with whom we spoke to embrace complexity. Indeed, many of our CIOs were in full agreement with our outlook, as several suggested that, given how tight spreads are these days, the complexity discount may actually be more attractive than the illiquidity discount that insurance CIOs are seeing across many parts of the private markets arena at this point in the cycle.

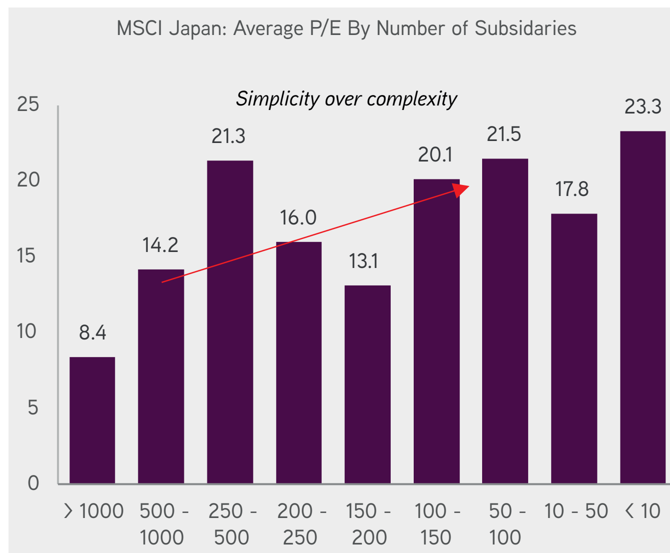
Opportunity #3 — The Digitalization of Everything:

We expect ongoing trends towards digitalization, e-commerce, Fintech, and online experiences to accelerate, and as such, we agree with our CIO colleagues that a massive trend is unfolding. Moreover, we think the collective arrival of the Internet of Things (IoT), Artificial Intelligence (AI), and 5G (5th Generation Connectivity) marks a pivotal point that will reshape the global economy. Indeed, in the year 2000, many believed that the AOL-Time Warner merger would herald in a new Internet age, but it was missing the processing speed, swaths of data, and mature algorithms to fuel AI.

Today, however, we believe 5G, AI and IoT will revolutionize every industry, including insurance. Technology driven innovation in data management, distribution, underwriting and pricing, processing of claims, and modeling for valuation, projections and risk management will all need to be upgraded and updated. Most in the insurance sector — and for the matter, all of financial services — tend to agree, as evidenced by the fact that fully 95% of those interviewed in a year end 2020 Deloitte financial services report noted that they were already in the process of updating their digital transformation.

Exhibit 61

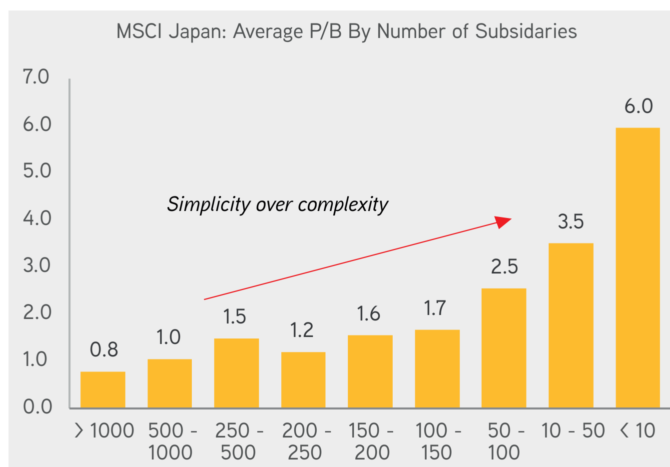
Valuations Are Generally Lower for Complex Corporate Structures in Mature Asian Markets…



Data as at December 31, 2020. Source: MSCI, Factset Global.

Exhibit 62

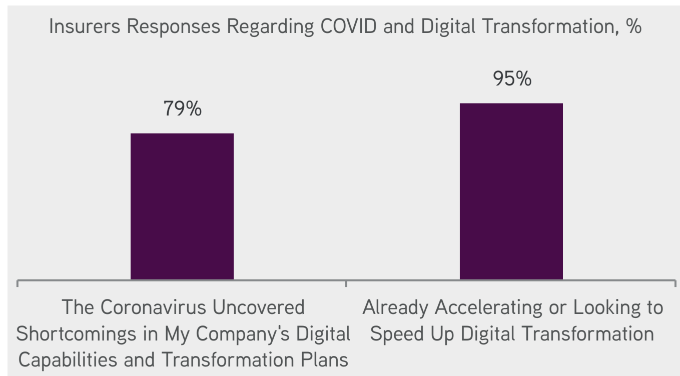
…As Such We Advocate Buying Complexity Where There Is the Potential to Create Simplicity Through Operational Improvements



Data as at December 31, 2020. Source: MSCI, Factset Global.

Exhibit 63

The Coronavirus Highlighted Shortcomings in and the Need for Digital Transformation Amongst Insurers

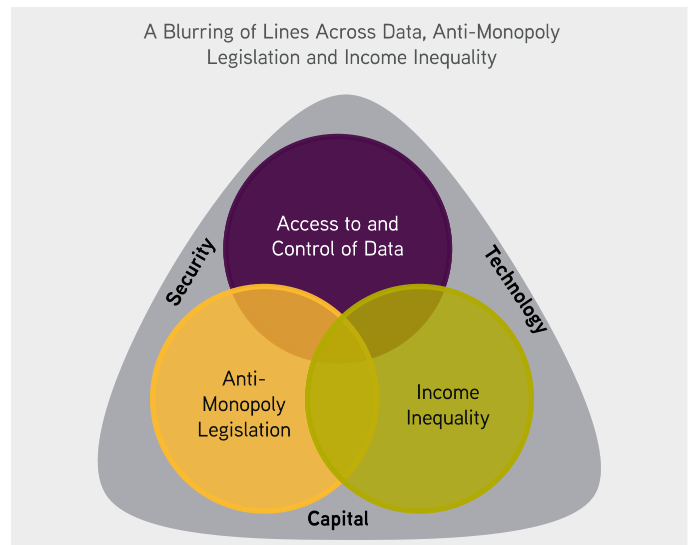


Data as at December 31, 2020. Source: The Deloitte Center for Financial Services Global Outlook Survey 2020.

However, as we are seeing play out in both the United States and China, geopolitics must be considered. Who owns the data? Who does the technology benefit — and hurt? And what does all this mean for overall prosperity? Our bottom line is that we see innovation maintaining or even accelerating in the coming years. Yet, at the same time, investors who want to deploy capital in key growth areas such as software, life sciences, e-commerce, and digitalization now all appreciate that there are important risks to be considered. Without question, this message was not lost on our CIOs; hence, we expect thoughtful deployment in this area, as this mega trend continues to shape the pace and direction of global growth.

Exhibit 64

The Pandemic Has Accelerated Trends Toward Digitization and AI, Both of Which Have Heightened Tensions Around Key Areas Such as Data, Monopolies, and Income Equality



Data as at September 5, 2021. Source: KKR Global Macro & Asset Allocation analysis.

Conclusion — Dream Big

If there is ever a time to *Dream Big*, now is that time we believe. Without question, we see structural convergence in insurance amongst three primary skills: asset management, technology, and portfolio construction. In our humble opinion, the firms that we think are going to gain share and improve returns will be the ones that accelerate this integration process. In addition, one of the other key conclusions from our survey is that scale is increasingly becoming a prerequisite for success in today's low rate environment. Scale also provides more sourcing/origination, greater diversification, and lower operating costs when done properly.

More creativity is also warranted, as every basis points matters when you are operating in and investing against a backdrop of $14 trillion in negative yielding securities. Indeed, as the CIO of Pacific Life Tod Nasser told us, "You have to think creatively in today's market. In too many instances, a rigid strategic asset allocation fails to look at gray areas across capital structures and sectors where a real opportunity might not fit neatly."

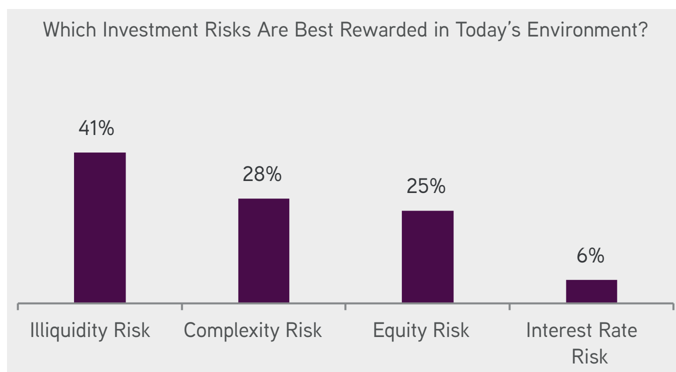
In terms of macroeconomic forecasts, our view remains that any major bond sell-off is likely to be met with significant

buying from yield-starved savers. So, from an asset allocation perspective, our message is clear: Despite the significant advances in market share that have already occurred in the Alternatives arena, we see these types of higher returning investments becoming more prevalent in insurance companies' asset allocation in the coming years. Infrastructure, Real Estate Credit, Private Credit, and Private Equity should all be major market share gainers. By comparison, we expect to see continued selling of both cash and Investment Grade debt.

We also expect more CIOs to wade into complexity to improve their return profiles (*Exhibit 65*). While CIOs favor illiquidity today over complexity, we think that excess cash chasing returns could — at times — narrow the value of the illiquidity premium during the next few years. As such, we think the need to buy complexity to deliver returns that earn in excess of a company's liabilities will further become a distinguishing feature in the macroeconomic environment we are entering.

Exhibit 65

In Today's Environment, Illiquidity Risk and Complexity Risk Are Best Rewarded, According to Our CIOs



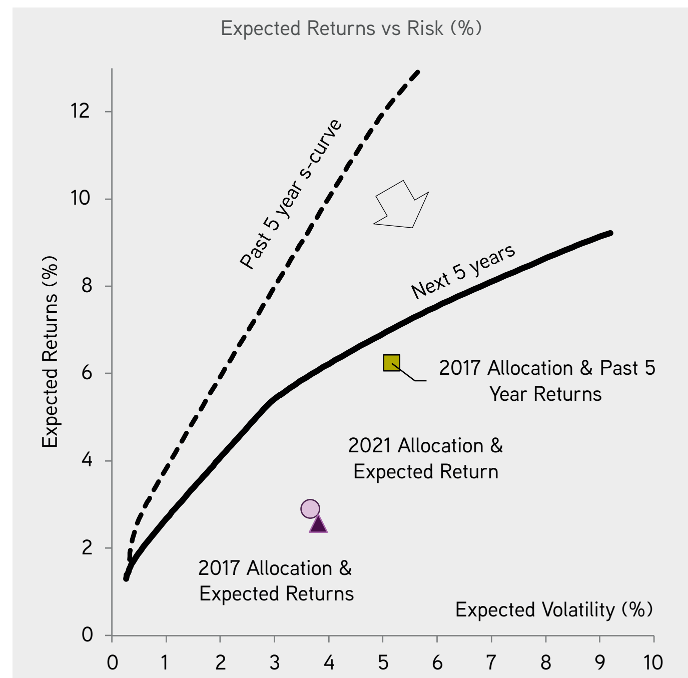
Data as at August 31, 2021. Source: KKR Global Macro & Asset Allocation analysis.

In terms of risks on which to focus, our survey responses were surprisingly bifurcated. Life and Annuity companies strongly fear deflation, as lower rates from current levels will dent their ability to take advantage of the longer duration liabilities that they have added to their books in recent years.

On the other hand, Property and Casualty companies are much more worried about inflation rising too quickly. Their concern is that replacement costs for properties insured will dramatically exceed what their underwriting profits and investment income can cover if inflation does not prove to be as 'transitory' as the Federal Reserve currently thinks. For our nickel, our base view is that rates will stay lower for longer, but we do believe that the post-pandemic low in rates will be the lows for the cycle. As such, we are more focused on tail risks, including geopolitical tensions and regulatory shifts versus a massive move higher or lower in 10-year yields.

Exhibit 66

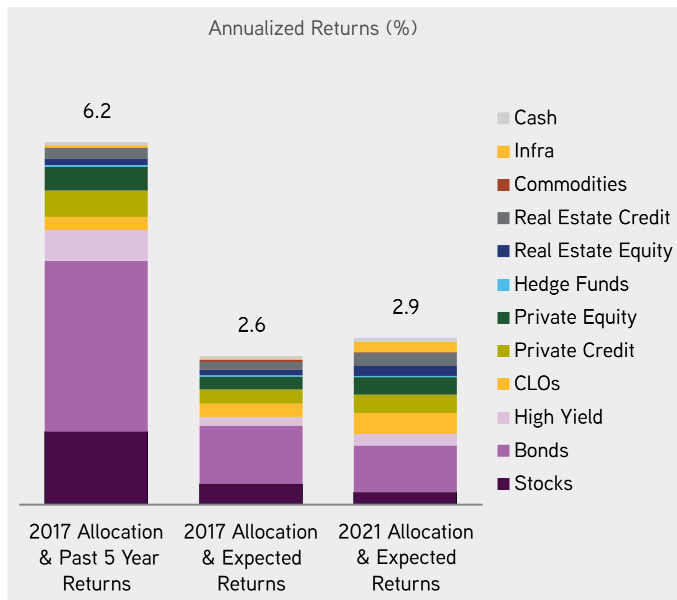
Recent Returns Have Exceeded Expectations. However, We Expect Returns to Fall Over the Next Five Years



Data as at August 31, 2021. Source: KKR Global Macro & Asset Allocation analysis.

Exhibit 67

The Good News for Savers Is That CIOs Are Shifting Their Portfolios Towards Assets That Can Earn Higher Returns in the Environment We Envision



Data as at August 31, 2021. Source: KKR Global Macro & Asset Allocation analysis.

Overall, we see the insurance industry, led by the CIOs with whom we engaged, to be market share winners across financial services in this next cycle. There are several factors at work. First, demographics, particularly driven by the emergence of the global millennial, means demand for insurance from large, well-branded global companies is going up. Second, CIOs are finding more ways to be creative on product innovation, including securitization, capital relief, partnership, and risk sharing. Maybe more important, though, is that they are also using higher quality private investments to offset the damage that has been created by quantitative easing during the past decade. Third, we think that insurance companies may be positioned within the financial services sector to best represent savers, as financial repression becomes a less prevalent overhang.

So, against this backdrop, we finished our second insurance survey energized about the future for our CIOs. Indeed, despite ongoing downward pressure on interest rates as well as the more 'visible hand' of global government intervention, the CIOs who guide these enterprises are finding more ways to add value, including sourcing, thematic investing, asset allocation, risk management, and portfolio construction. So, if there is ever a time for this group to *Dream Big*, now is that time, we believe.

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