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State of Play

KKR
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KKR GLOBAL MACRO & ASSET ALLOCATION TEAM

Henry H. McVey
Head of Global Macro & Asset Allocation
henry.mcvey@kkr.com

David McNellis
david.mcnellis@kkr.com

Aidan Corcoran
aidan.corcoran@kkr.com

Frances Lim
frances.lim@kkr.com

Changchun Hua
changchun.hua@kkr.com

Brian Leung
brian.leung@kkr.com

Rebecca Ramsey
rebecca.ramsey@kkr.com

Bola Okunade
bola.okunade@kkr.com

Miguel Montoya
miguel.montoya@kkr.com

CONTRIBUTORS:

Special thanks to Ken Mehlman, General (Ret.) David Petraeus, Vance Serchuk, Paula Campbell Roberts, and Roiana Reid

MAIN OFFICE

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

COMPANY LOCATIONS

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

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State of Play

No doubt, war is a human tragedy. It requires heavy reflection on what has transpired and how it can be avoided in the future. However, the current situation also demands that, as fiduciaries, we delve deeply into what the implications are for all our constituencies, including our portfolio companies, our limited partners, and our employees. From our perch at KKR, we believe that the pandemic started — and the war in Europe has now accelerated — structural shifts in the global economic system that warrant investor attention. For starters, we began this cycle with 'sticky' inflation that is both broad-based and accelerating; the Russia/Ukraine war as well as the recent surge in Omicron cases in China should only intensify this headwind in the near-term. Yet, surging inflation is occurring at a time when central banks will lag to tighten financial conditions, which means real rates will likely lag this cycle. We are also seeing a further splintering of supply chains. Importantly, we believe that Russia's attack on Ukraine may only reinforce the notion that security of energy, communications, healthcare, and data is not only an economic priority but a geopolitical one as well. It also has the potential to reinforce populism, geopolitical rivalry, institutional distrust, and political tumult, all recent trends we've written about that have significant long-term economic implications. Against this backdrop, we strongly advocate for macro professionals and asset allocators to prioritize inflation protection and pricing power by overweighting collateral-based cash flows, including Infrastructure, Asset-Based Finance, and Real Estate. We also expect Private Equity with high cash flow conversion characteristics as well as opportunistic strategies across both liquid and private Credit to perform well in this new macroeconomic environment we envision.

The past is prophetic in that it asserts loudly that wars are poor chisels for carving out peaceful tomorrows.

—Martin Luther King, Jr., American Baptist minister and activist

At KKR our hearts and minds go out to all those individuals adversely affected by the war against Ukraine. War is many things, but foremost it is a human tragedy. Unfortunately, as we detail below, the adverse human element of war will only be exacerbated by knock-on economic realities that are likely to further extend the pain and suffering, we believe.

From our perch at KKR, uncertainty around the situation remains high. However, the Ukraine crisis does not fundamentally alter the macro environment we have been forecasting for some time. Rather, it just aggravates the existing narrative we laid out in our *A Different Kind of Recovery* thesis. Specifically, we still see higher headline nominal GDP growth this cycle, but the underlying mix is increasingly shifting towards inflation relative to real growth. This reality is taking place against a backdrop of central bank tightening, ongoing supply chain disruptions, and liquidity withdrawal.

KKR's Macro Framework: The attack on Ukraine does not fundamentally alter the macro environment we have been forecasting for quite some time. Rather, it simply aggravates the existing narrative	
GDP	Lowering our GDP forecasts in the West; no real change in the East. We do not forecast a European or U.S. recession, but growth will slow substantially by 2023.
Inflation	Moving our U.S. and European CPI forecasts even further above consensus to 7.0% and 6.0%, respectively, for 2022. Higher expected energy and food prices are the key drivers.
Cycle	Our economic cycle indicator is now firmly late cycle, which is an important change. A robust labor market and an ongoing inventory restocking cycle remain bright spots for the economy, but most of our other lead indicators, including slowing ISMs, are now decisively past peak.
S&P 500	No change to our S&P 500 price target of 4,750 for 2022. In 2023, our price target remains modest at 4,840, driven by slowing earnings and ongoing multiple compression.
Oil	Raising our per barrel WTI forecasts to average $110 in 2022 and $100 in 2023.
Interest Rates	We raise our 2022 target for the U.S. 10-year yield to 2.50% from 2.25% previously. There is no change to our 10-year target of 2.75% for 2023 and beyond.
The Fed and the ECB	Given our view on inflation, we continue to forecast seven hikes in 2022, with fed funds ending the year at 1.875%, and potentially even further upside to our forecast, given that we do think the Fed could decide to hike by 50 basis at one or more meetings this year. We also raise our 2023 forecast to reflect four additional hikes, versus our prior expectation of just one hike next year. Meanwhile, we still see only one ECB hike by year end 2022.

Key Investing Conclusion	We still see higher headline nominal GDP growth this cycle, but the underlying mix is increasingly shifting towards inflation relative to real growth. This reality is taking place against a backdrop of central bank tightening, ongoing supply chain disruptions, and liquidity withdrawal. As such, we continue to advocate that asset allocators prioritize inflation protection by overweighting collateral-based cash flows, including Infrastructure, Asset-Based Finance, and Real Estate. We also expect high cash flow conversion Private Equity and Opportunistic Credit to perform well.

Not surprisingly, we have spent a lot of time of late discussing what all of this means for investing. Simply stated (and as we laid out in our January Outlook piece), we think that the pandemic started — and the war has now accelerated — a regime shift that warrants investor attention. To this end, we want to highlight the following five points that support our latest thinking:

1 **First, we are again lowering our global GDP forecasts for 2022, including the U.S. and Europe**. At the same time, we are raising many of our already-above consensus inflation forecasts. However, we make no changes to our China forecasts, given our already conservative economic outlook. In general, we believe that growth is the greatest challenge Europe is facing, while in the U.S., inflation is presenting the toughest challenge, driven by the trifecta of surging wages, rising rents, and broad-based commodity shortages. Importantly, as we will discuss later in the note, our cycle indicator moves firmly towards later cycle, which generally portends lower returns amidst slowing earnings and multiple compression.

2 **Second, we now have even higher conviction in several significant new structural forces at work that we think will redefine the current global economic footprint**. See below for details, but we enter this crisis with interest rates near the lower bound of history; we are also seeing a splintering of supply chains, driven by political regionalization, COVID-19, and war. As a result, inflation, driven by wages, housing, and commodities, will likely be more 'sticky' than central bankers had been forecasting. Just consider that we forecast core PCE inflation to be above the Fed's two percent target on a year-over-year basis for essentially three years ending December 2023 (and it could be longer). By comparison, core inflation ran above the Fed's target in just four of the 48 running quarters between 2009 and 2020. This unfortunate economic reality will fuel more populism and distrust of those in power, we believe. Finally, the 'weaponization' of economic policies for war now means a more sustained blurring between the fault lines that once distinctly separated geopolitics from macroeconomics during the rise of globalization in recent decades. Ultimately, we see some greater form of economic polarization as the most plausible outcome.

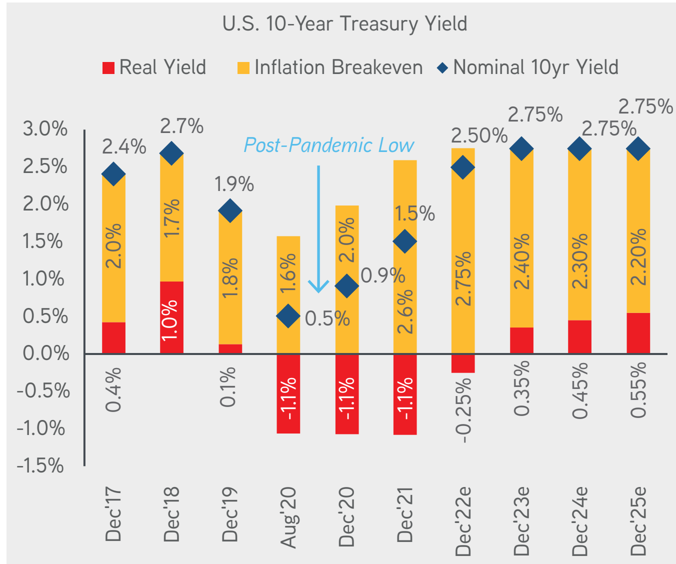
3 **Third, the macroeconomic and asset implications of the current environment could end up being quite profound over time, we believe**. We advocate shortening duration, leaning into collateral-based cash flows, and overweighting opportunistic vehicles across liquid and private markets. We continue to steer away from high beta growth equities with low cash flow conversion prospects. Overall, portfolio diversification matters now much more than in the past 10 years.

4 **Fourth, these macroeconomic trends are also likely to reinforce other recent trends**. We envision that more economic polarization and inflation will reinforce populism, further challenging the authority of those in power. These trends will also enhance already high institutional distrust as families see their purchasing power declining amidst higher prices. The regionalization of supply chains will add a new dimension to geopolitical rivalry that investors must consider as more industries and sectors become 'strategic' from a national security perspective.

5 **Finally, the democratization effects of trade many envisioned post the creation of the WTO in 1995 may now be replaced by 'like-minded blocks' rather than global markets**. Nowhere is this trend more on display than in Europe, as the surprising speed and unity of governments, businesses and individuals in expressing outrage over the invasion of Ukraine may have reinvigorated NATO, and ultimately could meaningfully change energy policy, defense spending, supply chains, and even consumption patterns. The war is also more likely to accelerate and intensify the dynamic between China and the industrialized democracies that has been building for several years, including the mutual hardening against economic and technological dependence on each other. Consistent with this view, we think that the definition of 'security' for governments and corporates extends beyond the military playing field to include data, search, payments, communications, and healthcare.

Exhibit 1

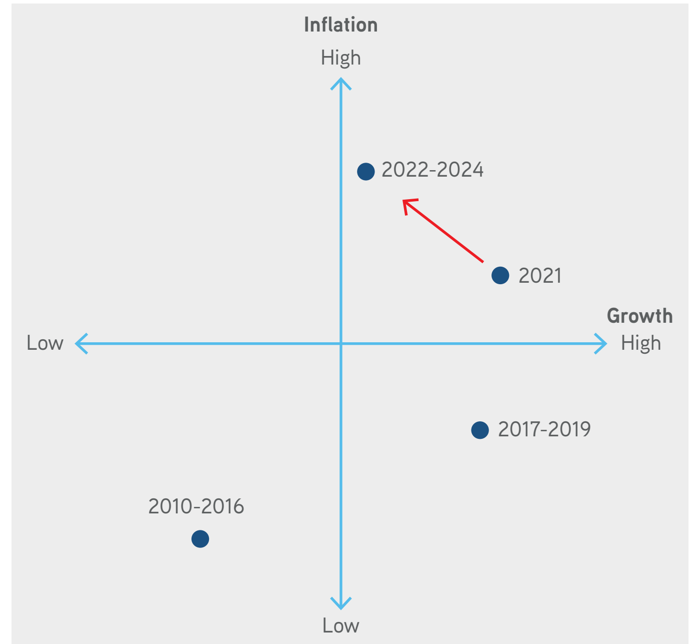
We Expect Real Rates to Remain Below Pre-Pandemic Levels, Even as Nominal Rates Rise Towards 2.75%



Latest data as at March 17, 2022. Source: Bloomberg, KKR Global Macro & Asset Allocation analysis.

Exhibit 2

In General, We Are Entering a Regime Change



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

Exhibit 3

We Are Generally Below Consensus for Growth and Above Consensus for Inflation

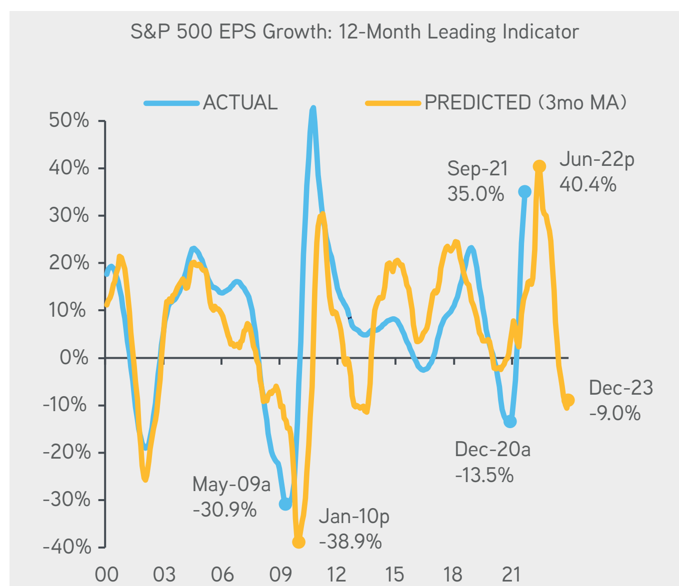
	2022e Real GDP Growth			2022e Inflation			2023e Real GDP Growth			2023e Inflation		
	GMAA New	GMAA Prior	Bloomberg Consensus	GMAA New	GMAA Prior	Bloomberg Consensus	GMAA New	GMAA Prior	Bloomberg Consensus	GMAA New	GMAA Prior	Bloomberg Consensus
U.S.	**3.2%**	3.8%	3.6%	**7.0%**	6.5%	6.1%	**1.8%**	2.25%	2.4%	**3.0%**	3.0%	2.6%
Euro Area	**2.6%**	3.5%	3.5%	**6.0%**	4.7%	5.0%	**2.1%**	2.1%	2.5%	**2.1%**	1.5%	2.0%
China	**4.8%**	4.8%	5.1%	**2.6%**	2.6%	2.2%	**5.4%**	5.4%	5.2%	**2.3%**	2.3%	2.2%

Data as at March 17, 2022. Source: Bloomberg, KKR Global Macro & Asset Allocation analysis.

Looking at the bigger picture, we think we are entering another uncertain period, driven by tightening financial conditions, a new form of war that includes both military action and unprecedented — for an economy of Russia's size — economic sanctions, and more supply chain disruptions, driven in part by a surge of Omicron cases in China. The technical picture too is also important, as many investors are still overweight high beta growth and tech stocks (which remains one of our Pans; see Picks and Pans in *A Different Kind of Recovery*).

Exhibit 4

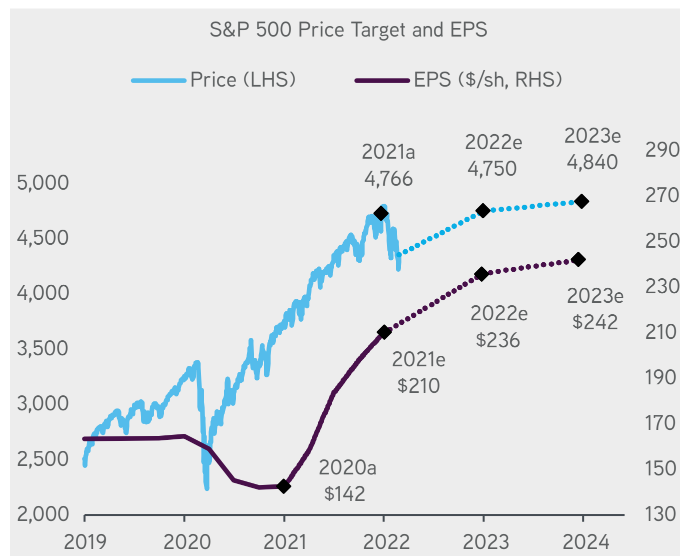
Our Earnings Model Is Now Suggesting a Notable Slowdown in 2023. If Inflation Stays High, It Could Feel Like Stagflation in Many Parts of the World



Our Earnings Growth Leading Indicator is a combination of seven macro inputs that in combination we think have significant explanatory power regarding the S&P 500 EPS growth outlook. Data as at January 31, 2022. Source: Bloomberg, KKR Global Macro & Asset Allocation analysis.

Exhibit 5

Our Forecast Has the S&P 500 Reaching Just 4,750 on $236 of EPS in 2022 and 4,840 on $242 of EPS in 2023



Data as at February 25, 2022. Source: KKR Global Macro & Asset Allocation analysis, Bloomberg, Factset.

If there is good news, we think that the marriage of a solid top-down macro framework with sound bottom-up analysis is very well positioned to deliver both outsized relative and absolute performance. Importantly, though, we are following a different playbook than the one we used after past crises. Key to our thinking is that global central banks are entering this difficult macroeconomic period near the lower bound of their rate targets; by comparison, in 2001, 2008, and 2020, central banks had both more interest rate and balance sheet capacity to serve as cushions. Meanwhile, inflation will continue to run hot for some time, adding another layer of complexity for all politicians especially elected officials, we believe.

As such, deployment should be at a walk, not run, pace; by comparison, at the outset of the pandemic, our bias was to lean much more into the uncertainty. From an asset allocation perspective, we continue to focus on pricing power stories, with a particular bias towards Infrastructure, Real Estate, and Asset-Based Finance areas. We also prefer more value and defensive-oriented Global Equities and favor opportunistic approaches to both traded and non-traded Credit. Finally, we would spend some capital to hedge that long-rates catch up to the 'sticky' inflation we are forecasting. And in all decisions, investors must incorporate social, geopolitical and societal lenses, given the turbulence in each.

My friend and colleague Vance Serchuk has been suggesting — well ahead of the Ukraine war — that we have shifted from a period of benign globalization to one of great power competition.

Section I: Economic Forecast Updates

Though the situation in Ukraine remains fluid, we believe that there is no easy off-ramp for Vladimir Putin. However, even before the war (and as indicated by *Exhibit 4*), our models were suggesting slowing growth amidst higher inflation and tightening financial conditions. So, as we detail below, our cautious bias has served us well thus far as we are making tweaks rather than huge changes to our global macroeconomic forecasts. We note the following:

- **Lowering our GDP forecasts in the West; no changes in the East.** By region, our Euro Area estimates move the most. Specifically, in the Euro Area, my colleague Aidan Corcoran is lowering his estimate for 2022 Real GDP growth to 2.6% from 3.5%, though there are no changes to his 2023 estimate of 2.1%. Higher fuel costs, lower consumer confidence, and slowing exports are all to blame for the downgrade to 2022 growth. Importantly, though, Aidan is not calling for a recession, but he is still more bearish than the consensus for growth, which is currently at 3.5% for 2022 and 2.5% for 2023, respectively. Meanwhile, in the U.S., Dave McNellis is lowering his Real GDP growth forecast for 2022 to 3.2% from 3.8%, compared to a consensus 3.6%. For 2023, Dave's U.S. Real GDP growth forecast falls to 1.8% from 2.25%, below consensus expectations of 2.4%. Finally, in Asia, our Chief Economist for Greater China Changchun Hua still forecasts China Real GDP growth for 2022 of 4.8% (i.e., no change), below consensus of 5.1%. Changchun is also not changing his 2023 Real GDP growth estimate of 5.4%, which is slightly above consensus of 5.2% His earlier forecasting conservatism allows for some slowdown from Omicron, partially offset by increased government measures to try to hit the 5.5% target.

- **We move our European and U.S. CPI forecasts even further *above* consensus.** Higher expected energy and food prices are the key drivers to this change. All told, in the Euro Area our 2022 CPI forecast jumps to 6.0% from 4.7%, well above the consensus estimate of 5.0%. We also raise our 2023 inflation forecast to 2.1% from 1.5%, above consensus of 2.0%. In the U.S., KKR's 2022 CPI increases to 7.0% from 6.5%, meaningfully higher than the consensus estimate of 6.1%. For 2023, we remain at 3.0%, above the current consensus of 2.6%. In China, there are no changes to our 2022 and 2023 inflation forecasts of 2.6% and 2.3% respectively. Even with the recent surge in Omicron and subsequent shutdowns of economically sensitive areas, we believe that our estimates already reflect this downside skew.

- **Our economic cycle indicator has moved to late cycle from mid-cycle.** After spending the last approximately 18 months in the mid-cycle 'expansion' phase, the U.S. economy has moved into a more stagflationary late-cycle environment. A robust labor market and an ongoing inventory restocking cycle remain bright spots for the economy, but most of our other lead indicators, including slowing ISMs, are now decisively past peak. See below for full details, but this viewpoint is consistent with the 'stall-speed' sequential forecast the Federal Reserve gave when it updated its forecasts on March 16, 2022.

- **We keep our S&P 500 target for 2022 the same at 4,750.** In 2023, our price target remains 4,840. Similar to what we highlighted earlier in 2022, our call remains that slower earnings growth and more multiple compression will continue to limit S&P 500 upside at this point in the cycle. As we show in *Exhibits 4* and *5*, we continue to expect more muted returns at this point in the cycle amidst tighter financial conditions, decelerating growth, and stubbornly high energy prices.

- **We raise our per barrel WTI forecasts to $110 in 2022 and $100 in 2023** from $100 and $85, respectively. See below for details, but the impetus for the change to our forecast is due to physical disruption in oil supply brought about by self-sanctioning.

- **Our Fed call for 2022 remains unchanged, but…**Given our view on inflation, we continue to forecast seven hikes in 2022, with fed funds ending the year at 1.875% and potentially even further upside to our forecast, given that we do think the Fed could decide to hike by 50 basis at one or more meetings this year. We raise our 2023 forecast to reflect four additional hikes, versus our prior expectation of just one hike next year. What shifts our

thinking is the fact that the Fed is exhibiting a new inclination to tighten policy even in the face of much slower growth. As Powell recently stated, "I want to say that…I saw a committee that's aware of the need to return the economy to price stability and determined to use our tools to do exactly that."

- **…We are building in a little more cushion at the long-end of the curve.** Reflecting the Fed's near-term hawkishness (including our belief that it needs to shrink the balance sheet to cool the housing market), we raise our 2022 target for the U.S. 10-year yield to 2.50% from 2.25% previously. There is no change to our 10-year target of 2.75% for 2023 and beyond. We still see one ECB hike by year-end 2022.

Section II: Key Questions We Have Been Receiving

In the following section, we detail responses to several questions we have received from deal teams and clients in recent days.

Question #1: *Will the war cause a recession in Europe?*

As the epicenter of the conflict, the Euro Area is definitely where we are spending the most time and fielding the most questions as we test our frameworks and revise our assumptions to chart a path forward. As indicated above, Aidan Corcoran, who heads our European macro effort, has cut his 2022 Real GDP growth forecast to 2.6% from 3.5%. Key drivers of this change include the following:

- Industrial demand destruction reflecting higher energy prices and curtailment of energy flows from Russia

- Consumer demand destruction as real income growth turns negative due to the energy and food price shocks

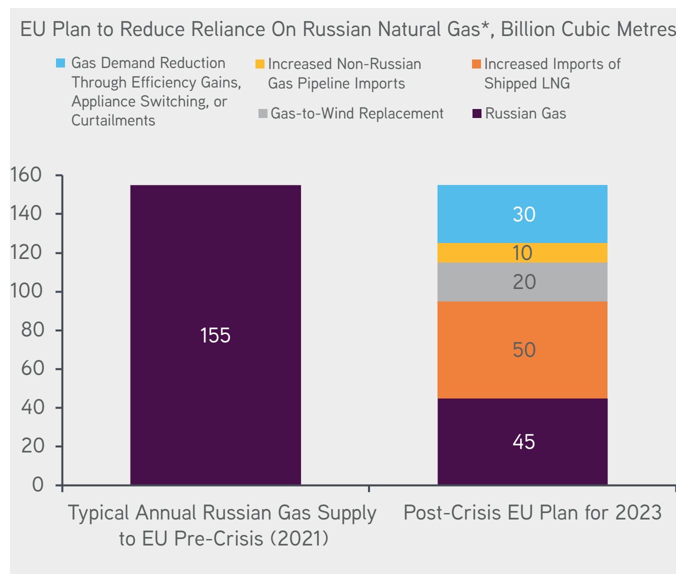
- Reduction in exports from the Eurozone to Russia (but from a low base) and business sentiment hit

As such, Aidan does believe investors should prepare for some limited energy rationing in Europe, meaningful dislocation in commodity-dependent industries outside the energy sphere, and a hit to consumption from the fall in real income. Though overall energy prices have climbed dramatically, European gas prices are showing the greatest dislocation, a dislocation we expect to continue for some time.

Importantly, however, a complete stop of energy flows from Russia to the EU is not in our base case. Instead, we are assuming a significant reduction in demand from the EU side. Indeed, the EU Commission has already outlined a plan under which the flow of gas from Russia to the EU by 2023 could be cut by two thirds. One can see this in *Exhibit 6*. Meanwhile, increased fiscal support, including offsets for consumer energy bills and investment in energy independence are potential positive proposals to help cushion the headwinds from the crisis. Hence, while we are forecasting a significant slowdown, we do not forecast a recession in 2022.

Exhibit 6

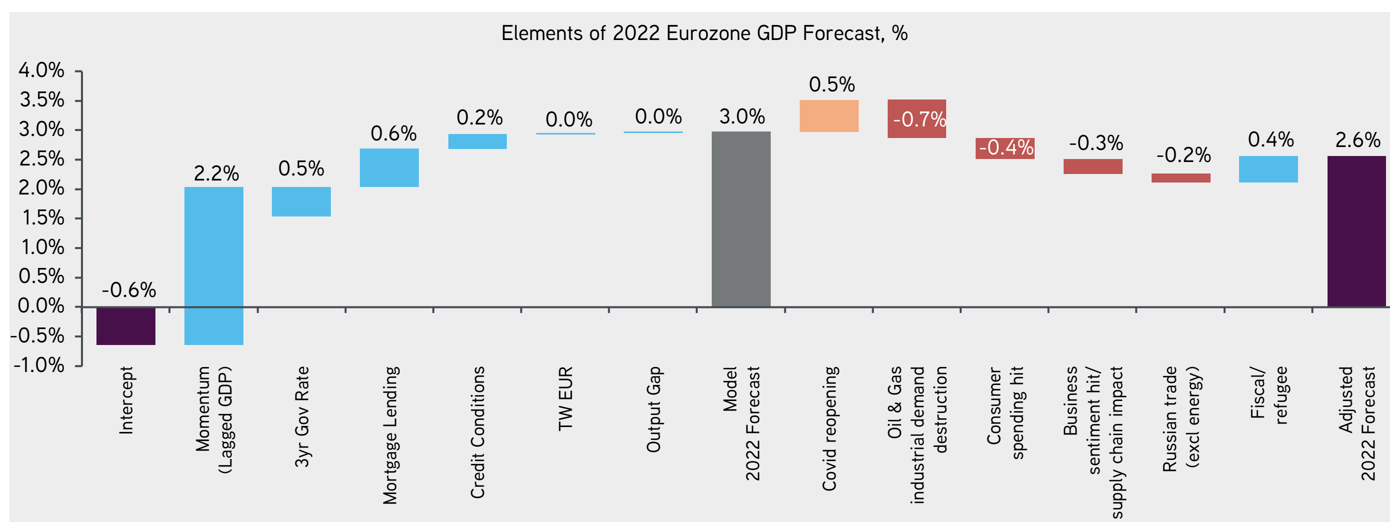
Europe Will Struggle to Immediately Reduce Reliance On Russian Gas, but Could Decouple in the Long Run



*Figures are based on industry estimates and unconfirmed policy proposals. Data as at March 10, 2022. Source: European Commission Proposal.

Exhibit 7

We Revise Down Our 2022 Euro Area GDP Forecast by 90 Basis Points to 2.6% From 3.5%



Note: Does not add to 2.6% due to rounding. Data as at March 10, 2022. Source: European Commission, Eurostat, and KKR Global Macro & Asset Allocation analysis.

Importantly, unlike the 2011 European debt crisis, the Euro Area banking system appears relatively well positioned to weather the current storm, thanks to the years spent building capital buffers under the Single Supervisory Mechanism. While we have seen a deterioration in financial conditions, the decline is not nearly as bad as could be expected given the circumstances. Thus, the ECB feels confident continuing its reduction of QE purchases. For this year, we stick to our single ECB rate hike expectation in December 2022. This also may be the appropriate place to touch upon the implications of a Russian default. Of Russia's $40 billion of outstanding USD and EUR bonds, as of December 2021 only half ($20 billion) were held by foreigners. This compares to the approximate $400 billion of gross debt that the Greek government had outstanding at the time of its crisis in 2011. In our view, the much bigger macro risk vectors emanating from this conflict surround geopolitics, energy, food, other commodities, and supply chains.

Question #2: *What are the key commodity inputs that could be affected by the war?*

Reflecting recent developments in the Ukraine crisis, we are raising our base case for WTI oil prices to $110 on average in 2022, up from $100 as of our last update in late February, and also making more modest upside revisions to our out-year forecasts. Specifically, we raise our 2023 estimate to $100, compared to a forward curve of $82 per barrel and a prior forecast of $85 per barrel. One can see all our estimates in *Exhibit 8*.

As one might guess, the range of potential outcomes remains incredibly broad, but the key change in our thinking is that we now reflect some material near-term disruption to physical oil supply. That is different from our prior base case, which reflected little physical disruption, but rather just a heightened risk premium amidst what was already a notably undersupplied global market.

The major needle-mover, from our perspective, has been the understandable level of global outrage over Russia's shelling of civilian and nuclear targets in Ukraine. Oil traders are 'self-sanctioning' by abstaining from buying Russian cargoes, either on principle, or from inability to secure ships, insurance, and financing. In fact, as of March 8, 2022, tanker loadings of Russian oil products had fallen to just 15–25% of normal levels, according to IHS data.

Exhibit 8

Our Revised Oil Price Forecasts Continue to Embed Substantial Upside vs. Current Market Pricing

	GMAA Base Case vs. Futures			High/Low Scenarios		Memo: Prior Forecasts		
	KKR GMAA (Mar'22)	**WTI Futures (Mar'22)**	**Mar'22 Forecasts GMAA vs. Futures**	**KKR GMAA High Case**	**KKR GMAA Low Case**	KKR GMAA (Feb'22)	WTI Futures (Feb'22)	Feb'22 Forecasts GMAA vs. Futures
2019	**57**	**57**	**0**	57	57	57	57	0
2020	**39**	**39**	**0**	39	39	39	39	0
2021	**68**	**68**	**0**	68	68	68	65	3
2022e	**110**	**97**	**13**	150	90	100	86	14
2023e	**100**	**82**	**18**	125	80	85	78	7
2024e	**80**	**74**	**6**	100	70	75	73	2
2025e	**75**	**70**	**5**	100	60	73	69	3
2026e	**75**	**67**	**8**	100	60	70	67	3

Note: Forecasts represent full-year average price expectations. Data as at March 9, 2022. Source: Bloomberg, KKR Global Macro & Asset Allocation analysis.

This self-sanctioning issue is actually far more consequential for oil markets than the recent U.S. and U.K. official sanctions. Importantly, the U.S. and U.K. represent only 10% of Russia's global exports, and should be fairly easily substituted via trade shifts to other regions.

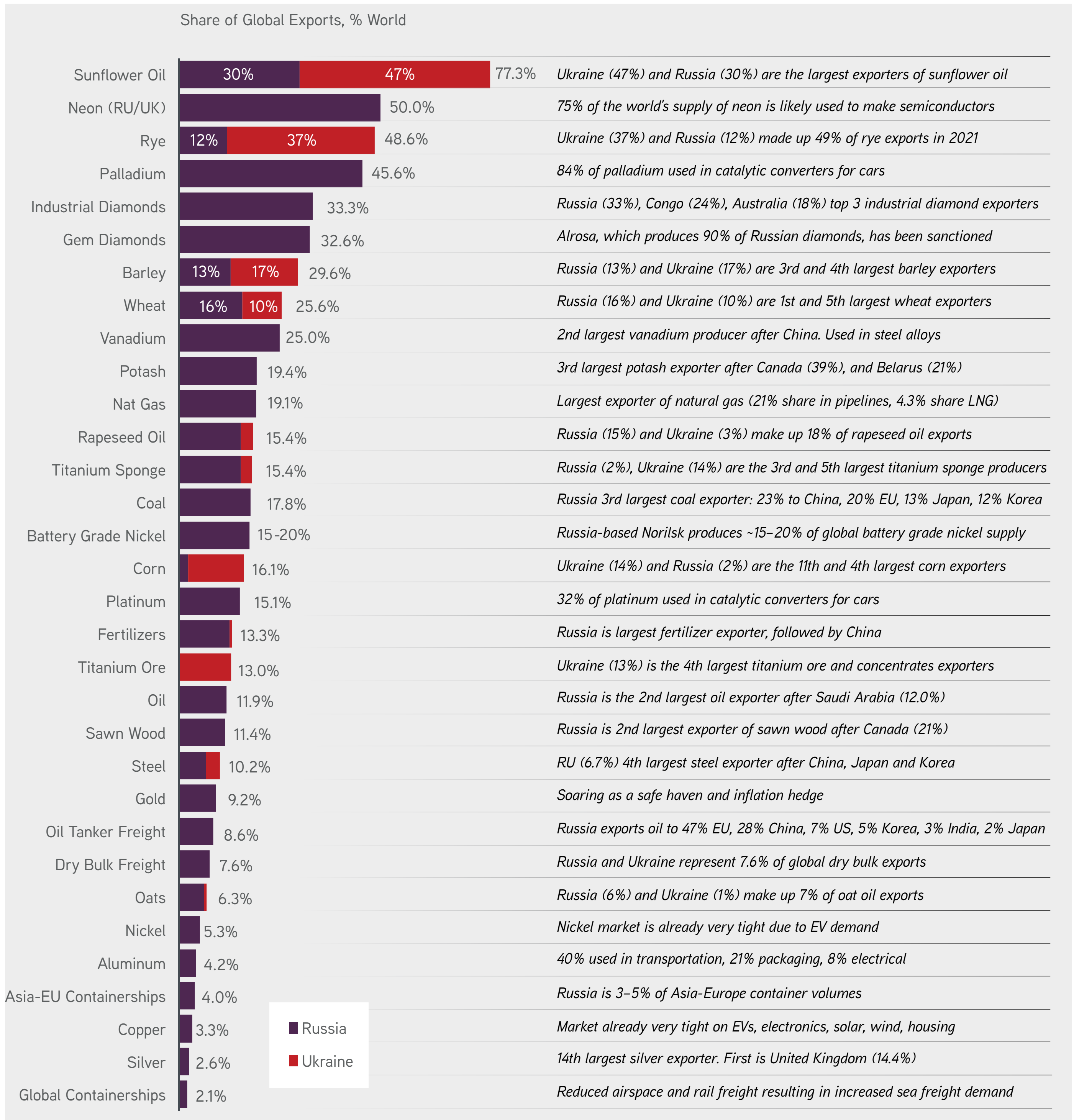
On net, the Russia-Ukraine war presents potentially historic levels of disruption. We think the potential near-term (perhaps around 1-month) disruption to Russian supply is on the order of five million barrels per day, amounting to the majority of Russia's seaborne oil trade. Over the longer term (6–12 months), we expect global oil shipments will rebalance and lost supply will moderate to a still meaningful one to two million barrels per day (i.e., one to two percent of global supply). The key longer-term issue is that shifting oil exports away from Europe and North America will require longer trade lanes, stretching global shipping capacity, and tying up inventories in transit. This is all taking place amidst a backdrop where OPEC has limited spare capacity to offset lost Russian production, and the U.S. has limited near-term ability to ramp up shale oil, given constraints on the services side.

So, our bottom line is that Russian aggression in Ukraine is translating into disruptions in physical oil supply that we think are likely to persist, which keep us wary that near-term risks for oil remain skewed to the upside. We suggest a high degree of caution underwriting investments in energy-intensive industries. See below for more details, but we also want to flag that this environment is eroding purchasing power for lower-income households, which spend a disproportionate wallet-share on energy. Already many households with less income were suffering from inflation, particularly in the energy sector. Overall, macro headwinds are mounting, s the environment becomes more stagflationary at a time when central banks have little capacity to offer any policy accommodation.

In terms of other commodity issues to consider, my colleague Frances Lim, who heads our Asia macro franchise, has done some excellent work analyzing what is exactly sourced from Ukraine and Russia, including hard commodities, precious metals, agriculture, and rare gases. One can see this in *Exhibit 9.* As a macro group, we are most focused on sunflower oil, palladium, wheat, aluminum, and neon, all five of which have meaningful exposure to Russia/Ukraine.

Exhibit 9

Russian/Ukraine Exports Span Hard Commodities, Precious Metals, Agriculture, and Rare Gases



Data as at March 11, 2022. Source: BP Statistical Review, WorldSteel.org, Geology.com, JPM, GS, CLSA, WSJ, Reuters, USDA, S&P, KKR Global Macro & Asset Allocation analysis.

Overall, our conclusion is that higher for longer is likely to persist across the commodity arena. As we detail below, the war has turbo-charged what was already an unsettled back-drop for commodities. The reality is that both lack of investment in old economy natural resources like oil and natural gas *and* a surge in interest in renewable platforms — many of which require hard to find commodities like nickel, lithium, etc. — were already an issue. Importantly, this analysis does not include 'second order' impacts on commodities and supply chains from the war. The Ukraine war — like COVID before it — is likely to enhance 'supply chain nationalism' as key markets seek more resiliency and self-reliance. As such, given our outlook that geopolitics is likely to remain a headwind to stability, we see a higher for longer thesis for much of the commodity patch well into 2023, despite our view that economic growth will slow notably during the next 12–24 months.

Question #3: *How has the war impacted your capital markets assumptions?*

After previously adjusting our forecasts downward in February, we are now keeping our SPX target for 2022 at 4,750 and 2023 at 4,840. To review, our forecast assumes the S&P 500 can trade at 20.1x our earnings per share estimate of $236 in 2022, which is down from 22.7x our earnings per share estimate of $210 in 2021. In 2023, we look for the market to trade at just under 20.0x our earnings per share estimate of $242. One can see details of our forecasts in *Exhibit 10*.

Our bottom line: the recent oil shock, if sustained, amounts to an increase in the U.S.'s annual oil bill of $245 billion, or 1.3% of GDP. However, the consumer in aggregate can create a $257 billion windfall by taking his or her savings down by 1.4% to five percent and still have a cushion – in aggregate – that is in line with historical trends.

Exhibit 10

At This Point In the Cycle, We Now Look for Multiple Compression, Partially Offset By Modest Earnings Growth

S&P 500			
	2021e	**2022e**	**2023e**
Price Target	4,766	4,750	4,840
y/y %chg		*-0.3%*	*1.9%*
EPS ($/sh)	$210	$236	$242
y/y %chg		*12.4%*	*2.6%*
LTM P/E	22.7x	20.1x	20.0x
y/y %chg		*-11.3%*	*-0.7%*
NTM P/E	20.2x	19.6x	18.8x
y/y %chg		*-2.9%*	*-4.1%*

Data as at February 28, 2022. Source: Bloomberg, Factset, KKR Global Macro & Asset Allocation analysis.

While the war is a new input into our frameworks, its overall impact is actually consistent with what we have been thinking for some time. Specifically, we continue to expect more muted returns at this point in the cycle, particularly amidst tighter financial conditions, decelerating growth and stubbornly high energy prices. Importantly, in aggregate for the S&P 500, we expect higher wages to persist — if not intensify — in coming years. As such, we believe sectors and companies with pricing power and operating leverage who are able to capitalize on cost efficiencies and falling rental expenses are likely to command a premium in the market. Also, we are very focused on companies with strong unit volume growth. On the other hand, those who are 'price-takers' with more labor-intensive business models will likely be de-rated. Overall, though, we see margins peaking this year (2022) and start rolling over in 2023, as the number of 'price takers' ultimately exceed the number of 'price makers' with the S&P 500.

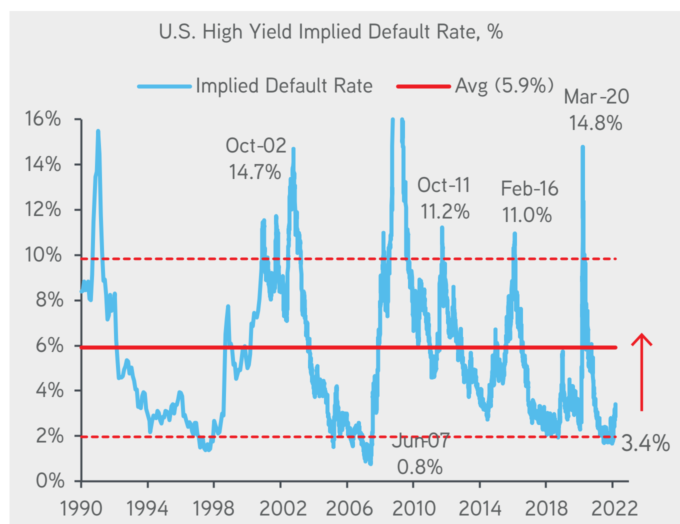
Within Liquid Credit, we see more of a two-way backdrop. On the one hand, fundamentals are actually pretty good, and we believe that High Yield is a stronger asset class than in the

past, given most companies have a fair amount of cash and have termed out their liabilities. On the other hand, the implied default rate on High Yield is still well below its historical average of around six percent, which suggests a degree of optimism is already in the price. One can see this in *Exhibit 11*.

Our bottom line: Both Equities and Credit represent good, but not great, value at current levels. Specifically, we see mid-single digit returns across both asset classes. Equities, in particular, are a good inflation hedge, and companies with high cash flow conversion and rising dividend yields should outperform in the environment we envision. We also like Credit as an asset class at current levels, but our models suggest credit selectivity via active management is probably the best route at this point versus passive exposure.

Exhibit 11

Even With All the Volatility, the High Yield Implied Default Rate Is Still Well Below Average



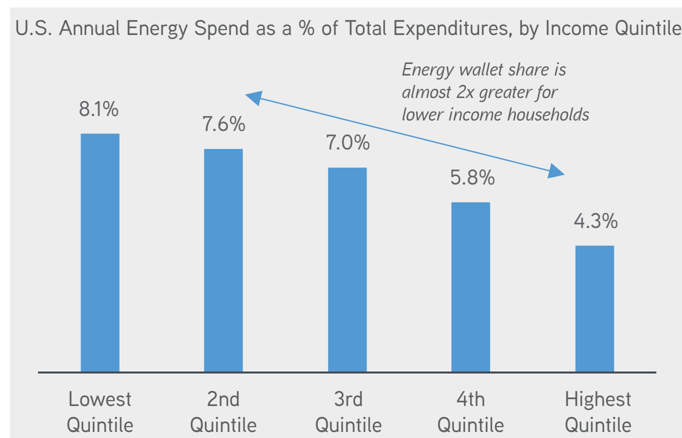
Data as at March 15, 2022. Source: Bloomberg.

Question #4: *How should we think about consumer spending on energy?*

Though we expect surging wage gains to help, we think consumer spending will be curtailed by higher commodity prices. In particular, we think consumers at the low end will be impacted. As *Exhibit 12* shows, prior to the recent spike in energy prices, the lowest quintile consumers spent almost two times more of their budgets on energy than those in the highest quintile. Moreover, low end consumers enter this commodity surge with very little savings. As such, there is no real available cushion to soften any material rise in commodity prices from higher gas and/or food costs. One can see this in *Exhibit 13*.

Exhibit 12

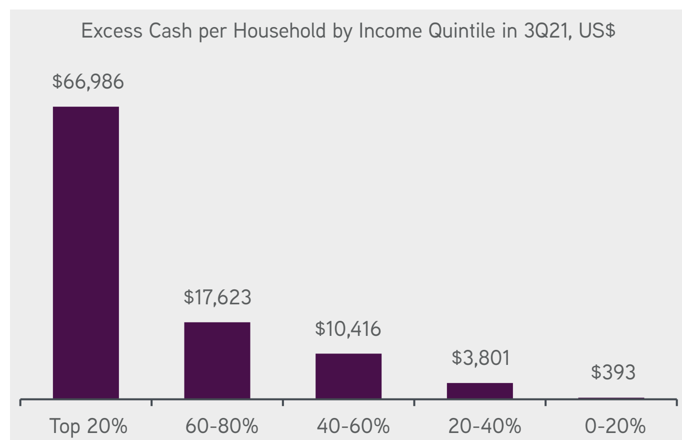
Energy Price Increases Weigh Disproportionately on Lower Income Households



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

Exhibit 13

Low Income Households Have Little to No Cushion to Absorb Higher Living Expenses



Data as at September 30, 2021. Source: BEA.

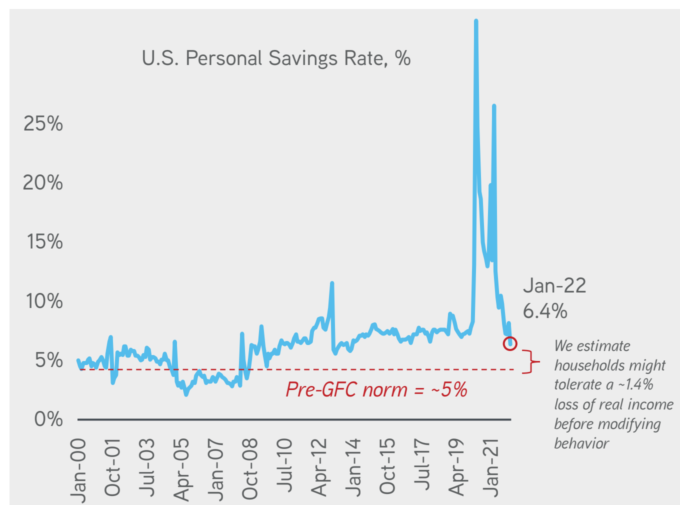
This has potential second order political implications as well, not just in the U.S., but across the globe. Historical inflation, particularly impacting commodities, has often been associated with seismic political change from the more recent Arab

Spring to the Reagan Revolution in the early 1980s. Inflation impacts all consumers and reinforces public attitudes of helplessness and lack of control. A world with much more inflation is likely to be a world with more policy and political instability.

That said, on an aggregate basis, the outlook is a little better than one might guess at first glance. Key to our thinking is that, as we show in *Exhibit 14*, U.S. consumers, in aggregate, can take savings down by another 1.4 percentage points, which totals approximately $257 billion dollars, before behavior patterns and demand destruction occur. Consumers are also benefitting from strong home price appreciation. Just consider last year that the average American homeowner enjoyed more in gains from home price appreciation ($53,000) than he or she did in annual income ($50,000).

Exhibit 14

We Believe That the Savings Rate Can Fall 1.4% to 5.0% Before Consumers Will Modify Spending Behaviors



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

For those who analyze the economy at the aggregate level, we also wanted to provide some perspective.

- At the January average of $83 per barrel, the U.S.'s annual oil bill amounted to $636 billion, or 3.2% of GDP.
- At $115 oil, the U.S. annual oil bill amounts to $881 billion, or 4.5% of GDP.
- However, the U.S. only imports about one-third of its oil, so there are some economic offsets that must also be considered.

Our bottom line: the recent oil shock, if sustained, amounts to an increase in the U.S.'s annual oil bill of $245 billion, or 1.3% of GDP. However, as we mentioned before, the consumer in aggregate can create a $257 billion windfall by taking his or her savings down by 1.4% to five percent and still have a cushion — in aggregate — that is in line with historical trends.

The natural gas story in the U.S. is a much better one. We note the following:

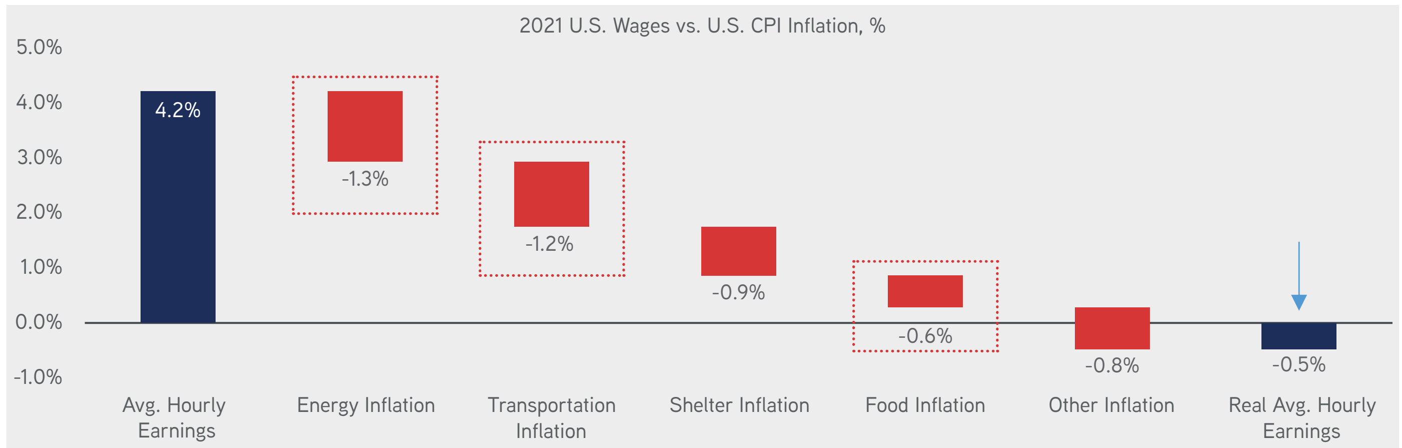
- The U.S. 'natural gas bill' is much lower than the oil bill. Our estimates suggest the natural gas bill at around $130 billion (0.7% of GDP) in January and $160 billion (0.8% of GDP) at March 17, 2022 prices.
- The U.S. is actually a natural gas net exporter, to the tune of 10–20% of its production. As such, higher gas prices are a slight net benefit in dollar terms.

However, it is not just oil and natural gas costs that are poised to adversely affect consumer spending. As *Exhibit 15* shows, commodity costs are also showing up in the form of transportation costs, food inflation, and even shelter inflation. As a result, despite huge pay increases, consumers are generally worse off on a real basis. Importantly, the headwinds we have identified will likely get worse, not better, in 2022.

Inflation impacts all consumers and reinforces public attitudes of helplessness and lack of control. A world with much more inflation is likely to be a world with more policy and political instability.

Exhibit 15

Even With the Substantial Wage Gains in 2021, Surging Inflation Means Real Hourly Earnings Have Declined



Data as at December 31, 2021. Source: BLS, BEA, Haver Analytics.

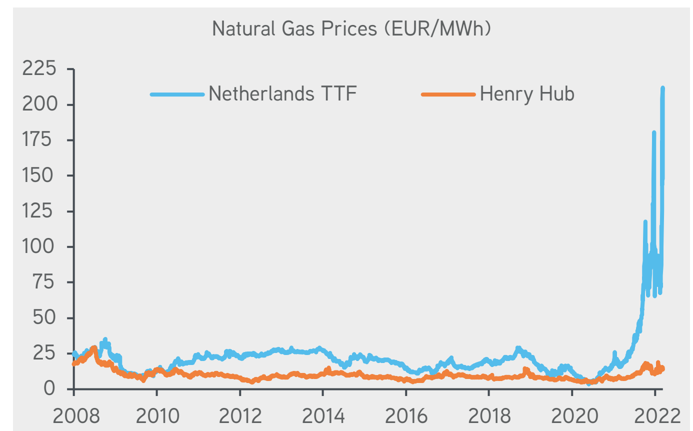
So, the punch line in the U.S. is that higher commodity prices will be a headwind, but — in isolation — they are not likely to cause a consumer recession. Remember that the top 20% of Americans account for around half of all consumer spending, and their net worth is actually at a record high. Moreover, the wealth bracket just below the top 20% now has more cash in their bank accounts than the top 20% did just before the pandemic. However, experiences will vary by consumer, and unfortunately, we do not see either real wages rising fast enough or savings acting as a buffer to the low end consumer.

Meanwhile, in Europe both oil and natural gas prices, given their elevated levels, are more problematic. As of 2020 (latest data available), we estimate that EU consumer spending on energy as a percentage of total household expenditure was about seven percent (€502 billion); for the UK, it was 4.5% (£57 billion). This equates to 3.7% and 2.6% of GDP, respectively.

Importantly, though, a sustained move in the Brent oil price to $115 per barrel suggests around €78 billion of additional household spending in the EU. Layering the impact of higher gas and electricity prices could bring total additional household spending on energy to approximately €203 billion (increasing energy spend to about 10% of household expenditure). That said, there are some potential offsets. Specifically, we expect that household excess savings could act as a counter balance. In fact, returning the EU household savings rate to the pre-COVID average would add back roughly €89 billion per quarter, albeit lower-income households will benefit less (the current savings rate in the EU is 14.6% versus the pre-pandemic average of 12.2%.)

Exhibit 16

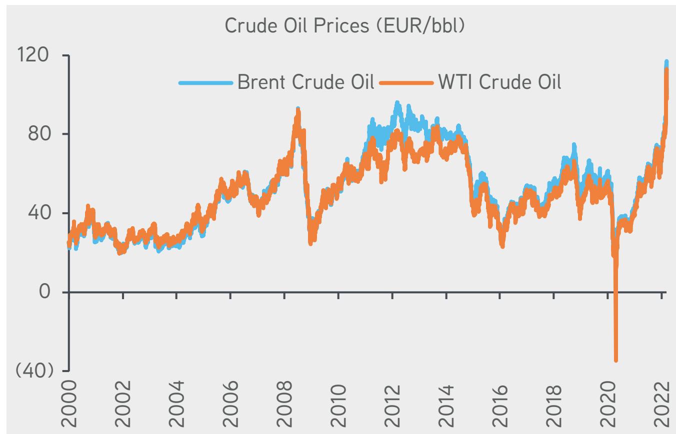
Natural Gas Prices in Europe Have Surged Since the Crisis and Remain at a Significant Premium to U.S. Gas Prices



Data as at March 10, 2022. Source: Bloomberg.

Exhibit 17

Oil Prices Are Also Elevated in Europe



Data as at March 10, 2022. Source: Bloomberg.

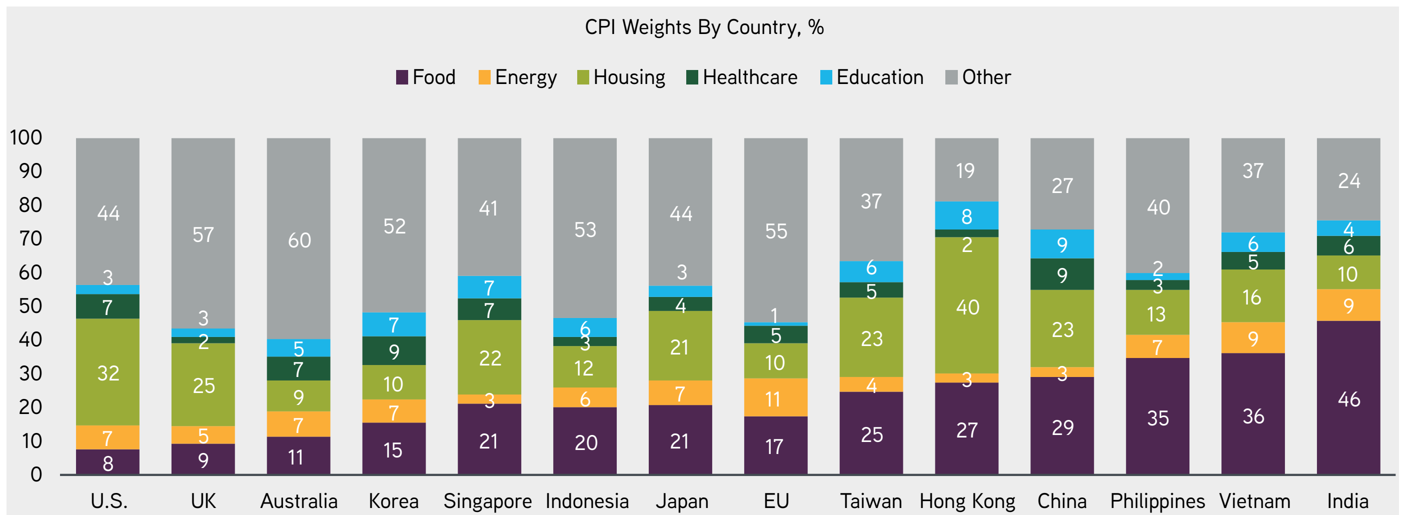
Natural gas is the second most important primary energy source in the Euro Area, after petroleum-based products. Moreover, it is the most important source of energy in the Euro Area manufacturing sector, and more than 90% of the gas consumed in the Euro Area is imported. As such, consumers will see prices of goods and services that rely on natural gas move up substantially in the coming weeks and months.

How bad could it get on a GDP growth basis? Aidan estimates that the if gas prices stay elevated around the mid-March level of €105 per MWh, up approximately 120% versus the 2021 average, this new price equilibrium — were it to hold — would translate to an approximate 80 basis point reduction in GDP. Regarding oil, if we assume Brent prices remain around current levels (around €90 per barrel), which is 50% higher than 2021 average levels, Aidan's work suggests that this roughly translates to a 50 basis point reduction in Euro Area economic activity. These assumptions are embedded in our 2.6% 2022 GDP forecast.

Asia too will feel the pain. One particular area that Frances is monitoring closely is the linkage of food and fuel inflation to potential unrest. As half of Asia is still 'emerging', food and fuel inflation will be extremely painful and politically unsettling. Every country will have its own nuance, but in general, most countries will be balancing weaker growth with higher inflation.

Exhibit 18

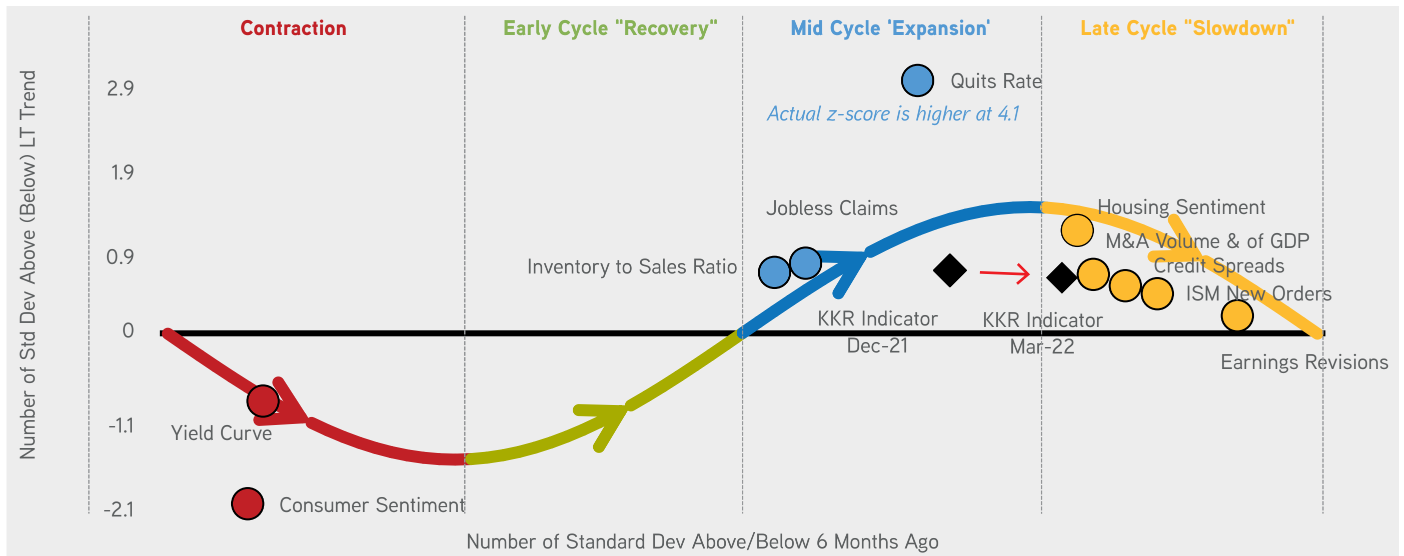
In Asia, We Are Particularly Focused On Food Prices, Which Are a Much Larger Component of Overall Inflation



Data as at March 7, 2022. Source: KKR Global Macro & Asset Allocation analysis.

Exhibit 19

The U.S. Economy Has Moved Into the Late Cycle 'Slowdown' Phase, After Spending the Last 18 Months in Mid-Cycle 'Expansion'



Notes: The cycle indicator is an equal-weighted average of ten components spanning macro, rates, corporate activity and the consumer. Data as at March 15, 2022. Source: Census Bureau, BLS, BEA, ISM, NAHB, Conference Board, Haver Analytics.

Question #5: *What does your cycle indicator now say, and what does this make you think about central bank policy?*

In light of all the central bank and geopolitical crosscurrents, our U.S. business cycle indicator has moved into the late-cycle 'slowdown' phase. While the robust labor market and ongoing inventory restocking cycle remain bright spots for the economy, most of our other lead indicators are now decisively past peak.

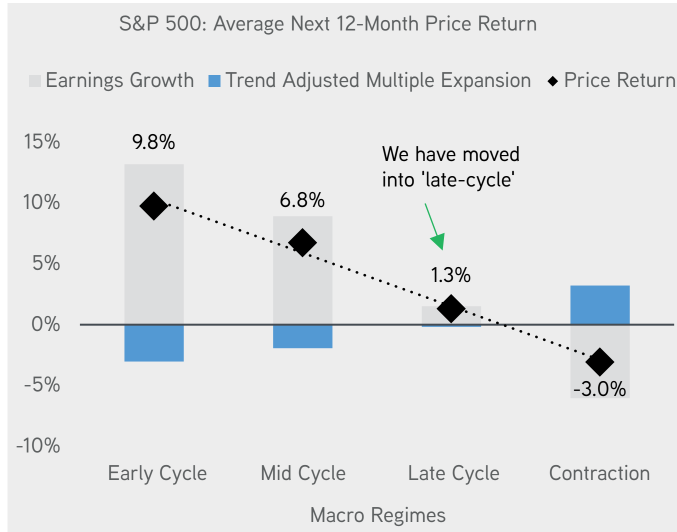
For equity investors, the move into late-cycle territory does not make us outright bearish on equities; however, it does point to a more challenging macroeconomic environment that is consistent with slower earnings growth and multiple contraction.

Looking at the component details, the yield curve has bear flattened to pre-pandemic levels and consumer confidence has fallen to decade lows owing to the hawkish Fed pivot and soaring inflation. Meanwhile, both ISM new orders and earnings revisions have continued to roll over from highs. More recently, credit spreads have begun widening following the latest surge in energy prices, while homebuilder sentiment is showing signs of fatigue given persistent labor/supply constraints and higher mortgage rates. In short, after spending the last approximately 18 months in the mid-cycle 'expansion' phase, the U.S. economy has moved into a more stagflationary late-cycle environment.

For equity investors, the move into late-cycle territory does not make us outright bearish on equities; however, it does point to a more challenging macroeconomic environment that is consistent with slower earnings growth and multiple contraction. Indeed, as we show below in *Exhibit 20*, equity market returns tend to be rather muted during late-cycle slowdowns, which is in-line with our call for low single-digit returns for the S&P 500 this year and next.

Exhibit 20

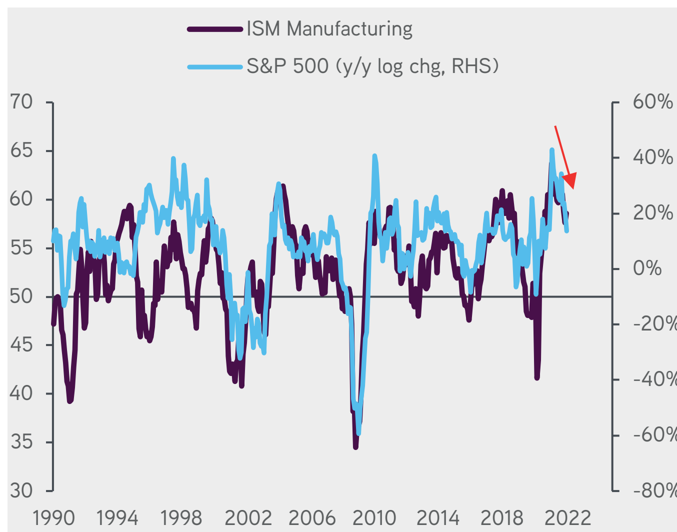
Late-Cycle 'Slowdown' Is Consistent With Below-Average Equity Market Performance, Owing to Slower Earnings Growth and Multiple Compression



Data as at March 15, 2022. Source: Census Bureau, BLS, BEA, ISM, NAHB, Conference Board, Haver Analytics.

Exhibit 21

As the ISM Decelerates, So Too Does the Pace of Gains for the S&P 500



Data as at February 28, 2022. Source: Bloomberg, KKR Global Macro & Asset Allocation analysis.

Looking ahead, we are now on high alert to make sure that we do not slip into contraction territory, which is usually the most unflattering period for capital market returns. So, what are we watching? There are four primary areas where KKR's macro team is focused. First, housing remains an important variable. Not only does it currently provide an important wealth cushion to consumers but it also provides a strong cyclical impulse to the current recovery. Were housing activity to seize up (not our current view), then we would definitely be more nervous. Second, our base view is that unemployment stays flat, or the labor market tightens even further. Third, we are watching the flatness of the yield curve. Our base view is that a reduction in the Fed's balance sheet will — over time — prevent the yield curve from inverting, but we still need more details from the Fed on the pace and timing of its balance sheet policies. Finally, we are watching consumer savings. So far U.S. consumer savings has dipped to 6.4% from north of eight percent. Were it to fall back closer to 2007 levels, then we would be more inclined to think that recessionary conditions were imminent.

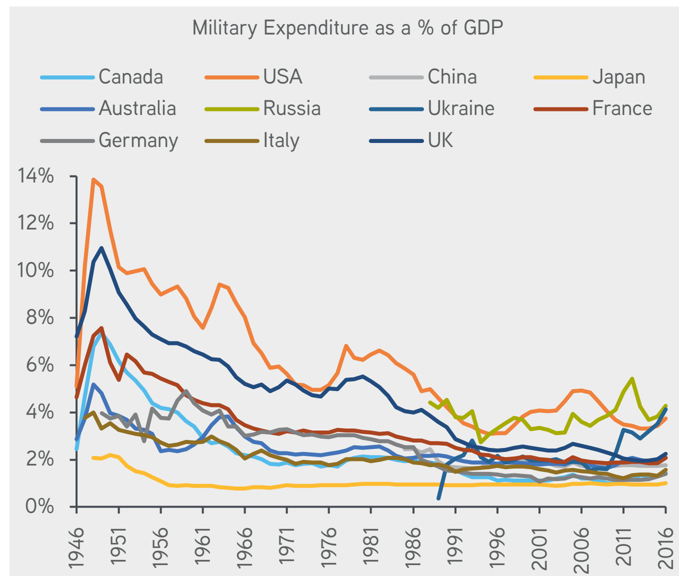
Section III: Structural Forces at Work

In terms of investment conclusions, our message is that there are several important structural forces at work that warrant investor attention at this time of heightened uncertainty. Specifically, we note where we see longer-term trends shifting direction in the following areas:

Point #1: Era of Sustained, Heightened Geopolitical Risks: My friend and colleague Vance Serchuk has been suggesting — well ahead of the Ukraine war — that **we have shifted from a period of benign globalization to one of great power competition**. Vance has written extensively on how the rise of authoritarian alternatives to democracy were wrongly 'presumed to have been safely consigned to the ash heap of history.' Post-Cold War societies had hoped that economic interconnectivity would ensure irreversible progress and lessen geopolitical tensions. Like Vance, we agree that — rather than dissipating — geopolitical risks are only rising.

Exhibit 22

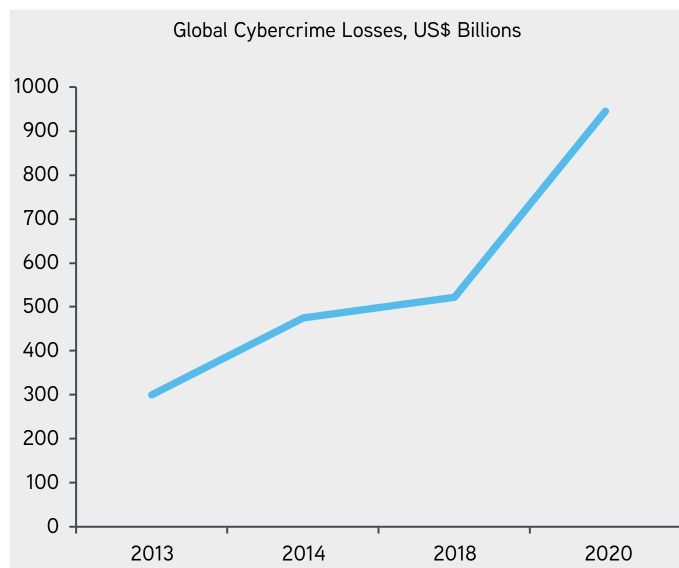
Defense Spending Has Fallen Consistently in the Post-WWII World, But Recent Events Are Likely to Mark a Turning Point



Data as at December 31, 2021. Source: SIPRI Military Expenditure Database 2021.

Exhibit 23

The Cost of Cybercrime Has Increased More Than 50% Since 2018



Data as at December 7, 2020. Source: *The Hidden Costs of Cybercrime*, McAfee and CSIS.

Given this view, we think that domestic economies will change to incorporate the reality of a more unsettled world. Two areas of potential growth quickly come to mind. First, we see defense spending structurally increasing. Already, Germany's pledge to spend 100 billion euros on its military augurs a new age of increased global defense spending. In our view, Germany's announcement is not an aberration; rather, it is the beginning of a secular trend that will permeate across geographies.

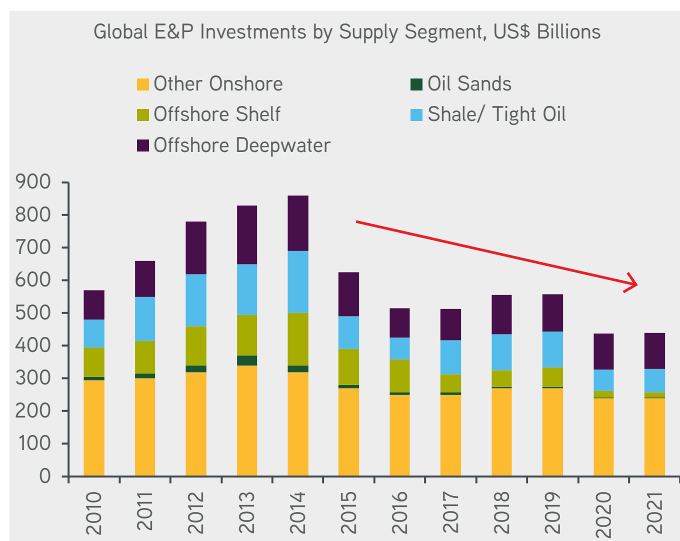
Second, as part of this evolution, cyber risks have escalated in an exponential fashion. All told, the Center for Strategic Studies and McAfee estimated that prior to the war in Ukraine, more than one trillion in USD was spent on cyber-security and lost due to cybercrime per year. This total is more than one percent of global GDP; however, given the heightened tensions we now see across Russia, Europe, he United States, and China, we expect this total to increase meaningfully in the next few years.

Ultimately, we see a world where greater regionalization unfolds, driven by sometimes controversial leaders who, in certain instances, represent a new era of 'strong men'. More restrictions and scrutiny on the transfer of capital, technology, and data are also likely to occur, as economic warfare becomes an increasingly critical tool in the era of great power competition. Consistent with this view, we expect to witness a further rise of more restrictive FDI regimes and potential for outbound restrictions. If we are right, how and with whom investment managers partner to deploy capital will become a major input in almost any transaction, we believe, on a go-forward basis, as the 'weaponization' of economic levers becomes a more prevalent part of the political arsenal. Note that some interesting work done by Miguel Montoya on our team highlights that — beyond the direct supply issues anticipated from Russia and Ukraine — there are already additional bans on, and higher taxes for, exports and stockpiling by governments and consumers in anticipation of food inflation and/or potential scarcity across the globe (e.g., Turkey, Egypt, Argentina, Indonesia, Hungary and Algeria to name just a few).

Point #2: The Intersection of Energy Security and the Energy Transition: For quite some time, we have been cautioning that the global energy transition would be inflationary. As *Exhibit 25* shows, the global economy is still largely dependent on 'old economy' natural resources. Moreover, there has been a substantial under-investment in existing capital expenditures, as investors have shied away from the traditional energy sector. In prior periods, oil and gas companies would have responded to oil prices in excess of $80 per barrel with additional drilling and investment, including in U.S. shale, to boost supply. However, oil and gas investment halved to just $350 billion in 2021 from about $740 billion in 2014.

Exhibit 24

Global Capex for Energy Has Crashed, Which Is Leading to a Tightening of Supply

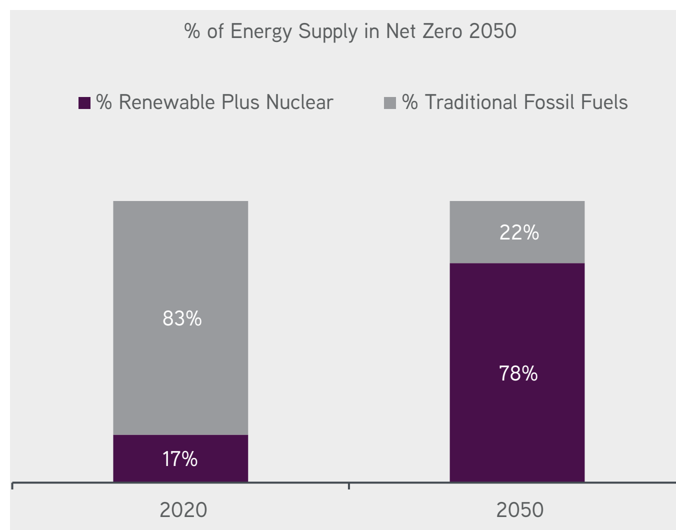


Data as at May 2021. Source: Rystad Energy, UCube, Citi.

Looking at the bigger picture, we envision energy production and delivery that is inherently more localized and decentralized, with the potential to reduce vulnerability to oil and gas price manipulation.

Exhibit 25

Attaining Net Zero Will Be Challenging



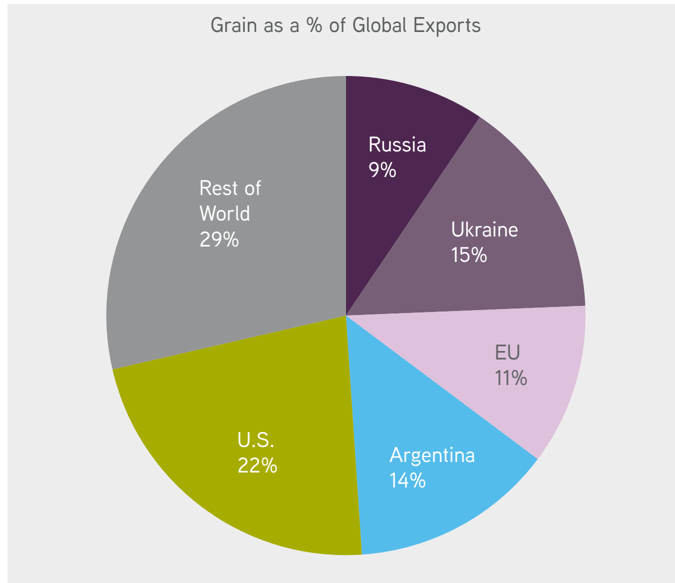
Data as at May 2021. Source: International Energy Agency (2021), Net Zero by 2050, IEA, Paris: Net Zero by 2050 Scenario - Data product - IEA. License: Creative Commons Attribution CC BY-NC-SA 3.0 IGO, KKR Global Macro & Asset Allocation analysis.

Looking ahead, we think that the energy transition will expand to include energy security. Embedded in this shift are two sizeable investment opportunities. First, there will be greater acceptance and support by investors for the transition of existing assets from brown to green. We view this opportunity, similar to what we have long said about corporate carve-outs, as a buy complexity, sell simplicity investment. All told, we think that there could be an 800–1,000 basis point difference in the cost of capital between the two types of investments, a substantial gap for alternative managers with strong operational capabilities.

Second, we believe that there is going to be a massive capex cycle that leads to new factories, homes, and jobs, as supply chains become more regional and/or redundant to survive the growing number of geopolitical shocks that are occurring. This phenomenon is not just a U.S. one; rather, as Europe rethinks its dependence for food and fuel on actors like Russia, we envision a wholesale review of energy platforms, including partners, production, distribution, and reserve capacity. These new supply chains are likely to be built to optimize energy and resource efficiency, reinforcing opportunities for investors to focus on companies that balance these objectives.

Exhibit 26

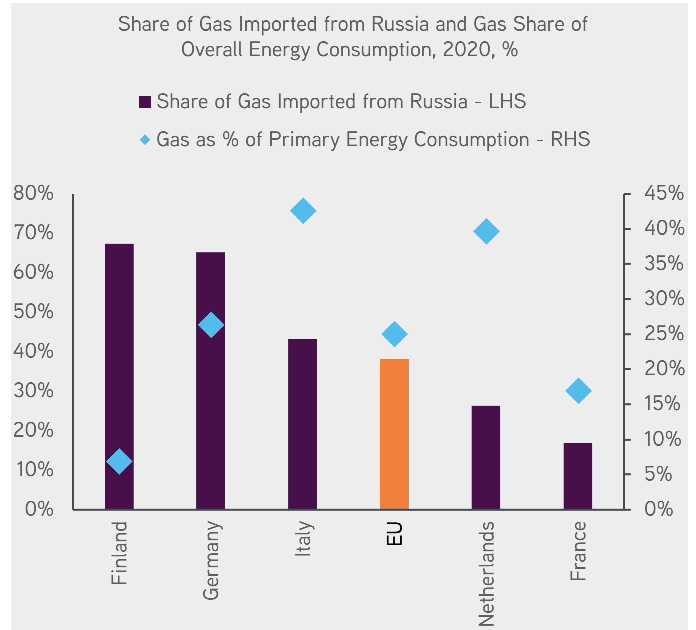
Russia and Ukraine Combined Also Make Up 25% of Global Grain Exports, Which Could Pressure Food Prices



Data as at February 25, 2022. Source: KKR Global Macro & Asset Allocation analysis, Bloomberg.

Exhibit 27

The EU Relies On Natural Gas for 25% of Its Primary Energy Consumption and Imports About 40% of Its Gas From Russia



Data as at February 23, 2022. Source: Morgan Stanley Research *Asia Economics Geopolitical Tensions.*

At KKR, we do not believe that globalization is dead; the world is too interconnected across too many basic industries at this point. However, we do acknowledge that globalization's rate of change is slowing, and in some areas it is actually going backwards.

Looking at the bigger picture, we envision energy production and delivery that is inherently more localized and decentralized, with the potential to reduce vulnerability to oil and gas price manipulation. We also expect some backtracking from government authorities. For example, we expect a recalibration of certain climate policies to allow for a smoother transition, including nuclear and LNG, and for implementation of a more reasonable timetable. Divestment could again be disfavored, and we expect governments, particularly the U.S., to use their strategic petroleum reserves more often and in size.

Point #3: Shifts in Globalization: At KKR, we do not believe that globalization is dead; the world is too interconnected across too many basic industries at this point. However, we do acknowledge that globalization's rate of change is slowing, and in some areas it is actually going backwards. Just consider the intensifying competition for search supremacy between the

West (Google) and the East (Baidu), or the shift in payment vendors that we are seeing since war broke out in Ukraine.

Exhibit 28

Tariffs Have Risen in Response to Anti-Globalization Trends

Note: 2021 is estimated. Data as at March 11, 2022. Source: WTO.

Exhibit 29

Trade as a Percentage of Global GDP Actually Peaked in 2008

Data as at November 30, 2021. Source: IMF.

According to the IMF, the theoretical high-water mark for globalization came in 2008, when global merchandise exports as a percentage of global gross domestic product reached nearly 27%. By 2021, that had dropped to 19%. Tariffs have been increasing too, slowing or in some cases reversing globalization. According to the WTO, global tariffs in 2021 reached $1.5 trillion, climbing from only $126 billion in 2000. Not surprisingly, global trade as a percentage of GDP has been declining for some time. One can see that in *Exhibit 29*.

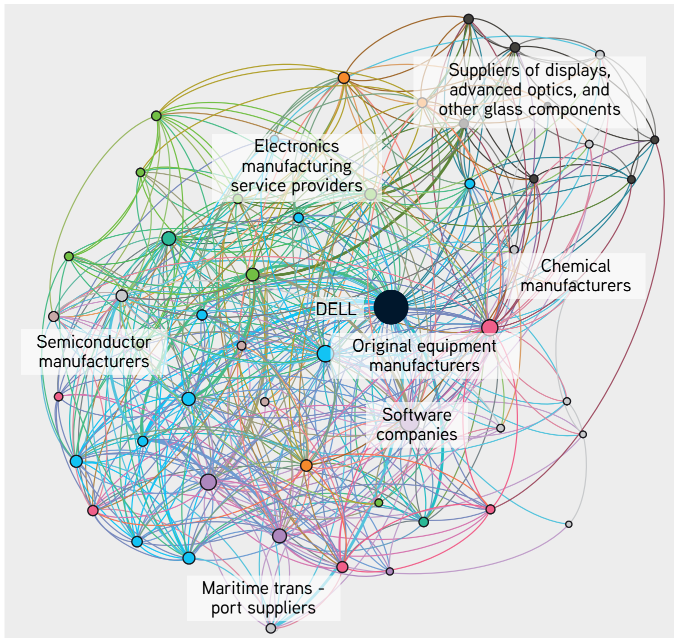
As we look ahead, we think that the epicenter of the globalization debate will increasingly focus on supply chains. Our take is that, within the corporate world, we are quickly transitioning from 'just in time' to 'just in case.' Redundancy and diversification too will be emphasized, as multi-national CEOs seek out the security and certainty for delivery of goods and services across their substantial global footprints.

Maybe more important, even within existing supply chains, security has become a top priority. Notably, however, security does not matter just for fuel inputs; rather, security now extends to global payments, soft commodities, communications, and data. Given this view, we believe that politicians in large economies such as the United States and China will further accelerate industrial policies to support critical components (e.g., semiconductors, pharma, etc.) as well as industries of the future like tech, clean energy, and synthetic bio fuels. Counterparty and supplier scrutiny too will intensify.

Maybe more important, even within existing supply chains, security has become a top priority. Notably, however, security does not matter just for fuel inputs; rather, security now extends to global payments, soft commodities, communications, and data.

Exhibit 30

The Russia/Ukraine War Will Only Exacerbate Current Supply Issues



Data as at December 31, 2019. Source: Bloomberg Supply Chain database, McKinsey *Risk, resilience, and rebalancing in global value chains.*

Point #4: We Think We Are Shifting From Disinflation Towards Inflation, or Even Stagflation in Certain Instances: With more than 96% of CPI inputs well above the Fed's two percent long-run inflation target (*Exhibit 31*), the 'transitory' part of the central bank's thesis has disintegrated. Said another way, inflation is no longer confined to a small set of pandemic-dislocated categories around autos and other scarce consumer goods. Rather, it is widespread across many of the inputs that KKR uses to assess the macroeconomic landscape. To be sure, there are lots of factors that we watch, but three stand out. They are as follows:

Said another way, inflation is no longer confined to a small set of pandemic-dislocated categories around autos and other scarce consumer goods. Rather, it is widespread across many of the inputs that KKR uses to assess the macroeconomic landscape.

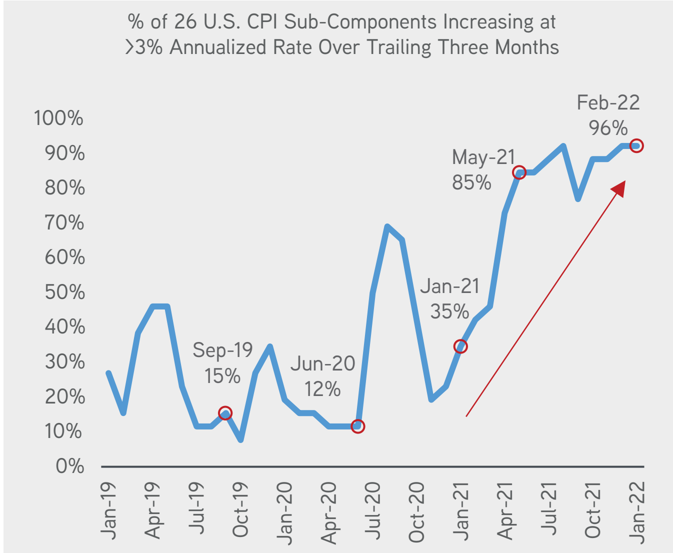
1. ***Wages:*** Though an indirect input into inflation, we see increasing wages as an important part of the inflation story in certain major economies, including the United States. We believe that ongoing tightness in the labor market will lead to higher wages across multiple industries on a sustained basis. There are three headwinds that we have identified: **1)** an increased pace of retirement of individuals 55-years of age or older; **2)** a decline in immigration; and **3)** an intensifying skills mismatch (e.g., one-third of unemployed in the U.S. have been unemployed 27 weeks or more). If we are right, then we believe that not only will corporate margins be adversely impacted, but that inflation could also settle at a higher resting 'heart rate.'

2. ***Housing:*** Across many developed markets, housing supply is extremely tight. Unfortunately, this lack of supply is coming at a time of increased household formation. In many instances, young adults are being forced to rent for longer at higher costs which has the impact of driving up inflation. This reality is important, because in the U.S., for example, actual and implied shelter rent is the largest single input in the government's inflation calculation.

3. ***Commodities:*** As we indicated above, we have for some time viewed the energy transition towards renewables as inflationary. Lack of investment in 'old economy' energy, which still powers 83% of global electricity, is leading to a $500 billion to one trillion dollar cumulative spending shortfall. At the same time, the surge in demand for renewables is creating outsized need for commodities that are in short supply, including lithium, nickel, and copper. Further exacerbating these issues are the war against Ukraine and the recent surge in Omicron cases in China.

Exhibit 31

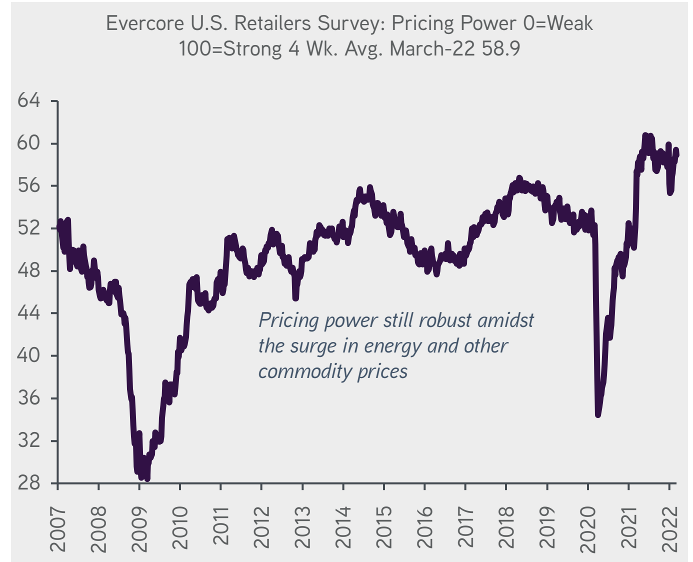
96% of CPI Sub-Components Are Rising Above the Approximate Two Percent Annualized Rate That We Would View as the Fed's Comfort Threshold



Data as at March 10, 2022. Source: BLS, Haver, KKR Global Macro & Asset Allocation analysis.

Exhibit 32

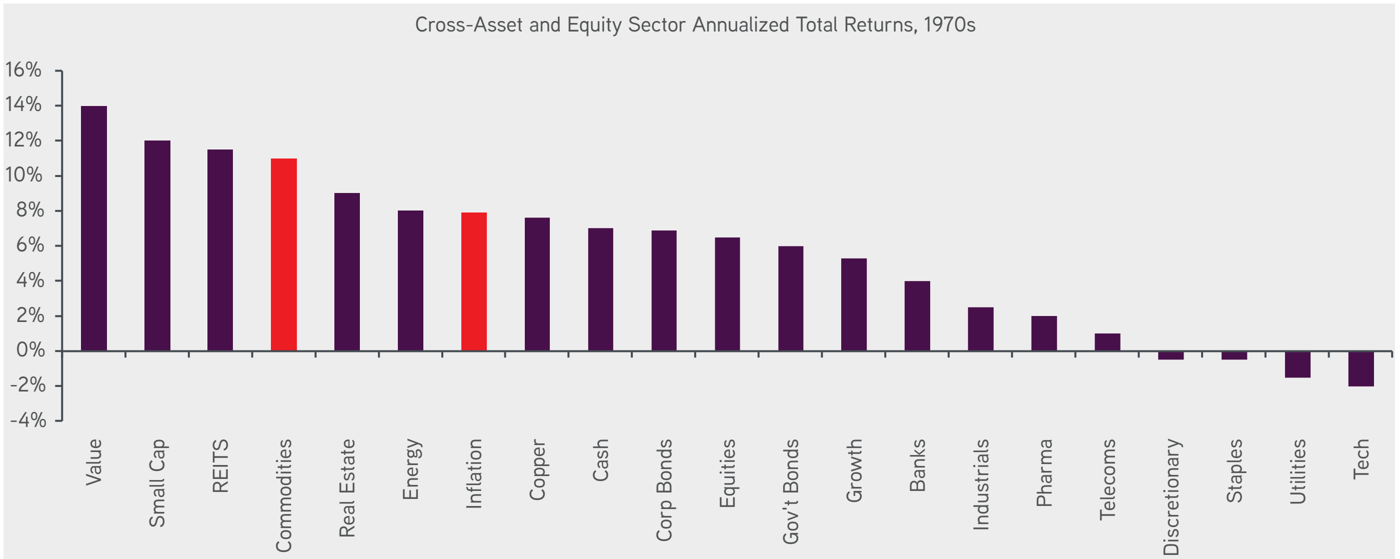
Right Now Everyone Has Pricing Power. The Key Will Be Which Companies Are Price Makers in 2023 and Beyond



Data as at March 11, 2022. Source: Evercore ISI Company Surveys.

Exhibit 33

History Shows That Price Makers Tend to Outperform in a Stagflation Environment



Data as at March 15, 2022. Source: BofA Global Investment Strategy.

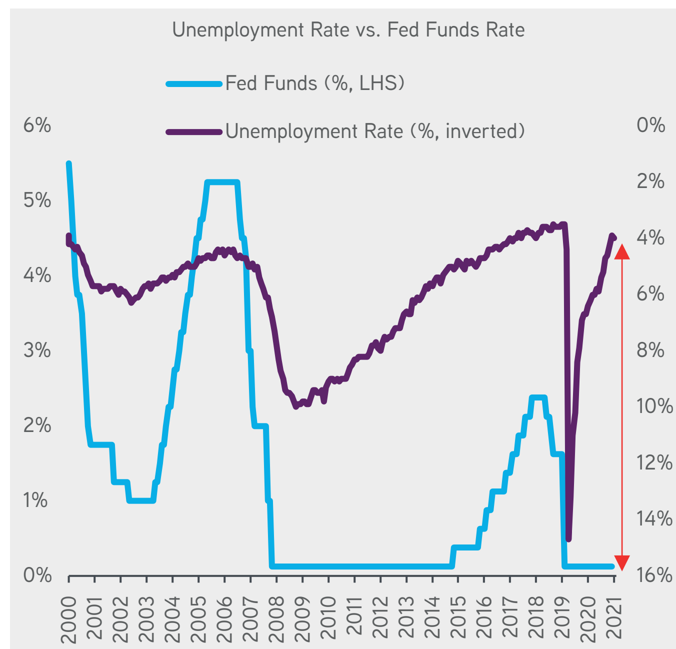
As CIOs come to better appreciate that persistently elevated inflation is likely to be a mega-theme for this cycle, we believe they will increasingly focus on companies and investments with pricing power, will likely overweight Infrastructure and Real Estate, and will seek out cash management alternatives that prevent them from losing purchasing power on their shorter-term investments. To be sure, history never repeats itself, but we think *Exhibit 33* gives some indication of what the new regime might look like if we do enter — as we think we have — a period of slowing real growth and persistently high inflation.

Point #5: Starting a Crisis Near the Lower Bound of Interest Rates: In our view, the Russia/Ukraine war only aggravates what is one of the biggest structural challenges that the global capital markets now face. Specifically, having both ballooned its balance sheet with bond purchases and slashed short-term rates to zero, the Fed is entering this latest crisis with monetary policy near its absolute lower bound relative to history. Said differently, the Fed and its peers don't have the same arsenal of tools they had, for example, after the tragic events of 9/11 occurred, or when the investment banking community began a forced de-leveraging at the onset of the GFC, or when the pandemic surprised everyone in early 2020.

In our view, the Russia/Ukraine war only exacerbates what is one of the biggest structural challenges that the global capital markets now face. Specifically, we are entering this crisis with interest rates near their lower bound.

Exhibit 34

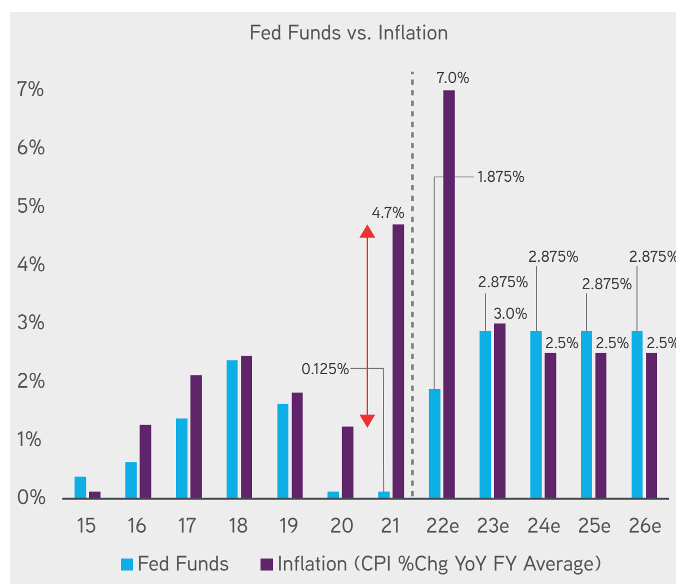
There Is a Disconnect Between the Fed Funds Rate and Unemployment...



Data as at February 4, 2022. Bloomberg.

Exhibit 35

...the Same Holds True for the Fed Funds Rate and Inflation



Data as at March 17, 2022. Source: BLS, Haver, KKR Global Macro & Asset Allocation analysis.

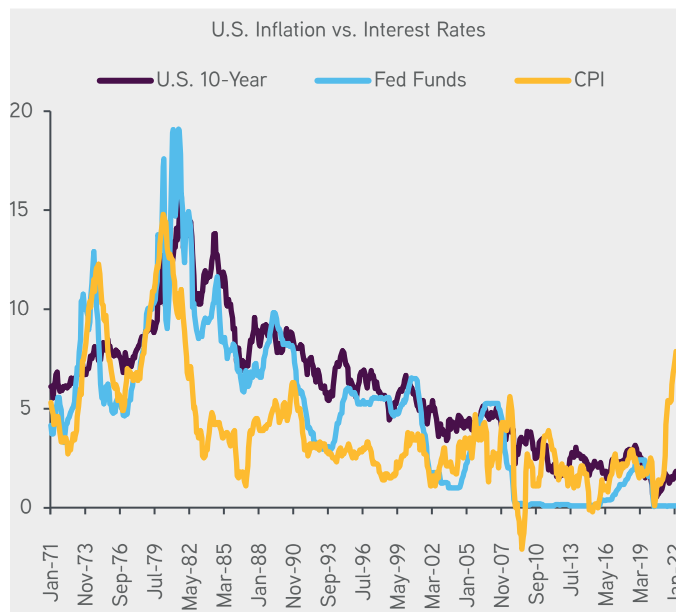
However, it is not just the absolute level of interest rates that seems at odds with current growth and inflation trends. Central bank balance sheets are bloated heading into this period of uncertainty. One can see this in *Exhibit 37*, which shows that G4 balance sheets expanded by fully nine trillion, or 21% of GDP. We find this escalation in size of central bank balance sheets incredible when one considers that bond buying, including mortgages to sustain the housing market, was implemented as an emergency pandemic measure. Moreover, the Fed has bought back almost two trillion dollars more of bonds since the vaccine was rolled out in November 2020. Similar numbers hold true in Europe and Japan.

Importantly, balance sheet management will likely be a lagging part of the tightening story. Indeed, at the March FOMC meeting, the Fed announced that it is on path to seven rate hikes in 2022, which is finally in line with our thinking; however, it also said that the balance sheet would be a *coming* attraction. Said differently, the Fed will still be re-investing principal payments into mortgages to support housing in the United States until at least May or June, despite the housing market being at red-hot levels. In our view, the strong ongoing emphasis on rates over the balance sheet is a mistake. Remember the balance sheet buying was supposed to be a pandemic-related initiative to support cyclical, economically sensitive areas of the economy such as housing. Housing across almost every city in the United States has 10–20% price appreciation.

As such, we continue to advocate that asset allocators prioritize inflation protection by overweighting collateral-based cash flows, including Infrastructure, Asset-Based Finance, and Real Estate. We also expect high cash flow conversion Private Equity and Opportunistic Credit to perform well.

Exhibit 36

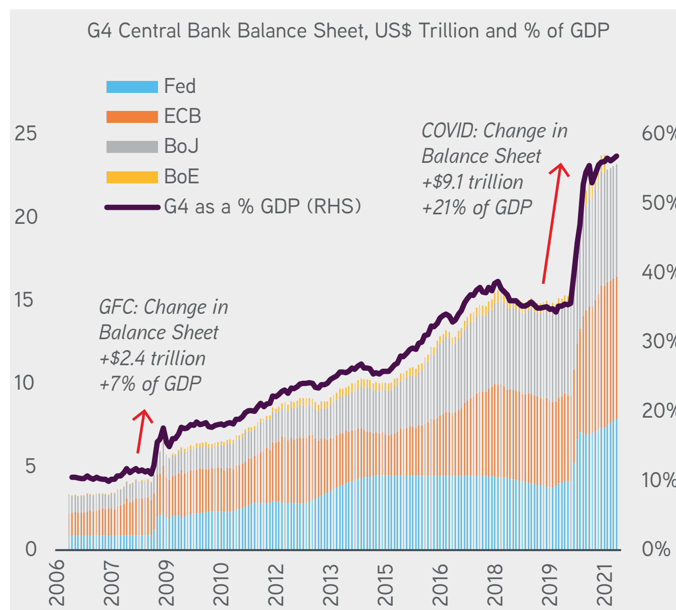
The Russia/Ukraine War Only Exacerbates the Fed's Dilemma on the Inflation Front



Data as at February 28, 2022. Source: Bloomberg.

Exhibit 37

There Is Still a Huge Amount of Stimulus in the System That Likely Needs to Be Withdrawn



Data as at October 31, 2021. Source: Morgan Stanley Research, KKR Global Macro & Asset Allocation analysis.

Against this backdrop, we are not surprised to see that inflation has spiked. One can see this in *Exhibit 36*. Unlike the post-GFC environment, consumers are spending their excess cash, much of which was directly placed in their bank accounts during this crisis. So, the reaction function this cycle is dramatically different than the sluggish spending and income recovery we saw in the post-2009 period.

Looking ahead, our base view is that inflation does not quickly fall back towards central banks' target levels. With tight unemployment, rising wages, surging commodity prices, and increasing rental incomes, we maintain our view that we are in a higher for longer environment for inflation this cycle. This viewpoint is significant because, as we detail below, it heavily influences our asset allocation tilts.

Section IV: Investment Conclusions and Asset Allocation Decisions

As we indicated in December of 2021, well before the Ukraine crisis, we see a different kind of recovery this cycle. For starters, the Fed will almost certainly and consistently overshoot its inflation target for an extended period of time. In 2010–2019, the Fed largely could not get inflation above its target. The offset is that the Fed could be quite prescriptive about the pace and level of rate hikes. However, against this new, unfamiliar backdrop, the Fed will not have the same ability to telegraph its direction to the market. As such, investors may have to endure greater uncertainty and still not gain comfort that the Fed will do enough to quell inflation. Said differently, we don't think the Federal Reserve will front end load its tightening campaign enough to tame inflation. As such, we continue to look for nominal rates to move up only stubbornly, which keeps real rates low (too low?) this cycle. If we are right, then wages will head higher in response to this backdrop, and coupled with rising commodity prices, we believe margin degradation in the second half of 2022 is imminent. So, we see a slower 2023 for corporate profits, particularly against a backdrop of tightening financial conditions.

We believe the inflation outlook will worsen on the back of the Ukraine war, which likely means lower consumer confidence and even more demand for wage increases. Importantly, we see the war — either formally or informally — continuing for some time. Thus, we envision a world where both soft and hard commodity prices remain higher for longer. Beyond the war in Ukraine, we are also increasingly concerned that the recent breakout of Omicron in China will lead to a bumpier, more inflationary global economic outlook. As such, we continue to advocate that asset allocators prioritize inflation protection by **overweighting collateral-based cash flows, including Infrastructure, Asset-Based Finance, and Real Estate.** We also expect high cash flow conversion Private Equity and Opportunistic Credit to perform well.

Investors, in our view, should continue to shorten duration in both Public Equities and Global Fixed Income. In equities, focus on companies with real pricing power and high cash flow conversion. Last cycle (i.e., 2010-2019), being long secular growth and long-duration fixed income was what worked. This cycle likely requires a different playbook, we believe.

Overweight opportunistic strategies in both liquid and illiquid markets: Volatility, in our view, is creating real alpha opportunities. We are very bullish on Opportunistic Liquid Credit as well as flexible capital in the private markets that can deliver financial solutions to good companies with bad capital structures. Preferred, convertibles, and convertible preferred securities could all be appealing in the new environment we are envisioning.

Dislocations bring opportunity, and to this end, we need to not only focus on defense but also to play offense as well, including leveraging a more thematic bent to our investing. We encourage all investors to focus on getting the themes right. Lean into high conviction ideas and/or complexity including the energy transition/security, cyber, defense spending, digitalization, automation/logistics, and the rise of the global millennial.

Section V: Conclusion

War is not always inevitable. It is always a defeat for humanity.

— Pope John Paul II

To paraphrase what Pope John Paul II so eloquently said, war is always a defeat for humanity. At KKR, there is no positive spin or angle that we have been able to identify on the war

in Ukraine. Beyond the near-term human tragedy, we also believe the current landscape could have profound and long-lasting macroeconomic and asset allocation implications. Indeed, we have a hard time imagining a world where Russia is quickly reintegrated into the global economy, or a world where monetary policy quickly gets back to neutral (*Exhibit 40*), or a world where global supply chains are not reorganized or strained by ongoing events in China (*Exhibit 39*). Said differently, the Russia/Ukraine war has accelerated the regional polarization thesis that we have laid out in recent years. Moreover, it extends the breadth of industries where national security interests could impact both the growth rate and structure of competition.

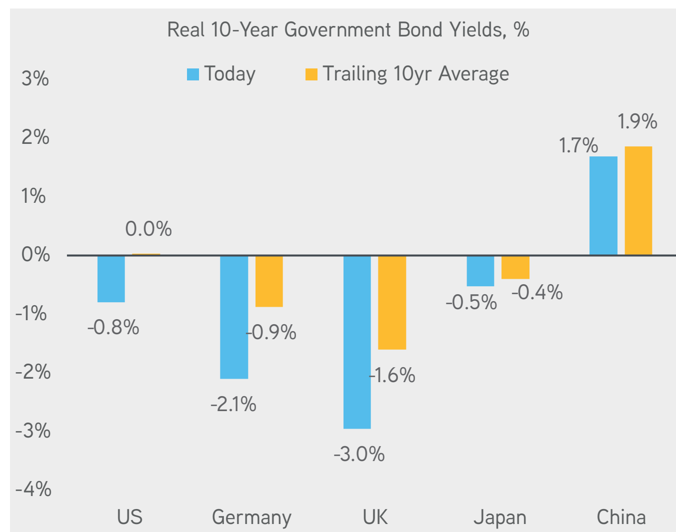
As we look ahead, we think we are stuck between three forces: war in Ukraine, supply chain issues in China (driven by rising Omicron cases), and above average inflation in the United States. These forces are not likely to get 'fixed' overnight. The offsets are that productivity is booming, consumer savings is high, and unemployment is low.

So, our base case is that we expect a grinding market that is full of sound and fury, signifying nothing. Real rates are still very, very negative (*Exhibit 38*) in the West, so the Fed needs to stay hawkish. However, as *Exhibit 40* suggests, that hawkishness comes with risks. For stocks, it likely means that valuation of companies that require longer duration cash flows could lag, while shorter-duration, collateral-based cash flows are likely to be revised upward.

As we look ahead, we think we are stuck between three forces: war in Ukraine, supply chain issues in China (driven by rising COVID), and above average inflation in the United States. These forces are not likely to get 'fixed' overnight. The offsets are that productivity is booming, consumer savings is high, and unemployment is low.

Exhibit 38

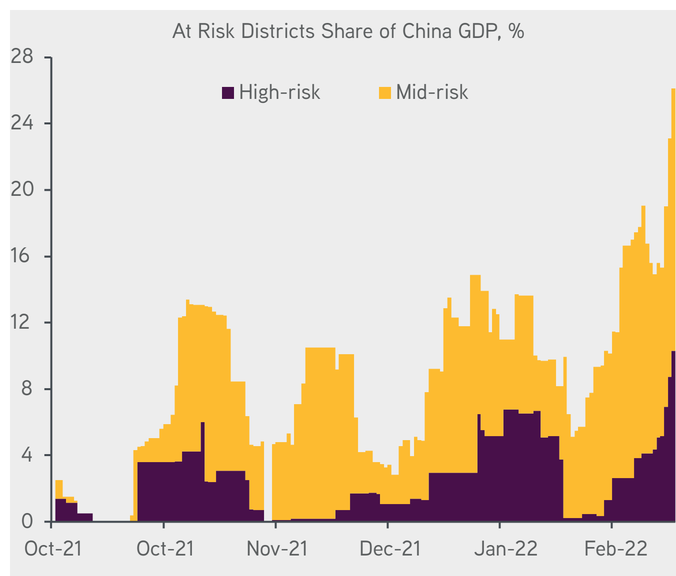
Despite Surging Inflation, QE Has Kept Real Rates Extremely Low Relative to History



Data as at February 28, 2022. Source: Bloomberg, KKR Global Macro & Asset Allocation analysis.

Exhibit 39

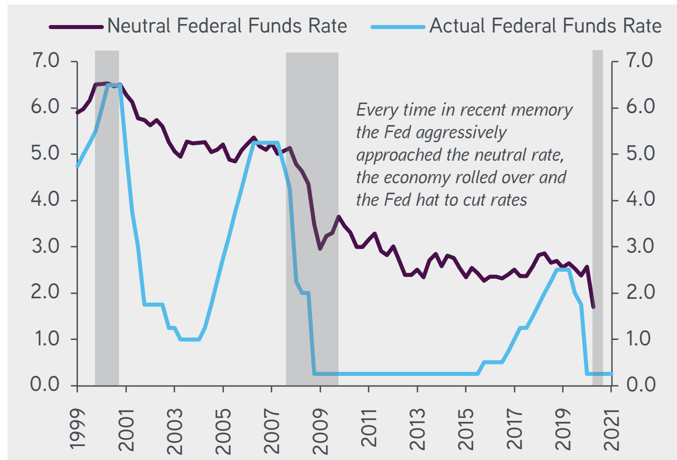
In China, the Government Is Classifying More Regions as Middle or High Risk from Rising Cases of Omicron



Data as at March 16, 2022. Source: Bloomberg.

Exhibit 40

We Are Early in the Tightening Cycle, But Ultimately a Move Towards Neutrality Means Slower Growth and More Volatility Ahead



Data as at December 31, 2021. Source: Piper Sandler, Bloomberg.

Given these views, we think that in many instances, portfolio construction and asset allocation need to be rethought. In particular, we believe that the recent success of the traditional 60/40 asset allocation benchmark will be seriously challenged in the macroeconomic environment we envision. As such, we advocate shortening duration, leaning into collateral-based cash flows, and overweighting opportunistic vehicles. We also suggest increasing diversification by allocating across more strategies, including some non-correlated ones. At the same time, we continue to directionally steer away from high beta growth equities with low cash flow conversion prospects. Ultimately, though, we believe investors need to remain flexible. As author John C. Maxwell wrote, 'Be stubborn about your vision, but flexible with your plan.'

Beyond the near-term human tragedy, we also believe the current landscape could have profound and long-lasting macro-economic and asset allocation implications. Indeed, we have a hard time imagining a world where Russia is quickly reintegrated into the global economy, or a world where monetary policy quickly gets back to neutral, or a world where global supply chains are not reorganized or strained by ongoing events in China.

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Kohlberg Kravis Robert & Co. L.P.
30 Hudson Yards
New York, New York 10001
+ 1 (212) 750 8300
www.kkr.com