Stick to the Plan
TABLE OF CONTENTS

INTRODUCTION ........................................................................................................ 4

SECTION I: MACRO BASICS .................................................................................... 11
Economic Outlook, Including Trade ................................................................. 11
United States Outlook ..................................................................................... 15
Europe Outlook ............................................................................................... 17
China Outlook ................................................................................................. 18
Mexico Outlook ............................................................................................... 20
Interest Rate Outlook ...................................................................................... 22
Equities: EPS/Valuation/Total Return .......................................................... 25
Where We Are in the Cycle ............................................................................. 30

SECTION II: KEY THEMES .................................................................................. 33
Corporate Carve-Outs ....................................................................................... 33
Yearn for Yield ................................................................................................. 35
Own Some Cash Flow Compounders ............................................................ 38
Buy Dislocation/Dispersions ......................................................................... 40
Experiences Over Things ................................................................................ 42

SECTION III: INVESTMENT CONSIDERATIONS/RISKS ................................. 44
Reliance on Technology .................................................................................. 44
Complex Geopolitical Environment ............................................................. 45
Corporate Margins at Risk ............................................................................. 47

SECTION IV: CONCLUSION ................................................................................. 48
Stick to the Plan

With all the geopolitical ‘noise’ swirling around these days, there is a growing propensity in the investment community to react quickly to near-term news flows, or even head to the sidelines until there is greater visibility. Our advice: stick to the plan. No doubt, overall portfolio risks are higher these days, but our work is telling us that there is still an attractive path forward for thoughtful investors who are willing to invest heavily behind big, large tail macro themes.

Specifically, we want to own more cash-flowing assets linked to nominal GDP as part of our goal of frontloading as much yield as possible in the portfolio. This approach should help mitigate both concerns about late cycle behavior as well as aggressive central bank policies. We also favor owning more Opportunistic Credit and Special Situations, both strategies that have the flexibility to lean into dislocations. Finally, we feel compelled to embrace Complexity through a variety of investment disciplines, including Energy, Private Equity, Real Estate, and Infrastructure. If we are right about our worldview, then our existing asset allocation framework, which includes an investment process that we have developed over nearly two decades, should continue to serve us well amidst the recent spike in uncertainty. Said differently, if “it ain’t broke, don’t fix it.”

“If it ain’t broke, don’t fix it.”

THOMAS BERT LANCE
DIRECTOR OF THE OFFICE OF MANAGEMENT AND BUDGET, 1977
Introduction

While I am not one hundred percent sure if Thomas Bert Lance, President Jimmy Carter’s Director of the Office of Management and Budget was the original creator of the quip “if it ain’t broke, don’t fix it”, I do find his 1977 public statement about government intervention to be the most relevant – and somewhat ironic – source of this iconic phrase. Almost eerily given present circumstances, Lance went on to explain, “That’s the trouble with government: Fixing things that aren’t broken and not fixing things that are broken.” Well, with public deficits ballooning, corporate debt levels surging, and geopolitical tensions rising, one does have to wonder whether the United States – and for that matter, many of its peers – are doing enough to ‘fix’ those issues that now are plaguing both global GDP growth and capital markets stability.

EXHIBIT 1

The Combination of the Tax Cuts and the Recent Budget Deal Could Drive a Record Divergence Between the U.S. Budget Balance and the U.S. Unemployment Rate

![Graph showing divergent trends in unemployment rate and budget balance percentage of GDP](image)

Data as at April 4, 2019. Source: Bloomberg.

EXHIBIT 2

As a Percentage of GDP, Budget Deficits Increase by 4.1%, on Average, During U.S. Recessions

![Graph showing average change in budget deficit during recessions](image)


Cutting through all the headline noise, we are of the mindset that globalization, or the notion that there is merit to the growing interdependence of the world’s economies, cultures, and populations, is under serious review – and potentially under attack. To many individuals with whom we speak, globalization just has not delivered the prosperity and harmony that they were told it would. Nominal GDP has decelerated, not accelerated, and with it, wealth concentration has intensified, not dissipated. As a result (and as we detail below), the reversal of globalization is now manifesting itself both in terms of shrinking cross border flows (Exhibit 4) and softening global trade as a percentage of GDP (Exhibit 106). Consistent with these trends, we are also seeing a fraying of traditional political structures, which is leading to more extreme representation by both the left and the right. These emerging headwinds are significant, as they potentially represent a structural break in the traditional world order that historians will use to define the last 30 years. If we are right about where we are headed, then investors should brace for a period of lower absolute returns with both higher volatility and increasing dispersions. Hence, the value of sound portfolio construction within each individual fund as well as across entire investment plans, including endowments, pensions, and family offices, has never been more important, we believe.

“We are of the mindset that globalization, or the notion that there is merit to the growing interdependence of the world’s economies, cultures, and populations, is under serious review—and potentially under attack.”
National Security Issues Are Now Being Bundled with Rule of Law and Trade Negotiations

EXHIBIT 3

Traditional Trade

Rule of Law

National Security


EXHIBIT 4

Cross-Border Capital Flow Trends, a Traditional Proxy for Globalization, Are Reversing as Protectionism Ramps Upwards

Global Cross Border Bank Lending as a % of GDP


Meanwhile, from a purely tactical perspective, Lance’s phrase also resonates well with how KKR’s Global Macro, Balance Sheet, and Risk Analytics team (GBR) is feeling about its current asset allocation framework. Specifically, whereas we had increased risk exposure in early January and then dialed some of that very same exposure back in February after a roaring surge in risk assets, we now don't feel compelled to dial back up our risks. As we detail below, we are structurally more cautious on the ‘trade war’ that is unfolding – and what that means for the traditional global world order – than some of the investors with whom we speak. Mexican trade issues appear headed in the right direction; however, when it comes to China, our view is that emerging issues surrounding rule of law and national security have now become intertwined with more conventional trade issues.

In our humble opinion, this development is not a positive one, and as such, we are now using a target multiple that is lower than the historical median on the S&P 500 to compensate for some additional risk premium that we think is now required (see Section I). To be sure, central banks are now more dovish than what we thought in 2018, and we now have the Federal Reserve easing twice in our base case for 2019. As we show in Exhibit 52, an accommodative Federal Reserve is almost always a good thing for risk assets. However, this time may be slightly different, as current headwinds feel more structural in nature, including heightened potential for sustained disinflation as well as more permanence around trade-related tensions. Moreover, while this recovery has been long in duration, it has been short on synchronized momentum.

So, if we had to speculate today on tomorrow about this cycle, the majority of our team would posit that this one clearly will be remembered – depending on what region one evaluates – as a series of mini-economic, idiosyncratic cycles that are neither strong enough to drive up inflation and curtail investment excesses, nor weak enough to induce a more traditional recession on a global basis. That said, given the fundamental interlinkage of global supply chains that are now being challenged, there is a growing contingency on the team who are increasingly worried about a more synchronized downturn occurring in 2020. Regardless of exactly how things play out, our team is fully confident that a backdrop of uneven growth, coupled with periodic bouts of volatility, favors a global investment approach that can transition across capital structures to gauge relative value. It also benefits allocators with longer duration sources of funding that allows investors to avoid any forced selling at disadvantaged levels when they should actually be adding to risk assets.

We also want to underscore our existing macro view that we could be entering a period where the growth rate of nominal GDP and global profits are more aligned. There is even the potential that profits lag GDP growth in an economic downturn. In the past decade, by comparison, global profits have reached uncharted territory, driven by unprecedented central bank resolve, lower corporate taxes in the

The trend towards large corporate multinationals divesting non-core subsidiaries remains strongly in force. The complexity associated with these transactions is substantial, but carve-outs often have the potential to unlock significant value, particularly as it relates to cash flow generation.
United States, robust buybacks, and vigorous cost take-outs. Moreover, with U.S. margins now at record levels, we think that the profit gap that has existed between the U.S. and the rest of the world could also converge (Exhibit 6).

**EXHIBIT 5**

**U.S. Corporate Profit Growth and Nominal GDP Are Becoming More Aligned...**

Ratio of U.S. Corporate Profits Growth to U.S. Nominal GDP Growth (5-Year CAGRs, Rolling)


**EXHIBIT 6**

...As the Profit Gap Between the U.S. and the Rest of the World Begins to Finally Converge

Change in Trailing 12-Month EPS Since 2007 Peak

Data as at March 31, 2019. Source: KKR Global Macro & Asset Allocation analysis.

So, what is our call to arms for the second half of 2019 and beyond? See below for full details, but our key messages are as follows:

**We remain bullish on deconglomeratization, or carve-outs.** In addition to what we see occurring in the United States, recent trips to Tokyo and London lead us to believe that the trend towards large corporate multinationals divesting non-core subsidiaries remains strongly in force. Recent divestiture announcements out of Hitachi, Nestle, General Electric, Bayer, and Walt Disney only add to our optimism. From what we can tell, a combination of sagging returns on capital, increased shareholder activism, and intensifying local competition all suggest that more activity is in store, which we view positively for Private Equity managers. Key to our thinking is that the complexity associated with these transactions is substantial, but carve-outs often have the potential to unlock significant value, particularly as it relates to cash flow generation. In addition to the sizeable opportunity we are seeing in Private Equity for global corporate carve-outs, we are also observing similar compelling trends across Energy Real Assets and Infrastructure, particularly in the area of optical fiber. Importantly, we like the opportunity set for this theme not only on the equity side but also on the debt side.

**The ‘Yearn for Yield’ underscores the structural reinvestment risk that we think has emerged for income-oriented investors.** From our perch at KKR, we see reinvestment risk as one of the greatest challenges that CIOs now face. Importantly, this risk is coming during a period that we have identified as The Uncomfortable Truth, which we define as record low interest rates amidst bulging deficits and soaring debt loads. Our advice is to own more cash-flowing assets linked to nominal GDP, build more flexibility across mandates, and shorten duration where appropriate. Importantly, despite our view that inflation will remain low in the medium term, we respect that the ‘Authorities’ are trying to shrink existing debt loads by holding nominal interest rates below nominal GDP. As such, we believe strongly that an overweight to modestly leveraged Infrastructure and certain Real Estate investments with yield is prudent to add some ballast to one’s portfolio. We are also quite constructive on Asset-Based Finance, which continues to provide us with lots of shorter duration opportunities with good cash flow characteristics and sound collateral.

**Lean into periodic dislocations and growing dispersions.** As we show later in Exhibit 92, our implied default indicator has spiked to recessionary levels multiple times in recent years, despite the reality that we have not technically had a recession. We view these false readings as compelling because it confirms our thesis that the capital markets are giving investors multiple opportunities to lean into dislocation to buy mispriced assets. Given inadequate dealer inventories, rising geopolitical tensions, and slowing liquidity growth, we believe that the frequency of these occurrences is likely to increase, not decrease, in the coming quarters. Meanwhile, as we detail below (Exhibits 96 and 97) our research shows that dispersions across many equity and debt markets are starting to increase again—a backdrop that we believe allows investors to buy attractive cash-flowing assets at reasonable valuations at this late point in the capital markets cycle. At the moment, we are playing this macro theme through our Opportunistic Credit and Distressed/Special Situations allocations, but we do believe it is constructive for Equity Hedge Fund managers as well.
Own some secular growth stories that are ‘Cash Flow Compounders’ amidst slowing nominal GDP. With China’s nominal GDP falling from 36.0% year-over-year growth in 1994 to a low of 6.7% in 2016, overall global nominal GDP growth has suffered mightily. This decline makes sense to us, as China typically accounts for one third of total global growth these days. As we look ahead, we are still not expecting any rebound soon, as the OECD projects that China’s nominal growth will fall further towards just 5.9% by 2030.

Meanwhile, though GDP and corporate profits are not 100% correlated, they are linked, and the GDP slowdown is having an impact on the ability for companies to grow. All told, the percentage of companies in the MSCI All Country World that are poised to grow eight percent or more has fallen sharply to 23% in 2018 from more than 40% during the 2000 – 2001 period. Beyond just China, we also link some of the slowdown to the massive impact disruptive technology has had in almost every industry. In fact, according to investment bank Goldman Sachs, global earnings excluding technology have not grown in absolute terms since the Global Financial Crisis (GFC). In terms of where to invest behind our favorable outlook on secular growth stories, we currently favor several regional themes over global ones, including U.S. business services, European logistics, Asian travel, and U.S. automation. Importantly, we feel strongly that the Public Equity markets are actually trading well below the Private Growth markets in many parts of the world, especially in China. Regardless of whether they are in the Public or Private Markets, we tilt heavily in favor of companies that have established cash flowing business models where there are identified economies of scale that result in significant improvement in cash flow yields. By comparison, we are quite cautious on companies that cannot generate positive cash flow, and we look for their cost of capital to rise meaningfully into 2020.

In terms of what this all means for our asset allocation positions, we note the following:

We are lowering our U.S. Short Duration Government Bond bet to five percent from seven percent. We still like this investment idea, but two-year U.S. yields have fallen from a high of 2.61% in January to 1.93% currently1. So, some of the easy money has been made. Overall, though, we still retain an outsized position because, when we look around the world, U.S. two-year Treasuries offer a current coupon that – apart from China two-year bonds – dwarfs almost any other sovereign debt that we can find (regardless of duration).

Our Opportunistic Credit bet increases by another 100 basis points to eight hundred basis points, compared to a benchmark of zero. This bet remains an outsized one for us, but we are convinced that more – not less – flexibility is required to be effective in the Liquid Credit market these days. In particular, we want to have the ability to toggle amongst Levered Loans, High Yield, and Structured Products. We are currently tilted more towards Levered Loans in our Opportunistic Credit portfolio. However, we might actually increase this exposure further, given that Levered Loans have lagged High Yield of late. Also, as we detail below, we are seeing dispersions start to widen across sectors and between securities within a sector, both trends which could provide tailwinds to Opportunistic Credit managers.

We are raising our Cash allocation to three percent from two percent. We had added one percent to Cash when we took the money off the table in Public Equities in February 2019 (see Insights: Another Swing at the Plate). However, given the unsettled backdrop of late, we think that having even a little more extra dry powder makes sense these days. Where might we use it in a dislocation in the second half of the year? We likely would add to Special Situations/Distressed, a position we have been building incrementally over the last 12-18 months. We might also start to put some money back into Private Growth investments, an area where we currently hold a substantial underweight. The reality is that valuations in the Private Growth area got stretched, but they are finally starting to adjust meaningfully, an emerging opportunity for investors who have been patient in this area.

We reiterate our Overweight positions in Traditional Private Equity (300 basis points overweight), Distressed/Special Situations (400 basis points overweight), Asset-Based Finance (600 basis points), and Energy/Infrastructure (500 basis points overweight). As these positions indicate, we think that the value of the illiquidity premium is higher later in the cycle. One can see this in Exhibits 7 and 8. We also want to signal that we are adopting more of a later cycle playbook by targeting overweight positions in Distressed/Special Situations as well as strategies linked to collateral and nominal GDP like Asset-Based Finance and Energy/Infrastructure.

Private Equity Typically Outperforms Over the Cycle Relative to Public Equities. However, the Majority of the Alpha Comes When Capital Markets Conditions Are Not So Ebullient

---

1 Data as at June 13, 2019. Source: Bloomberg.
The Illiquidity Premium in Private Credit Has Actually Grown in Importance Since 2016 Relative to Publicly Traded Levered Loans and High Yield

EXHIBIT 8

The Illiquidity Premium in Private Credit Has Actually Grown in Importance Since 2016 Relative to Publicly Traded Levered Loans and High Yield

EXHIBIT 9

KKR GMAA Target Asset Allocation

<table>
<thead>
<tr>
<th>ASSET CLASS</th>
<th>KKR GMAA JUN-19 TARGET (%)</th>
<th>KKR GMAA FEB-19 TARGET (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Equities</td>
<td>53</td>
<td>53</td>
</tr>
<tr>
<td>U.S.</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Europe</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>Turkey</td>
<td>-1</td>
<td>0</td>
</tr>
<tr>
<td>All Asia ex-Japan</td>
<td>10</td>
<td>7</td>
</tr>
<tr>
<td>Japan</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Latin America</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Total Fixed Income</td>
<td>23</td>
<td>30</td>
</tr>
<tr>
<td>Long Duration Gov’t</td>
<td>0</td>
<td>20</td>
</tr>
<tr>
<td>U.S. Short Duration</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Asset-Based Finance</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>High Yield</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Levered Loans</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>High Grade</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Emerging Market Debt</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Opportunistic Credit</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>Global Direct Lending</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Real Estate Cr (B-piece)</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Stabilized Credit</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Real Assets</td>
<td>9</td>
<td>5</td>
</tr>
<tr>
<td>Opportunistic Real Estate</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Energy / Infrastructure</td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>Gold</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Grains (Corn)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Other Alternatives</td>
<td>12</td>
<td>10</td>
</tr>
<tr>
<td>Traditional PE</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td>Distressed / Special Sit</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Growth Capital / VC</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Cash</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>


We reiterate our Underweight positions in Long Duration Global Sovereign debt (2000 basis points), High Grade Debt (500 basis points), and Latin American Public Equities (200 basis points). As our allocation preferences indicate, we think that there is better value in the short-end of the U.S. Treasury curve (e.g. 2-Year notes) relative to the long-end of the curve. Also, given that we hold approximately 30-40% of our total allocation in some form of private securities that hopefully capture the value of an illiquidity premium, we think our “barbell” approach, which includes both overweight positions in Cash and shorter duration U.S. government bonds, makes a lot of sense. Meanwhile, within global Public Equities, we still tilt away from Argentina and Mexico relative to Asian Equities. Brazil is certainly improving off a low base (and has done better than its regional peers on a 12-month basis), but we see its recovery this year as more cyclical than secular. Corruption headwinds, complex taxation, and high unemployment are all still issues that make us somewhat guarded about the country.

We also want to underscore our existing macro view that we could be entering a period where the growth rate of nominal GDP and global profits are more aligned.

Looking at the big picture, our view is that we may be “stuck” in a trading range. On the one hand, interest rates remain low, particularly relative to cash flows, and this arbitrage should prevent any long sustained, 2007-like downturn in risk assets (Exhibit 11).
The Earnings Yield Arbitrage Relative to the Risk-Free Rate Is Still Positive in the U.S., But It Has Narrowed Meaningfully in Recent Years

On the other hand, corporate margins are high, valuations are generally full, and earnings power is slowing. Importantly, these headwinds are intensifying at a time when global trade tensions now definitely require a higher risk premium, we believe. As we describe in greater detail below, we are more focused on the long-term impact of trade on capital expenditures – not just the direct hit to the consumer segment of the economy. Indeed, many of the sell-side and media reports we have read are likely underestimating the magnitude of the capex hit to GDP. Our quick math is that a 10% reduction in capex linked to CEO reticence is on par or greater than all direct tariff drags combined (Exhibit 26).

Against this macroeconomic backdrop, we generally like our positioning, and as such, we still feel inclined to stick with many of the themes we laid out in January. Said differently, “If it ain’t broke, don’t fix it.” Simply stated, we feel confident in our long-term macro themes, and as such, we think the potential for continued outperformance in our portfolio during the second half of 2019 remains significant. Key to our thinking is that we want to allocate capital towards ideas being awarded a significant complexity discount, particularly relative to underlying cash flows. Our deconglomeratization thesis is clearly a play on this mindset, but as we detail below, we think that there are other significant opportunities where cash flow is attractively priced – and with some downside protection – in the debt markets too. In particular, we strongly favor Asset-Based Finance, B-piece Real Estate Credit and Infrastructure assets linked to nominal GDP, particularly those with yield. Without question, at this point in the cycle we want to own assets with collateral that are long fiscal initiatives over monetary ones. Finally, given our view that we are now in a structurally slower nominal GDP environment (Exhibit 46), we think that owning some early stage secular winners in the Public Equity markets also makes sense.

If we are wrong in our outlook, we think that it will be because growth trends become worse than the more modest slowdown that we are forecasting. However, as we detail below, we think that a strong consumer savings pool and an accommodative Fed should bolster our base case relative to something more extreme. There is also the risk that economic growth could rebound faster than expected if President Trump does ultimately secure an attractive trade deal, despite the Fed having already eased meaningfully. In this scenario central bankers would have to move more quickly than the consensus is now forecasting. However, given our view that inflation remains challenged and the government’s stimulus will start to dissipate in the second half of the year, we think the potential for an upside surprise in growth during the next six to 12 months is much more unlikely.
We now expect the Fed to cut rates by 50 basis points in the second half of 2019, starting in July or September. Previously, we had no cuts in our Fed outlook for 2019.

If our ‘mild recession’ base case comes to pass in 2020, we would expect another 100-150 basis points of cuts next year, leaving rates hovering just above zero.

Importantly, however, our dovish Fed outlook does not translate into sharply lower expectations for the long-end of the curve. Specifically, our fair value model points to 10-Year yields trading in a 2.0-2.5% range in the second half of 2019 (year-end target = 2.25%), which implies no significant change relative to current levels.

We use a 16.3x multiple for the S&P 500 heading into 2020, compared to a historical median of 17.0x for today’s low real rate environment. We think that peaking corporate margins and heightened trade tensions largely keeps the market “stuck” in a trading range through year-end 2020 (with the S&P 500 returning four to 11% during this period.) The good news for alpha generation is that dispersions are widening, as the massive tailwind from Quantitative Easing (QE) dissipates.

We are bullish on our five key macro themes: Deconglomeration, Yearn for Yield, Lean Into Complexity/Dislocation, Own Some Cash Flowing Secular Growth, and Experiences over Things.

As we detail below, the underlying dependence on Technology for the global economy/capital markets is likely underappreciated. All told, nearly 100% of global profits this cycle are – to date – linked to the Technology sector.

Finally, as we describe below in Section III (Investment Considerations/Risks), overall activity in the Technology sector is becoming somewhat outsized, we believe. All told, Technology is now driving 100% of global earnings growth, and it is accounting for nearly 40% of lease up in certain areas of the Real Estate market. Meanwhile, new issuance in the Credit markets is skewing heavily towards levered transactions in the Software arena. So if the Technology sector were to stumble for any reason (including increased regulation), the knock-on effect on the global economy could be profound. At the moment, we do not expect a major crack in the digital economy, but we do believe that the recent underperformance of several high profile technology IPOs underscores our point that private investors have already begun to overpay for cash flows – many of which we think may not materialize as robustly as the consensus now thinks.

At a much broader and higher level, we think that a structural divide between the U.S. and China is likely to continue. As part of this new reality, China’s government is going to move to internalize its economy as fast as it possibly can.

We Favor Upfront Yield, Collateral and Mandate Flexibility as We Enter a New Phase of This Cycle

---

**EXHIBIT 12**

We Favor Upfront Yield, Collateral and Mandate Flexibility as We Enter a New Phase of This Cycle

<table>
<thead>
<tr>
<th>KKR GMAA Target Asset Allocation, % Over / Under Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date as May 31, 2019. Source: KKR Global Macro &amp; Asset Allocation analysis.</td>
</tr>
</tbody>
</table>
SECTION 1: Macro Basics

Economic Outlook, Including Trade

"I want 5G, and even 6G, technology in the United States as soon as possible. It is far more powerful, faster, and smarter than the current standard. American companies must step up their efforts, or get left behind. There is no reason that we should be lagging behind on something that is so obviously the future. I want the United States to win through competition, not by blocking out currently more advanced technologies. We must always be the leader in everything we do, especially when it comes to the very exciting world of technology!" Donald J. Trump, February 21, 2019

EXHIBIT 13

EM Countries Are Expected to Account for More than Three-Quarters of Total Global Growth in 2019

![Diagram showing 2019 Real Global GDP Growth, %]

Data as at April 9, 2019. Source: IMFWEO, Haver Analytics.

EXHIBIT 14

We Are Generally More Cautious on Global Growth and Inflation in 2019

<table>
<thead>
<tr>
<th>2019 GROWTH &amp; INFLATION BASE CASE ESTIMATES</th>
</tr>
</thead>
<tbody>
<tr>
<td>GMAA Target Real GDP Growth</td>
</tr>
<tr>
<td>---------------------------------------------</td>
</tr>
<tr>
<td>U.S.</td>
</tr>
<tr>
<td>Euro Area</td>
</tr>
<tr>
<td>China</td>
</tr>
<tr>
<td>Mexico</td>
</tr>
</tbody>
</table>


In the following section we update our global GDP forecast by region, including the United States, Europe, China, and Mexico. One can see a snapshot of our overall conclusions in Exhibit 14. While we are upgrading our U.S. forecast slightly at the headline level, the quality of the GDP growth has deteriorated. Moreover, U.S. growth is clearly decelerating. Meanwhile, we remain cautious on growth in Europe and Mexico, both regions that continue to struggle with tough political crosscurrents as well as uneven fixed asset investment. Finally, we retain our below consensus forecast for GDP for China.

While we still feel confident in our economic frameworks, we do want to highlight that trade tensions make forecasting visibility more clouded than usual. We think that President Trump maintains his recent decision to raise the tariff rate to 25% from 10% on the existing U.S. $200 billion of goods through the end of at least 2019, and we now think that there is a greater than 50% chance that he imposes the additional $325 billion in tariffs. This step-up in the $325 billion in tariffs represents a change in our thinking since February. As we show in Exhibits 15 and 16, respectively, implementing the final set of tariffs would affect not only key consumer goods like smart phones, but it would also tariff goods where there are fewer options to switch production outside of China. Over time, this ‘new’ reality will surely accelerate the shift of supply chains in many areas to other lower cost Asian producers like Vietnam, Thailand, and Malaysia.

EXHIBIT 15

Successive Rounds of U.S. Tariffs on China Will Increasingly Hit Goods with Fewer Sourcing Alternatives

![Diagram showing Average % of U.S Imports Sourced from China]

The Final $325 Billion Includes Some Very Important Consumer Products

<table>
<thead>
<tr>
<th>BRIEF DESCRIPTION</th>
<th>2017 U.S. TRADE IMPORTS FROM CHINA, US$ BILLION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobile phones</td>
<td>45</td>
</tr>
<tr>
<td>Laptop computers</td>
<td>37</td>
</tr>
<tr>
<td>Toys (other than bicycles, puzzles, models)</td>
<td>12</td>
</tr>
<tr>
<td>Video game consoles and machines</td>
<td>5</td>
</tr>
<tr>
<td>Computer monitors</td>
<td>4</td>
</tr>
<tr>
<td>Solid state HDDs</td>
<td>4</td>
</tr>
<tr>
<td>Flat Panel TVs over 34.29 cm</td>
<td>4</td>
</tr>
<tr>
<td>Multifunction office machines</td>
<td>2</td>
</tr>
<tr>
<td>Knitted cotton apparel</td>
<td>2</td>
</tr>
<tr>
<td>National Flags</td>
<td>2</td>
</tr>
</tbody>
</table>


U.S. Firms Generate a Significant Amount of Revenues by Selling Into China. We Feel Strongly This Reality Has Been Underappreciated

President Trump’s only focus

**Key risk if China goes after U.S. businesses in China**

Goods through trade* 207
Goods through subsidiaries 59
Services imports 38
Services through subsidiaries US Surplus With China -284 20

2017: U.S. Surplus (Deficit) with China, US$ Billions (China Sold to U.S. Less U.S. Sold to China)


At a much broader and higher level, we think that a structural divide between the U.S. and China is likely to continue. As part of this new reality, China’s government is going to move to internalize its economy as fast as it possibly can. Already, exports as a percentage of GDP have been shrunk to 18% of GDP, compared to 36% in 2007 (Exhibit 19). For perspective, U.S. exports as a percentage of GDP are 12% and Europe’s are 46%. Indeed, after 24 years of traveling to China, my conclusion after my most recent trip is some structural damage has been done to the U.S.-China relationship. As such, it is caveat emptor on both sides of the world.

There are several layers of disappointment and/or concern amongst both parties to consider. First, many U.S. CEOs in China are disappointed that President Xi’s original economic reform plan from 2013 has actually not progressed as much as they might have hoped for. In fact, the percentage of U.S. CEOs in China who were optimistic about business conditions recently dropped to 38% from 45%, according to the 2018 U.S. China Business Council Survey we track. Not surprisingly, this sentiment is adversely affecting their commitment to maintain such a large presence in China, despite the total addressable market (TAM) being huge in most areas.

Second, Chinese CEOs view the ZTE and Huawei incidents as game changers. Somewhat perversely, these two crackdowns in the West have created an accelerated rush in China to become less dependent on foreign manufacturers, particularly those in the U.S., as the Chinese move even more quickly to internalize as much of their supply chain as possible. While this internalization may create greater self-reliance, this shift could actually lead to higher inflation, less cross-border flows, and potentially lower profits over time, we believe.

Third, as the Chinese government creates more favorable operating environments for local champions to gain market share, U.S. companies in China are being forced to invest more in capex to remain competitive. For those U.S. firms operating in China that redeploy...
even more into capital expenditures and research and development in order to maintain their lead over local players, the outlook for their business and profits could diminish quite quickly, in our view.

**EXHIBIT 19**

Importantly, Trade Is Becoming a Smaller Part of China’s Economy

![China: LTM Trade as a % of GDP](chart)

*Global trade is a smaller part of China’s economy*

*Data as at June 30, 2018. Source: China Customs, Haver Analytics.*

**EXHIBIT 20**

China Continues to Rebalance Its Economy Towards Higher Value Added Goods and Services. Ultimately, We View This Migration as Deflationary

![China % of Total Exports, 12mma](chart)

*Re-exports are now less than a third of exports*

*Data as at May 31, 2019. Source: China Customs, Haver Analytics.*

"Against this macroeconomic backdrop, we generally like our positioning, and are largely inclined to stick with many of the themes we laid out in January."
Our bottom line: Investors should make no mistake about where we are headed, given how intertwined the two countries are. Simply stated, we think that a modern day ‘cold war’ of sorts has emerged between China and the United States. Consistent with this view, we think that we are at an inflection point for global supply chains, particularly those that rely on proprietary technology. Just consider that out of $70 billion Huawei spent buying components in 2018, some $11 billion in Huawei allocations went to U.S. firms including Qualcomm, Flextronics, and Broadcom. One can see some of this dependence in Exhibit 23. Without question, these relationships are now all in play in a world where it appears U.S. national security concerns have trumped more traditional trade priorities.

Beyond the aforementioned trade issues surrounding technology, we would not be surprised to see Taiwan become a tension point again. The U.S. election in 2020 – and all the hype that will lead up to it – also remains a wild card. Finally, the hope of any accelerated SOE reform or privatization now appears more challenging, as by controlling its SOEs, the government is in charge of the lion’s share of employment opportunities across China.

EXHIBIT 23

Huawei’s Supply Chain Is Quite Global, Including a Heavy Dependence on the U.S.

![Exhibit 23](image_url)

Data as at March 31, 2019. Source: Goldman Sachs, The Economist.

EXHIBIT 24

China and the U.S. Are Benchmarking Themselves Across Many Key Growth Areas of the Global Economy

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. 0.45</td>
<td>U.S. 31</td>
<td>U.S. 377</td>
<td>U.S. 607</td>
</tr>
<tr>
<td>China 40</td>
<td>China 39</td>
<td>China 1447</td>
<td>China 1382</td>
</tr>
</tbody>
</table>

United States

We must stop being so passive. For ten years now, U.S. policymakers have done very little as China pursued policies that have resulted in an enormous trade imbalance. This approach has not worked, and it is past time for the U.S. government to become more aggressive.


As we indicated in our January outlook piece, we are still forecasting a deceleration in GDP in 2019, albeit it is likely now more modest in aggregate after the upside surprise to first quarter 2019 GDP. To this end, my colleague David McNellis is raising his U.S. 2019 GDP estimate to 2.4% from 2.25% previously. Importantly, though, on a bottom-up basis, note that our 2019 GDP upgrade is rather ‘low quality’ in nature, as inventories drive most of the upside.

Maybe more importantly, though, than focusing on a point estimate of GDP, is the progression of GDP trends. To this end, we have tried to create an easy to understand ‘roadmap’ that investors can follow. One can see this in Exhibit 25, which we think is a compelling ‘dashboard’ that can be used to outline how we suggest thinking about the potential U.S. economic effects from the tariffs, including China Rounds 1-4, as well as the potential auto tariffs. Bottom line is that all the measures in total are a GDP drag of approximately 80 basis points in 2020 (hence why we are not pushing out our potential 2020 recession call; see Where Are We in the Cycle starting on page 30 for further details), while we think another 40 basis points could manifest in 2019.

Importantly, if President Trump does add on the next $325 billion in tariffs as we now expect, we think that it could have a quite meaningful impact not only on growth (i.e., a 40-50 basis point hit in 2020) but also inflation (the inflation drag would increase to 80 basis points annually). The delta between the 0.5% hit to GDP and 0.8% pressure on CPI is due to CPI’s focus on consumer items, which is where ‘Round 4’ of tariffs hits hardest.

While the consumer impact is not to be underestimated, we actually are spending more time on what trade headlines mean for CEO confidence and ultimately growth. Simply stated, the capex impact from tariffs is the biggest ‘X-factor’ out there, we believe – something we think is being notably understated and not fully appreciated in sell-side forecasts. Specifically, Wall Street estimates generally do not assume any headwind to corporate capex from tariff-related uncertainty (e.g., executives are now unsure whether to invest incremental capital into the U.S., Mexico, China, Vietnam, etc., so better to wait until we have more clarity). Exhibit 26 underscores our point that the risk to a capex slowdown could be substantial. To date, the evidence so far is that capex has moderated a bit due to tariffs, but not collapsed (Exhibit 27). As such, we will all need to watch that capex momentum does not erode more meaningfully in 2020 than the 2.2% year-over-year growth we are forecasting for 2019.

EXHIBIT 25

To Date, Proposed Tariff Measures Represent an Aggregate Potential U.S. GDP Headwind of 1.25%, of Which We Think Approximately 0.4% Could Manifest in 2019. In 2020, However, the Drag From Tariffs Could Reach 80 Basis Points

<table>
<thead>
<tr>
<th>IMPLEMENTED, ANNOUNCED, OR THREATENED AS OF MAY 2019?</th>
<th>TOTAL DIRECT POTENTIAL GDP EFFECT</th>
<th>2019E POTENTIAL IMPACT</th>
<th>2020E POTENTIAL IMPACT</th>
<th>COMMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>China Round 1: $50 billion Tariffs @ 25% Implemented</td>
<td>-0.10%</td>
<td>-0.07%</td>
<td>0.00%</td>
<td>Partial impact already felt in 2018</td>
</tr>
<tr>
<td>China Round 2: $200 billion Tariffs @ 10% Implemented</td>
<td>-0.10%</td>
<td>-0.09%</td>
<td>0.00%</td>
<td>Partial impact already felt in 2018</td>
</tr>
<tr>
<td>China Round 3: Prior $200 billion to 25% Implemented</td>
<td>-0.20%</td>
<td>-0.09%</td>
<td>-0.13%</td>
<td>Impacts from mid-May onwards</td>
</tr>
<tr>
<td>China Round 4: $325 billion Tariffs @ 25% Announced</td>
<td>-0.50%</td>
<td>-0.11%</td>
<td>-0.44%</td>
<td>Assumes 2H19 implementation, and some partial offset from pre-buying</td>
</tr>
<tr>
<td>Autos: 25% Auto &amp; Auto Part Tariffs on Europe and Japan Threatened</td>
<td>-0.25%</td>
<td>-0.03%</td>
<td>-0.23%</td>
<td>On May 15th, President Trump announced a 6mo delay to his decision</td>
</tr>
<tr>
<td>TOTAL</td>
<td>-1.25%</td>
<td>-0.38%</td>
<td>-0.79%</td>
<td></td>
</tr>
</tbody>
</table>

Data as at June 7, 2019. Source: KKR Global Macro & Asset Allocation estimates, Bureau of Economic Analysis, Census Bureau, Office of the U.S. Trade Representative, Haver Analytics.
**EXHIBIT 26**

Capex Deferrals Due to Tariff Uncertainty Remain the Most Important ‘X-Factor’ in Our Outlook

Approximate Cumulative Potential Tariff Impacts as a % of U.S. GDP

Deferral of business investment due to tariff-related uncertainty could present a greater obstacle to growth than the combined effects of all the proposed direct tariffs.

Looking at the bigger picture (and again consistent with our view that President Trump will implement the next $325 billion in tariffs), we remain on the hawkish side of the trade debate. To be sure, there may ultimately be some opening up of Chinese markets to buy more goods such as soybeans, but rule of law issues are likely to remain problematic between the two countries. Moreover, Trump has allowed national security issues to bleed into the current trade negotiations, a political move that we think has longer-term implications than many investors currently appreciate. Said differently, even if the current impasse on trade is resolved, there will not be an easy fix on the race for global technological dominance.

Hence, we view this latest salvo in the U.S.-China trade war as one that has – over time – serious implications for global supply chains and capital allocation. Our view is that China will escalate the already rapid pace of development and acquisition of high value added industries, particularly as the latest moves by President Trump could likely foster distrust in regard to global supply chains, especially around the reliance of foreign markets for needed technology. Businesses, particularly those in technology related industries, will be looking to develop supply chains in other locales such as Vietnam, the Philippines and Thailand to circumvent U.S.-China trade concerns. If we are right, then we should expect lower global growth than in the past and likely a structural peak in corporate profitability.

**EXHIBIT 27**

To Date, the Evidence Suggests Tariff Uncertainty Has Slowed – But Not Collapsed – U.S. Investment Trends


"Simply stated, the capex impact from tariffs is the biggest ‘X-factor’ out there, we believe."
**Europe**

My colleague Aidan Corcoran continues to hold steady his 2019 Eurozone Real GDP forecast of 1.2%, unchanged from his February update in *Another Swing at the Plate*. One can see this in Exhibit 29. Importantly, the key driver of the model remains an outsized positive influence from central bank intervention. In fact, it generates greater than two thirds of the positive uplift in the quantitative model that Aidan has been using for quite some time.

**EXHIBIT 29**

*We Are Maintaining Our 2019 Eurozone Real GDP Growth Forecast of 1.2%*

Somewhat ironically, Europe is more susceptible to the vagaries of trade than almost any other region where we do business. Remember that our thesis is that global trade peaked in 2008, and the tensions of late have only accelerated this slowdown. Given that gross exports account for 46% of Eurozone GDP versus 19% for China and 12% for the U.S., this downward pressure is significant. Moreover in Germany, which is often considered the engine of Eurozone growth, the trade balance with China can add 60 basis points of growth in a good year and minus 30 basis points in a bad year.

**EXHIBIT 30**

*Easy Central Bank Policy in Europe Is Only Partially Being Offset by Tight Credit Conditions*

**EXHIBIT 31**

*Our Forecast Is for Eurozone Inflation to Reach 1.5% in the 2019-2020 Period*
Disposable Income Is Supporting European Inflation, While the Region’s Consumer Remains in Decent Shape


China

Despite strong real GDP growth of 6.4% year-over-year in 1Q19, my colleague Frances Lim is retaining her below consensus 2019 real GDP growth target of 6.2%. Trade tensions (Exhibit 34), a weak auto sector, and a maturing consumer are all weighing on growth trends. Maybe more important, though, than a point estimate in time is that our 2019 forecast still continues to represent a notable deceleration from 6.6% growth last year and 14.2% growth as recently as in 2007.

Similar to the U.S., though, we think that direct tariff impacts understate the longer-term – and potentially more important – effect trade wars are having on CEO sentiment, particularly as it relates to capital expenditures. Based on our high-level conversations in China with executives across a variety of industries, we think the potential for a second half slowdown is now more likely than the consensus forecast embeds.

As one might guess, further escalation in the trade arena will likely be met with fiscal and monetary stimulus including more reserve required ratio cuts, liquidity injections, pledged supplementary lending, and other short-term liquidity tools. Moreover, as the Fed begins to lower rates, we expect China to follow with interest rate cuts to manage the rate differential, while maintaining tight capital controls, to limit currency depreciation. On the fiscal side, we expect even more targeted stimulus focused on infrastructure, the consumer, and the auto sector.

This shift in the structural outlook for trade influences our thinking on Europe’s business model for recovery. Specifically, unlike after the 2011 crisis, Europe cannot grow its way out of the current slowdown by just increasing competitiveness and weakening its currency. Rather, it now needs some consumption, which requires Germany to reduce its current account surplus. It also requires some fiscal spending.

As one might guess, further escalation in the trade arena will likely be met with fiscal and monetary stimulus including more reserve required ratio cuts, liquidity injections, pledged supplementary lending, and other short-term liquidity tools. Moreover, as the Fed begins to lower rates, we expect China to follow with interest rate cuts to manage the rate differential, while maintaining tight capital controls, to limit currency depreciation. On the fiscal side, we expect even more targeted stimulus focused on infrastructure, the consumer, and the auto sector.

This shift in the structural outlook for trade influences our thinking on Europe’s business model for recovery. Specifically, unlike after the 2011 crisis, Europe cannot grow its way out of the current slowdown by just increasing competitiveness and weakening its currency. Rather, it now needs some consumption, which requires Germany to reduce its current account surplus. It also requires some fiscal spending.
China Continues to Add More Stimulus to Support Growth as the Trade War Escalates. Despite This Impressive Effort by the Government, We Wonder If Slowing Growth in Capital Expenditures Will Require Even More Stimulus

Fiscal stimulus includes value added tax cuts, personal income tax cuts, personal income special deductions, social insurance reduction, infrastructure spending, and other various tax cuts implemented since May 2018. The targeted reserve required ratio cut refers to the May 2019 policy response to the latest escalation in tariffs. Data as at May 31, 2019. Source: KKR Global Macro & Asset Allocation analysis.

Year-to-date, core inflation has been soft falling to 1.6% year-over-year on weak domestic demand. At the same time, however, headline inflation actually increased to 2.7% in May 2019 from just 1.5% year-over-year in February 2019 on the back of higher commodity prices (Exhibit 37). A key driver has been bad weather, which has led to a 13-18% year-over-year increase in vegetable prices. In addition, the outbreak of swine flu has brought the supply of pigs to the lowest level in over a decade. As a result, pork prices are already up 18% year-over-year, and will remain elevated for a few more months, as it takes at least six months for piglets to reach full size. As such, given that pork has an estimated 2.5% weighting for the country’s CPI basket, pork prices could add up to 50 basis points to headline inflation, we believe. If there is good news on the headline inflation front, we believe that the recent VAT tax cut, which became effective April 1, 2019, should help offset the 10 basis point price increase from tariffs that we had been previously forecasting. All told, we believe average CPI for 2019 will be around 2.3% year-over-year, which is below the three percent threshold and leaves the PBoC with ample room to ease monetary policy.

"We think the potential for a second half slowdown in China is now more likely than the consensus forecast embeds."
Despite the Slowdown in Its GDP, China Continues to Innovate in Key Strategic Areas, Including Robotics

Annual Supply of Industrial Robots, Thousands


China Headline Inflation Is Currently Higher on Food Prices…

China: CPI, Y/y , %


Mexico

We are using this mid-year update to downgrade our 2019 GDP growth estimate for Mexico to 1.2%, which is below both consensus expectations of 1.4% and our prior forecast of 1.6%. Even though the threat of U.S. tariffs is averted for now, significant growth headwinds remain and we believe there is a non-trivial chance that the U.S. could again threaten Mexico with protectionist measures leading up to the 2020 elections.

What’s ailing the Mexican economy? Well, a recent trip to the nation’s capital confirmed that the combination of rising U.S.-China trade tensions, roadblocks in USMCA\(^2\) approval, construction delays in Mexico City, recent credit rating downgrades, and Pemex’s long-term fiscal sustainability concerns will all likely keep a lid on private investment (Exhibit 40). Meanwhile, on the public expenditure front, Andrés Manuel López Obrador (AMLO) has actually shown himself to be fiscally prudent thus far. Somewhat ironically, though, this discipline is resulting in cuts to current expenditure in many areas of the economy. Finally, while consumer confidence is actually hovering near record highs, it has not led to a boom in consumer spending. In fact, actual private consumption data continues to underperform expectations, as many in Mexico’s population worry about increasing violence, slowing growth, and potential conflicts with the United States.

While consumer confidence in Mexico is actually hovering near record highs, it has not led to a boom in consumer spending.
EXHIBIT 39

We Expect Mexico Real GDP to Grow Just 1.2% in 2019, Dragged Down by Both Tight Monetary Conditions and Lackluster Investment Appetite

Components of Mexico Real GDP Growth Model

<table>
<thead>
<tr>
<th>Baseline</th>
<th>US GDP Growth</th>
<th>Credit Condition</th>
<th>Manu. Confid.</th>
<th>Mex Equities</th>
<th>2019e growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.2%</td>
<td>1.1%</td>
<td>-0.3%</td>
<td>-0.7%</td>
<td>-0.1%</td>
<td>1.2%</td>
</tr>
</tbody>
</table>

Data as at June 7, 2019. Source: Bloomberg, Banxico, Haver Analytics, KKR Global Macro & Asset Allocation analysis.

EXHIBIT 40

Investment Has Been Non-Existent in Mexico of Late, Weighed Down by the Energy Downturn, Policy Uncertainty, Rising Trade Tensions, and Fiscal Sustainability Concerns

Mexico GDP Components (1Q13 =100)

Data as at June 7, 2019. Source: Bloomberg, Banxico, Haver Analytics, KKR Global Macro & Asset Allocation analysis.

EXHIBIT 41

MXN Is Already Trading More Than One Standard Deviation Below Its Long Term Average in Real Effective Exchange Rate Terms

Mexico: Real Effective Exchange Rate (CPI-based)
% Deviation from Long Term Average


EXHIBIT 42

We Forecast That Inflation Differentials Between the U.S. and Mexico Remain Outsized Through 2023

Annual Average CPI Estimates, Y/y % Change


Separately, we expect headline inflation to average four percent in 2019, which is up from our previous estimate of 3.8%. As such, it is now in line with Banxico’s estimate and just above consensus expectations of 3.9%. In light of persistently elevated inflation expectations and risk premia, we believe the central bank of Mexico will maintain a cautious monetary stance. Keeping financial conditions tight and real rates high at or greater than 4.2% will be needed to combat stubbornly elevated domestic prices and anchor the peso, we believe. As
such, we do not expect any rate cuts this year.

Finally, on the currency front, we expect the Mexican peso to depreciate by approximately two percent per annum over the next five years, which is actually better than the 4.8% implied by forward curves. Key to our thinking is that the peso is a high carry currency (i.e., its nominal short-term rates are 8.25%, compared to 2.40% in the U.S.) as well as the fact that it screens quite undervalued in our models after depreciating 39% over the past five years.

Interest Rate Outlook

As we noted in our most recent Insights essay, *The Uncomfortable Truth*, dated April 2019, our macro framework continues to suggest that long-term rates will be stuck at low levels for the foreseeable future. Importantly, we are making this call despite rising deficits in many of the markets in which we invest. There are several key underpinnings to our thesis. First, we think that technology is creating structural downward pressure on inflation. One can see this in Exhibits 43 and 44, respectively, which show the consistent downward pressure that technological transparency/advancement are having on both consumer and producer prices.

EXHIBIT 43

*Moore’s Law Is a Drag on Inflation, Particularly in the Early Years of Innovation*

As we noted in our most recent Insights essay, *The Uncomfortable Truth,* dated April 2019, our macro framework continues to suggest that long-term rates will be stuck at low levels for the foreseeable future. Importantly, we are making this call despite rising deficits in many of the markets in which we invest. There are several key underpinnings to our thesis. First, we think that technology is creating structural downward pressure on inflation. One can see this in Exhibits 43 and 44, respectively, which show the consistent downward pressure that technological transparency/advancement are having on both consumer and producer prices.

EXHIBIT 44

*Technology’s Effect on Producer Prices by Industry Has Been Significant in Recent Years*

Second, our research shows that the direction of interest rates generally correlates with growth in nominal GDP. One can see this in Exhibit 45. This viewpoint is significant because nominal GDP in both the United States and China, two of the major drivers of global GDP, has slowed materially in recent years. Third, we think that demographic forces are increasingly driving more demand for income-related products. In fact, by 2030, all baby boomers will be older than age 65. As a result of this new demographic reality, one in every five U.S. residents will be above retirement age.

"As we noted in our most recent Insights essay, ‘The Uncomfortable Truth,’ our macro framework continues to suggest that long-term rates will be stuck at low levels for the foreseeable future. Importantly, we are making this call, despite rising deficits in many of the markets in which we invest."
Finally, we believe the technical tailwinds in the bond market are still quite compelling, despite the increase in issuance that we have seen in recent years. Indeed, as my KKR colleague Chris Sheldon who runs our Liquid Credit franchise reminds me, outright supply is actually shrinking in key markets such as High Yield. Moreover, while quantitative easing has turned towards quantitative tightening, the pace of it is now much more gradual. In Europe, for example, the introduction of another central bank-driven lending program to its banks has pushed back meaningfully the slope of sovereign debt exodus (Exhibit 47). This shift in policy is important not only in Europe but also in major markets like the United States, as the 10-year U.S. Treasury bond has never really traded more than 250 basis points above the 10-year German bund in the 30 years of data that we have been tracking (Exhibit 48).

**EXHIBIT 46**

With China Slowing, Global Nominal GDP Growth Continues to Trend Downward

Data as at April 9, 2019. Source: IMF, Haver Analytics.

**EXHIBIT 47**

The ECB Remains Focused on Ensuring There Is Adequate Liquidity in the System


"Pulling all the pieces together, we come away expecting the Fed to cut rates by 50 basis points in the second half of 2019, starting in July or September. If our ‘mild recession’ base case comes to pass in 2020, we would expect another 100-150 basis points of cuts next year, leaving rates hovering just above zero."
We Believe That U.S. Rates Can’t Break Out to the Upside as Long as the Yield on German Bunds Remains So Low

We Believe That U.S. Rates Can’t Break Out to the Upside as Long as the Yield on German Bunds Remains So Low

EXHIBIT 48

EXHIBIT 49

EXHIBIT 50

Turning to the short end of the yield curve, we now expect the Fed to start cutting rates later this year. Economic momentum is slowing amidst trade-related uncertainty, and Core PCE inflation is again below the Fed’s two percent target (Exhibit 51). Maybe even more important, interest rates markets embed a strong expectation of cuts, which means that the Fed would implicitly tighten financial conditions if it failed to act—something we do not think it wants to do. History offers a useful guide to the current environment: U.S. two-year yields have fallen to more than 50 basis points below the fed funds rate, reflecting a market expectation for cuts. This backdrop is something that has happened only four other times since the 1980s (Exhibit 52).

Maybe even more important, interest rate markets embed a strong expectation of cuts, which means that the Fed would implicitly tighten financial conditions if it failed to act—something we do not think it wants to do.
After a Decade, the Fed Is Still Badly Missing Its Target of Two Percent Inflation

U.S. Core PCE, Y/y %

Core PCE Y/y | FOMC 2% Target
---|---
3.0% | |
2.5% | |
2.0% | |
1.5% | |
1.0% | |
0.5% | |
Apr-19 1.6%

Data as at June 7, 2019. Source: BEA, Haver Analytics, KKR Global Macro & Asset Allocation analysis.

Prior Times U.S. 2-Year Yields Dipped 50 or More Basis Points Below the Fed Funds Target

| 2-Year Yield - Fed Funds Target (Basis Points) | 12-Month Forward Change in Fed Funds Target (Basis Points) | 12-Month Forward Change in U.S. 10-Year Yield (Basis Points) 10-Year | 12-Month Forward S&P 500 Total Return | Months Until Official Onset of Next Recession |
---|---|---|---|---|
Apr-89 | -53 | -150 | 2 | 11% | 16 |
Aug-98 | -59 | -25 | 93 | 40% | 32 |
Sep-00 | -52 | -350 | -120 | -27% | 7 |
Sep-06 | -54 | -50 | -5 | 16% | 16 |
Jun-19 | -53 | ??? | ??? | ??? | ??? |
**Median** | **-54** | **-100** | **-2** | **13%** | **16** |

Dates represent the first month in a cycle in which two-year yields were more than 50 basis points below the fed funds rate. Data as at June 7, 2019. Source: BEA, Haver Analytics, KKR Global Macro & Asset Allocation analysis.

Equities: EPS/Valuation/Total Return

As we turn towards the back half of 2019, we thought it might make sense to review what has changed in our thinking since January. As a refresher, in January we made the following assumptions in our forecast:

- In terms of forward P/E, we thought SPX would trade in the 15.5x to 16.5x range. Throughout the year, the multiple has ranged from a low of 14.2x on January 3rd to a high of 17.2x on April 30th (Exhibit 56).

- In terms of 2019e EPS, we thought it would come in at $167-$168 per share (2.5% growth), now essentially in line with current expectations of $168-169 (which have fallen from north of $175 at the beginning of the year).

- We estimated 6-14% upside in U.S. Equities (inclusive of dividends). As of May 31, the S&P 500 had returned roughly 11%.

As we look ahead, we take comfort that the consensus forecast for 2019 earnings per share now appears much more reasonable to us. One can see this in Exhibit 55. This new, more conservative forecast of 2.7% is down significantly from an unrealistic 10% in October 2018, and it is now essentially in line with our own forecast of 2.5%. Maybe more important, though, in our view is that the earnings revisions downgrade cycle is ending, and it is actually turning upward. Indeed, earnings revisions in the U.S. have quietly improved for the third straight month to 1.02 (positives relative to negatives) in May 2019 from a trough reading of 0.54 in February 2019.
EXHIBIT 53

Our Preliminary Model for S&P 500 EPS Growth Indicates Some Modest Acceleration in 2H20

EXHIBIT 55

Consensus Now Expects 2.7% EPS Growth in 2019, Down From 10% at the Start of the Year

EXHIBIT 56

We Are Using a 16.3x Multiple for 2020, Compared to a Median of 17.0x, to Reflect a More Conservative Outlook
Our Earnings Growth Leading Indicator (EGLI) Is Pointing to Some Modest Acceleration in Earnings Growth in 2020. However, the Model Does Not Capture the Impact of Tariffs on Expected Growth

EXHIBIT 57

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 May 31, 2019. Source: Bloomberg, Haver Analytics, S&P, IBES, KKR Global Macro & Asset Allocation analysis.

While we will not officially publish a formal 2020 forecast until early next year, we did want to lay out a preview of how we are thinking about how things could play out. To this end, we note the following “rough” assumptions:

- **EPS Growth:** We are currently using 6.3% year-over-year growth for 2020, which is implied by our Earnings Growth Leading Indicator (EGLI). That would suggest around $178.20 in EPS for the S&P 500 in 2020.

- **Forward P/E:** Amidst escalating trade tensions in 2019, the multiple on the S&P 500 recently de-rated by 6.3%, falling to around 16.0x before rebounding during June. Importantly, though, we have also shifted into a lower real rate environment. Specifically, since January real rates have fallen to 0.3% from 0.8%, which means that a higher implicit multiple should be used – all else being equal. All else is not equal, however, given heightened trade concerns and peaking margins. As such, we are using a 16.3x multiple for 2020, compared to a historical median of 17.0x.

- **Total return:** So, when we pull it all together, our base case, including a two percent dividend yield, calls for a four to 11 percent return through year-end 2020, assuming the S&P 500 trades at approximately 15.8x to 16.8x our 2020 EPS estimate of $178.20 per share next year. One can see this in Exhibits 59 and 60.

EXHIBIT 58

If Our EGLI Is Right, Then the Consensus EPS Estimates for 2H19 and 2020 Are Too High

While we will not officially publish a formal 2020 forecast until early next year, we did want to lay out a preview of how we are thinking about how things could play out. To this end, we note the following “rough” assumptions:

- **EPS Growth:** We are currently using 6.3% year-over-year growth for 2020, which is implied by our Earnings Growth Leading Indicator (EGLI). That would suggest around $178.20 in EPS for the S&P 500 in 2020.

- **Forward P/E:** Amidst escalating trade tensions in 2019, the multiple on the S&P 500 recently de-rated by 6.3%, falling to around 16.0x before rebounding during June. Importantly, though, we have also shifted into a lower real rate environment. Specifically, since January real rates have fallen to 0.3% from 0.8%, which means that a higher implicit multiple should be used – all else being equal. All else is not equal, however, given heightened trade concerns and peaking margins. As such, we are using a 16.3x multiple for 2020, compared to a historical median of 17.0x.

- **Total return:** So, when we pull it all together, our base case, including a two percent dividend yield, calls for a four to 11 percent return through year-end 2020, assuming the S&P 500 trades at approximately 15.8x to 16.8x our 2020 EPS estimate of $178.20 per share next year. One can see this in Exhibits 59 and 60.

EXHIBIT 59

Our Work Suggests That U.S. Equities Can Deliver Only Modest Upside Through 2020

While we will not officially publish a formal 2020 forecast until early next year, we did want to lay out a preview of how we are thinking about how things could play out. To this end, we note the following “rough” assumptions:

- **EPS Growth:** We are currently using 6.3% year-over-year growth for 2020, which is implied by our Earnings Growth Leading Indicator (EGLI). That would suggest around $178.20 in EPS for the S&P 500 in 2020.

- **Forward P/E:** Amidst escalating trade tensions in 2019, the multiple on the S&P 500 recently de-rated by 6.3%, falling to around 16.0x before rebounding during June. Importantly, though, we have also shifted into a lower real rate environment. Specifically, since January real rates have fallen to 0.3% from 0.8%, which means that a higher implicit multiple should be used – all else being equal. All else is not equal, however, given heightened trade concerns and peaking margins. As such, we are using a 16.3x multiple for 2020, compared to a historical median of 17.0x.

- **Total return:** So, when we pull it all together, our base case, including a two percent dividend yield, calls for a four to 11 percent return through year-end 2020, assuming the S&P 500 trades at approximately 15.8x to 16.8x our 2020 EPS estimate of $178.20 per share next year. One can see this in Exhibits 59 and 60.
EXHIBIT 60

In Percentage Terms, We Now See 4%-11% Upside in U.S. Equities (Inclusive of Dividends) Over the Next 18 Months

S&P 500 Preliminary 2020e Total Return Target
(Assuming SPX ends 2019 at May 31st levels)

<table>
<thead>
<tr>
<th>P/E</th>
<th>S&amp;P Total Return at Various P/E and EPS Y/Y Levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPS</td>
<td>14.8X</td>
</tr>
<tr>
<td>-0.9%</td>
<td>-9.1%</td>
</tr>
<tr>
<td>0.9%</td>
<td>-7.5%</td>
</tr>
<tr>
<td>2.7%</td>
<td>-5.9%</td>
</tr>
<tr>
<td>4.5%</td>
<td>-4.2%</td>
</tr>
<tr>
<td>6.3%</td>
<td>-2.6%</td>
</tr>
<tr>
<td>8.1%</td>
<td>-0.9%</td>
</tr>
<tr>
<td>9.9%</td>
<td>0.7%</td>
</tr>
<tr>
<td>11.7%</td>
<td>2.3%</td>
</tr>
<tr>
<td>13.5%</td>
<td>4.0%</td>
</tr>
</tbody>
</table>


Beyond the more traditional valuation metrics described above, we also try to understand how stock market valuations look when compared to GDP growth and the intersection of corporate profits and interest rates. As Exhibit 61 shows, global equities generally look somewhere between fairly valued to downright expensive on a market capitalization-to-GDP perspective. However, when we adjust for interest rates, they appear to be at attractive levels. Our bottom line:

When we consider the two conflicting signals together (i.e., low rates versus full valuations), we feel comfortable with our mostly modest upside forecasts through year-end 2020. Said differently, although low rates should help support equity prices, we think the chance that U.S. Equities materially outperform their long-term historical average through the end of 2020 is quite low, given recent strong performance, geopolitical tensions, and current corporate profitability. This viewpoint is consistent with our original January comments that equities may be “stuck” in a trading range throughout the medium term.

So, given our more modest return for Global Equities during the next 12-18 months, we think that the key to alpha generation will be differentiation. So, where should an investor lean in and out? Our two cents is that Europe is cheap, but we expect the public equity markets in Europe to stay low-priced amidst low rates. Interestingly, again in 2020, the consensus is forecasting a material boost in EPS from the Financials sector (Exhibit 62); we remain more cautious because of the negative impact that low rates have on Europe’s financial institutions, insurance companies in particular. As discussed earlier, we also believe that Europe could be more adversely impacted by trade tensions than the consensus currently believes.

EXHIBIT 61

Our Global Cycle Dashboard Suggests That U.S. Equities Are Moderately Overvalued on the Whole. However, the Rates-Adjusted Equity Valuation Metric Suggests There May Be Further Room to Run

<table>
<thead>
<tr>
<th>Avg. Across All Metrics</th>
<th>Avg. Across Equity Metrics</th>
<th>Equity Valuation Metrics</th>
<th>Embedded EPS Growth (Rate-Adj. Equity Valuation)</th>
<th>Shiller P/E</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. 0.7</td>
<td>0.7</td>
<td>1.5</td>
<td>0.5</td>
<td>-0.7</td>
</tr>
<tr>
<td>Europe 0.2</td>
<td>-0.1</td>
<td>0.1</td>
<td>0.0</td>
<td>-1.4</td>
</tr>
<tr>
<td>EM 0.1</td>
<td>-0.1</td>
<td>0.9</td>
<td>-0.1</td>
<td>-0.5</td>
</tr>
<tr>
<td>Japan -0.3</td>
<td>-0.7</td>
<td>-1.2</td>
<td>-1.0</td>
<td>-1.3</td>
</tr>
<tr>
<td>Avg. Across Credit and Cycle-Related Metrics</td>
<td>Unemp. Rate (inverse)</td>
<td>Credit Spreads (inverse)</td>
<td>Trailing 5y Equity Mkt Return</td>
<td></td>
</tr>
<tr>
<td>U.S. 0.8</td>
<td>1.5</td>
<td>0.7</td>
<td>0.1</td>
<td></td>
</tr>
<tr>
<td>Europe 0.8</td>
<td>2.0</td>
<td>0.7</td>
<td>-0.3</td>
<td></td>
</tr>
<tr>
<td>EM 0.3</td>
<td>0.6</td>
<td>0.6</td>
<td>-0.4</td>
<td></td>
</tr>
<tr>
<td>Japan 0.4</td>
<td>1.2</td>
<td>-0.8</td>
<td>0.9</td>
<td></td>
</tr>
</tbody>
</table>

**EXHIBIT 62**

Europe: Consensus Expects 4.8% Earnings Growth in 2019, Driven by Financials, Industrials and Consumer

*MSCI Europe 2019e Earnings Growth Contribution*

<table>
<thead>
<tr>
<th>Sector</th>
<th>Growth Contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europe</td>
<td>4.8%</td>
</tr>
<tr>
<td>Materials</td>
<td>(3.7%)</td>
</tr>
<tr>
<td>REITs</td>
<td>1.0%</td>
</tr>
<tr>
<td>Telcos</td>
<td>2.0%</td>
</tr>
<tr>
<td>Healthcare</td>
<td>2.2%</td>
</tr>
<tr>
<td>Energy</td>
<td>4.9%</td>
</tr>
<tr>
<td>Utilities</td>
<td>6.7%</td>
</tr>
<tr>
<td>Tech</td>
<td>8.6%</td>
</tr>
<tr>
<td>Cons Disc</td>
<td>16.0%</td>
</tr>
<tr>
<td>Staples</td>
<td>17.7%</td>
</tr>
<tr>
<td>Industrials</td>
<td>18.6%</td>
</tr>
<tr>
<td>Financials</td>
<td>26.1%</td>
</tr>
</tbody>
</table>

Data as at May 31, 2019. Source: Bloomberg, Factset, IBES Consensus, MSCI.

**EXHIBIT 63**

Emerging Markets: Consensus Expects 1.3% Earnings Growth in 2019, Driven Largely By Financials

*MSCI EM ex-Tech 2019e Earnings Growth Contribution*

<table>
<thead>
<tr>
<th>Sector</th>
<th>Growth Contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSCI EM</td>
<td>1.3%</td>
</tr>
<tr>
<td>EM ex-Tech</td>
<td>9.2%</td>
</tr>
<tr>
<td>Energy</td>
<td>(4.3%)</td>
</tr>
<tr>
<td>Healthcare</td>
<td>2.4%</td>
</tr>
<tr>
<td>Telcos</td>
<td>3.2%</td>
</tr>
<tr>
<td>Industrials</td>
<td>5.1%</td>
</tr>
<tr>
<td>Utilities</td>
<td>5.8%</td>
</tr>
<tr>
<td>Staples</td>
<td>6.8%</td>
</tr>
<tr>
<td>REITs</td>
<td>9.5%</td>
</tr>
<tr>
<td>Materials</td>
<td>16.5%</td>
</tr>
<tr>
<td>Cons Disc</td>
<td>18.5%</td>
</tr>
<tr>
<td>Financials</td>
<td>36.4%</td>
</tr>
</tbody>
</table>

Data as at May 31, 2019. Source: Bloomberg, Factset, IBES Consensus, MSCI.

*Note that EM tech earnings are expected to decline by 35% Y/y. We’ve excluded it from the chart as it would show a -460% contribution to overall EM earnings. Data as at May 31, 2019. Source: Bloomberg, Factset, IBES Consensus, MSCI.*

Meanwhile, we also do not believe that Japan is poised to outperform meaningfully, given its heavy dependence on global trade. And beyond the issues that Japan may face from a slowdown in global trade, we also expect domestic headline noise around the upcoming consumption tax increase. If we had to speculate today on tomorrow, our base case now is that there is greater than a 50% chance it is pushed to 2020 as part of a potentially larger reform package. In the interim, however, there could be significant bouts of uncertainty and volatility, we believe.

In terms of Emerging Markets as an Equity asset class, we think that the long-held bear market is in the process of bottoming. As a result, we continue to support our January 2019 call to lean into areas of EM such as non-Japan Asia, which we underscore with our 300 basis point overweight to this region in our target asset allocation. This viewpoint is also consistent with what our EM/DM model is suggesting *(Exhibit 65).* Our bet is that, similar to what we saw in the 1999-2001 timeframe, a double bottom is in the process of occurring. As such, we would buy into attractive long-term markets, particularly those that could benefit from the rethinking of global supply chains, including Vietnam, Indonesia, and the Philippines. On the other hand, we remain short Turkey, given its excesses, and we remain underweight Latin America. Brazil continues to bump along the bottom, with no apparent sustainable catalyst. In Mexico, we think lack of investment as well as ongoing tensions with the United States will likely keep the country risk premium wide for some time.

**EXHIBIT 64**

EM May Have Put in a ‘Double Bottom’ Relative to DM, Similar to What Happened in 1999-2001

*Relative Total Return, MSCI EM/DM (Dec-'87 = 0%)*


*Global equities generally look somewhere between fairly valued to downright expensive on a market capitalization-to-GDP perspective. However, when we adjust for interest rates, they appear to be at attractive levels.*
Our EM Model’s Indicators Still Tilt Slightly More Positive

<table>
<thead>
<tr>
<th>'Rule of the Road'</th>
<th>May '15</th>
<th>Jan '16</th>
<th>Aug '16</th>
<th>May '17</th>
<th>Sep '17</th>
<th>Jun '18</th>
<th>DEC '18</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Buy When ROE Is Stable or Rising</td>
<td>↔</td>
<td>↔</td>
<td>↔</td>
<td>↔</td>
<td>↔</td>
<td>↔</td>
<td></td>
</tr>
<tr>
<td>2. Valuation: It’s Not Different This Time</td>
<td>↔</td>
<td>↔</td>
<td>↔</td>
<td>↔</td>
<td>↔</td>
<td>↔</td>
<td>↔</td>
</tr>
<tr>
<td>3. EM FX Follows EM Equities</td>
<td>↔</td>
<td>↔</td>
<td>↔</td>
<td>↔</td>
<td>↔</td>
<td>↔</td>
<td></td>
</tr>
<tr>
<td>4. Commodity Correlation in EM Is High</td>
<td>↔</td>
<td>↔</td>
<td>↔</td>
<td>↔</td>
<td>↔</td>
<td>↔</td>
<td></td>
</tr>
<tr>
<td>5. Momentum Matters in EM Equities</td>
<td>↔</td>
<td>↔</td>
<td>↔</td>
<td>↔</td>
<td>↔</td>
<td>↔</td>
<td></td>
</tr>
</tbody>
</table>

Overall: We recommend selective engagement with EM investing in 2019. Momentum is tenuous but many equity indexes and FXs look fairly washed out. Falling commodity prices are a concern, but earnings fundamentals have been impressively resilient across most countries and sectors.


Where Are We in the Cycle?

Predicting recessions correctly is likely the toughest part of forecasting. However, we are of the mindset that it is worth doing because it forces everyone on our team to deeply assess and discuss the direction of a variety of global macroeconomic variables during our formal investment committee meetings. Similar to what we laid out in January, we are still forecasting something akin to a modest recession – defined by weak capital spending and exports, partially offset by modest consumption trends – between now and the end of 2020. For our nickel, we believe that there is a lot of late cycle behavior occurring that will likely be corrected amidst heightened geopolitical tensions during the next few quarters.

As part of this view, our overarching thesis remains that financial assets will not outperform real economy assets at the same pace that they did in the past. All our data continues to suggest that central bankers used quantitative easing (QE) to pull returns forward, and in so doing, they accelerated an inequality trend that was already in place for nearly two decades. Not surprisingly, politicians are now focused on ‘righting’ this wrong, and in doing so, we expect them to focus more on nominal GDP growth, which leads to higher wages, than the trickle-down effect of boosting financial asset prices.

We Are Quite Long in the Tooth in Terms of Pure Cycle Duration at 120 Months

<table>
<thead>
<tr>
<th>Duration of US Economic Expansions (Months)</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 2009 Current (Jun-19)</td>
</tr>
<tr>
<td>November 2001 - December 2007</td>
</tr>
<tr>
<td>March 1991 - March 2001</td>
</tr>
<tr>
<td>November 1982 - July 1990</td>
</tr>
<tr>
<td>July 1980 - July 1981</td>
</tr>
<tr>
<td>March 1975 - January 1980</td>
</tr>
<tr>
<td>November 1970 - November 1973</td>
</tr>
<tr>
<td>February 1961 - December 1969</td>
</tr>
<tr>
<td>April 1958 - April 1960</td>
</tr>
<tr>
<td>May 1954 - August 1957</td>
</tr>
<tr>
<td>October 1949 - July 1953</td>
</tr>
<tr>
<td>October 1945 - November 1948</td>
</tr>
<tr>
<td>June 1938 - February 1945</td>
</tr>
<tr>
<td>March 1933 - May 1937</td>
</tr>
<tr>
<td>November 1927 - August 1929</td>
</tr>
<tr>
<td>July 1924 - October 1926</td>
</tr>
<tr>
<td>July 1921 - May 1923</td>
</tr>
<tr>
<td>March 1919 - January 1920</td>
</tr>
<tr>
<td>December 1914 - August 1918</td>
</tr>
<tr>
<td>January 1912 - January 1913</td>
</tr>
<tr>
<td>June 1908 - January 1910</td>
</tr>
<tr>
<td>August 1904 - May 1907</td>
</tr>
<tr>
<td>December 1900 - September 1902</td>
</tr>
</tbody>
</table>

**EXHIBIT 67**

Market Performances Following Long Stretches of Consecutive Performance Are Usually Choppy

<table>
<thead>
<tr>
<th># OF CONSECUTIVE YEARS OF POSITIVE RETURNS</th>
<th>START</th>
<th>END</th>
<th>CUMULATIVE RETURN</th>
<th>CAGR</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>1954</td>
<td>1956</td>
<td>113%</td>
<td>28.7%</td>
</tr>
<tr>
<td>3</td>
<td>1963</td>
<td>1965</td>
<td>61%</td>
<td>17.1%</td>
</tr>
<tr>
<td>3</td>
<td>1970</td>
<td>1972</td>
<td>41%</td>
<td>12.2%</td>
</tr>
<tr>
<td>3</td>
<td>1978</td>
<td>1980</td>
<td>67%</td>
<td>18.7%</td>
</tr>
<tr>
<td>4</td>
<td>1942</td>
<td>1945</td>
<td>146%</td>
<td>25.2%</td>
</tr>
<tr>
<td>4</td>
<td>1958</td>
<td>1961</td>
<td>104%</td>
<td>19.5%</td>
</tr>
<tr>
<td>5</td>
<td>2003</td>
<td>2007</td>
<td>83%</td>
<td>12.8%</td>
</tr>
<tr>
<td>6</td>
<td>1947</td>
<td>1952</td>
<td>154%</td>
<td>16.8%</td>
</tr>
<tr>
<td>8</td>
<td>1982</td>
<td>1989</td>
<td>299%</td>
<td>18.9%</td>
</tr>
<tr>
<td>9</td>
<td>1991</td>
<td>1999</td>
<td>450%</td>
<td>20.9%</td>
</tr>
<tr>
<td>9</td>
<td>2009</td>
<td>2017</td>
<td>259%</td>
<td>15.3%</td>
</tr>
<tr>
<td>Avg. CAGR</td>
<td>18.7%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


**EXHIBIT 68**

Our Work Shows That Cyclical Areas of the Economy Such as Autos Are Past Their Peak This Cycle

**EXHIBIT 69**

S&P 500 Margins Have Approached Peak Levels at a Time When Wages and Input Costs Are Rising. By Sector, Technology Is at the High End, While Healthcare Is at the Low End

**EXHIBIT 70**

The Late-Cycle Acceleration in Goods Employment Is Showing Clear Signs of Fatigue

Data as at May 31, 2019. Source: Bloomberg, S&P.
While We Expect Services to Outperform Goods, We Do Expect Payrolls in the Services Sector to Keep Moderating As Well

Yet, in areas such as housing, we still think that we are only mid-cycle at best. Supporting our constructive view is the reality that residential construction as a percentage of GDP is now just 18.9%, compared to 22.5% as of the end of 2005. In addition, housing stock has grown old, which fuels our bullish stance on areas such as home improvement. One can see this in Exhibit 73. We continue also to forecast solid household formation statistics. All told, we expect U.S. net new household formation of around 1.3-1.4 million annually over the next five years, which would represent a 30-40% acceleration from the 1.0 million average that prevailed over the past five years. Generational trends are also supportive: Millennials are starting to age into the key household-enlarging demographic of 35-44 year-olds. Meanwhile, the senior population is living at home longer into old age, which is another demographic support for housing demand.

Yet, in areas such as housing, we still think that we are only mid-cycle at best. Supporting our constructive view is the reality that residential construction as a percentage of GDP is now just 18.9%, compared to 22.5% as of the end of 2005.
So, what are the key variables that we are watching to see whether a recession could occur earlier or later than 2020? On the earlier side, a spike in trade tensions surrounding Huawei and/or a more rapid deterioration in corporate margins are the key areas on which we are focused. Not surprisingly, banks are growing apprehensive, and as a result, they are tightening lending standards, which is creating minor shock waves in our recession model. One can see this in Exhibit 74.

In terms of what could go right and extend the cycle, global central banks could turn even more dovish and the cloud of uncertainty that has defined the trade talks could lift. Already, in Asia we see that Australia, New Zealand, India, and Malaysia have cut rates, while in the United States the Federal Reserve has done a total about face since Chairman Powell muttered that the bank’s balance sheet was on “autopilot” in late December 2018. Moreover, if President Trump shifts his focus towards more domestic issues ahead of the November 2020 election, he could not only back away from trade but also focus on domestic catalysts such as a highway spending reauthorization and/or improved drug pricing.

Our bottom line, though, is that the economy is likely to muddle through, with quarterly GDP bouncing unevenly between 0.5% and 2.5% before sputtering a bit more consistently in early 2020. Against that bumpy backdrop, there is a greater probability this cycle of ongoing rolling regional and/or sectoral recessions (e.g., Europe in 2011, U.S. Retail in 2013, U.S. Energy in 2016, etc.) versus a 2007-like broad-based, global catastrophe. Maybe more importantly, though, is our strong belief that corporate profits are no longer likely to grow faster than nominal GDP. If we are right, then it would represent a major change to the macroeconomic backdrop that we all enjoyed during the prior decade.

SECTION II: Themes

#1: Corporate Carve-Outs Recent trips to Europe and Japan give us increased confidence that our ‘deconglomeratization’ thesis still has legs to run much further into this cycle. Several factors influence our thinking. First, many big conglomerates are underperforming in certain regions of the world. General Electric certainly has raised awareness about the pitfalls of trying to be all things to all people in the United States. However, our research suggests this problem runs much deeper and broader. Said differently, we think that the uptick in ‘deconglomeratization’ is a global phenomenon. Indeed, just consider the significant decline in return profiles that we are seeing in Asia, as illustrated in Exhibit 76, which shows how dramatically the returns of conglomerates have fallen to below average from above average since the Global Financial Crisis.

Not surprisingly, banks are growing apprehensive, and as a result, they are tightening lending standards, which is creating minor shock waves in our recession model.
The Number of European Union Spin-off Announcements So Far This Year Is at Record Levels

As we show in Exhibit 77, we believe that this opportunity for more corporate carve-outs is a structural, not a cyclical, one. The reality is that return on capital for many large global conglomerates has been in secular decline for some time. Intensifying local competition in many sectors, which we show in Exhibit 78, is certainly a major factor, but untimely acquisitions, shifts in regulatory regimes, and poor leadership are also significant contributors to what has emerged as one of the most favorable value creation opportunities for global private equity firms and thoughtful strategic buyers, we believe.

Consistent with this trend, the pace of carve-outs has been surging, particularly in Europe. One can see this in Exhibit 75. A recent report by Ernst & Young on corporate behavior highlighted that this trend is gaining momentum, as fully 75% of European respondents indicated a carve-out was their preferred method of divestment, up sharply from 48% last year. Seventy-nine percent of these same individuals reported that streamlining their operating model will factor into their divestment plans over the next 12 months.

Against a bumpy backdrop, there is a greater probability this cycle of ongoing rolling regional and/or sectoral recessions (e.g., Europe in 2011, U.S. Retail in 2013, U.S. Energy in 2016, etc.) versus a 2007-like broad-based, global catastrophe. Maybe more importantly, though, is our strong belief that corporate profits are no longer likely to grow faster than nominal GDP.
Local and Regional Competitors Are Increasingly Challenging the Returns of Multinational Firms

Top 500 Global Companies Return on Equity, LTM as at 2016, %

<table>
<thead>
<tr>
<th>Sector</th>
<th>Multinational Firms</th>
<th>Local Firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy</td>
<td>10.5%</td>
<td>12.0%</td>
</tr>
<tr>
<td>Media &amp; Communications</td>
<td>8.5%</td>
<td>9.0%</td>
</tr>
<tr>
<td>Basic Materials</td>
<td>7.0%</td>
<td>7.5%</td>
</tr>
<tr>
<td>Diversified</td>
<td>6.0%</td>
<td>6.0%</td>
</tr>
<tr>
<td>Financial</td>
<td>5.0%</td>
<td>5.5%</td>
</tr>
<tr>
<td>All Sectors</td>
<td>4.0%</td>
<td>4.5%</td>
</tr>
<tr>
<td>Utilities</td>
<td>3.0%</td>
<td>3.5%</td>
</tr>
<tr>
<td>Cyclic Consumer</td>
<td>2.0%</td>
<td>2.5%</td>
</tr>
<tr>
<td>Other Consumer</td>
<td>1.5%</td>
<td>2.0%</td>
</tr>
<tr>
<td>Industrial</td>
<td>1.0%</td>
<td>1.5%</td>
</tr>
<tr>
<td>Technology</td>
<td>0.5%</td>
<td>1.0%</td>
</tr>
<tr>
<td>Energy</td>
<td>0.0%</td>
<td>0.5%</td>
</tr>
</tbody>
</table>


#2: ‘Yearn for Yield’ Without question, we think that reinvestment risk remains one of the biggest concerns in the market today, and as such, we are constantly looking for creative strategies to satisfy the ongoing ‘Yearn for Yield’ that we continue to forecast. At the moment, the two areas of the investment management business most under “attack” by low rates are pension plans and insurance companies, we believe. The much hoped for rebound in interest rates after the end of Quantitative Easing never occurred, and barring a collapse in the dollar, we do not see global rates moving materially higher during the next few years. Not surprisingly, given this backdrop, many yield-oriented allocators of capital have been consistently moving into Private Credit and Real Estate Credit. One can see this in Exhibit 80.

The much hoped for rebound in interest rates after the end of QE never occurred, and barring a collapse in the dollar, we do not see global rates moving materially higher during the next few years. Not surprisingly, given this backdrop, many yield-oriented allocators of capital have been consistently moving into Private Credit and Real Estate Credit.

The Gap Between Target Returns and Traditional Fixed Income Instruments Likely Means a Greater Move into Alternative Products...

Median Pension Plan Assumed Return vs. 30-Year Treasury Rates


...Insurers Have Added Substantially to Private Credit and Real Estate Credit in Recent Years

Change in Asset Allocation Between 2014 and 2017, % of Total

Data as December 31, 2018. Source: KKR Insurance Survey
So, what is driving rates so low? Beyond a strong technical backdrop from the central banks, there are several factors to consider, we believe, on why rates may stay lower for longer. First, we think that there are demographic and socioeconomic influences that are leading to lower rates. We note a strong ‘Yearn for Yield’ evident among U.S. consumers, who continue to sock away savings at a heady rate relative to the current advanced state of the economic cycle. We can quantify this trend in several of the emerging markets where we invest, but our data in the U.S. is fairly compelling. One can see this in Exhibit 82.

For our nickel, we think multiple long-tailed factors are driving the high U.S. savings rate, including lingering consumer caution in the post-GFC era and the structural savings needs of an aging society, particularly relative to incomes (Exhibit 84). Indeed, our research shows that the savings rate for individuals aged 55 years and older is now a chunky 13%, which is significant given that this demographic controls much of the current wealth in the United States. One can see this in Exhibit 82. There also has been a sizeable uptick in global reserves (Exhibit 83). These increases are important because central banks are looking for safe homes for their assets, particularly if they feel comfortable with the local currency.

EXHIBIT 81
In an Unusual Break from Recent History, Savings Rates Have Not Declined This Cycle

EXHIBIT 82
Wealthy Baby Boomers Are Leading the Surge in Savings We Are Seeing Across the U.S.

EXHIBIT 83

Data as at April 1, 2019. Source: Bureau of Economic Analysis, NBER, KKR Global Macro & Asset Allocation analysis.

Data as at January 31, 2019. Source: Respective national statistical agencies, Haver Analytics.
Importantly, though, we think selectivity is warranted when looking for yielding assets in today’s low rate environment. For our nickel, we would try to own yielding assets linked to nominal GDP. For example, in both Europe and the United States we are finding compelling opportunities in the Asset Based Finance arena to provide attractive short-term housing loans to qualified buyers in good growth markets. In our view, these types of investments provide not only collateral in what is likely a late cycle environment but also produce upfront cash flows with plenty of equity cushion. Finally, assets linked to nominal GDP also provide inflation protection and macro ballast in an environment where we know that the ‘Authorities’ are running policies that are quite aggressive. Specifically, as we show in Exhibit 85, holding nominal interest rates below nominal GDP is an effort to not only inspire growth but also to defease the substantial debt liabilities that have been accumulated during the last decade since the GFC.

**EXHIBIT 84**

U.S. Households Are Not Spending Relative to Their Net Worth This Cycle

![Graph showing US Household Net Worth as % of Disposable Income and Personal Savings Rate (%)]

Data as at May 20, 2019. Source: Bloomberg.

We note a strong ‘Yearn for Yield’ evident among U.S. consumers, who continue to sock away savings at a heady rate relative to the current advanced state of the economic cycle.

**EXHIBIT 85**

The Government Has Focused on Stimulating Nominal GDP Through Monetary Policy

![Graph showing U.S. Fed Funds Rate, % Points Above/(Below) U.S. Nominal GDP Growth 3yr Moving Avg.]

Data as at May 18, 2018. Source: Bloomberg, KKR Global Macro & Asset Allocation analysis.

**EXHIBIT 86**

Easy Monetary Policy Drove a Wide Dispersion Between Financial Real Asset and Real Economy Prices

![Graph showing Financial and Real Economy Prices Total Return Performance in Local Currency Since January 2009, %]

Data as at December 31, 2017. Source: Goldman Sachs.
#3: Own Some Secular Growth Winners That Are Cash Flow Compounds Amidst Slowing Nominal GDP

As we mentioned earlier, there has been a notable deceleration in China’s nominal growth rate (Exhibit 46). In addition, we also think that disruptive forces, particularly in the Technology, Healthcare, and Financial Services Technology sectors, are creating something akin to an industrial revolution that we have not seen since the 1870s. Against this backdrop of a slowing China and increasing disruption, we have seen the percentage of companies with top line growth of eight percent or more decline to 23% of the MSCI All Country World, compared to 45% in 2000/2001 (Exhibit 87). In our humble opinion, many of these structural growers now enjoy not only a cheaper cost of capital but are increasingly benefiting from a network effect that allows them to gain greater operating leverage than their peers. In many instances we are witnessing fast-moving corporate ‘winners’ taking market share while maintaining pricing, and as such, the outlook is quite bright, we believe. Key markets like cybersecurity and value-added payment systems are obvious examples of this new world order playing out, but we also believe that this ‘winner take all approach’ is also occurring in logistics, defense electronics, and even food and healthcare delivery platforms that we see in Asia. Importantly, though, we probably would avoid or own smaller positions in some of the high profile growth companies in areas where anti-monopoly or anti-competitive behavior is being charged by elected officials in Europe and the United States.

**EXHIBIT 87**

Few Companies Generate Top-Line Growth These Days

<table>
<thead>
<tr>
<th>Year</th>
<th>% of MSCI World Companies With Expected Sales Growth of Greater Than Eight Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998</td>
<td>50%</td>
</tr>
<tr>
<td>2000</td>
<td>40%</td>
</tr>
<tr>
<td>2002</td>
<td>30%</td>
</tr>
<tr>
<td>2004</td>
<td>20%</td>
</tr>
<tr>
<td>2006</td>
<td>10%</td>
</tr>
<tr>
<td>2008</td>
<td>5%</td>
</tr>
<tr>
<td>2010</td>
<td>2%</td>
</tr>
<tr>
<td>2018</td>
<td>1%</td>
</tr>
</tbody>
</table>

Data as of December 31, 2018. Source Bloomberg, S&P.

**EXHIBIT 88**

We Are Looking for Companies With True Economies of Scale in Key Secular Growth Areas Such as Data

```
IDC estimates that every connected person in the world will have one digital interaction every 18 seconds by 2025. Today more than five billion consumers interact with data every day; by 2025 that number will be six billion or 75% of the world’s population.
```


At the moment, we actually are seeing better value in the public markets, particularly relative to many private markets, in countries such as China and the United States. Implicit in what we are saying is that we believe that some private company valuations have run too far, too fast to be supported through initial public offerings the way some of the Venture Capital and Growth communities may hope. Hence, we maintain our more cautious stance on Private Growth and other early stage financings in our target asset allocation.

```
Against this backdrop of a slowing China and increasing disruption, we have seen the percentage of companies with top line growth of eight percent or more decline to 23% of the MSCI All Country World, compared to 45% in 2000/2001. In our humble opinion, many of these structural growers now enjoy not only a cheaper cost of capital but are increasingly benefiting from a network effect that allows them to gain greater operating leverage than their peers.
```

"
Private Investments in Six of the 10 Best-Funded U.S. Tech Startups to Go Public Since 2015 Have Fallen from the Peak Levels They Hit in Funding Rounds Before the Companies’ Stock Debuts

The Top 10 Best Funded U.S. Tech Companies to Go Public Since 2015

Data as at May 25, 2019. Sources: Pitchbook (Total raised), company SEC filings (private share prices, amount raised at peak price), Wall Street Journal.

Ultimately, we believe that the poor performance of several recent IPOs in the Growth arena support our view that cash flow matters. One can see this in Exhibit 89. To be sure, we are not back to 1999, but we do believe that several recent investment rounds in the Private Growth markets have been at speculative levels. In our humble opinion, investors should avoid where possible business models that are predicated on low marginal revenue economics amidst continued high fixed costs. We also believe that estimates around the total addressable market have been exaggerated in certain instances. Importantly, though, we view recent disappointment in performance as a long-term opportunity, and accordingly, we do expect to shift our significant underweight in Private Growth back to an equal weight or overweight as leading investors in the sector are forced to acknowledge that some of their valuation metrics have gotten too robust.

In an odd time characterized by low interest rates and sluggish global GDP growth, we expect above average periodic dislocations across the capital markets.

Demand for European Logistics Has Exceeded Supply Every Year Since 2009

European Logistics Thousands of Square Meters, %

Data as at 2018. Source: CBRE, Euromonitor.

We Are Bullish on Data and Analytics Across a Variety of Sectors

Industry Datasphere CAGR, 2018-2025, %

Healthcare is poised to grow given the advancements in healthcare analytics, increasing frequency and resolution of MRIs, and other image and video-related data being captured in today’s advanced modes of medical care.

#4: Buy Dislocation/Dispersions  As we described in our April 2019 Insights note The Uncomfortable Truth, we are living in an odd time characterized by low interest rates and sluggish global GDP growth. Against this backdrop we expect above average periodic dislocations across the capital markets. Indeed, as we show in Exhibit 92, our implied default model has hit recessionary levels several times since 2009, despite the reality that we have not yet had a technical recession in the United States. We view this backdrop as an opportunity because it confirms our strong view that assets are consistently being mispriced.

EXHIBIT 92

Our Implied Default Rate Has Hit Recessionary Levels Several Times, Despite the Reality That We Have Not Yet Had a Technical Recession in the United States

```
In our humble opinion, investors should avoid where possible business models that are predicated on low marginal revenue economics amidst continued high fixed costs.
```

EXHIBIT 93

Periodic Dislocations Mean That Investors Need to be More Nimble Than in the Past

```
Periodic Dislocations Mean That Investors Need to be More Nimble Than in the Past
```

Exhibit 92: U.S. High Yield Implied Default Rate, %

- Implied Default Rate
- Avg (6.2%)

Data as at June 6, 2019. Source: Bloomberg.

EXHIBIT 94

China Equities, Technology Growth Stocks in Particular, Have Experienced a Massive Correction...

```
China Equities, Technology Growth Stocks in Particular, Have Experienced a Massive Correction...
```

Exhibit 94: MSCI China Price-to-Sales

Data as at May 31, 2019. Source: MSCI, Factset.
Maybe of more significance, though, is that we are finally seeing dispersions widen out. This shift in the macroeconomic backdrop as liquidity exits the system likely means that stock picking and security selection are going to become more important again. Indeed, both Exhibits 96 and 97 speak to this new reality where the micro might begin to trump the macro again. If we are right (and we think that we are), some asset allocators could be exiting certain hedge funds and long only managers at a time when their performance is likely to improve.

Meanwhile, in the Emerging Markets, as countries move up the GDP-per-capita curve, we continue to see demand for basic healthcare offerings, including private insurance and specialized surgery care, especially in fast-growing consumer markets such as Brazil, China, Indonesia, and India.
As a firm, KKR has been investing behind this theme for the lion’s share of our team’s nearly eight years at the firm. Interestingly, when we re-underwrote this theme from a macro perspective again this summer, we actually came away more bullish, not less. Key to our thinking is that the pace of implementation appears to have accelerated in recent quarters. Importantly, we do not think the trend towards experiences is just the ‘Amazon’ effect. Rather, we believe that key influences such as increased healthcare spending, heightened rental costs, and rising telecommunications budgets (e.g., iPhones) are leaving less and less discretionary income for traditional items, particularly mainstream retail. Recent trips to continental Europe as well as Asia have lent support to our view that this trend towards experiences is global in nature and cuts across a variety of demographics. For example, in Japan and Germany, aging demographics are boosting the use of later stage healthcare offerings, while younger individuals in the U.S. are embracing more health, wellness and beautification.

EXHIBIT 98
Healthcare, Consumer Services, Recreation and Travel Now Outpace Spending on Traditional Things

We are finally seeing dispersions widen out. This shift in the macroeconomic backdrop as liquidity exits the system likely means that stock picking and security selection are going to become more important again.

EXHIBIT 99
Healthcare Has Been the Only Consistent Growth Area in U.S. Personal Consumption Since 1967

Meanwhile, in the Emerging Markets, as countries move up the GDP-per-capita curve, we continue to see demand for basic healthcare offerings, including private insurance and specialized surgery care, especially in fast-growing consumer markets such as Brazil, China, Indonesia, and India. Importantly, the trend towards services extends well beyond just the Healthcare sector. Recreation, travel, and leisure all appear to be market share gainers versus basic ‘things’ that consumers traditionally bought with their disposable income. Moreover, consumers are more willing to use the Internet to price shop, making them more fickle in some instances.

As one might guess, there are times when our team does macro analysis on a particular topic while working with a deal team on an investment. An on-the-ground visit to a certain country and/or company can help to confirm that the micro and the macro are totally in sync, which is what we are usually searching for when we deploy capital on behalf of our limited partners. Our recent trip to China was one of those times, as Frances Lim and I had several corporate meetings that confirmed her bullish thesis about the massive opportunity set linked to the burgeoning Chinese millennial population. By way of background, of the total 828 million millennials in Asia, Frances estimates that fully 40%, or 330 million, are today in China. To put the 330 million in perspective, we would note that there are ‘just’ 66 million millennials in the U.S. Said differently, China’s millennial population alone is now roughly the same size as the entire population of the United States. Also, as we show below, millennials are now a sizeable proportion of the overall Chinese population. Given this heft and growth, they will unequivocally dominate the labor force and consumer markets over the next two decades.
Against this current backdrop, we have come to appreciate that Chinese millennials have developed distinct consumption preferences in recent years. As we show in Exhibit 101, they spend about one-third more on leisure. They value fresher and healthier food and product alternatives than their parents, and they price comparison shop much more than their elders and many of their global peers. We link many of these traits to their tech-savvy ways—and it is not just goods purchased. Just consider that it only took Didi, China’s ride hailing leader, three years to reach 50% penetration, while Uber has yet to reach 50% penetration after seven years in the U.S. Meanwhile, Alipay has only taken four years to hit a penetration rate of 50%, while ApplePay has yet to reach the 50% milestone in the United States. To be sure, some of this accelerated migration in China is linked to the country’s desire to use technology to accommodate its population of 1.4 billion as well as to create national champions, but it also speaks to the rapid adoption of technology throughout the country. Favorable logistics also help greatly in a country where courier costs are low and population density is high.

EXHIBIT 100

With More than 6x as Many Millennials in Asia than in the U.S. and Europe Combined, the Asian Millennial Will Reshape the Global Consumer Market

2017: Number of Millennials
Born 1980-1994 (Millions)

5.0x the number of millennials in China and 12.5x the total number in Asia relative to the U.S.

Asia includes China, India, Japan, Hong Kong, Korea, and ASEAN (Indonesia, Malaysia, Philippines, Thailand, Singapore, Vietnam). Data as at June 24, 2017. Source: United Nations World Population Prospects, Haver Analytics.

EXHIBIT 101

Chinese Millennials Save Less and Allocate Three Times More of Their Income to Leisure

Spending Breakdown China Overall vs. Chinese Millennials

<table>
<thead>
<tr>
<th>Category</th>
<th>China Overall</th>
<th>Chinese Millennials</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leisure</td>
<td>30%</td>
<td>90%</td>
</tr>
<tr>
<td>Shopping, Non-Food</td>
<td>16%</td>
<td>28%</td>
</tr>
<tr>
<td>Shopping, Food</td>
<td>14%</td>
<td>49%</td>
</tr>
<tr>
<td>Housing, Transport, Utilities</td>
<td>4%</td>
<td>3%</td>
</tr>
</tbody>
</table>

Data as at December 31, 2016. Source: Goldman Sachs Global Investment Research.

EXHIBIT 102

We Believe That Potential Spending of High Earners Will Be Oriented Towards Upgrades and Experiential Spending

Millions of Chinese Living in High Income Households

Data as at 2018. Source: Global Demographics estimates, HSBC.
SECTION III: Investment Considerations/Risks

#1: Reliance on Technology While maybe not as extreme as 2000, this cycle has clearly been heavily technology dependent. How dependent? As Exhibit 104 shows, essentially all the earnings growth this cycle has come from the Technology sector. However, it is not just corporate profits that are being driven by technology. Indeed, we recently heard one major CEO in the real estate sector acknowledge that fully 35% of commercial lease ups during the past 12 months were directly linked to the Technology sector.

However, it is not just corporate profits that are being driven by technology. Indeed, we recently heard one major CEO in the real estate sector acknowledge that fully 35% of commercial lease ups during the past 12 months were directly linked to the Technology sector.

EXHIBIT 103

Millennials Have Different Attitudes and Buying Habits Than Older Generations

EXHIBIT 104

Technology Has Been the Key to EPS Growth This Cycle

EXHIBIT 105

Technology Remains an Area of Outsized Growth in the Credit Markets These Days
On the debt side, a similar concentrated bet is being made. As we show in Exhibit 105, Technology, Media, and Telecommunications now accounts for around 40% of total issuance for Levered Loans, and it is certainly sizeable in the High Yield market as well.

At the moment, we find it hard to avoid allocating capital to Technology deals because of all the technological change we see transpiring around the world. However, in the asset allocation accounts where we do portfolio construction, we are becoming increasingly valuation sensitive, and as such, we are watching our pace of deployment closely in the Technology arena. We also are shying away from Technology deals where the embedded value creation in the deal depends on huge cost savings and high leverage levels. So, our bottom line is certainly not to avoid investing in parts of the Technology sector. Rather, we are acknowledging that the sector’s outlook has gotten increasingly frothy, and as such, we are proponents of aggressive use of many of the sophisticated asset allocation tools that we have been advocating for some time (see October 2018 Insights note Rethinking Asset Allocation for further details).

#2: An Increasingly Complex Geopolitical Environment The populist and geopolitical disruptions that my colleagues Ken Mehlman and Travers Garvin predicted in each of the past three years have again manifested themselves in 2019. These trends are disrupting global trade, paralyzing the largest democracies in Europe, and sidelining policymaking in the U.S. While the U.S. and China may ultimately muddle through on tariff matters in the near-term, the broader geopolitical struggle between these two nations has now been exposed – on trade, on technology, on rule of law and national security -- and it is not likely to abate.

Importantly, there is political instability across all regions these days. For example, in Europe the recent elections for the European Parliament confirmed that the balance of power is shifting away from the traditional center parties (Christian-Democrat and Social-Democrat), which – for the first time since 1979 (first European Parliament elections) – have lost their combined majority. The old, post-World War II political parties, built around class and economic structures and party loyalty have eroded with the increased prominence of identity, migration and climate change as core voting issues. At the same time, radical populist parties, while gaining seats, remain below the 25% threshold and are strongly internally divided on core issues, such as migration and Russia. In this context, Liberals (economically to the right and socially on the left) and Greens (who have now become an established political force in Northwestern Europe) will have a strong voice in the upcoming appointments of key personnel (presidency of EU Commission, EU Council, EU parliament and European Central Bank) and legislative initiatives over next five years. Both parties have a strong pro EU agenda.
Meanwhile, French President Macron has maneuvered himself into the midst of the EU decision-making machinery. He is not only building a coalition with the liberals but also leveraging that position to seek a strengthening of the institutional structures of the European Union, a stronger European backbone on the international scene, including on trade, and a further injection of French influence into the EU decision-making machinery. In the United Kingdom, polarization linked to Brexit is only further intensifying, and it is putting the Conservative Government, the Labour Party, the two-party politics system (Conservatives–Labour) and the Four Nations Union (England, Scotland, Wales, Northern Ireland) under severe, even existential, pressure.

EXHIBIT 108

Regulatory Issues and Investment, Not Tariffs, Were of Paramount Concern in a Recent U.S.-China Business Council Survey

<table>
<thead>
<tr>
<th>Impact of U.S. - China Trade Tensions on Business</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased Scrutiny From Regulators in China</td>
</tr>
<tr>
<td>Delay or Cancellation of Investment in the U.S. or China Due to Uncertainty</td>
</tr>
<tr>
<td>Lost Sales Due to Tariffs That Have Been Implemented by China</td>
</tr>
<tr>
<td>Lost Sales Due to Customer Uncertainty of Continued Supply</td>
</tr>
<tr>
<td>Increased Scrutiny From Regulators in the U.S.</td>
</tr>
<tr>
<td>Other</td>
</tr>
<tr>
<td>Uncertainty Due to Trade Tensions</td>
</tr>
<tr>
<td>Lost Sales Due to Concerns About Doing Business with American Companies</td>
</tr>
<tr>
<td>Increased Sales or Opportunities</td>
</tr>
<tr>
<td>Lost Sales Due to Tariffs That Have Been Implemented by the U.S.</td>
</tr>
</tbody>
</table>


The U.S. certainly remains a hot spot of political uncertainty as well. Already, policymakers have begun to pivot to the 2020 elections, with a record 23 Democrats seeking to oppose President Trump. Such a large field, combined with Democratic base voters’ dislike of President Trump, is likely to pull Democratic policy to the left. President Trump welcomes confrontation and will likely look for nearly daily opportunities to stoke this fight, hoping to frame 2020 as a choice, not a referendum on his leadership. A critical question is how this drama impacts U.S./China trade, EU/U.S. trade, Japan/U.S. trade, NAFTA/USMCA – particularly as President Trump uses tariffs or the threat of trade barriers to reinforce his disruptive bona fides and focus attention on topics he favors (see Mexican tariffs and immigration).

Also, in this populist environment, the Technology and Healthcare sectors can expect bipartisan examination, and potentially pro consumer legislation (for example: drug prices and surprise medical billing) and regulatory actions (Google antitrust). Beyond these industries, expect continued scrutiny on gun sales, consumer loan products, bankruptcies, treatment of workers, and outsourcing. So needless to say, our call for corporate and investment leaders to remain acutely focused on establishing and demonstrating the social value of their businesses remains in full force.

EXHIBIT 109

The Wave of Discontent Across Europe Taps into Concerns About Globalization, Immigration, a Dilution of National Identity, and the EU Itself

<table>
<thead>
<tr>
<th>% of Votes Won By Nationalist Party in Most Recent European Election</th>
</tr>
</thead>
<tbody>
<tr>
<td>1%-8%</td>
</tr>
<tr>
<td>9%-16%</td>
</tr>
<tr>
<td>17%-24%</td>
</tr>
<tr>
<td>25%+</td>
</tr>
</tbody>
</table>

Data as at April 2019. Source: BBC.


“
So needless to say, our call for corporate and investment leaders to remain acutely focused on establishing and demonstrating the social value of their businesses remains in full force.”
Given all the above, our view is that investors should make sure to maintain some additional liquidity or shock absorbers in their portfolios. Hence, we have made the decision at mid-year to add a little more Cash to our portfolio. However, there is a bigger shift in approach that should be implemented, we believe. Specifically, as Ken and Travers have been advocating through their work at KKR, investors need to spend more time on the “soft stuff,” including reputational risks. To this end, we believe that all allocators of capital should carefully assess whether companies and industries act like monopolists, can appropriately mitigate the negative externalities of their business models, and thoughtfully consider business practices that are “allowed but not proud” – and look to invest with companies who credibly maintain their social “license to operate.” This approach certainly applies not only to new technology platforms, but really to all business behavior. Finally, we also believe that short-term greed will lead to long-term decline in value; said differently, long-term thinking about corporate positioning, culture, and community engagement has never been more important.

#3: Corporate Margins Are at Risk

One of the benefits of working in the KKR Global Macro & Asset Allocation team is that it provides a wonderful window into the key questions that potential investors and/or companies are wrestling. Right now our backlog for deal-related work is highest in the area of corporate profitability. Specifically, a lot of the ‘swing factor’ we see around profitability for both new investments and existing portfolio companies centers around margin sustainability. In particular, will downward pressure on operating leverage – most often driven by higher wages amidst limited pricing power – dent EBITDA margins more than budgets suggest at this point in the cycle? As we show in Exhibits 110 and 111, we think that the answer is yes more often than not at this point in the economic cycle, though productivity growth has emerged as a key buffer.

EXHIBIT 110

We Believe That Slowing Growth Amidst Higher Wages Will Become a Headwind to Margins in 2019...

EXHIBIT 111

...Though Better Productivity Growth Has Been an Important Offset to Rising Wages, Keeping Unit Labor Costs Stable

Coming into 2019, we had more conservative operating margins assumptions than the consensus, expecting margins to compress by 20 basis points or so rather than expand for a third straight year. Consensus has since converged towards our view, and the analyst community now expects margins to fall to 11.3% this year from 11.5% in 2018. As we look ahead into 2020, though, we still continue to think that operating margins will come under additional pressure again. As we show in Exhibit 110, our proprietary model for tracking the revenue-wage differential falls towards just one percent by the fourth quarter of 2019. In our base case, we assume hourly earnings of 3.2% and revenue growth of 4.3%. In our bear case, the revenue-wage differential turns negative by the end of this year, a backdrop that last occurred in 2007.

Coming into 2019, we had more conservative operating margins assumptions than the consensus, expecting margins to compress by 20 basis points or so rather than expand for a third straight year. Consensus has since converged towards our view.
Productivity Growth Climbed to 1.7% Year-over-Year in the First Quarter, the Fastest Pace Since 2010

U.S. Productivity Growth (Output / Hours Worked)


Is The Trade War Really Having an Impact on Sourcing Costs and Logistics? Yes, It Absolutely Is

Data as at June 3, 2019. Source: EvercoreISI.

That said, we note that the recent upturn in productivity has been an important mitigant. Indeed, as we show in Exhibit 112, productivity actually jumped 1.7% year-over-year in the first quarter of this year, which is the fastest pace since September 2010. Rising productivity could be a material offset to the negative operating margins we have seen in prior cycles, as it helps to keep unit labor costs stable (Exhibits 110 and 111). However, if trade tensions continue to ratchet up rather than down (which is our base view), CEOs may once again pull back on capital expenditure – which is key to productivity – at exactly the time spending needs to increase (to boost productivity).

SECTION IV: Conclusion

We have been doing macroeconomic analysis for nearly two decades, and it certainly feels to us right now that – after the most recent tariff confrontation with China, Mexico, and India – the current environment has gone to eleven on a scale of one to 10. This reality humbles us because it means that the risk of a blunder for macro investors and asset allocators is extremely high – even for those who have been navigating global markets for quite some time. The stakes are also higher, as we are now likely living in a world of lower returns with above average dispersions.

Against this backdrop, we are relying more than ever on the proprietary macro frameworks that we have built over the last two decades to guide our thinking. At the moment, our work is telling us to own more assets linked to nominal GDP as part of our goal of frontloading as much yield as possible in the portfolio. It is also telling us to hold a little more Cash to be able to lean into periodic dislocations. Beyond Cash, it likely means owning more Opportunistic Credit and Special Situations. Finally, we also feel compelled to embrace Complexity through corporate carve-outs in our Energy, Private Equity, Real Estate, and Infrastructure allocations.

There are clearly risks to consider. Tariffs are undoubtedly overhangs to both growth and confidence, and as we indicated earlier, we view the U.S.-China tensions as much more concerning than the U.S.-Mexico ones (and we do not mean to belittle them either). Beyond heightened geopolitical tensions, we think both corporate margins and excesses in the Technology sector warrant investor attention.

Overall, though, we think the most likely outcome is more of a muddle through one – one that is defined by isolated downturns that create short-term dislocations. Ultimately, though, low rates, de-levered financial institutions, and accommodative central banks should help to prevent a 2007 repeat. So, stick to the plan. If we are right, then we think our existing asset allocation framework should continue to serve us well. Said differently, if “it ain’t broke, don’t fix it.”
Important Information

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

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

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

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

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

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

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

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