FIS GROUP

BATTENING DOWN THE HATCHES
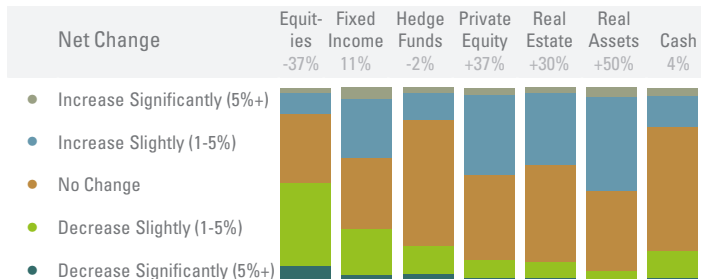### Part 1: Why Should Investors Derisk & What Should They Consider?

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SUMMARY

In the U.S., we are in the late innings of the longest economic expansion on record and the bull market which began in February 2009 is clearly late cycle. Outside of the U.S., the recovery has been more halting with the 2011-2012 European debt crisis and the mid-cycle slowdown caused by fears of a Chinese hard landing in 2015.

For allocators, signs of an aging economic cycle and bull market as well as elevating geopolitical risks are leading them to pull assets from public equities in favor of so-called safety assets, such as bonds and real assets. According to a January 2019 survey conducted by BlackRock on Institutional Trends in Asset Allocation, 51% of their clients signaled an intention to decrease their allocation to equities in 2019; a clear acceleration from 2018 and 2017 when 35% and 29% signaled an intention to reduce their equity allocation. Heading into 2019, this trend is most pronounced in the U.S. and Canada, where 68% of clients plan to reduce equity allocations, versus just 27% in Continental Europe. Additionally, the study found that Corporate pensions globally continue to derisk; 60% intend to decrease equity allocations and 48% plan to increase fixed income (see CHART 1).

CHART | Allocators are Derisking
1

Net Change	Equities -37%	Fixed Income 11%	Hedge Funds -2%	Private Equity +37%	Real Estate +30%	Real Assets +50%	Cash 4%
● Increase Significantly (5%+)							
● Increase Slightly (1-5%)							
● No Change							
● Decrease Slightly (1-5%)							
● Decrease Significantly (5%+)							

Net percentages represent a net percentage intending to increase or decrease allocations to each asset class. (Calculation: % of firms intending to increase - % of firms intending to decrease.

Source: BlackRock

As of the writing of this paper, the broad messages on the immediacy of a recession from various macro indicators remain mixed: tentative signals of a bottoming, but no lift-off yet in sight. Financial markets are telling the same story. Bond yields are depressed; industrial metal prices remain soft against the backdrop of a firm dollar while oil prices are trending lower. Global equities, however, have risen a long way from their December lows, yet the recovery masks a divergence between strength in the US and underwhelming performance in most other markets.

Barring a negative supply shock from a geopolitical event or an unexpected reversal of the FOMC to tighten liquidity, we believe that recession is more likely over the next 18 to 24 months. However, there is a reasonable case for investors to gradually and systematically reduce their equity risk exposures. Because the anatomy of every major recession differs with varying economic sector and geographic epicenters, we would suggest that the most pertinent questions for asset allocators should be:

- **how might the drivers and policy reactions to the next recession be different from the most recent recessions and,**
- **what asset classes and sectors are most overpriced and likely to be most vulnerable?**

This three-part paper reviews the case for derisking and the potential opportunity costs of doing so prematurely. The paper also evaluates asset allocation strategies over the last three economic downturns as well as the stagflation period of the 1970s that have most effectively preserved capital; as well as those assets that may be more vulnerable than is commonly understood. Finally we look at cost-effective methods for derisking, including traditional rebalancing and options techniques. Each part, which will be distributed separately and sequentially over the next coming weeks, is briefly described below.

PART 1 discusses two possible responses to the first question; with the first recession scenario caused by declining industrial production (which has already metastasized from Europe and Japan to the U.S.) which meaningfully erodes aggregate demand globally. The second recession scenario, is caused by a negative supply side shock due to escalating geopolitical pressures either between the U.S. and Iran or from the Sino-US strategic rivalry, leading to stagflation. Stagflation can be defined as an inflationary period accompanied by rising unemployment and lack of growth in consumer demand and business activity. While this second scenario has a lower probability, it would far be more troubling; because it would upend traditional policy prescriptions and meaningfully change asset derisking assumptions that have underpinned asset allocation models for over 30 years.

PART 2 answers the second question by examining the effectiveness of traditional safe haven assets through an analysis of their returns and characteristics during the last three economic downturns, as well as the stagflation period of the mid 1970s. While past performance relationships provide a useful guide, it is critical to remember that there are no assets that one can say will always hedge every recession effectively. Holistically identifying the assets and sectors that are most vulnerable to sharp losses is as important as finding assets that will perform best during the downturn. We therefore attempt to gauge which risk seeking and safe haven assets have become unhinged from their fundamental underpinnings or appear to be rapidly attracting assets as investors reach for additional return or yield.

PART 3 evaluates methods for systematically and cost effectively reducing equity risk through a combination of options strategies as well as traditional rebalancing methods that help reduce the potential funding opportunity costs that could be incurred by prematurely derisking.

SECTION 1: ASSET ALLOCATION AND THE TREND TOWARDS DERISKING

Asset allocation strategies are designed to optimally balance investors' long and short-term funding objectives/requirements in order to meet their underlying liability or spending obligations. Asset allocation model outcomes are highly dependent on long-term return estimates, the variability of those estimates and the correlations among them. Long term return estimates are in turn typically based on a combination of the prevailing discount or "risk free" rate (usually represented by the short term fixed income rate), an assumption about economic growth and inflation plus the relevant combination of return premia required for incurring additional risks (such as credit, duration, equity, currency, etc.) relative to the risk free investment.

The most common concern cited by investors who are derisking is that the risk reward trade-off associated with equity beta has become less compelling. According to the aforementioned BlackRock study, the heightened risk perception associated with public equities in particular primarily reflected concerns over rising interest rates and late cycle earnings pressures in North America; and geopolitical and economic uncertainty for allocators in the EMEA and Asia Pacific region.

SECTION 2: EVALUATION OF THE CYCLICAL BACKDROP FOR RISK ASSETS

There are several compelling cyclical dynamics that warrant a reduction in investors' equity allocations.

1. **We Are Late-Cycle Globally.** The most profitable time for equity investments is in the early recovery period that succeeds a recession. As the economic cycle peaks and capacity tightens, earnings typically come under pressure from two sources – higher costs (from wages and other inputs such as interest rates) and counter-cyclical monetary policy designed to create price stability and reduce imbalances or price bubbles. The FOMC raised the discount rate 9 times from 0.25% prior to the first hike in December 2015 to 2.5% at the end 2018. This is why, according to the BlackRock survey, a majority of North American allocators cited a concern about rising U.S. interest rates as a motivation for derisking.

2. **Global growth is slowing.** Based on PMI data, we appear to be facing a synchronous global production slowdown. Back in January 2018, every major economy in the world was expanding. Fast forward 18 months and all bar four— the US, India, Canada and Australia—now risk seeing manufacturing activity contract. Although commodity-producing countries—Canada, Australia and Brazil— have actually held up reasonably well in an unfavorable environment, growth in the Eurozone has collapsed, particularly in Germany and Italy. This is especially notable

considering there was no major crisis during the period. Barring a dollar liquidity crisis (see POINT 8), we do not foresee an imminent recession risk. However, further declines in industrial production, particularly if there is not sufficient policy accommodation, could eventually depress aggregate demand to cause a global recession.
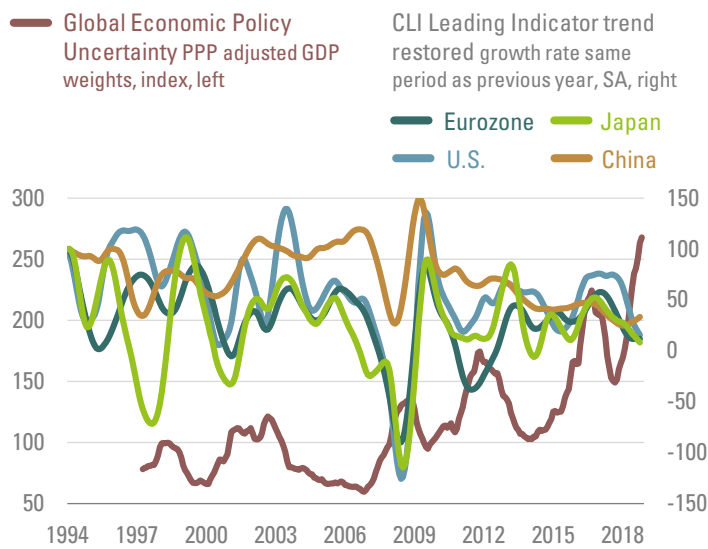
TABLE 1 | Every economy but India has deteriorated since January 2018 *Markit manufacturing PMIs, red denotes contradictory territory*

Country	Jan 2018	July 2019	Change
U.S.	55.5	50.4	-4.1
China	51.5	49.9	-1.6
Japan	54.8	49.4	-5.4
Germany	61.1	43.2	-17.9
India	52.4	52.5	0.1
Brazil	51.2	49.9	-1.3
France	58.4	49.7	-8.7
UK	55.2	48.0	-7.2
Italy	59.0	48.5	-10.5
Canada	55.9	50.2	-5.7
Australia	55.4	51.6	-3.8
S. Korea	50.7	47.3	-3.4

3. **Bearish signals from the bond markets.** Bond yields are reflective – i.e. the level and the shape of the yield curve can signal a bearish outlook for equity and credit markets. Currently, a record amount of debt (over US $16 trillion) has negative yields and over US $30 trillion of debt has negative real yields (assuming inflation of 1.6%). Additionally, for most of 2019, the U.S. yield curve (as measured by the ratio of the 10 year minus fed funds rate) has been flat and in March, this ratio inverted. Yield curve inversions have historically been good indications to reduce risk in U.S. equities. Generally, bonds start to outperform equities after the curve is inverted and continue to do so as the yield curve steepens (i.e. as the Fed embarks on an easy cycle). There have been seven US recessions since 1960 and each has been preceded by an inverted yield curve. However, as discussed below, yield curve inversions' record of predicting recessions is mixed in the U.S. and insignificant elsewhere. Our view in this cycle is that the FOMC will react more readily to inversion signals and ease policy more rapidly than it has done in the past to avoid an inversion-driven credit crunch which could lead to a recession.

4. **Unlike 2009 and 2015, China's reflation policies will provide a much less powerful locomotive for jump-starting global growth.** In 2009, China provided massive stimulus which helped support global growth (see CHART 2). While the lagged effects of China's gradual reversal to more reflationary policies in 2018 appears to be stabilizing growth, China's ability to reflate global growth is hampered by both structural reasons – an aging population and the weight of debt – and because of trade war uncertainties. Additionally, Chinese policy-makers may feel somewhat less enthusiastic about helping to jump start global growth again having been a good global citizen after the GFC when they didn't devalue their currency while others did.

CHART 2 | Weak Global Growth and Elevated Geopolitical Uncertainty

— Global Economic Policy Uncertainty PPP adjusted GDP weights, index, left

CLI Leading Indicator trend restored growth rate same period as previous year, SA, right

— Eurozone   — Japan
— U.S.   — China

Source: FIS Group Professional Estimates and FactSet

5. **Heightened geopolitical uncertainty has increased fears of bear market and recession inducing tail risk.** Accordingly, CHART 2 also shows a meaningful rise in the Economic Uncertainty Index. The potential flashpoints that provide the most likely source of a negative supply side shock are:

   a. The Sino – U.S. strategic and technological rivalry (currently being manifested through an escalating trade war)

   b. Hong Kong and Taiwan challenges to the Chinese mainland

   c. The breakdown of Japanese and South Korean relations as well as escalating hostilities between India and Pakistan

   d. Increased probability of a "hard" Brexit and increasing tensions between Italy and the EU

   e. Escalating tensions with Iran

6. **Diminishing returns to traditional growth inducing monetary policy tools.** Currently, the Fed Fund target rate

stands at the 2.00 to 2.25% range vs. 5.00% to 5.25% in 2007, prior to the GFC (see CHART 3). While central banks can turn to more drastic policy measures (such as debt monetization, further asset purchases and/or interest rate or inflation targeting), with interest rates in negative territory across much of the industrialized world and real rates below 1% in every developed market, their ability to fine tune economic outcomes through traditional measures may be reaching their limit. Additionally, further gains in asset prices may become potentially counter-productive for both mass consumption and political harmony because of already stretched levels of income inequality.

CHART 3 | U.S. Fed Funds Rate
*Funds Rate: 2.00-2.25% as of July 31, 2019*
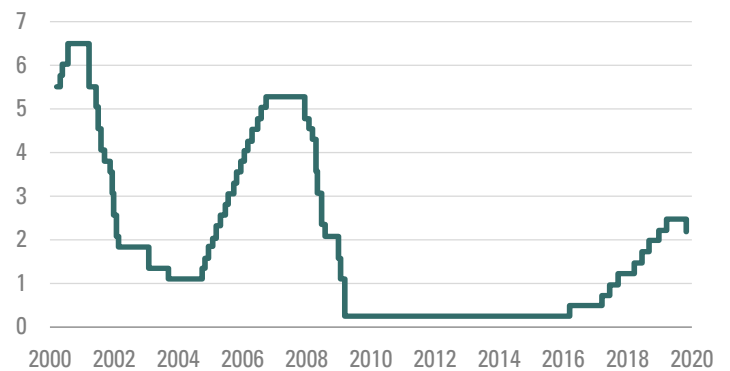
Source: Federal Reserve

7. **Diminished Global Policy Coordination to Combat Global Crises**

Over the last five years, we have witnessed the steady rise of populist and more nationalistic policies that continue to challenge traditional world alliances that have been crucial to either preventing or muting the impact of economic crises or geopolitical tensions.

Much of the framework for the world's political, economic and financial system was born out of global crises (such as the United Nations after WWII). For example, the Group of 7 (G7) was formed in 1975 to coordinate global fiscal and monetary responses to oil shocks and the stagflationary environment of the 1970s. The G7 was later the initial venue for the Plaza Accord in 1985 which was critical in arresting an appreciating U.S. dollar which was depressing global growth. Post-GFC, the Group of 20 (G20) was similarly instrumental in coordinating global fiscal and monetary responses leading to the recovery of risk assets in early 2009. More recently the G20 hosted the 2016 Shanghai Accord that calmed then cratering financial markets that feared a "hard landing" in China. Today, it is hard to envision that level of cooperation in an environment in which major powers are at loggerheads (e.g., UK vs. EU; US vs. China; Italy vs. Brussels). One need look no further than the G20's tepid response to the wild fires in the Amazon jungle and the tit-for-tat between world leaders to gauge the erosion of comity among them.

8. **Declining global liquidity.** Relative to the rest of the world, the U.S. is still growing, buttressed primarily by positive consumer sentiment. Growth in the rest of the world has been challenged by a sharp decline in dollar liquidity in 2018 (see CHART 4). In the past, tightening offshore dollar lending standards and dollar flows back to the U.S. used to drive a dollar rally in a US recession. Today, the landscape is different, as competitive devaluation now drives a dollar rally ahead of a US recession, and in so doing, could help to precipitate that recession.

CHART 4 | Excess Global USD Money Supply
6m annualized, %
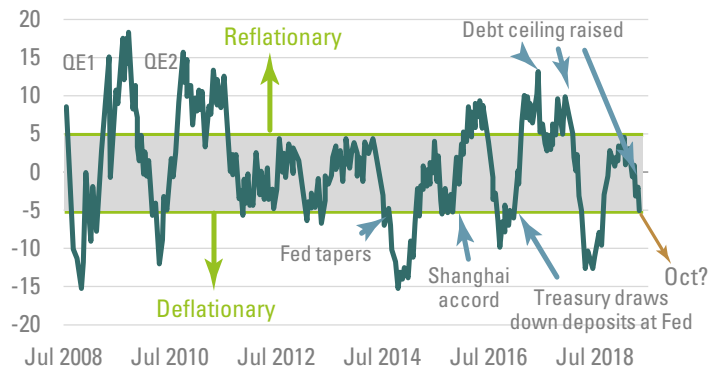
Source: The MacroStrategy Partnership, Bloomberg

The critical difference between a mid-cycle slowdown and a slowdown that ends the cycle is the Fed's ability to inject dollar liquidity into the system. Chairman Bernanke did just that with QE2 & QE3. Chairman Yellen did it with the Shanghai accord and by lowering the dot plots. In the first half of 2019, Chairman Powell failed to support dollar liquidity even though he has helped to guide the market from pricing in four hikes this time last year to pricing in four cuts. More recently, however, there have been some signs that policy has become supportive of liquidity. Net of QT, the total liquidity injection was US$460bn over the last seven months, or around US$850bn annualized. That is around 1.4x more aggressive than QE2. We believe that these liquidity injections have supported the rally in global equity markets this year, despite trade-war fears and the slowdown of industrial output. However, this benign liquidity injection could easily morph into an aggressive liquidity tightening, at this vulnerable time for the global macro financial system. As a result of the financing activity required by a ballooning budget deficit, U.S. Treasury deposits are set to rise from US$111bn on August 15th to US$350bn by the end of September, and likely US$410bn by end-October. Another concern is that recent SIFMA data indicates declining corporate credit issuance with buybacks declining sharply in Q2. If US corporates move from growing borrowing at 5% to cutting borrowing by 5%, that would take US$2trn of liquidity out of the system, and it would render Fed rate cuts ineffective.

SECTION 3: COULD DERISKING BE PREMATURE?

Since late 2018, investors have piled into safe haven assets, typically government bonds and precious metals (see CHART 5). Government bonds are the natural destination for a world in which growth continues to collapse, but less so if growth rebounds or if governments embark on massive fiscal stimulus. Gold, on the other hand, would be expected to benefit from higher government spending funded by central bank generosity.

CHART 5 | Investors Have Piled into Gold and Government Bonds this Year *Jan 2019 = 100*
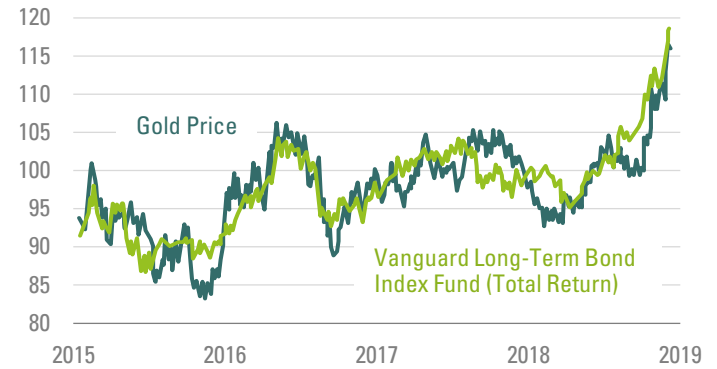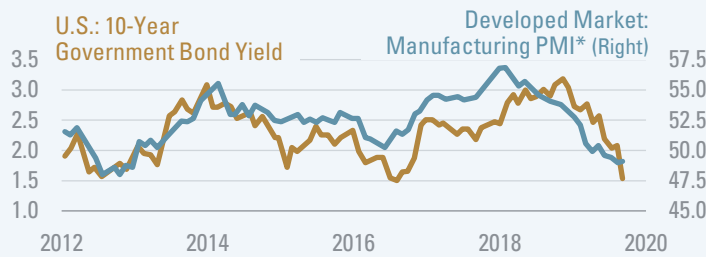

Source: Gavekal Data / Macrobond

However, as more government bonds around the world slide into negative yields, investors can draw one of two conclusions: either the world faces an economic meltdown, or there is a buying panic in safe assets and thus a buying opportunity in risk assets. For allocators, if the latter is correct, then significant equity derisking in the short term could present a meaningful funding opportunity cost. This is why we would recommend a gradual and systematic reduction to investors' equity exposure.

Bond prices have an inverse relationship with yields. At current yields, the short-term potential for capital appreciation – nominal or real – diminishes, while the potential for vicious losses increases dramatically. The technical term for this unattractive asymmetry is *negative skew*. The key vulnerability for long duration bond exposures would be a positive surprise in economic growth. As shown in CHART 6 (on the next page), bond yields both in the U.S. and globally closely track the Purchasing Managers Index (PMI), which in turn tracks economic output. Therefore, a positive upturn in the global cycle would not only likely lead to a late cycle equity rally; but it could also lead to negative total returns for long duration bond portfolios. PART 2 of this paper quantifies this possibility by evaluating return scenarios for the 10-year treasury bond under different economic scenarios. Investors might therefore want to consider whether the rush out of equities into low-yield long duration bonds is akin to rushing into a burning building?

CHART
6 | Declining Bond Yields Reflect Declining Output

U.S.: 10-Year Treasury Yield

J.P. Morgan Global Government Bond Yield

U.S.: 10-Year
Government Bond Yield

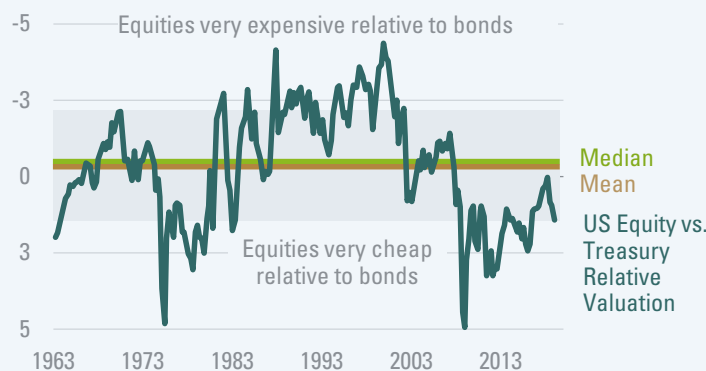Developed Market:
Manufacturing PMI* (Right)

*Arithmetic average of the U.S., Euro Area, and Japan. Based on Market Data
Source: J.P. Morgan Chase & Co.

TABLE
2 | Yield Curve Inversions Followed by Significant
Negative Events

Yield Curve Inversion	Recession	Intervening Event
1968	1969	Escalation in Vietnam War
1978	1979	Paul Volcker's inflating fighting policies
1989	1990	Iraq invasion in Kuwait
2006	2007	Sub-prime crisis

CHART
7 | If Bond Yields Stay Near Current Levels, Equity
Valuations are Cheap *Cyclically-adjusted earnings-yield
(1/Shiller PE) minus 10-year treasury yield*

Equities very expensive relative to bonds

Equities very cheap
relative to bonds

Median
Mean

US Equity vs.
Treasury
Relative
Valuation

Shaded area = 1 standard deviation
Source: Gavekal Data / Macrobond

In March of this year, the inversion of the 2 year over 10-year bond further escalated late cycle fears among investors. Yield curve inversions have historically been good indications to reduce risk in U.S. equities. Generally, bonds start to outperform equities after the curve is inverted and continue to do so as the yield curve steepens (i.e. as the Fed embarks on an easing cycle). Historically, when the yield curve steepens near to its cyclical high, then it is time to add risk in equities and cut exposure to bonds.

However, yield curve inversions' record of predicting recessions is mixed, has a highly variable lag (from a few months to up to 18 months) and is much less significant outside of North America. To say "a recession always follows an inversion" is merely a statement of fact; but it is not necessarily correct that an inversion always causes a recession. There have been seven US recessions since 1960. Each have been preceded by an inverted yield curve. Of the seven, three (1973, 1980/81 and 2000/01) saw recessions within months of the inversion. Two yield curve inversions were either false positives or were around 2 years ahead of the subsequent recession (1966-67 and 1998); four had meaningfully negative intervening events that arguably also contributed to the subsequent recession (see TABLE 2). Additionally, outside of the U.S., yield curves have limited predictive relevance. (For example, Australia has had significant yield curve inversions while the economy has enjoyed 15 years of uninterrupted expansion).

Our view in this cycle is that the FOMC will react more readily to inversion signals and ease policy more rapidly than it has done in the past to avoid an inversion-driven credit crunch which could lead to a recession.

While low bond yields typically signal a bearish outlook for equity and credit markets, they can also signify expectations of a dovish monetary policy stance and hence be perceived as bullish for global risk assets. Falling discount rates applied by equity markets to cyclically-adjusted corporate profits, the cap rates assumed by property investors and hurdle rates used by business managements flatter valuations. For U.S. equities, if bond markets are right in predicting a world in which interest rates will stay forever near zero, then US equities on a cyclically adjusted price-earnings ratio of 29—equivalent to an earnings yield of 3.4%—could be viewed as a bargain (see CHART 7). If earnings either stabilize or increase, this valuation dynamic could provide the basis for a powerful late stage rally (such as what occurred in 1/1996 through 12/1999, when the S&P 500 index rose by 155.2% or 1/2005 through 12/2006, when the S&P 500 index rose by 21.5%).

A key question therefore is what would cause a positive reversal in the cyclical growth? Here are some factors worth considering:

• Neither investment-grade nor high-yield corporate bond spreads evince any particular concern about the economy. Although both investment-grade and high-yield corporate bond spreads have ticked up recently, they remain near the bottom of their post-crisis range and are nowhere near the levels they reached in prior risk-off periods, such

as the federal budget showdown/U.S. downgrade; the flare-up of the Eurozone crisis in 2011-12, and during the last manufacturing recession in 2015-16. With banks still easing lending standards for corporate and industrial borrowers, spreads won't undergo a systematic widening. Borrowers do not default as long as there is a lender willing to roll over their maturing obligations; so tighter credit standards are a precondition for spread-widening cycles.

- Tight global financial conditions may be reversed by aggressive central bank stimulus, which is already occurring in the Eurozone and several Emerging Market countries. Financial conditions are easier now than they were in 2018, and much easier than they were prior to the 2015/16 global growth slowdown.

- China has started to ease credit conditions in response to U.S. tariffs and the slowdown in growth. So far, stimulus has been tepid relative to 2015/16 levels, but it should ramp up in the coming months.

- Large segments of the global economy remain unaffected by the global manufacturing slowdown. The U.S. consumer, which represents 70% of the economy, continues to spend and is relatively under leveraged relative to the pre-GFC period. Encouragingly, spending on big ticket items such as automobiles and household furnishings rose 5.8% YoY in July, up from a low of 1.1% in December last year.

- Fiscal policy could become a greater tailwind for economic growth this year and next.

SECTION 4: WHAT ARE THE LIKELY CONTOURS OF THE NEXT RECESSION AND HOW MIGHT THEY BE DIFFERENT?

While the aforementioned factors render a 2019 recession unlikely, we do believe that recession is more likely over the next 18 to 24 months.

The most likely cause of the next recession will be a deteriorating industrial sector's contamination of the rest of the US economy. Stagflation caused by negative supply shock from escalating geopolitical risks is a lower probability recession scenario; but one which would be most challenging to both policy makers and allocators. Therefore, we would advise that allocators evaluate derisking strategies for both outcomes. The discussion below discusses the key dynamics of each scenario. PART 2 will recommend derisking strategies for both.

1. **A Cyclical Downturn Spurred by a Faltering Industrial Sector**

    Currently, the combination of slowing demand, bloated inventories, protectionist trends, Brexit uncertainty and a resilient dollar is holding the global industrial cycle hostage. Wholesale sales ex-autos/petroleum are down on a three-month basis, pushing the inventory-to-sales ratio

higher and pointing to further weakness in new orders (see CHART 8 and CHART 9). The recent relapse in the EM services PMI is concerning – although the clear shift of major EM central banks towards monetary easing should cushion the blow to economic activity. However, the longer the industrial sector falters, the more visible the spillover to overall earnings and employment is likely to become. It is therefore concerning that hiring and wages are already slowing in tandem with corporate profits. Correspondingly, the University of Michigan Consumer Sentiment Index posted its largest monthly decline in August of 2019 (-8.6 points) since December 2012 (-9.8 points), with the YOY change declining to -6.7%.

CHART 8 | Global Inventory Overhang
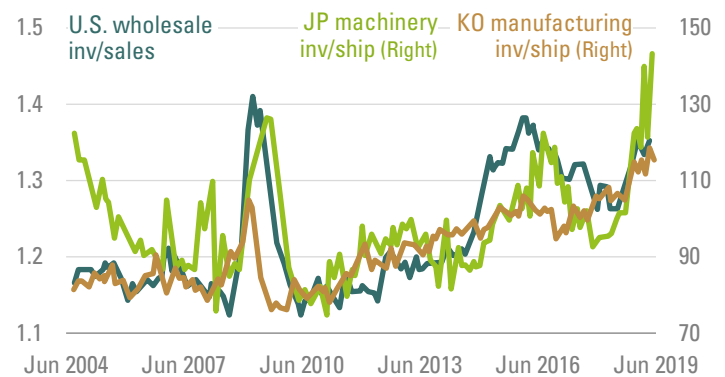
Source: Datastream, TS Lombard

CHART 9 | U.S. Manufacturing Feeling the Pressure
ISM Manufacturing
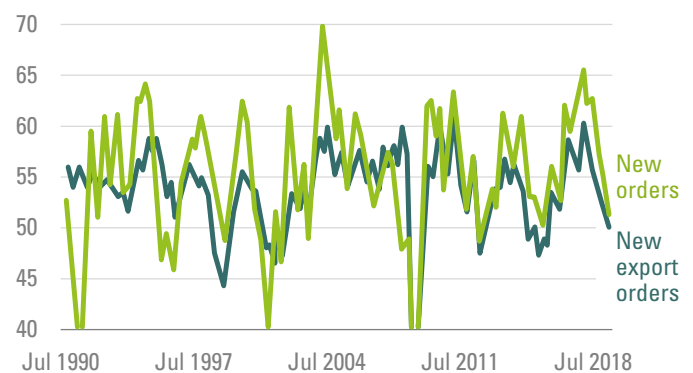
Source: Datastream, TS Lombard

As mentioned previously, the critical difference between a mid-cycle slowdown and a slowdown that ends the cycle is the Fed's ability to inject dollar liquidity into the system. In 2019 monetary policy has become more supportive of global liquidity. This policy reversal has supported the rally in global equity markets this year, despite trade-war fears and the slowdown of industrial output.

2. **Stagflation**

Nouriel Roubini, the preeminent NYU economist who famously forecasted the end of the real estate bubble in September 2006 posits that unlike more recent recessions, the next recession is likely to emanate from a negative supply induced shock from three potential sources:

a. The Sino-American trade and currency war, which could lead to a full-scale implosion of the open global trading system.

b. The slow-brewing cold war between the US and China over technology, a rivalry that has all the hallmarks of a "Thucydides Trap," so named for the Greek historian who chronicled how Sparta's fear of a rising Athens made war between the two inevitable. Despite their mutual awareness of the Thucydides Trap – and the recognition that history is not deterministic – China and the US seem to be falling into it anyway. Though a hot war between the world's two major powers still seems far-fetched, a cold war is becoming more likely as both countries are vying for dominance over the industries of the future: artificial intelligence (AI), robotics, 5G, and so forth.

c. Escalation of the confrontation between the U.S. and Iran into a military conflict, which could cause global oil prices to spike and bring on a recession. This scenario would reprise previous Middle East conflagrations in 1973, 1979, and 1990.

Stagflation can be defined as an inflationary period accompanied by rising unemployment and lack of growth in consumer demand and business activity. All three of these potential shocks would have a stagflationary effect; resulting in higher prices for imported consumer goods, intermediate inputs, technological components, and/or energy, while reducing output by disrupting global supply chains. According to Professor Roubini's thesis, the Sino-American conflict is already fueling a broader process of deglobalization, because countries and firms can no longer count on the long-term stability of these integrated value chains. As trade in goods, services, capital, labor, information, data, and technology becomes increasingly balkanized, global production costs will rise across all industries.

Professor Roubini's thesis could also be supported by the notable resurgence of populism, which has historically led to increased inflation and declining real growth (see CHART 10). Loose fiscal policies adopted by populist regimes (on both the right and the left) have historically been combined with direct challenges to central bank and/or judicial independence, corporate governance, and property rights. This policy cocktail has historically led to unsustainable fiscal deficits and high inflation that eventually lead to slower capital formation and ebbing business confidence.

CHART 10 | Developed World Populism Index* %
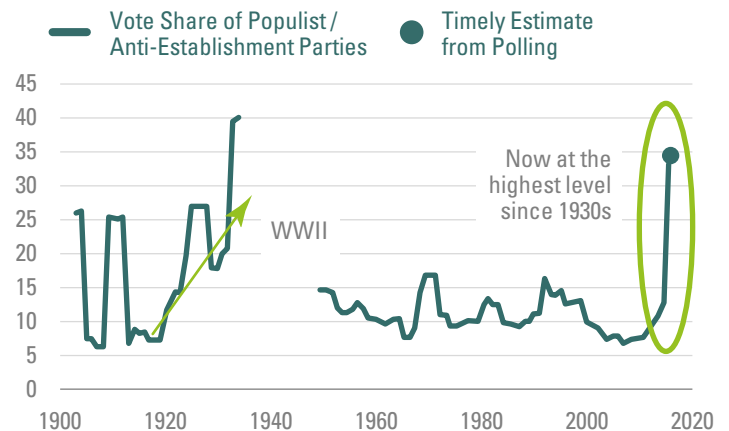
*The latest point includes cases like Trump, UKIP in the UK, AfD in Germany, National Front in France, Podemos is Spain, and Five Star Movement in Italy. It doesn't include major emerging country populists, like Erdogan in Turkey or Duterte in the Philippines. In the rest of the study, we look at populists of the past rather than those now in office in order to study the phenomenon because the stories of ones in power or possibly coming to power are still being written. For example, while we consider Donald Trump to be a populist, we have more questions than answers about him and are using these other cases to assess him against by seeing if he follows a more archetypical path or if he deviates from it significantly.

Source: BridgeWater

ARGENTINA:
A CAUTIONARY TALE

Argentina's descent into economically destructive cycles of populism, beginning with the Peronist government of the mid-1940s, presents an extreme cautionary tale. When Juan Domingo Peron rose to power in 1945, Argentina was the 7th wealthiest nation on earth, the most developed in Latin America, with the largest and best educated middle class. The purchasing power of Argentine workers was among the highest in the world. However, amid the transition to a modern industrialized nation, the seeds of populism and extreme nationalism found fertile ground in Argentina's growing inequality. In hindsight, four factors were especially critical to setting the stage for what was to come in Argentina. First, the top 1% increased its share in national income from 17% in 1933 to 26% in 1943. Second, at the same time, an elite that partly benefited from this distribution of income had chosen the president of Argentina by resorting to fraudulent elections. Third, the Argentine economy started to lag behind its then economic peers in Australia and Canada and then eventually other large countries in Latin America. Fourth, Argentina experienced the rise of a powerful strain of nationalism buoyed by fears over a decline in relative economic status as well as a national narrative surrounding their unique history of independence.

Initially, Peron's solutions seemed promising. From 1943 to 1949 industrial production increased by about 40 percent and industrial employment by about 30 percent. Peron's policies, however, were not simply designed to augment industrialization, but also to establish a firm bedrock of support among the newly urbanized electorate. A major instrument for pursuing both objectives was to increase real wages. Real wages doubled between 1943 and 1949, rising well above the marginal product

Source: Keystone/Hulton Archive/Getty Images

of labor at full employment. This coupled with the break-down or capitulation of institutions that may have circumscribed his policies led to decades of stagflation, an intractable budget deficit, ballooning national debt and a much weakened currency. This in turn has led to repeated cycles of radical shifts in policy-making as far left and far right politicians vie for power in a democratic system that has almost completely hollowed out the middle ground of compromise politics. The surprise defeat of current Argentine President Mauricio Macri in August's primary election is just the next turn in the seemingly endless cycle of Argentine politics. Ultimately, the populist "solution" that Peron implemented not only did not solve the underlying problems faced by Argentine society, it aborted the structural transformation of its economy and hollowed out the country's democratic institutions. As a result, in 2018, Argentina's GDP ranked 24th and its GDP per capita ranked 64th on a PPP basis in the world. No other country except Venezuela has experienced such an abrupt decline in its economic fortunes. In both cases thanks to populism.

While the seeds of populism in Argentina were sown by the dislocations caused by their transition from an agrarian to an industrial society, the challenges facing the U.S and most of the industrialized world similarly result in part from structural dislocations caused by a transition from an industrial to a post-industrial or knowledge-based society. The resultant "frustration gap" over increasing income inequality and declining social mobility is similarly pushing median voter preferences towards populist leaders on either the right or the left. Therefore, one should not view the elections of Donald Trump in the U.S., Viktor Orbán in Hungary, Andrés Manuel López Obrador in Mexico, Jair Bolsonaro in Brazil, Brexit and the election of Boris Johnson in the U.K. as well as the coalition of the Five Star Movement and the League in Italy as isolated events; rather, they are likely to be the first in a string of such victories. Moreover, this shift in median voter preferences is already prompting mainstream

politicians to shift their stances to address populist threats. To keep populist politicians from power, mainstream parties will find that they must offer a viable alternative—that is, center-right parties must shift further right, and center-left must shift further left. In this way, populist movements can and have exerted considerable influence over policy without actually gaining power.

A stagflation scenario would be most challenging for monetary and fiscal tools that have been deployed for recessions. The key difference between the 2008 global financial crisis as well as the prior two downturns is that they resulted from a negative aggregate demand shock that depressed growth and inflation; which was appropriately met with monetary and fiscal stimulus. However, attempts to accommodate stagflation recessions eventually lead to both inflation and inflation expectations

rising well above central banks' targets. For example, the Fed attempted to reign in oil shock led inflation in 1973, followed by quick accommodation after the economy slowed significantly. This helped lead to a repeat scenario later in the decade with persistently rising inflation and inflation expectations, unsustainable fiscal deficits, public-debt accumulation and another recession in 1980.

Inflation soared to a peak of around 12% in 1974, and reached a second peak of about 14% in 1980. Real weekly earnings fell about 21% from a peak in 1974 to the trough in 1991; as negative supply shocks tend to also become temporary negative demand shocks that reduce both growth and inflation, by depressing consumption and capital expenditures. Unemployment soared to a high near 8.8% in 1975, fell back to about 5.7% in 1979, and then rose back up to about 8.2% in 1981.

For allocators, a stagflation scenario would give rise to the twin challenges of materially changing the assumptions about inflation _and_ the correlation between stock and bond prices embedded in their asset allocation models.

Specifically, asset allocation models typically incorporate a long-term inflation assumption of between 2% to 2.5%. Over the past 49 years (from 1970 to 2018), the average rate of annual inflation (as an arithmetic mean) has been approximately 4%, whereas the 49-year median change in the consumer price index (CPI) has been 3.26%. Between 1970 and 1981 (which spans both stagflation periods), inflation averaged 8%.

There is much debate as to what measure of inflation is most appropriate for gauging asset returns. For example, do simple partitions of the level of inflation suffice (low, moderate, high)? What matters most? The change in the rate of inflation, or the level of the rate of inflation? Do inflation surprises – relative to market expectations – matter more than the actual level of inflation? Is it acceptable to aggregate data across time periods, or should we focus on contiguous, and therefore path-consistent, time periods (the '70s for example)? We agree with the method posited by PIMCO authors Page, Pedersen and Guo[1] which was designed to improve the accuracy and flexibility of scenario analysis by controlling for macroeconomic expectations. Their key insight was that inflation surprises are a more significant driver of asset returns than just the level of inflation, because it is changes in inflation expectations that tend to matter to security returns. For example, if inflation is high, it is likely that interest rates are high and already factored into the price of bonds. Instead, it is the unanticipated move from low inflation to high inflation that is particularly negative for the returns of bonds or stocks. To illustrate, while average inflation was high during the Volcker Fed period of the late '70s and early '80s, they were declining both in absolute terms and relative to expectations because of Volcker's commitment to reducing inflation.

CHART 11 shows the Sharpe Ratios of different assets during stagflationary regime conducted by the PIMCO authors. The study identified stagflation periods as periods during which GDP growth was in its bottom 25% and inflation was in its top 25%. It defined inflation surprises as the difference between actual inflation at the end of the quarter and expectations for inflation at the start of the quarter with a period being designated as "high inflation" if inflation surprise is in the highest 25% of historical inflation surprises, based on data from Q2 1973 to Q1 2012. The chart suggests that TIPS, commodities, gold, and intermediate government bonds (possibly reflecting a "flight-to-safety" effect created by negative growth surprises, despite the greater inflationary pressures) performed well during historical periods of stagflation. Bond slope, corporate bonds, credits spreads and stocks had negative Sharpe Ratios.

CHART 11 | Sharpe Ratios During Stagflation
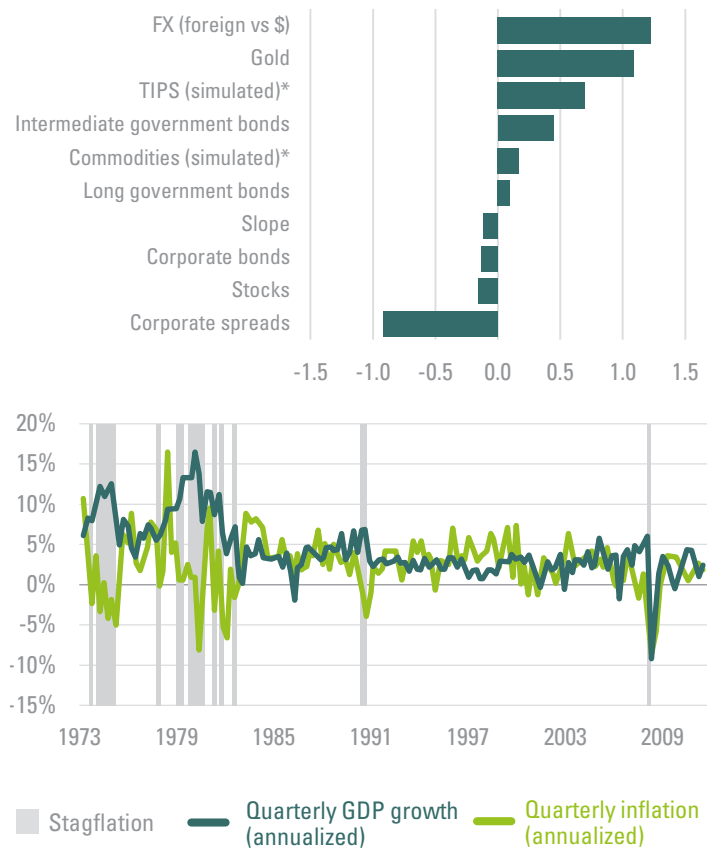
Hypothetical example for illustrative purposes only.
Source: PIMCO

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[1] Page, Pedersen and Guo, Asset Allocation, Does Macro Matter?, Part II

The correlation of equity and investment grade sovereign bond returns is another powerful driver of portfolio construction and the term premia of interest rates. The correlation is foundational to asset allocation models and products (such as target date models). **But this correlation is both conditional and time-varying based on the relationship between expected inflation and expected equity cash flows.** For example, the correlation between bond and stock prices turned from positive in the 1970s-1990s to negative in the 2000s-2010s, on the back of similar shifts in the correlation between inflation and economic growth and between inflation and real interest rates. (See CHART 12 which evaluates the correlations between stocks and bonds for the U.S. and various major bourses). Over the last 30 years, this structural correlation shift gave rise to a boom in risk parity investment strategies and contributed to the compression in long-term yields. However, both theoretical and empirical analysis suggests that negative equity-bond correlation is due largely to pro-cyclical inflation, i.e. higher inflation coinciding with better economic performance, as opposed to counter-cyclical inflation or stagflation. Inflation is more likely to be pro-cyclical if it is low or in deflation and driven by demand rather than supply shocks. This was what occurred during and after the GFC. Stagflation, which would result from negative supply shocks, reverses this relationship. With stagflation, good (bad) news about future cash flows tends to be accompanied by news of lower (higher) expected inflation; a pattern which is consistent with returns in the 1970s to the late 1990s.

CHART 12 | The Correlation between Equities and Bonds is Conditional and Time-varying
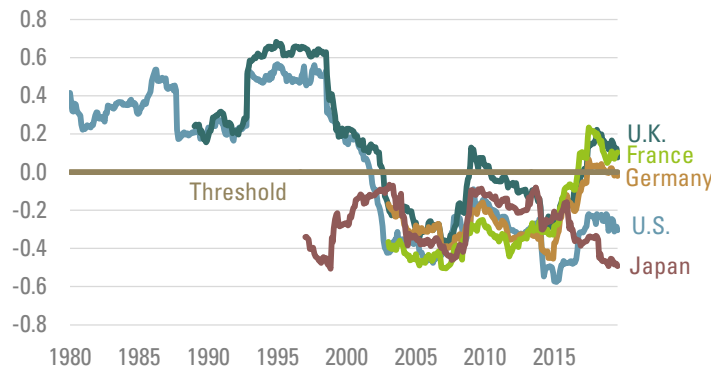
Source: FIS Professional Estimates and Factset

PART 2 more specifically examines derisking asset allocation strategies over the last three economic downturns as well as the stagflation period of the 1970s. It further evaluates which assets are at the most risk of severe loss during the next recession and recommends derisking strategies for both types of recessions, discussed in this section.