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Innovative Thinking + Smart Strategies

2019: The Year Ahead

Annual Market Outlook

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The Year Ahead: 2019 Annual Outlook

Note to our readers: On pages 12-13 you can find an executive summary presenting in bullet point form the key themes we discuss in more detail elsewhere in this report. Of course, we invite you to read the full document for an understanding of the economic, capital market and other forces shaping our thought process.

I. The World in 2019: Tectonic Shifts

A. Irrelevant Economics and Complex Markets

In his masterpiece "The Wealth of Nations" Adam Smith, one of the founding fathers of what we now call classical economics, gave the world the compelling image of the "Invisible Hand," an easy shorthand for free-market competition in decentralized economies. Not all economic concepts are accessible to the layperson, but the Invisible Hand is intuitive even for those with only a passing awareness of which way the lines point on supply and demand charts. Competition, according to Smith, was the process of self-interested individuals pursuing their own advantage in the marketplace. The end product of all this self-interested behavior was a common good – a system that efficiently allocated economic resources between the sellers and buyers of goods and services even though the agents themselves were neither aware of nor interested in any such "common good" when they made their individual decisions about price and volume for the items they bought and sold.

The Invisible Hand described a phenomenon we now call an "emergent property." An emergent property exists when knowledge of all the specific inputs into a system (in this case the individual production and consumption decisions of each agent participating in the Smithian economy) is insufficient to describe the details of a particular outcome (in this case, the common good produced by the efficient allocation of resources). Today, we employ the concept of emergent properties to describe complex systems, such as the interaction of a particular combination of biochemical molecules in a Petri dish.

Adam Smith never used phrases like "emergent property" or "complex system," of course. He and other thought leaders of the classical economics school, such as David Ricardo, John Stuart Mill and (though towards a different set of conclusions) Karl Marx were not scientists or theoreticians. They were moral philosophers, intensely interested in how economics actually worked in the social world they observed – roughly from the last quartile of the 18th through the middle of the 19th century. The Invisible Hand could not be described or modeled as an abstraction of reality – that was only to come later with the arrival of the neoclassicists. There was a great deal of messiness in the Smithian model. Those economic agents to whom we referred above – owners of capital assets, managers of production lines, retail vendors and individual consumers – made their decisions in a general fog of uncertainty. Only over time would the emergent property of market-clearing prices for units of goods sold become apparent.

Lost in Translation

"The Wealth of Nations" remains a good read today for its accessibility and because of how relatable and intuitive the general concepts are to our sense of how economies actually work. Unfortunately, though, the profession of economics itself long ago took a sharp turn away from the empirical, messy world of Smith and built instead a very different artifice – one distinctly inaccessible to the interested casual reader.

If you stumble via a Google search upon practically any paper produced by someone with a Ph.D. in economics from one of the discipline's top centers of academic excellence – from the Atlantic Seaboard redoubts of MIT, Harvard and Princeton, westward to the University of Chicago and on further still to Cal Berkeley – you will in almost all likelihood barely make it past the introductory paragraph before being assaulted by an incomprehensible battery of partial differential equations and strings of numbers and letters lined up in set theory format. You will, sensibly, abandon hope of trying to figure out what point this particular economist is attempting to make about retail pricing in the perfume industry or the link between oil prices and transportation logistics or whatever else it was that piqued your interest in the first place.

This unfortunate state of affairs has its roots in a specific time and place – Great Britain and Continental Europe in the last 30 years or so of the 19th century. The progenitors included Alfred Marshall of Britain and the French-Swiss Leon Walras. Their school became known as the "marginalists" and then more broadly as the "neoclassicists." The life's work of the neoclassicists was to confer onto the field of economics a scientific discipline. The science to which they gravitated was physics, and the aim was to somehow translate that sprawling Invisible Hand, described in whole English sentences in "The Wealth of Nations," into the kind of elegant mathematical formulas that populated the newly-discovered descriptions of the physical world by the likes of Robert Brown, James Clerk Maxwell and Max Planck. Unfortunately, something got lost in translation.

Irrational Rationality

What got lost in that sleight of hand, by which the Invisible Hand went from readable English prose to a battery of numbers sandwiched in between deltas and sigmas and thetas divided by the cube root of the natural log of pi, was the connection between the economists' definition of competition and…the actual real world of competition. The reason? Computational reducibility. For those physics-inspired equations to work, they had to make some basic assumptions about the world they were modeling. And the key assumption – the hack from which a hundred thousand stochastic demand models bloomed – was rational expectations. Rational expectations could reduce the messiness of the world to a single number.

According to the rational expectations model, every agent (person) in an economic system is fully and completely fungible with every other agent, all of whom are in possession of full and complete knowledge of the present and future consequences of every single economic decision they make. The act of buying tomatoes at the grocery store, for example, involves an instantaneous calculation of the cost of those tomatoes against every other cash flow permutation the buyer will ever make, include full knowledge of all the future prices that will affect the outcomes, and for that matter the precise calculation of all the macroeconomic variables that will be at play in each and every time period from now until infinity. This is not an exaggeration – this really is the premise of rational expectations, which in turn is the premise for the world of "perfect competition" described by the standard neoclassical economic model.

Put a Pin In That

If the actual economy looked the way the model of perfect competition describes it, we wouldn't have a bunch of securities analysts at financial firms sitting around every quarter analyzing corporate profits, because there would be no corporate profits. Every company would produce and sell fully commoditized wares (remember that in this model all agents, including firms and the individuals therein, are identical and interchangeable) at prices just sufficient to clear costs. The economy would be in a harmonious equilibrium until and unless affected by some external shock – and would then readjust instantaneously to resume equilibrium. Every company would be a price taker – accepting whatever the market clearing price dictated. In some of the fun variations of the neoclassical model we have a Divine Auctioneer (kid you not) who calls out the market clearing price which all firms will then take.

Doesn't sound like the economy you know, does it? It also isn't anything Adam Smith would have ever dreamed up. Smith gave us another iconic image in the "Wealth of Nations," this one made tangible by the author's visit to a late-eighteenth century factory engaged in the manufacture of pins. Smith effused over the remarkable production processes at this pin factory, spending many pages describing the degrees of efficiency to be gained from organized, process-driven, specialized labor allocation across production functions. Here was how Smith's self-interested agents actually went about their business – noodling over better ways to make the stuff they make, and then putting their knowledge to work in the most efficient way possible to earn a profit.

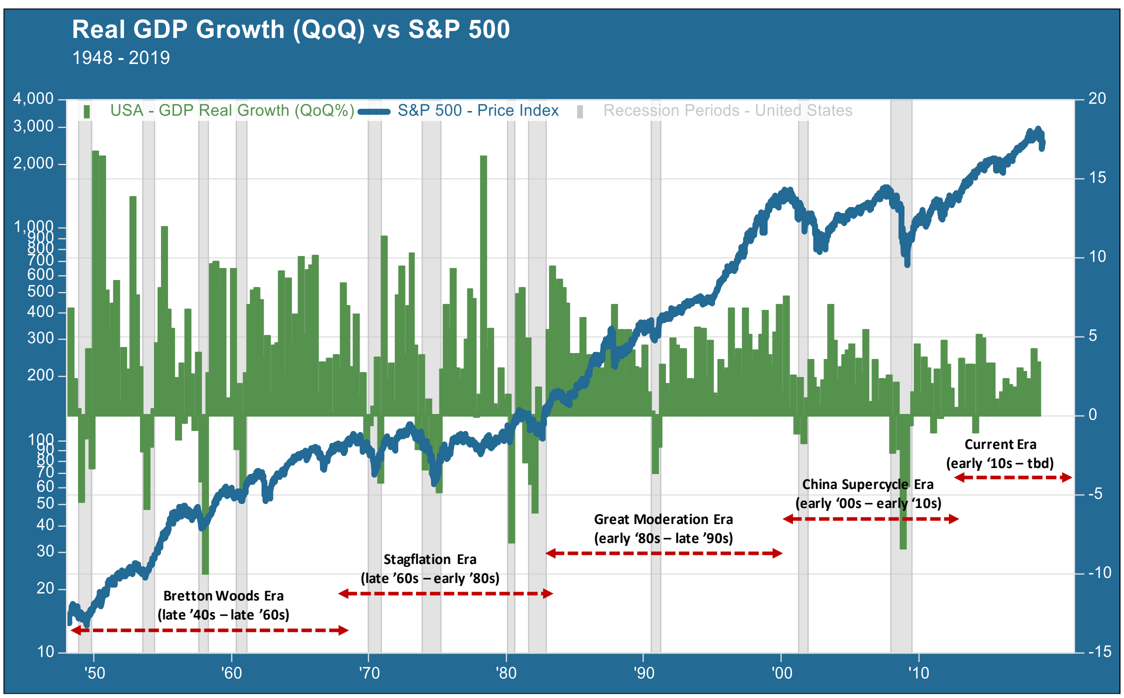
Real economies have lots of modern-day Pin Factories – think of premium brands, intricate multinational supply chains and the network effects of successful technology platforms, to name a few. But these wonders do not factor into those mathematically rich economics papers we described above. Think about it. Neoclassical economics models can be just as formidable to the non-economist as Schrödinger's wave function or Maxwell's electromagnetism models are to the non-physicist. The difference being that those models describe actual physical properties of the world and have been validated time and again through empirical testing – whereas the beautiful math of neoclassical economics describes absolutely nothing that exists in the world as we know it.

And yet – and here is where we come to the point as to why we have filled up several pages of this report with this discussion – the entire economics profession has stood on the shoulders of its neoclassical giants for more than 100 years in supplying us with explanations for how the world works. Have you ever wondered why economists have such a spotty record in telling us when the next recession will arrive, or why they were so famously inept in warning us ahead of the great financial tsunami of 2008? The reason, in a nutshell, is that the profession's mainstream core institutions long ago came to a fork in the road between messy economic reality and beautiful, elegant math – and opted for the latter.

Mendel, Not Maxwell

The economics profession might have avoided its long journey into irrelevance if it had chosen a different branch of science on which to hitch itself. Rather than the elegant electromagnetism of James Clerk Maxwell, they might have been better served by the organic, pulsating genetics pioneering of Johann Gregor Mendel. For the economy is not something that can be measured the same way that one can measure radio waves or the transfer of heat between bodies. It is a living organism, populated by highly diverse, fallible, unique human and institutional agents, constantly evolving, learning and mutating in unpredictable ways that can only be studied and evaluated after the fact – and even then without necessarily having recourse to true causes versus coincidental correlations. In other words, the economy is a complex adaptive system. Its story can be told in charts, like that below, and those charts can reveal apparent patterns. But behind the data, the graphs and the (apparent) resulting patterns are unique stories, each of which is the outcome of a complex interaction of events, behaviors, reactions and outcomes.

Chart 1: S&P 500 Price Performance and US Real GDP Growth, 1948 – 2019



Source: MVF Research, FactSet

A chart like this is a convenient way to tell a story – in this case, the story of economic growth in the US from the end of the Second World War up to the present. We have the benefit of hindsight, so we can go back and assign nice, tidy descriptions around the major eras that characterized this span of time. We know, for example, that the US reigned as the world's sole economic superpower for roughly the first quarter century after the war, and that the rules of the game for the postwar economic environment were written by the participants of the Bretton Woods conference in New Hampshire in the summer of 1944. We know that this was a time of stupendous economic growth here, when many of the patterns of life we still follow today were formed – suburban lifestyles, the widespread pursuit of higher education, increasingly powerful private sector corporations becoming the dominant voice in our national debate and our cultural norms.

As other countries rebuilt and grew after the war – notably the war's losers Japan and Germany – the obligations of the Bretton Woods framework became increasingly cumbersome for the US. The system essentially fell apart from the late 1960s until then-president Nixon took the US off the gold exchange standard in 1971. We know this, too, and we also know that the ensuing decade was one of comparative hardship for many, with rising unemployment, soaring inflation and insults to the great American dream like gas shortages. And of course we know what came next. We know that the so-called Great Moderation that got going in the mid-1980s and rocked out the '90s was torn asunder by two major financial crises – the collapse of Internet stocks in 2000 and the global financial meltdown eight years later – and that this was also the period when China's economy went into hyperdrive and emerged as the world's major consumer of practically every industrial commodity. Finally, we know that the Fed and other central banks pulled out all the stops in order to stabilize the global economy after 2008. These unprecedented efforts produced a growth cycle in the US that is now within a matter of months of becoming the longest on record.

Recessions, Markets, Correlation and Effect

These things we all know, because they already happened. At the beginning of 2019, as the dust settles after a punishing several months of losses in equity markets in last year's final quarter, the question on everyone's mind is what happens next. If you are a typical investor looking to make the most of your financial resources towards a particular set of goals, then your interest in US postwar economic history is likely to be attuned mainly to whatever useful information it may contain about what may follow.

During the equity market pullback of late 2018, when the S&P 500 stock index fell 19.8 percent from its earlier September peak, the chatter about a forthcoming recession became incessant. Is there a recession on the horizon? If so, what does that actually mean for stocks? Here, when we actually look at the evidence close-up, the picture is not quite so tidy as the neat segmentation of categories we performed in Chart 1 above. Consider the following table, which lays out the actual details of every US recession since 1948, along with the magnitude of the peak-to-trough drawdown for the S&P 500 in the same time period.

Chart 2: US Recessions and Related Market Pullbacks, 1948 - Present

Recession Dates[1]	Duration in months	Max GDP Contraction[2]	Pullback Dates[3]	Duration in months	Max Market Drawdown
Nov-48 – Oct-49	11	-5.4%	Jun-48 – Jun-49	12	-20.0%
Jul-53 – May-54	11	-5.9%	Jan-53 – Sep-53	9	-14.8%
Aug-57 – Apr-58	10	-10.0%	Aug-56 – Oct-57	14	-21.5%
Apr-60 – Feb-61	8	-5.0%	Aug-59 – Oct-60	14	-14.0%
Dec-69 – Nov-70	11	-4.2%	Nov-68 – May-70	17	-36.1%
Nov-73 – Mar-75	16	-4.8%	Jan-73 – Oct-74	21	-48.2%
Jan-80 – Jul-80	6	-8.0%	nm[4]	nm	nm
Jul-81 – Nov-82	16	-6.1%	Nov-80 – Aug-82	19	-27.1%
Jul-90 – Mar-91	8	-3.6%	Jul-90 – Oct-90	4	-19.9%
Mar-01 – Nov-01	8	-1.7%	Mar-00 – Oct-02	31	-49.1%
Dec-07 – Jun-09	18	-8.4%	Oct-07 – Mar-09	17	-56.8%

Source: NBER, FactSet, MVF Research

[1] Official US recession periods as defined by the Business Cycle Dating Committee of the National Bureau of Economic Research (NBER)

[2] Represents fiscal quarter with largest contraction in real GDP growth

[3] Represents peak and trough levels for S&P 500 in period closest to associated recession

[4] There was no stock market pullback during the recession of 1980

So there it is. That's the nutshell history of recessions and associated stock market pullbacks in the United States in the postwar period. What, if anything, does that tell us about prudent investment strategies for planning for a recessionary period?

If you look closely enough at the numbers, the first thing that should be clear is that there is an incidental correlation between economic recessions and stock market drawdowns. In other words, periods of economic contraction tend to be associated with market drawdowns of 10 percent or more. That, of course, should come as no surprise. If you look even closer you will notice something else: the drawdown tends to happen first. In all of the previous recessions (except for 1980) the market set its high a number of months before the first contraction in GDP growth.

That piece of evidence might lead one to conclude a significant drawdown is evidence of a gathering recession. This flavor of thinking can be seen all over the financial media – markets "talk themselves into recession" is how the line usually goes. The flaw in this argument is that it ignores all the false positives. Just to take a few examples: 1962, 1966, 1987, 1998, 2010 and 2011 were all years in which the stock market fell by more than 15 percent without an accompanying recession. Oh, yes, so was 2018! That's too many false positives to serve as any kind of a reliable predictive value.

Another important takeaway from Chart 2 above is that while a reasonably strong correlation exists between the existence of a recession and that of a market pullback, there is essentially no correlation between the respective magnitude of each. Look at the magnitude of GDP contractions. The biggest quarterly decline in real GDP growth happened in the recession of 1957-58: a ten percent fall. During this period the stock market also fell, with a peak-to-trough decline of 21.5 percent. Compare those figures to the recession of 2001. Here we have a relatively shallow recession, both in terms of magnitude (maximum contraction of minus 1.7 percent) and duration (a mere eight months). Yet the associated market pullback was the second-worst of the entire postwar period, a wrenching 49.1 percent crash that lasted for a miserable 31 months.

Adam Smith, Tolstoy and Predictive Analytics

Here is where we loop back to our earlier disquisition on the evolution of the economics profession and tie it into our observations on the pitfalls of predicting recessions and attendant market outcomes. Recall that the path of economics went from Adam Smith and the classicists, who were trying to make sense of the real world outcomes taking place during the first wave of the Industrial Revolution, to the neoclassicists and their obsession with physics, where increasingly the end objective seemed to be nothing more than to show off one's command of advanced mathematics. In the modern era this physics envy spilled over into the study of financial markets. The analytical methods of modern financial theory are as wedded to those unrealistic assumptions of rational expectations and perfect competition as are those of neoclassical economics. The predictive analytical models that proceed from these methods are linear – they have to be, in order for the math to work and reduce all the potential variables at work to one single number.

If you are a regular reader of our weekly market commentaries or previous years' annual outlooks, you know that we frequently invoke the great Russian writer Tolstoy in making a point about one thing or another. Often the point has to do with the uniqueness of every situation involving a significant event in markets or economies. "Every unhappy family is unhappy in its own way" goes the opening of Tolstoy's masterpiece "Anna Karenina."

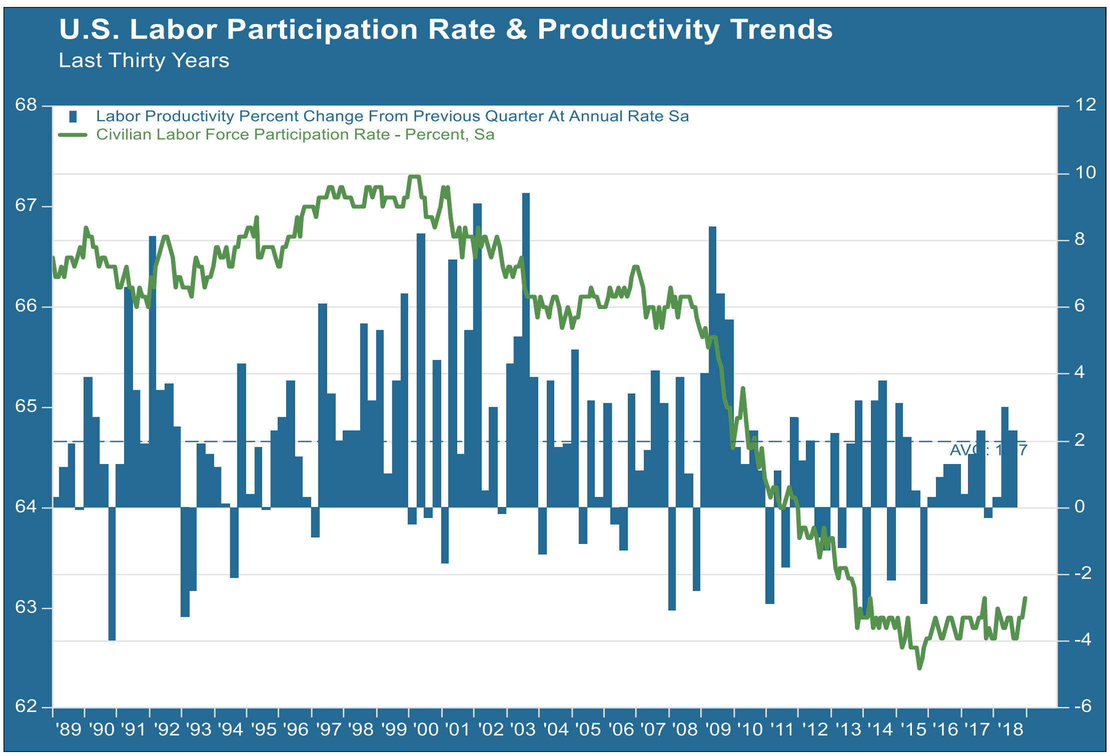
Go back and look at the numbers in Chart 2, above, and then go back further to Chart 1 showing GDP trends and stock market performance in graphic form from 1948 to the present. Look at those neat segmentations into which we divided that 70 year stretch of time. The growth market of the Bretton Woods era followed by the nowhere market of the 1970s, to the great bull of the 1990s and then another nowhere market bookended by two financial earthquakes. The mathematical methods of modern financial theory will work around this data, crunching numbers this way and that way, until they can shoehorn them into a formula that "explains" why X, Y or Z happened exactly when and as it did. Of course, there is a ready legion of smooth-talking salespersons out there ready to sell these predictive "insights" to investors willing to believe that they have the right crystal ball and are ready for the next big turn of events.

We're not anti-math – we have our own models and run our own numbers for market intelligence. But in terms of thinking about what comes next – which indeed is a question of significant importance at the start of 2019 – we are much more of the Adam Smith way of going about our analysis than we are disciples of the neoclassicists. That is to say, we need the power of qualitative reasoning, based on empirical, cognitive observation of the facts at hand, to arrive at conclusions. Math helps us to do this. But math is a tool to get to the end result – it should not be the end result in and of itself. That's where the neoclassicists took a wrong turn and ran mainstream economics aground on the shoals of the real world.

Is a Low-Growth Future Stable?

So what does concern us as this last year of the 2010s gets underway? We'll start by putting up one of our favorite go-to charts, the one that deals with the question of long term growth. You'll see this chart most years in our annual outlook, not because we like being redundant but because economic growth – or the lack thereof – is the fundamental premise of capitalism. And there are a limited number of ways to get it.

Chart 3: US Labor Participation & Productivity Trends



Source: FactSet, Bureau of Labor Statistics, MVF Research

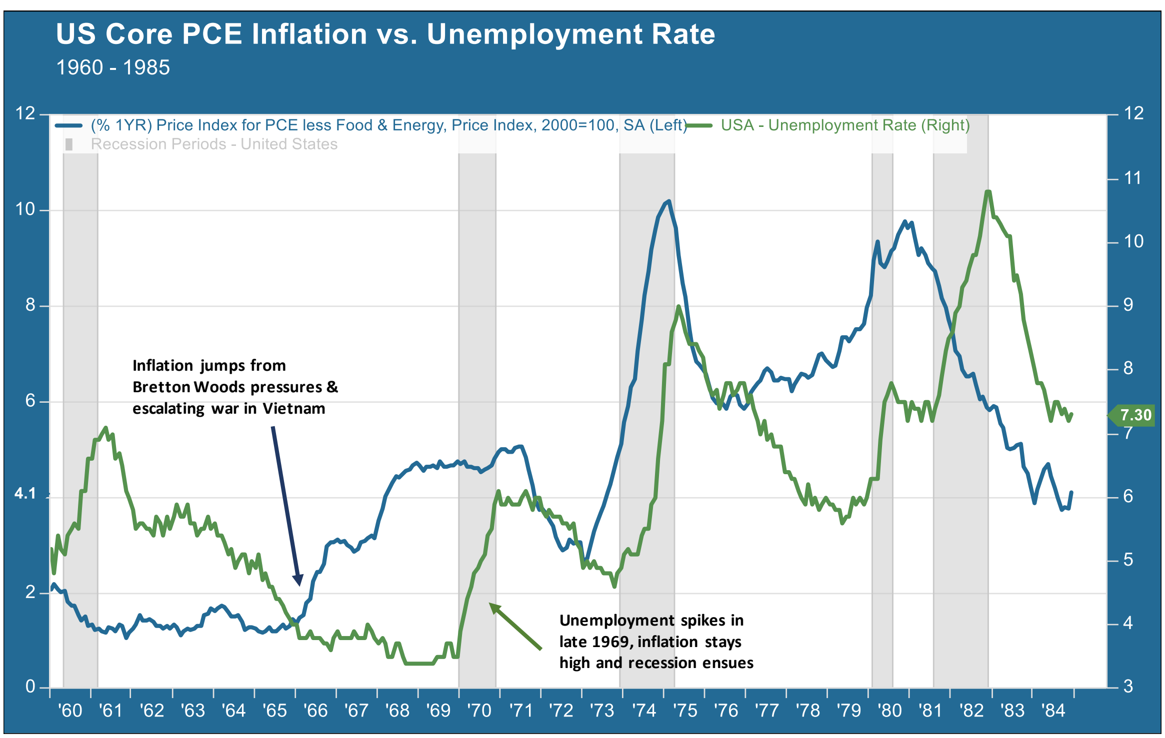
An economy grows for just two reasons, or a combination thereof. For most of human history the key variable was population growth – more specifically, growth in the number of people whose daily toil contributed to economic output. The Industrial Revolution introduced a second variable. Remember the Pin Factory of Adam Smith we described earlier? That was an example of productivity improvement – essentially, being able to make more stuff for the same amount of human effort. There were periods of explosive productivity at various times in the 19th and 20th centuries. There has not been as much of it in the 21st century, as Chart 3 above shows. Nor is there much positive movement in the percentage of the population employed in the labor force (the green line in the chart).

None of this is to say that higher productivity growth will never come back. We can even speculate on some of the recent technological innovations that might translate to actual economic growth. But we lack any compelling evidence as to what might catalyze such growth, or when it might happen. In the meantime we are left with a default assumption of positive growth, but only modestly so. We want to dwell on this a bit, specifically with regard to one question that we think has particular relevance for the year and possibly two years or so ahead. The question is whether a slow-growing economy can be a stable environment over a sustained period of time. We think it more likely that slow growth will lead to greater instability, which in turn has the potential to lead to uncertainty and volatility in returns achievable from the capital markets.

There may be something of a rhyme here with the past. The last years of the Bretton Woods era, in the late '60s and early '70s, were also a time of speculation as how durable the institutions of the day were. If you will recall, these were also years of a great deal of socio-cultural unrest. The two are not unrelated; rather, they are both products of the unsettling effects of uncertainty, of a sense that what worked before is no longer working. It is clear to anyone who is paying attention to world events today that institutions – political, educational, religious, civic and media-related to name a few – are under siege. Not just here in the US but around the world in both developed and emerging economies.

Not all this dissatisfaction comes from a sense (real or perceived) of economic deprivation brought about by slow, occasionally negative growth. For the most part, the 1960s were a prosperous time in our history. But the growth in international trade put pressure on the US dollar, which had to remain at a fixed convertible value of $35 per ounce of gold even while US trade accounts with fast-growing exporters like Germany and Japan suggested that the artificially fixed exchange rate was far off the dollar's actual market value (this would prove true when the US went off the gold exchange standard in 1971). The rapidly escalating war in Vietnam substantially added to the pressure (both economic and social). As the chart below shows, the result was a rapid jump in consumer price inflation starting in the mid-1960s.

Chart 4: US Inflation and Unemployment, 1960 – 1985



Source: Bureau of Economic Analysis, Bureau of Labor Statistics, FactSet, MVF Research

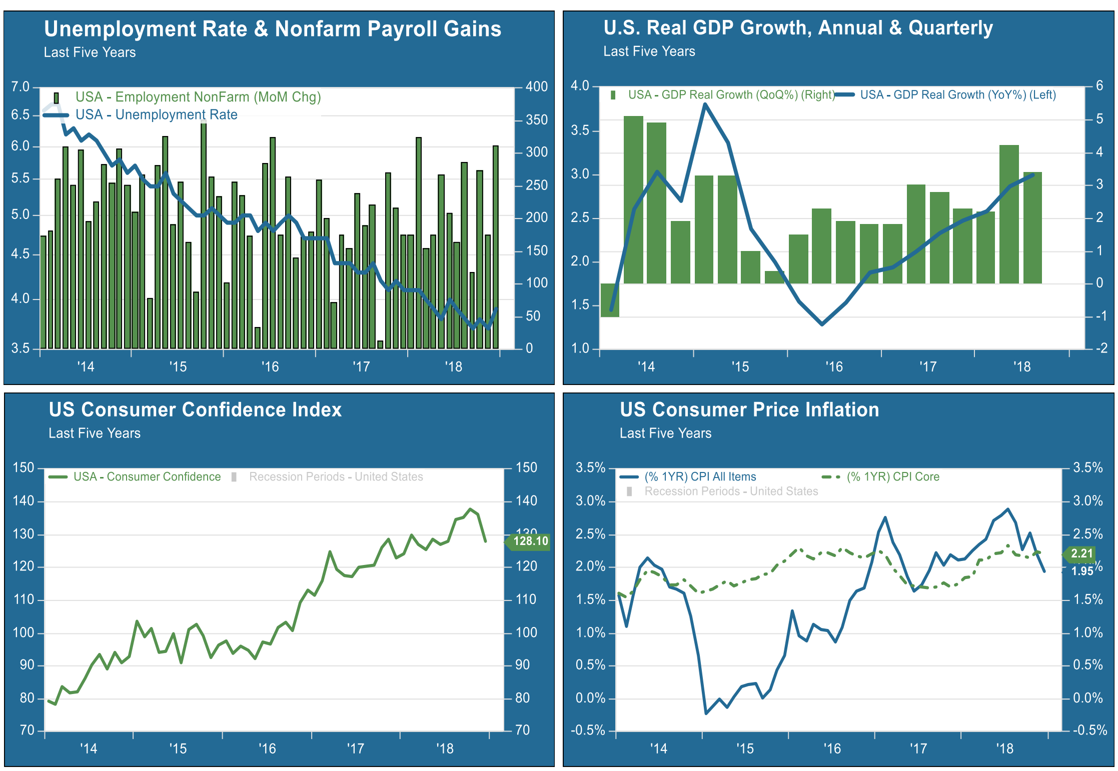
Four years of rising inflation finally took its toll on the other headline macroeconomic data points at the end of the 1960s: unemployment jumped from around 3.5 percent to more than 6 percent and GDP growth turned negative. The growth formula that had worked for most of the postwar period (albeit with intermittent, mostly limited recessions) seemed to no longer work. For that matter the role of the US itself was in doubt. Still by far the world's strongest economy, the US had to deal with a battery of new challenges. Japanese manufacturers were making steady inroads into that very epitome of US postwar dominance, the auto industry. The OPEC cartel brought about the indignity of gas shortages, not to mention skyrocketing prices at the pump. Meanwhile the emerging political crisis of Watergate called into question the integrity of the US political system at its highest level.

Eventually the country stumbled out of the fog of the 1970s and embarked on a couple decades of high-octane growth, if not necessarily evenly distributed growth (average real wages, to be clear, have barely improved at all since the 1970s). But the market crash and deep recession of 2007-09 laid bare the failings of the key innovative engine of that growth period – the financial industry. More recently the other outperforming sector of the economy – the technology field dominated by the sprawling platforms of communications devices (Apple), Internet access and search (Alphabet), social media (Facebook), cloud storage (Microsoft and Amazon), consumer activity (Amazon) and streaming media (Netflix) – has faced a reckoning of its own. Faith in any of the traditional institutions, as noted above, is vanishing to the point of non-existence. It is not a stretch to imagine that we may be heading into another extended fog of uncertainty – different in many ways from that of the 1970s with its own unique variables (remember Tolstoy!), but similar in that the challenges are less cyclical, and more structural.

But Not Yet

Lest that picture just painted seem too doom and gloom fear not – we are not suggesting that a sharp contraction is imminent either in the economy or in financial markets. Not to say that one couldn't happen, but we see little evidence of 2019 being the year it all falls apart. We show in Chart 5 below another one of our go-to diagrams, this one giving an overall present-moment snapshot of economic health.

Chart 5: US Economic Snapshot



Source: Bureau of Labor Statistics, Bureau of Economic Analysis, FactSet, MVF Research

The job creation rate is a thing of wonder: the last month for which net new payroll gains in the non-farm sector were negative was September of 2010, which is far and away the longest positive streak since these records started to be kept. The unemployment rate itself is as low as it has ever been during postwar growth cycles. Meanwhile, throughout the entirety of this growth cycle – which is now the second-longest on record and likely to become the longest by July of this year – inflation has stayed in check. If the early 1970s proved that high unemployment and high inflation can exist at the same time (a position that violates the mainstream economic orthodoxy of the Phillips Curve) then we seem to have the reverse today. A hot labor market does not necessarily mean rising prices (the more disturbing side of that equation is that it does not necessarily mean rising wages, either, which presents its own set of problems). Consumer and business sentiment are both not far off decades-long highs.

We don’t want to give away too much more of the store here. Section II, which follows, will go into further depth about the current state of play in the economy and in major asset markets including equities, fixed income, commodities and currencies here and around the globe. Our message here is that we are at the same time calm and concerned about what lies ahead in 2019 and beyond. The economy does not seem poised to fall into recession any time soon, and that is a reason for being relatively calm. Corporate sales and earnings, about which we will have more to say in Section II, look set to remain relatively healthy even as the sugar high of the tax cuts that hit corporate bottom lines wears off in this year’s first quarter. Market valuations are comparatively modest, and very far away from their ludicrous levels at the end of 1999. Credit markets may face challenges if rates continue to rise, but there is hardly anything apocalyptic to be suggested by the idea of 10-year Treasury yields reaching, say, 3.5 percent (which level in any case is far from a sure thing).

But volatility is elevated, the yield curve is hovering in a state of partial inversion (historically something that precedes a recession), global trade is challenged both by organic demand factors and manufactured geopolitical factors, and in many places the very notion of liberal (in the classical sense) free market democracy itself is seen to be under fire. Social disenchantment is high and the siren song of authoritarian populism, though not necessarily rampant, commands the approval of not insignificant pluralities from the US to Britain, France, Germany, Hungary, Poland and Brazil. If the global economy is a living organism, then think of these challenges as potential viruses. A rogue enzyme that catalyzes a particular chain of molecules could unleash an unfortunate reaction – and it may happen before anyone even knows it is there.

Adam Smith never forgot that markets are made up of humans, and that describing the workings of an economy without thinking deeply about the motivations, strengths and frailties of its diverse collection of agents was unlikely to provide meaningful insights. That message got lost when physics envy and math for math’s sake took over the brain of the mainstream economics profession. We are quite certain that Smith himself would be extremely interested to understand how the embryonic capitalism he observed in the Great Britain of the 1770s evolved to the global pulsating force it is today – and where it goes from here. We share that interest, and wrestle with its implications every day.

II. 2019 Investment Thesis: Into the Fog

A. Executive Summary

- In May 2018 the US economy achieved a milestone of sorts, outlasting the growth cycle of 1961 to 1969 to become the second-longest expansion in the country's history. In 2019 an even more auspicious accomplishment is in sight. If the economy does not experience a recession between January and July of this year it will become the longest-ever expansion, supplanting the decade of growth enjoyed between 1991 and 2001. From where we sit today, the odds appear rather strongly in favor of July arriving without a recession along the way. Indeed, for a recession to officially begin as early as July we would need to be experiencing nearly uninterrupted negative GDP growth between now and then – a possibility that would appear remote to the point of being negligible. Barring the catastrophically unexpected, this recovery looks set to claim the gold medal for longevity, if for nothing else.

- Not that we should expect investment markets to be toasting the newly-minted longest-ever recovery with Champagne and noisemakers, though. Markets are forward-looking by nature, and they are already looking well past July in anticipation of when this economic cycle does turn. In some corners of the developed world outside the US, initial signs of the turn are already at hand. Five developed-market economies – Germany, Japan, Italy, Switzerland and Sweden – saw negative GDP growth in the third quarter of 2018. The IMF has lowered its outlook on global growth in 2019. At 3.5 percent the outlook is still relatively rosy, but the effects of slowing international trade, including the potential impact of a trade war yet to be actualized, give cause for concern. As the effects of fiscal stimulus in the US wear off, the persistent absence of meaningful growth in productivity – the one viable source of long-term growth – will come back into focus.

- There is a growing dissonance between markets and the economy based on deeper issues than headline macro data and other short-term sentiment drivers. There is a case to make that the world is in the early stages of a transition not unlike the unraveling of the Bretton Woods framework that guided the global economy's first quarter century after the end of the Second World War. By the late 1960s the US was losing its grip as the great stabilizing force of the world economy. The waning of US preeminence was underscored when then-president Nixon took the US off the gold exchange standard in August 1971. What ensued for the next decade was a period of great uncertainty, including four recessions of varying degrees of intensity with persistently high unemployment accompanied by soaring inflation. Equities fell in and out of bear market territory, finishing this miserable stretch more or less where they began it – in nominal terms, that is. On an inflation-adjusted purchasing power basis, an investor in a basket of S&P 500 stocks was much worse off at the end of this cycle than he or she was at the beginning.

- Eventually the fog of uncertainty lifted and the era of what former Fed chair Ben Bernanke termed the "Great Moderation" began. Neoliberal politics and relatively unfettered global capitalism – known as the "Washington Consensus" – flourished as the dominant model for the next three decades. That model got its comeuppance with the 2008 market crash and deep recession. The institutions emblematic of the Washington Consensus have become increasingly strained. As in the early 1970s, there is a sense that what worked once is no longer working. And, likewise, a growing uncertainty about what comes next.

- ***We believe heightened volatility will be the principal characteristic of asset markets in 2019. Volatility cuts both ways – up and down – meaning that predictions about market directional trends will be subject to high amounts of variability. Developments to which markets typically pay little heed – including political dysfunction and foreign policy crises – potentially will come under greater scrutiny. Outside the US, China and the EU may be sources of increased instability. Risk spreads are positioned to widen between benchmark government credit and various tiers of corporate, mortgage-backed and other debt types. The corporate debt market could be particularly tricky, and we will be paying close attention to trends in lower investment grade paper. Central banks will be following these developments closely and may turn more dovish than expected in efforts to mitigate the impact on global markets. What central banks do – and do not do – will in turn influence investor sentiment back and forth between risk-on and***

risk-off. Currency and commodity markets will likely find themselves in the cross-winds of these sentiment shifts – again, volatile swings have the potential to impede the formation of durable directional trends.

- A prediction for heightened volatility does not necessarily translate into a doom-and-gloom outlook. For starters, we do not see compelling evidence of imminent financial risks on par with those that catalyzed the massive market sell-offs in 2000-02 (absurd asset valuations) or 2007-09 (overleveraged and intertwined credit markets). Valuations, in fact, are relatively attractive: the S&P 500 price-to-sales (P/S) ratio is currently near its 5-year average on both a twelve trailing months and forecasted basis. With the consensus forecast for FY 2019 sales still in the mid-high single digits, there are buying opportunities aplenty for investors willing to look past the short-term fury of the past two months.

- Inflation – or rather its absence – could be another positive influence in the months ahead. The Core Personal Consumption Expenditures (PCE) index, which is the Fed's preferred inflation gauge, has remained fairly closely tethered to the central bank's two percent target in recent months, with little upward pressure thus far from continued tightness in the labor market. As long as inflation remains in check, the Fed will have flexibility to pause its monetary policy tightening in response to other potential developments.

- Finally, one wild-card boost to sentiment (though relatively limited in terms of real economic impact) could come between now and March if UK Prime Minister Theresa May's government manages to either succeed in bringing about a second referendum on Brexit (i.e. with the potential to avoid Brexit altogether) or at least push the March deadline for Article 50 down the road. On January 16 the UK parliament delivered a defeat of historic proportions to the May government's Brexit proposal. Any talk of a revised deal that can somehow be acceptable to both the EU and to the discombobulated cacophony of stances in the UK – particularly within May's own Tory party – are farcically fanciful. Mechanically speaking, a deal is not possible. Either the UK will crash out of the EU with no deal at all – an option credibly shown to be economically disastrous for Britain – or the government buys a bit more time to figure out a Plan B. There does not seem to be a Plan B that involves a mutually viable deal, as we noted above. A second referendum is a way out, and there is increasing support for one among the citizenry. Yes – the move would infuriate a meaningful plurality of Britons. But so would any other move. In a choice between the less-than-desirable and the disastrous…well, hopefully there are still a few wisps of the Enlightenment left in the body politic.

- Any such positive X-factors as may emerge will, however, have to contend with plenty of negative possibilities. In our view one of the biggest of these resides at 1600 Pennsylvania Avenue. We say this with no regard whatsoever for ideological reasons or personal preferences, but simply as an assessment of the current power dynamics in Washington and sufficient existing evidence of a willing recklessness on the part of this administration with scant regard for consequences. Global trade, geopolitics and the independence of the Federal Reserve are examples of where and how what happens in Washington could matter to markets far more than is typically the case.

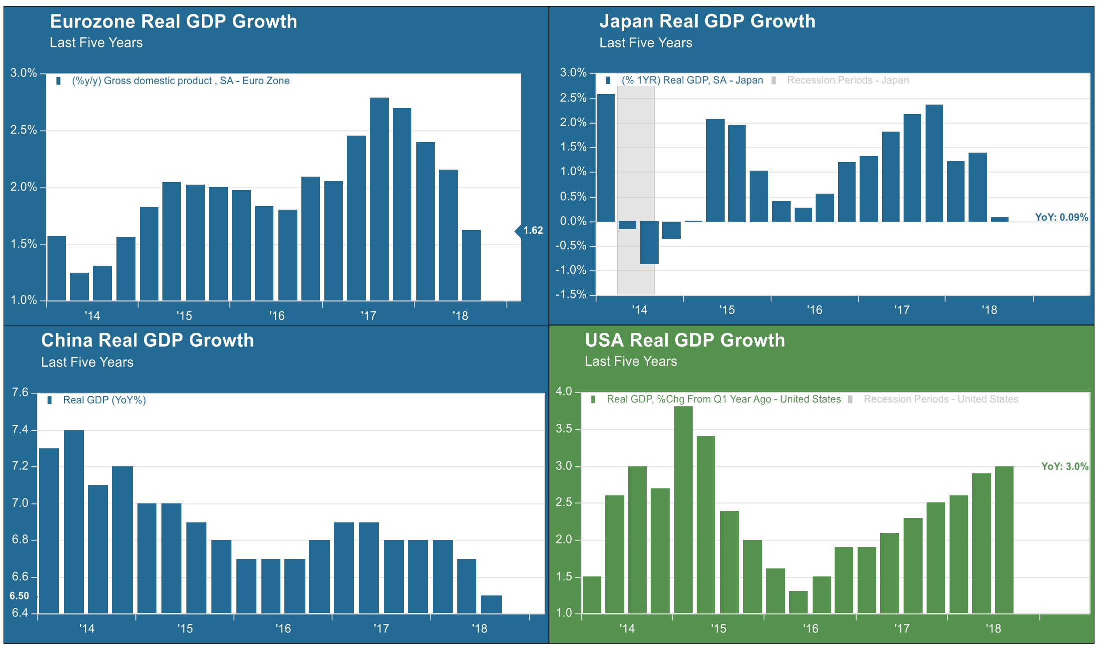
- In conclusion: while the direction of risk assets in 2019 could plausibly end the year in either positive or negative territory, we believe the going will be bumpier than usual. If we truly are in the early stages of a tectonic shift in the socio-economic environment similar to what happened in the late 1960s, then there will potentially be an increased tendency to interpret new information through a glass-half-empty rather than half-full perspective. There will be opportunities, but it will be harder to capitalize on emergent trends in the presence of higher volatility – and this could well be equally true for equity, credit and alternative asset classes. In this environment we believe a more defensive position is warranted than one year ago, and that careful diversification among both riskier and low-risk portfolio segments can help buffer the impact of multiple cross-winds.

B. State of the Global Economy

i. Convergence No More

Several key economic themes changed over the course of 2018. One was the idea of convergence in the global economy. At the beginning of last year strong real GDP growth was a feature of both the developed and the developing world; indeed, perhaps the biggest surprise of 2017 had been the recovery in the Eurozone against more pessimistic expectations. Global growth could be a virtuous feedback loop, with demand over here stimulating supply over there. But no more. As Chart 6 below shows, the US kept growing in 2018 (partly due to the end-2017 tax cuts) but the growth rates of other key economies declined and, in some cases, even put up a quarter of negative growth. The US gets its own special color in this chart to underscore the extent of the divergence.

Chart 6: Real GDP Growth in the Eurozone, Japan, China and the US



Source: FactSet, MVF Research

How might this divergence play out in 2019? Let's first consider what is going on outside the US. From a global demand standpoint, the biggest concern on the minds of market observers is China. While headline real GDP growth is still a respectable 6.5 percent, the trend is clearly a slowing one (as seen in Chart 6 above). Bank lending slowed markedly in the waning months of 2018, indicating a general slowdown in consumer credit. The recent sales guidance miss by Apple, a highly unusual occurrence, traces back to slower than expected iPhone sales in China. In response to these trends, the government recently announced a record injection of $84 billion into the Chinese banking system to try and stimulate demand as the country heads in to the important pre-Chinese New Year holiday period.

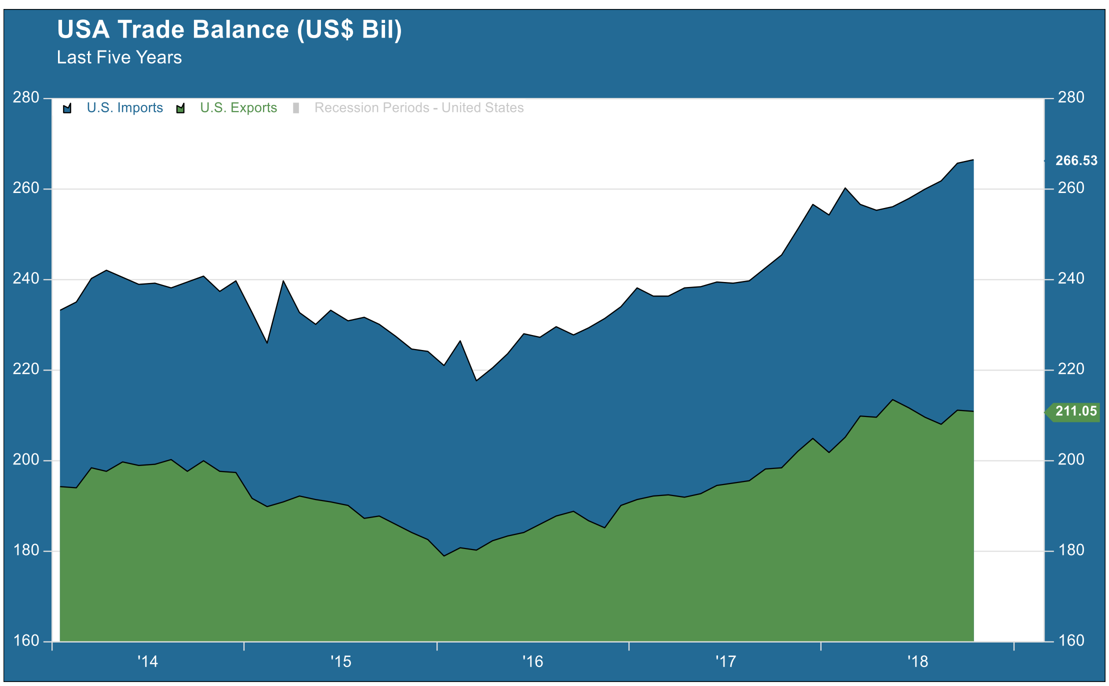
These negative trends, mind you, are taking place even as the full impact of the US-originated trade war has yet to be felt. China's export numbers have held up rather well in recent months despite the successive implementation of tariffs on a growing range of products. If the trade war takes a turn for the worse, which is a reasonable expectation, the effect on China's growth prospects could be even more dramatic, with some observers predicting the possibility of real GDP growth falling below 5 percent. Moreover, this is happening in the immediate aftermath of a series of austerity measures undertaken by Beijing earlier last year to reform some problem areas of the economy like the shadow banking system, low-end factories and environmental concerns. Those reform measures, while well-intentioned, had a greater negative impact on the important small and mid-sized businesses that make up the vibrant private sector, while implicitly transferring more power to the larger, less efficient state-owned enterprises.

Now let's visit another potential economic trouble-spot in 2019. Germany's economy is unusual in that exports of goods and services make up nearly half of the country's entire gross domestic product. German manufacturing of everything from automobiles to industrial control systems to advanced medical devices is world-class. But the country's reliance on exports is a key reason why real GDP growth turned slightly negative in the third quarter of 2018. China is an outsize importer of German products. Falling demand in the world's second largest economy – China – will have an outsize negative impact on the most important national economy in the European Union. As goes Germany so goes the EU – particularly given the increasingly apparent difficulties being faced in France, Italy and elsewhere in the region.

ii. Can the US Go It Alone?

The US is not Germany – exports account for a much smaller percentage of our GDP than Germany's does. Our economy is driven primarily by personal consumption of goods and services – a meaningful chunk of which, of course, come in the form of imports. The US regularly runs a trade deficit with the rest of the world and has for almost the entire postwar economic era. Recently, the size of the deficit has increased as exports peaked in the first half of 2018 while imports continued to rise. Chart 7 below illustrates the US trade balance pattern over the past 5 years.

Chart 7: US Trade Balance



Source: Department of Commerce, MVF Research, FactSet

The $55 billion trade deficit reported for the third quarter of 2018 was the widest since 2008. A significant contribution to the decline in exports was agricultural, with traditional exports like soybeans among the first items targeted by China as the trade war got underway in the middle of last year. Now, contrary to the thinking of some on the economic fringe who read into the deficit some kind of health measure, the balance of trade by itself is not likely to figure directly into the overall economic health of a country where, again, domestic consumption is the most important growth driver. What Chart 7 would seem to indicate though, at least on a preliminary read, is that if one of the main goals of the trade war was to reduce the US trade deficit, then the trade war is conspicuously not working. How that will translate into policy in the year ahead is anyone's guess. For the time being, the combination of strong consumer confidence at home and average wage growth outpacing consumer price inflation suggests that it would take more draconian tariff levels to start to bite into that blue import area in Chart 7.

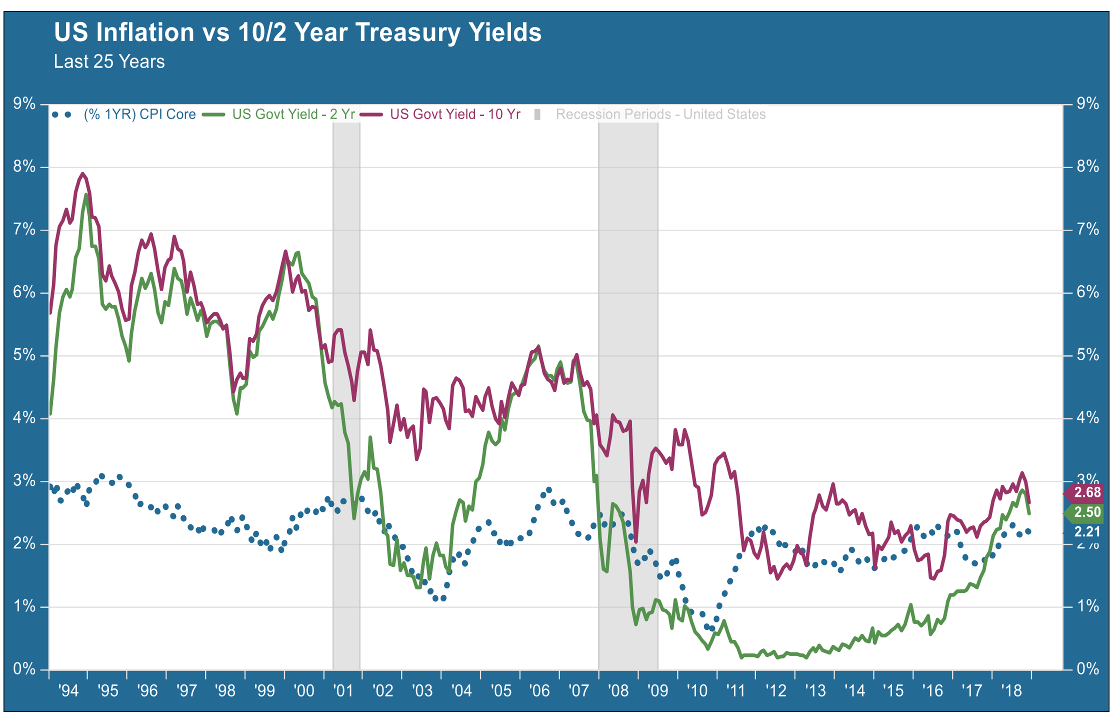
Our sense is that the trade war will not be the catalyst that drives the US into recession in the near future. The impact of tariffs will have effects at the margins of import dynamics, weaker demand in China and the EU will have an ongoing impact on US exports, but none of this by itself will be sufficient to turn US economic growth negative. Weaker, yes – in the likely absence of any further fiscal stimulus, or conversely the absence of an unexpected negative shock – we expect US GDP will taper off from the current trajectory shown above in Chart 6 and settle closer to a range plus or minus two percent. But not negative – not yet.

iii. The Fed's Non-Dilemma

What does all this mean for the Fed? An oversize amount of economic commentary in the past months has focused on whether the Fed intends to keep raising rates at the same cadence as indicated earlier. If the global economy is less well positioned for self-reinforcing growth between the major regions and nations, does the same logic apply to Fed funds rate targets, or should these be lower? It's an important question as far as investment markets are concerned. Arguably the principal catalyst to the pullback in US stocks last fall was the Fed itself. In the September meeting of the Federal Reserve Open Market Committee (FOMC) the expected rate hike was accompanied by an affirmation of a further hike in December and 3-4 in 2019. Suddenly the market "got the memo" with a spike in bond yields and the first wave of an equity market selloff. The theater repeated itself in December with the (again, expected) delivery of the rate hike and a less dovish message than the market had expected.

The Fed did suggest in the December press conference that the number of hikes in 2019 might decrease (2 rather than 3 or 4) but that the winding down of the balance sheet from its post-crisis high of $4.5 trillion would proceed with little deviation. The storied "Fed put" of the Greenspan-Bernanke-Yellen years seemed to be dead in the water. Is that true, or does this whole drama amount to less than meets the eye? Consider Chart 8, below, showing long term trends in US inflation and government bond yields.

Chart 8: Consumer Inflation and Government Bond Yield Trends



Source: Bureau of Economic Analysis, FactSet, MVF Research

The picture suggested by Chart 8 could be interpreted in a couple different ways, neither of which would indicate an immediately perilous situation. The first thing to note is that for much of the current economic recovery period – i.e. from 2009 to 2016 – short term nominal interest rates were well below inflation (the metric shown here is the core consumer price index (CPI) which excludes the volatile categories of gasoline and food products). That makes this recovery period different from most others. Consider where both the 2-year and the 10-year yields (green and crimson lines, respectively) were during the growth cycle of the mid-late 1990s and that of the mid-2000s. They were substantially above the rate of inflation.

In the current growth cycle, though, real rates (i.e. inflation adjusted) stayed negative until the relatively late stage of 2017, and even since then the real rate remains quite low compared to historical norms. This, of course, was by design. The Fed engineered the easy money conditions in part so that investors would shift funds out of safe havens (like Treasury bonds) and into riskier exposures in credit and equity markets. In the past several months we have heard much commentary about so-called “rotation thresholds” where conservative money – think pension funds or insurance companies – rotates back out of equity and into debt, given the better terms for real yields.

Last fall a popular notion took hold that a 10-year yield of 3.5 percent (presumably with inflation staying right around the 2 percent level where it is currently) would be a likely trigger point. As yields moved above that threshold, the notion went, money would spill out of stocks, back into bonds and cash equivalents. The Fed would be shooting its own recovery in the foot, raising the likelihood that negative sentiment in financial markets would then extend into the real economy. That was the putative Fed dilemma.

Really? In the late 1990s real yields averaged well over two percent. They were in the two percent range during the growth cycle of the mid-2000s as well – and yet risk assets like equities performed just fine during those cycles. Why would a real rate of return on the 10-year Treasury of 1.5 percent (i.e. the implied real rate if nominal yields jumped to 3.5 percent while inflation stayed around two percent) be the catalyst that launched a massive exodus by pension funds out of equities and into safe havens?

We believe the Fed has plenty of leeway to chart the course deemed most appropriate as they continue to take in and absorb data about changes in the global economic picture. Given our comments above regarding divergence and slowing growth, it may well be prudent to scale back to just two increases this year. Inflation being fairly well in check, there should not be any urgency to move faster than they would like. At the same time, the economic consequences of further rate hikes would seem to be relatively mild. We are not convinced at all that there is a real dilemma here.

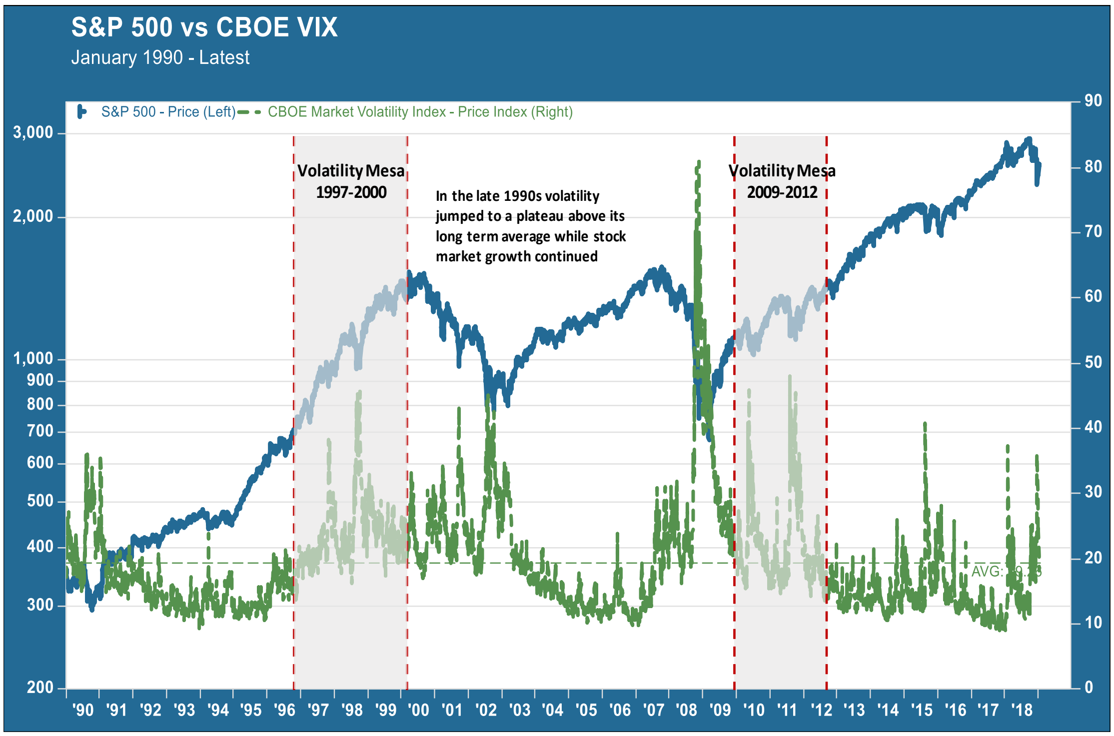
Economically speaking, that is. The question is whether markets can allow the Fed to chart whatever course is economically prudent without staging a major temper tantrum similar to what we saw late last year. That question brings us to the current state of the capital markets, which is not entirely healthy.

C. State of the Capital Markets

i. A New Volatility Mesa?

In 2019 we expect that the key characteristic of risk asset markets will be volatility – where the magnitude of change through short term trading cycles outweighs directional trends. Volatility itself does not imply a directional tendency in either a positive or negative direction. Chart 9 below shows the common volatility measure of the CBOE VIX (in green) plotted together with the S&P 500 price index (blue).

Chart 9: S&P 500 and CBOE VIX (Volatility Index)



Source: MVF Research, FactSet

While it is true that sharp equity market pullbacks tend to be accompanied by sudden spikes in volatility (see, notably, the 2008 market crash and then to a lesser extent some of the double-digit pullbacks that occurred subsequently), high volatility can also occur when markets are rising. We call this a "volatility mesa." Over the course of the last 30 years there have been two notable volatility mesas. The first was in the late 1990s, starting with the Asian currency crisis in 1997 and lasting through the rest of the manic dot-com rally that finally sputtered out in 2000. During this period the equity market registered some of its most impressive gains of that bull market – so investors who took high volatility as a cue to reduce their equity exposure in 1997 missed out on several years of good gains.

The second volatility mesa took place in the aftermath of the 2008 market crash. The crash reached its trough in March 2009, and volatility fell sharply after that from its crisis highs. But it remained elevated. The long-term average price of the VIX is very close to 20 – and this price is also a convenient shorthand for a risk threshold. A VIX price of 20 or higher indicates a period of heightened volatility. US equities registered strong gains throughout 2010, 2011 and 2012 – but the gains were interrupted by periodic directional reversals and overall risk sentiment never settled into one of the benign "volatility valleys" that characterized the early 1990s, the mid-2000s and most of the period from 2013 through 2017.

We think there may be useful parallels between the volatility mesa of the late 1990s and the environment today. Now, we say this without even knowing whether we actually are heading into another volatility mesa. But the bull market has already run for a long period of time, and sentiment tends to get jumpy as more investors start looking for reasons to confirm the end of the bull run. Headlines trigger sudden movements one way or the other, with scant attention being paid to fundamental value metrics. One day the trigger may be favorable, and a "junk rally" ensues where stocks with lower quality metrics do better than their blue chip counterparts. Another day the catalyst may be negative, and markets can pull back five percent or more for no apparent reason. Fed comments perceived by the market as hawkish have a tendency to engender this kind of effect.

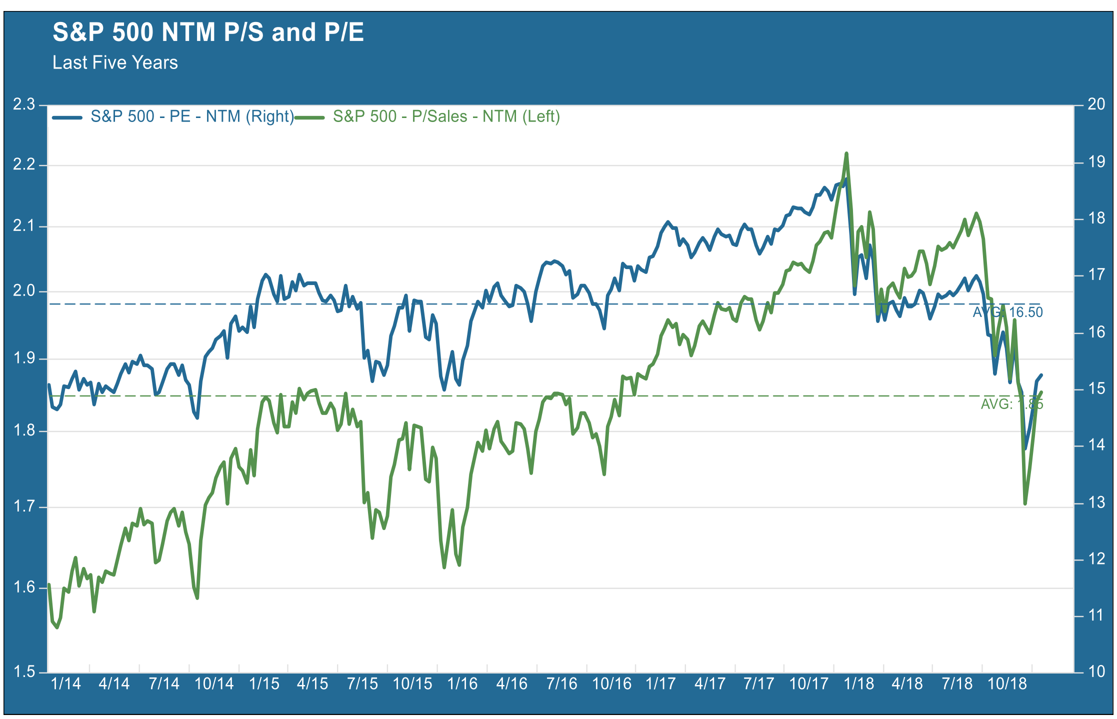
The main thing to bear in mind when risk assets are in a volatility mesa environment is that rational judgments about directional probabilities are going to be subject to a great deal of noise. As an investor you don't want to be out of the market in this kind of environment – witness those who got out too early in the late 1990s or were afraid to dip their toes back in to reap the gains of 2010-12. At the same time, it makes sense to be a bit more conservatively positioned than usual, because skittish markets can move in a negative direction with little prodding. Our message here, which is consistent with our overall comments on the current state of the economy in the previous section, is to resist the gloom-and-doom temptation, but to carefully build up a little more protection.

ii. Two Questions of Valuation

Question 1: Are US Stocks Overpriced?

In the early years of this growth cycle corporate earnings grew relatively slowly, while the stock market responded to monetary stimulus by growing faster than underlying sales and earnings. The result was steady expansion of valuation multiples to the point where, by 2015, equities started to look unsettlingly expensive. But the situation started to move in the other direction starting in 2017. Both sales and earnings have grown at above-trend rates for the past three years. As Chart 10 below shows, the market is, if not necessarily cheap, not nearly as expensively priced as it was several years earlier.

Chart 10: S&P 500 Price-Sales and Price-Earnings Trends



Source: FactSet, MVF Research

On a next twelve months basis (i.e. the current stock price divided by the analyst consensus forecast for next year's sales or earnings) the P/E ratio is well below its five year average while the P/S ratio is close to the five year average. We pay more attention to the P/S ratio because it is not distorted by the 2017 tax cuts. The effect of those tax cuts was a windfall to the corporate bottom line (net earnings), so a comparison between, say, the third quarter of 2017 and the third quarter of 2018 contained a one-time tax benefit that won't be repeated when 3Q 2018 is compared to 3Q 2019. Sales, or the top line, is a pre-tax number and thus not affected.

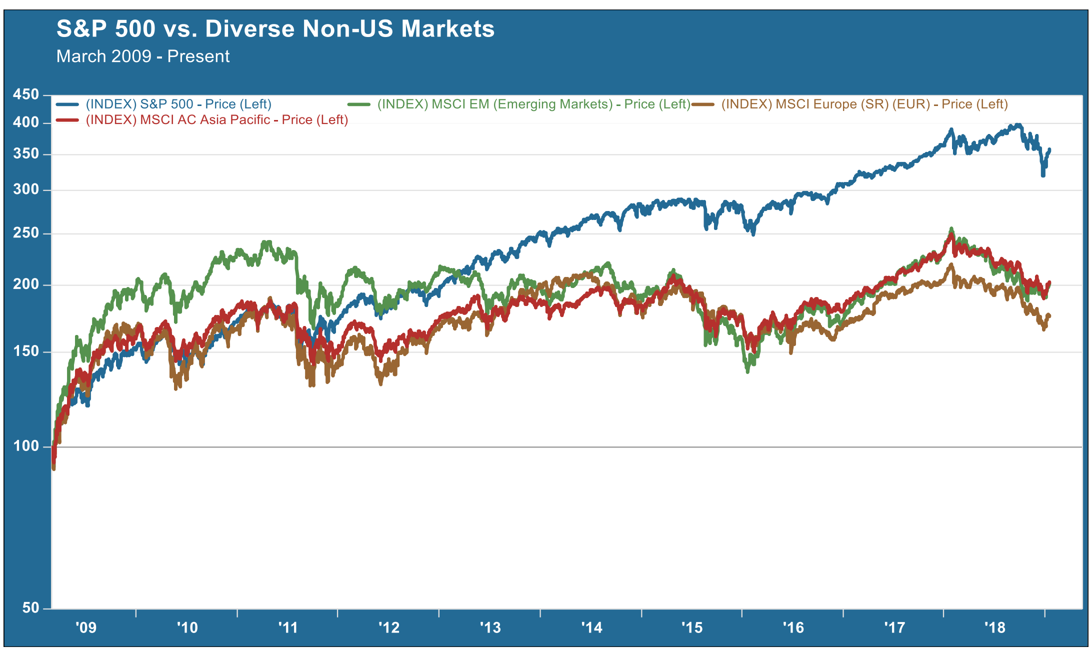
With this in mind, consider that the analyst forecast for S&P 500 sales through the first half of 2019 remains fairly robust, in the range of 5-6 percent growth from the previous year. That gives support to the notion that stock prices have some upside room to run – if the S&P 500 gains 5 percent in 2019 and sales perform as expected, then the multiple will remain right around its five year average. If share price gains are higher there is still some latitude before they start closing in on nosebleed territory.

It is important to remember that valuation metrics, while critically important in the long run (stock prices are, fundamentally, nothing more or less than a collective estimate of the net present value of the company's future stream of cash flows) they are of little use as a short term predictive tool. Sometimes earnings quality matters more than others, and sometimes it doesn't seem to matter at all (see, any junk rally in the history of markets). What it means is that you should pay scant attention to anyone who proclaims that stocks are due for a fall because they are so expensively priced today.

Question 2: Are Non-US Stock Valuations Relatively Attractive?

US stocks have outperformed foreign stock markets for nearly the entire duration of the bull market. Chart 11 illustrates the extent of this performance gap, showing that an investor in the S&P 500 at the beginning of the current bull run in 2009 would have been almost twice as well-off as an investor in a basket of non-US equities over the same period (we show here representative indexes for developed Europe, developed Asia and emerging markets).

Chart 11: US vs. Non-US Stock Price Performance



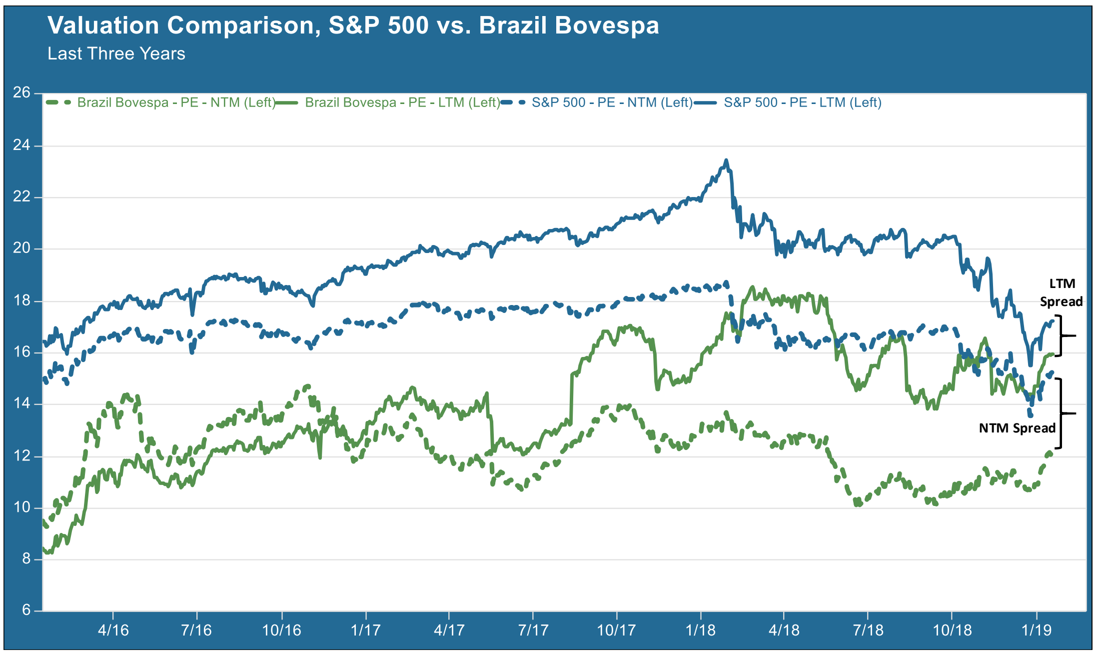
Source: FactSet, MVF Research

The performance gap actually raises two somewhat different takes on this question of relative valuation. One: is the US market due to underperform just because – in other words because mean reversion happens and what goes up must come down? Two: are valuation spreads really so wide between US and non-US stocks? And if they are, is that because the valuation premium is deserved for US companies given their home market competitive advantages and wider footprint in the world?

We can dispense with the first part of that question relatively easily. Mean reversion generally does happen – nothing outperforms forever – but there is no particular reason to imagine it will happen this year as opposed to last year or next year or three Chinese New Years from now. Market timing a mean reversion is a fool's errand and we have no more to say on the subject.

The relative valuation question is more interesting. We show below in Chart 12 an illustration of price-earnings ratios in the US and Brazil, one of the more prominent emerging markets that has until recently been a relative laggard in the market.

Chart 12: P/E Ratio Comparison Between US and Brazil



Source: FactSet, MVF Research

Here's how to read Chart 12. The blue lines represent the S&P 500 and the green lines represent the Brazil Bovespa index. The solid lines represent LTM (last twelve months) earnings, and the dotted lines represent NTM (next twelve months) earnings.

For both the NTM and LTM pairings a valuation spread exists between US and Brazilian stocks. The spread is somewhat wider on an NTM basis, which might indicate some meaningful value capture if shares of leading Brazilian companies really are due to take off after many years of lackluster performance.

The results appear to us somewhat less than conclusive when considered in the aggregate. The US NTM P/E is around 15 now, compared to 12 for the Bovespa. The LTM spread between the two markets is less than two: about 17.7 for the S&P 500 and 16 for Brazil.

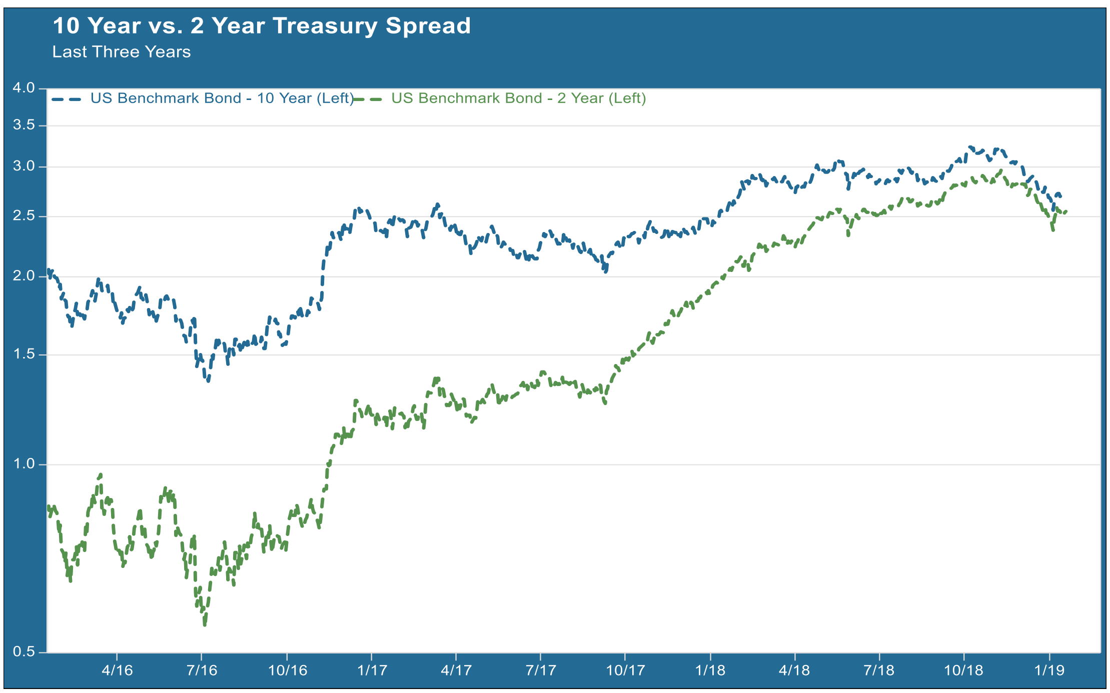
In our opinion, the only useful way to go about this kind of valuation analysis is to consider the relative merits of similar companies in the two countries and assess whether one is being discounted more than appropriate by the market. For example, if one were to conclude that Petrobras, a Brazilian energy conglomerate, trades at an unfair discount to Exxon Mobil (after taking into account all the relevant factors that distinguish the competitive industry position of Petrobras and Exxon Mobil) then a value opportunity may present itself. When considering the same question at a market level, rather than an individual stock level, a difference of two points on the P/E scale doesn't make a strong case. Any number of factors will influence the actual performance of the US and other stock markets this year, any one of which could render modest valuation spreads inconsequential.

iii. Will Treasury Yield Spreads or Credit Risk Spreads Dominate Markets?

Fears of Flatness

As go credit markets, so go equities…this is a recurring theme of ours. Much of the discussion in credit market analysis over the course of the past year focused on two aspects of interest rates: the shape of the yield curve, and the absolute level of rates. In 2018 the Fed raised its Fed funds target rate four times. Short term interest rates like the 2-year Treasury note, which are closely correlated with monetary policy, moved up sharply. Intermediate rates like the benchmark 10-year note, however, didn't rise nearly as much. Indeed, over the course of the last three years, the only significant upward movement in the 10-year note took place in the immediate aftermath of the 2016 election. That, as you may recall, was the ill-advised and short-lived "infrastructure-reflation trade" or what starry-eyed investors at the time thought was going to be a new magical era of public spending on infrastructure that would send inflation and interest rates soaring. The infrastructure trade was dead by early 2017, and the 10-year yield drifted lower for much of the rest of that year. Chart 13 below illustrates the respective trajectories of 2-year and 10-year yields.

Chart 13: Yield Trends for 10-year and 2-year Treasury Notes



Source: MVF Research, FactSet

The shape of the yield curve resulting from these respective trajectories is a cause for concern because a flat yield curve has historically been one of the most prescient indicators of an approaching recession. The last time the gap between the 2-year and the 10-year was as tight as it is today was 2007, the time before that was 2000 and so it goes back through the annals of US recession history. However, please bear in mind what we talked about during our discussion in Section 1 of this report. The actual number of recessions the country has experienced since the end of the Second World War is not significant enough to derive statistically relevant insights from it – moreover, *pace* Tolstoy, every recession is miserable in its own special way. We have argued elsewhere that empirical evidence for a recession in the near term is scant, with all macroeconomic indicators and corporate financial performance reports pointing to at least modest growth. Still, one cannot ignore the Euclidian flatness of the curve as it stands today. What factors might influence the evolution of this shape over the next twelve months?

Currently the upper range of the Fed funds target rate is 2.5 percent, which is also roughly what the 2-year note yields (see Chart 13 above). Historically there tends to be a slight positive spread between the 2-year note and the Fed funds rate, so there is still some upward potential for the 2-year even if the Fed stays put and holds off on rates for the next few FOMC sessions. However, if economic conditions remain more or less where they are today, there is a decent chance the Fed would move again on rates as early as its March meeting. That would imply that short term rates are more likely to trend higher than lower over the first half of 2019. Given where rates are today, it would only take about 20 basis points of movement for the 10-2 curve to invert, and that would have the potential to unnerve both credit and equity markets.

What about the 10-year? Intermediate and long term rates are subject to more influencing variables than just monetary policy decisions. Recall the famous “Greenspan conundrum” of the rate hike period that ran from 2004-06. The Fed raised rates from 1 percent to 5.25 percent over this period, but the 10-year didn’t budge so that by 2006, with Fed funds at that cycle’s peak of 5.25 percent, the 10-year was below 5 percent. The principal reason, as ensuing Fed chair Ben Bernanke later figured out, was massive demand for intermediate Treasuries from abroad, principally China.

China’s supercycle era is over, but overall foreign demand for US government securities remains relatively strong. Both EU and Japan are still in the late stages of easy monetary policy, and it remains advantageous for foreign institutions to hold US paper. There are no signs of an imminent jump in inflation that could be another catalyst for higher rates. If growth in the US moderates, which is a reasonable assumption, then expectations for less hawkish monetary policy will also have an effect. Finally, if risk asset markets are as volatile as we expect them to be this year, low-risk credit instruments like Treasuries will likely serve their traditional role as safe havens.

All this leads us to the conclusion that the shape of the yield curve is not likely to change all that much this year, with roughly equal likelihood that it could steepen slightly (if growth data and market sentiment turn higher than expected) or even invert slightly (if the Fed raises rates a couple more times as planned). Another influencing factor, though, will be what happens elsewhere in credit markets. Risk spreads – i.e. the magnitude of premia demanded by holders of riskier fixed income securities – may be a more interesting story this year than the shape of the yield curve.

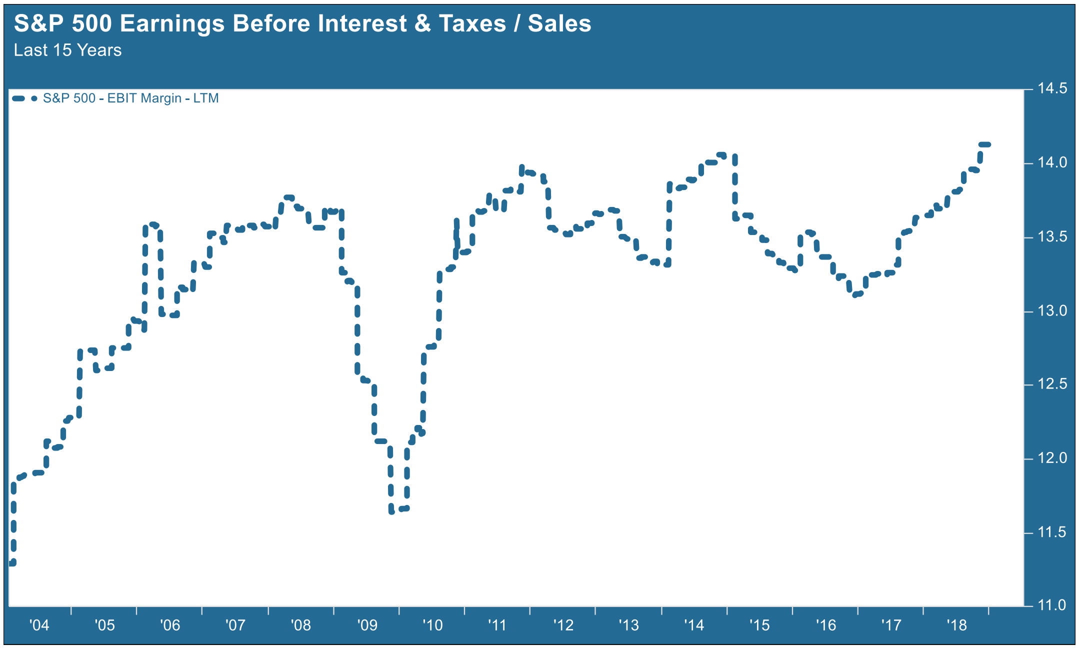
41 Days in the Desert

January 10 of this year was an important date in the annals of the high yield bond market. On that day a bond issue by gas pipeline company Targa Resources became the first new high yield bond to be issued after a drought of 41 days – the longest such absence of new issues since records on this started being kept. The success of the Targa issue provided some relief to investors concerned about risk spread trends in credit markets. The high yield debt market is how many small and mid-sized companies fund their investment projects. The leveraged loan market, another financing option for enterprises below the investment grade threshold, has also been moribund for a number of months.

The era of low interest rates provided companies with an attractive environment for tapping the debt markets, and many have done so with abandon. Among the larger companies with investment grade ratings and a following of securities analysts who judge their performance in quarterly earnings calls, the favorable credit market terms have facilitated record amounts of share buybacks along with steady increases in dividend payouts. Leverage for corporations is a two-edged sword. During a growth cycle leverage is a means to achieve higher returns. When conditions change, though, companies still need to cover their fixed interest payments. If they took out too much debt in the good times, then they can get into trouble when their profit margins start to turn down.

Here, then, is the crux of the problem. Not only have credit market conditions been great for corporate debt issuance, but profit margins have pushed up to all-time highs. Chart 14 below shows the trend in earnings margins for S&P 500 companies (pre-tax and pre-interest on debt) over the past 15 years.

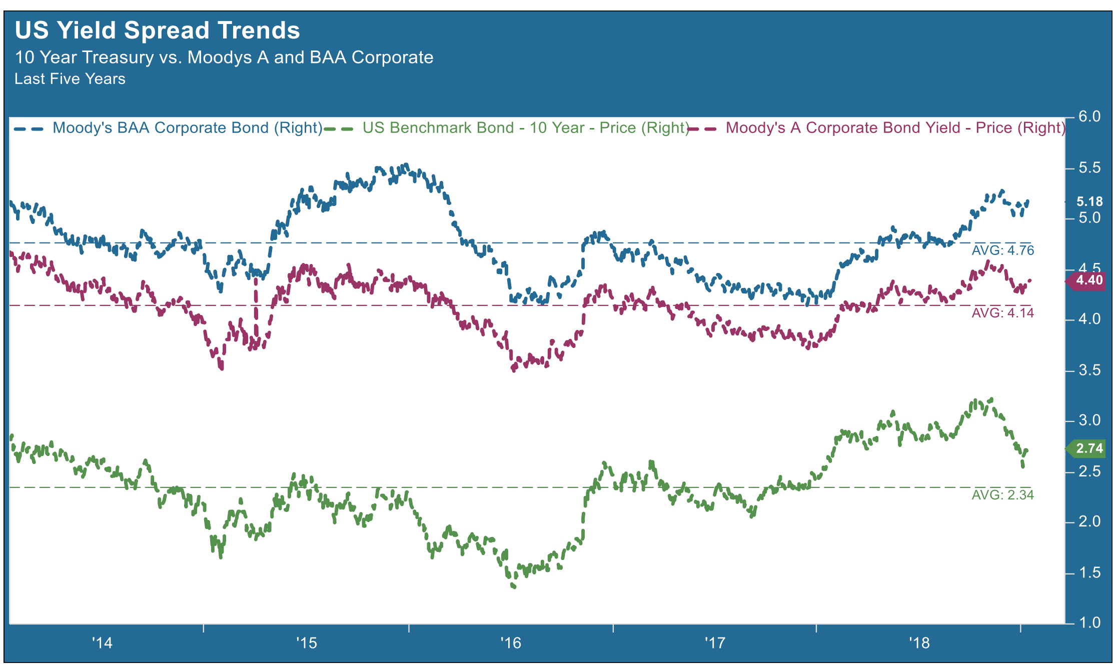
Chart 14: EBIT Margin Trend for S&P 500 Companies



Source: MVF Research, FactSet

The strong growth in profit margins over the past couple years owes much to the pickup in top line sales companies enjoyed over this period, coupled with the effects of cost-cutting measures and efficiency improvements made in earlier years. But there is a limit to how much more profitable companies can become without either a newfound surge in demand for their products or even more cost-cutting. Bear in mind also that, with a tight jobs market, labor costs will put downward pressure on margins. The result is what many observers see is a peak margin environment. This may be coming just when credit risk spreads are poised to widen. Chart 15 below shows investment grade credit spreads to the 10-year Treasury.

Chart 15: Investment Grade Credit Risk Spreads



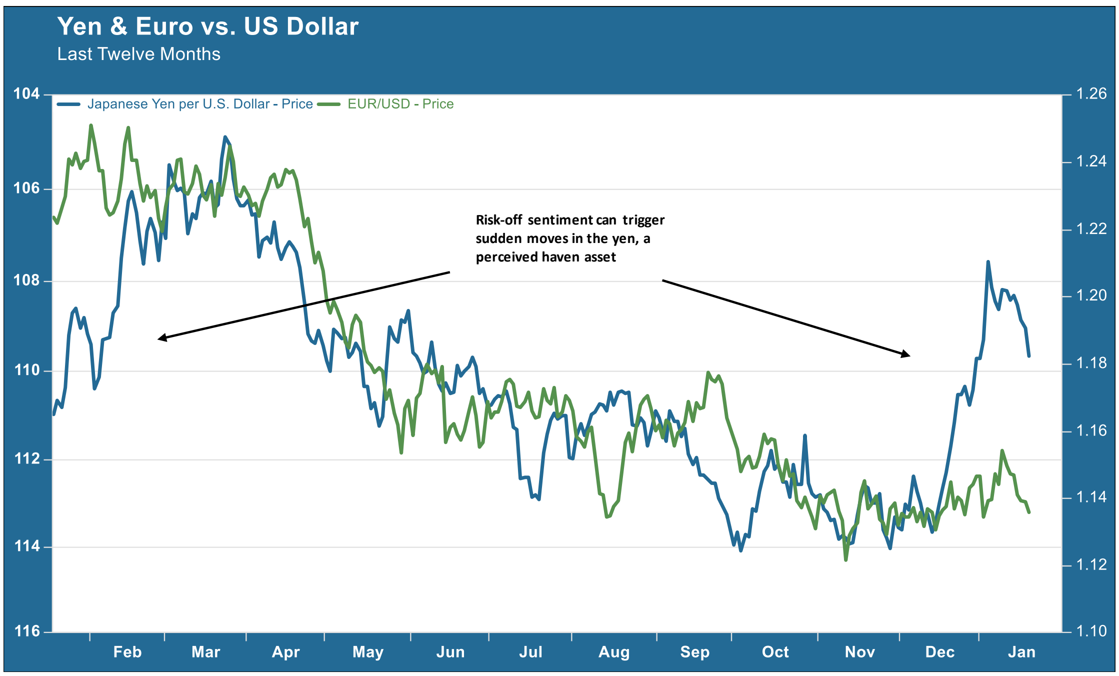
Source: FactSet, MVF Research

Spreads are not as wide today as they were in 2015 and early 2016. But the yield on Baa corporate bonds (the lowest rating on corporate bonds) is not far in absolute terms from the peak rates reached back then. Note how corporate bond yields did not fall in tandem with benchmark Treasuries during the risk-off haven-seeking of late 2018 – particularly the Baa yields. Peak margins and rising yields could be an unhealthy recipe, one with the potential to spill directly over into sentiment about corporate share prices.

iv. Dollar On, Dollar Off

Does it make sense to have a larger chunk of assets in foreign currency securities in 2019? Here again – the common theme of this report – it depends on many conflicting variables. The dollar is considered overvalued against many of its major trading partners on a purchasing power parity basis. For example, the dollar was up about 5 percent versus the euro in 2018, and 7 percent against a broad basket of currencies. But it ended the year a bit down against the yen, and there is a useful story there for thinking about 2019. Chart 16 below shows the parallel trends of the euro and the yen versus the dollar over the past five years.

Chart 16: Euro and Yen versus US Dollar



Source: MVF Research, FactSet

When you see a radical move in the trajectory of the yen (blue line in Chart 16) versus the dollar, which doesn't show up in the euro or another developed currency, the reason often has to do with a sudden burst of risk-off sentiment. That happened at the end of 2018 – witness the sharp spike in the yen in early December – and it happened earlier in the year as well when risk assets took a hit after the January melt-up. Along with the Swiss franc and (to a somewhat lesser extent now than in earlier periods) gold, the yen tends to rise in favor when things go pear-shaped in equities, industrial commodities and the like.

A turn in the dollar's strength more generally could come from a visible move away from monetary tightening by the Fed (including a pause in its balance sheet wind-down as well as further Fed funds moves). A détente or outright cessation of the trade war, though not altogether likely, could also weaken sentiment towards the greenback. An all-out political meltdown is not out of the question. On the other hand, as we have noted elsewhere, the Eurozone economy is not looking particularly strong. Weakness in China, which we also flagged as a variable in play, could spill over into emerging market currency sentiment as well. It's probably a good idea to keep some eggs in different baskets. But it will take a confluence of several forces working in the right direction to effect a solid turn in the fortunes of the dollar.

D. Concluding Thoughts: Where Should You Be Positioned In 2019?

We have spent much of this report observing that things could go one way this year, or they could go another way this year. That is not an observation likely to be of much comfort to someone looking for a confident prediction. Sadly, we are in the business of analysis, not crystal ball gazing, and the best we can do is to supply some of the analytical insights suggesting why this will be a particularly challenging year in which to profit from short-term tactical bets. If the main characteristic of investment markets is high volatility – which is our central argument – then the ultimate direction of the market will turn on the specific outcomes of a handful of X-factors out there. Think of each of these X-factors as a lightbulb, which can be in one of two states. On or off. Trade war? On, off. Hard crash out of the EU for Britain? Likewise. An unprecedented constitutional crisis in the United States that results in actual fighting in the streets between hard-edged partisans? Not entirely likely, perhaps, but possible. On or off.

Now you have the picture that we have in our heads every day when we contemplate the globe. A whole bunch of lights blinking on and off like some nightmarish forest populated by demented Christmas trees. And these lights are connected to each other, so that the state of one light (on or off) has an influence on the state of other lights whether nearby or across the globe. Furthermore, the agents making decisions based on these blinking lights (you, us, pension fund managers, algorithm-driven tradebots, the Fed, Xi Jinping) are going to impact the environment as well. A particular pattern of events that seemingly has nothing to do with, say, corporate sales performance may trigger a sell-off in equities; the sell-off, in turn, spooks consumers (who start to spend less) and enterprises (who start to make less) and – voila, the recession is at hand way ahead of schedule. This is what we meant back in Section 1 of this report in talking about complex adaptive systems, where outcomes are not computationally reducible by the linear models of neoclassical economics.

So what to do? As we prepare to rebalance our clients' portfolios in the coming weeks, we believe in maintaining fidelity to a mix of assets best suited to the particular return objectives and risk considerations of each client. A properly constructed portfolio needs a certain amount of exposure to growth opportunities, and a certain amount of risk mitigation (which may be very low, or very high depending). It needs a predictable income stream, that, again, will be high or low (or zero) depending on the client's particular circumstances. And there should be a suitable amount of diversification between assets that share low correlation properties. Think again of those blinking lights – if some of them happen to go off, you want to have at least some exposure to assets that will be less affected by the outcomes.

With this in mind, our strategic models will be somewhat less favorably weighted towards equities this year – roughly in the midpoint of our approved ranges. We will maintain exposure to non-US assets primarily for currency diversification purposes. In fixed income our positioning is conservatively weighted towards low-duration floating rate instruments. A mix of income-oriented alternative assets and a modest cash equivalent buffer rounds out the model structure.

Every year requires a careful weighing of two possible risks: the risk of missing out, when a conservatively positioned portfolio fails to capture all the upside of a robust bull market; and the risk of being in, when market conditions turn negative and leave more aggressive portfolios more fully exposed to the headwinds. This year, we believe it is important to maintain a steady discipline through potential downturn periods (this was a recurring weekly theme in our market commentaries last fall) but to be cognizant of the risks ahead – the blinking light patterns that could bring about a more sustained downturn. Be assured, we will continue to share our views with you as the year develops and apprise you as and when our views evolve and change on any of the observations we have made herein.

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