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July 31, 2018

To Our Clients and Friends:

The Monthly Letter covers three topics this month. First, we provide our Quarterly Global Economic Overview. The Global Economy continues its strong growth, driven by global consumer spending and economic development. However, Global Rebalancing accelerated as. Global Economic Warfare broke into the open. The US and China began openly fighting over trade, with the US finally acting to defend its national economic interests. (For a more extensive discussion of this topic, please see *Currency Wars, Trade Wars, The Fight For Economic Growth, and The New Cold War* published April 30, 2018.) Second, we review the Equity Markets at the end of the first half. With US economic growth accelerating and unemployment low, earnings have been strong. Offsetting this, interest rates have begun a long term rise and corporations face higher reinvestment needs to meet this strong growth and to make up for underinvestment over the past decade. These demands will pressure their ability to throw off cash over the long term. For the investor, with these contrasting forces facing off in the ring, it has been a bumpy ride in 2018, with lower returns than in some time. But unless the Federal Reserve chokes off the recovery, economic growth should continue, driving earnings and the markets upward offset by classic late cycle multiple compression and rising volatility. And Third, as always, we close with brief comments of interest to our readers.

Dragon Smoke, A Setting Sun, Elephant On The Move, Latin Beat, The Lion Roars Again, Bear Spring, Old Man Reality, and The Quickening Climb

> "*The study of the forces that shape, maintain and alter the state is the basis of all political insight and leads to the understanding that the law of power governs the world of states just as the law of gravity governs the physical world. The older political science was fully aware of this truth but drew a wrong and detrimental conclusion – the right of the more powerful. The modern era has corrected this unethical fallacy, but while breaking with the alleged right of the more powerful one, the modern era was too much inclined to overlook the real might of the more powerful and the inevitability of its political influence.*"

Grunsatze der Realpolitik Angewendet Auf Die Staatlichen
Zustande Deutschlands
Ludwig von Rochau
1853

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"*But in this moment the problems of foreign policy are not yet solved; the dazzling successes of the army have in a sense raised the stakes of the game, we have more to lose than before, but the game is by no means won as yet; the more firmly we hold together at home, the more certain we are to win it. If you study conditions abroad, if you study the Vienna newspapers, especially those which are commonly thought to represent the views of the imperial government, you will find the same expressions of hatred and anger toward Prussia that could be found before the war and contributed not a little to making that war a necessity for the imperial government, which it could not have avoided even if it had wanted to. If you study the behavior of the peoples of southern Germany, as they are represented in the armies, you will fing that a spirit of reconciliation and acknowledgment of shared tasks for all Germany is certainly not present as long as Bavarian troops on railroad cars treacherously fire on Prussian officers. If you examine the attitude of the various foreign governments toward the institutions that must be established for the new North German Confederation, it is satisfactory with some and hostile with others, but you will certainly find hardly any power in Europe that offers benevolent support for the construction of this new common life for Germany… Therefore, gentlemen, our task is not yet accomplished, and it demands unity from the whole country in word and deed. Even though it has often been said, 'What the sword has won, the pen has lost,' I have complete confidence that we will never hear it said, What the sword and pen have won, has been destroyed by this rostrum!*"

Address to the Reichstag on The Indemnity Bill of 1866
September 1, 1866
Otto von Bismarck

The Global Economy remains strong, with growth in 2018 likely to equal or exceed 2017's growth. However, the distribution of this growth will change. Developing Economies in Latin America and Africa will see growth accelerate this year, adding to their initial recoveries in 2017 that came after a difficult 2016 and 2015. On the other hand, Developed Economies in Europe, as well as the Central European Economies tied to them, will see slower growth this year despite improvement in Southern European countries, due to a slowdown in their export growth. For the rest of the world, including North America and much of Asia, growth will remain strong, chugging along down the river. Overall, a good result for the world in general, with global growth expected to reach 3% to 4% despite Central Banks beginning to tighten around the globe.

However, lurking in the background for the Global Economy sits Global Rebalancing, led by the actions of the United States. The United States, which funded a large portion of the growth around the world at its own expense over the past 50 years, found the costs had risen too high. With the need to reclaim at

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least a portion of its growth from other countries to restore its economic growth rate to acceptable levels, new policies that emphasized US economic growth came to the fore over the past two years. These policies target the mercantilist economic structure of countries such as China, Japan, South Korea, India, Germany, Indonesia, Malaysia, and other countries which drove their growth through exporting medium and high value goods while protecting their own domestic markets. This process of change will exhibit much noise and political calculation to optimize each country's result. However, at the end of the day, the US trade deficit will shrink, US Investment and productivity growth will rise, and the US long term economic growth will accelerate.

While the allies of the United States likely will receive some form of reprieve to adjust their economic relationship with the US over a period of years, this peace offering will not wend its way to China. With the rise of China as a global strategic threat to the US economy, to US allies, and to US interests around the globe, policy will move to contain China and away from engagement. While this might shock some, given the abrupt change in rhetoric, it recognizes reality and harks back to the Realpolitik espoused by Otto Von Bismarck in the 1860s and 1870s. This philosophy emphasized recognizing the economic power possessed by each country and the impact each country could make by exercising this power. With Donald Trump ascending to the US Presidency, the United States recognized China's economic power and its moves to advance its economic growth. In fact, President Trump explicitly stated that he viewed no wrong with China's leaders acting in China's best interests. However, he stated, that unlike the past 20 years whereby the United States sacrificed its interests to engage China, the US would now focus on acting in its best interests and taking actions to benefit its interests at the expense, if necessary, of other countries, including China. As part of adjusting the relationship with China, he emphasized the United States would act to accelerate and protect its economic growth by righting the trade deficit and addressing its predatory economic policies. And lastly, President Trump brought back the concept of the National Interest, focusing on protecting technology and other key goods where China stole the technology to produce the products in China and then export them around the globe. For China, this change will start to have negative impact over the next few years as tariffs move in place that will begin to shut Chinese goods out of the marketplace and replace them at first with other countries goods and then with US production. While the US cannot build plant overnight, as planning, siting, and constructing plants takes several years, the tariffs coupled with looming actions to prevent China from depreciating its currency to offset the tariffs will provide incentives for the products to move onshore. And if this is insufficient, actions to embargo Chinese goods, both here in the US and abroad, will follow. While Congress may act to support the Fortune 1,000 firms which fund their campaigns and provide money for their PACs, they may find their seats endangered as the US populace begins to understand how China represents a threat to the average American's daily life. And while politics is messy, the outcome will likely resemble a return to the 1950s and the triumph of a Bismarck-like solution, recognizing the Realpolitik today.

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For China, even before the majority of planned tariffs take place, its economy appears under strain. Despite reporting 6.7% economic growth for the year to date, similar to 2017, foreign companies' earnings reports produced data indicating a real slowdown in the Chinese economy. For example, AO Smith, which manufactures both air purifiers and water heaters in China for the Chinese market, indicated a significant downturn in the air purifier market. Akzo Nobel, which sells paint in China, stated volume growth was negative in China during the second quarter at the same time as markets such as India and Vietnam grew significantly. Domestic Chinese firms found the capital market spigot shut off, forcing the closure of many firms and other firms to defer their investment plans. Chinese entities moved to sell real estate in the United States on net to regain liquidity. Given this data, something smells rotten in Denmark.

With multiple data points indicating a broad based slowdown even before the tariffs, the Chinese economy appears in a precarious position. And, with the real data likely indicating significant problems, the Chinese government appears in the process of acting to prop up the economy. The Chinese Central Bank (BOC) entered into a massive easing program. First, the BOC provided a 400 billion Renminbi (RMB), equivalent to $60+ billion, injection into the banking system in June. It then moved to lower Required Reserve Requirements (RRR) by 50 basis points (0.50%). This will free up RMB 700 billion ($100+ billion) in lending capacity. The BOC expects to lower the RRR two to three additional times before year end, providing another 1.0 – 1.5 billion RMB ($200 - $300 billion) in lending capacity. In other words, a quick stimulatory injection of $350 - $450 billion, 3% - 4%+ of GDP, is on the way. In addition, to offset the looming tariffs proposed by Donald Trump of 10% on $200 billion in Chinese goods, China depreciated the Renminbi (RMB) against the US Dollar by 7.5%, returning it to the level it possessed before Donald Trump became President and pre-empting the initial move on tariffs.

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And to fully offset the last 2.5% portion of the tariffs, the Chinese government will rebate the VAT to its exporters, lowering their export prices. Thus, they effectively nullified the tariffs prior to their coming into effect. (Given that China runs a massive trade surplus with the United States, the currency should appreciate not depreciate according to economic theory.) Lastly, the Chinese government increased Fiscal Stimulus and accelerated Fixed Asset Investment (FAI) into the economy. They did this in two ways. First, the government plans to increase the effective government deficit to ~11% of GDP. They will accelerate Infrastructure investment, which slowed to just 2% year-over-year in June, and increase local government spending. Second, the government will accelerate manufacturing FAI through State Owned Enterprises (SOEs), supporting further Chinese company market share in China to accelerate the Made in China 2025 goals. (Note: For example, Emerson Electric recently expressed concerns as the Chinese government provided technology and support to new companies that would compete with its products manufactured locally there.) Furthermore, instead of addressing the bad debt in China, the Chinese government continues to support SOEs that would otherwise default. While the SOE default rate is currently 0.2%, if the banks applied the same criteria private companies endure, the SOE default rate would reach 8% - 9% of all SOE loans outstanding.

While the government can continue to stimulate the economy, depreciate its currency, and ignore the bad debt in the short term, these policies appear unsustainable in the medium to longer term. Chinese Credit Efficiency stands at one half its level in from 1998 to 2008. During that time, each dollar of debt produced one dollar of GDP. Today, each dollar of debt produces only 40 – 45 cents of GDP. In other words, the economy must add $2.00 - $2.50 in debt for each $1.00 in GDP. Given the current debt levels in the economy and the strain to service the debt, adding significantly to these levels will create

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danger for the economy. Furthermore, the Chinese economy stands too large for the use of currency depreciation to solve its economic problems at other countries expense. This is typically reserved for small insignificant countries that will not impact the larger economies to any significant extent. As the #2 economy in nominal terms and the #1 economy in PPP terms globally, the rest of the world will not allow it to grow via depreciation. Already countries such as Vietnam, Indonesia, Germany, Japan, and many others, manage their currency against the RMB to insure their currencies do not appreciate significantly and put their companies at a competitive disadvantage. In fact, the only major country not managing its currency against China is the United States. Once the United States acts in the currency markets to ensure China cannot depreciate its currency to grow at US expense and offset the impact of tariffs, this avenue will shut permanently for China. Lastly, with fundamental economic growth slowing and significant bad debt in the economy already, China stands at a crossroads. While it attempts to grow Consumption to offset the slowing on the export side of the equation and the closing of markets to Chinese goods, the country possesses over 50% of global capacity in numerous industries with an economy, that even at PPP, is no more than 20% of the global economy. For example, China produces 57% of the fiber optic cable in the world and somehow consumes this domestically. When it finishes building out the wireless 5G Network, what happens to this capacity? China produces 50%+ of the steel in the globe. However, with the US shutting its markets to Chinese steel, other countries now are acting to do likewise. These include Malaysia, Canada, the EU, … What will happen to this capacity and the debt it supports? Given this reality, we see the Chinese economy blowing Dragon Smoke with a reckoning coming in the early to mid 2020s.

For Japan, economic growth appears strong over the near term, likely hitting 2.8% in Q2. Japanese exports rose 10% in Q2 to the US, EU, and China for its value added machinery and equipment. This is bolstering government revenue, enabling the government to increase public investment 4.5%. In addition, corporate investment rose 5% in the first half. With this strong growth coupled with low unemployment, Real Incomes have risen almost 4% so far this year. However, the sustainability of the growth over the intermediate to long term stands in question. The trade surplus with the United States is under fire, just as in the 1980s. And while the US may allow some surplus to support an ally of the country, the current size of the surplus stands well in excess of those levels. In addition, while China's Made in China 2025 thrust stands as a stimulus plan today for the Japanese economy, China likely will want to take these goods in-house over the intermediate term. China purchases significant machine tools, robots, and semiconductor equipment from Japanese companies. Once China completes the construction of its new semiconductor fabs as well as high level manufacturing in areas such as health care equipment and other high value goods, the country will likely establish companies to produce all the goods it currently purchases from Japan. This type of pattern already occurred in MOCVD equipment for LED manufacturing, whereby China stole the technology to establish a domestic manufacturer of the equipment and then embargoed the foreign company from selling its equipment in the country. With this intermediate term outlook, it is late in the day with A Setting Sun for Japan.

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India continues to recover from its physical currency replacement. Currency in Circulation is now 10.7% of GDP, up from its low of 6.4% in early 2017 and close to the 12.2% level that existed prior to the government's moves. This currency growth reliquified the Indian consumer and allowed the economy to recover. However, with the rise in the Indian Rupee of almost 20% on a trade weighted basis from 2014 through late 2017, Industrial Production growth slowed in 2018, hitting just 3.2% year-over-year in May, and the trade deficit widened. To combat this drag on the economy, India depreciated its currency this year, lowering it 5% on a trade weighted basis, with a goal to restore its currency to values closer to where it stood in 2014 over the next couple of years. Despite this drag India's GDP growth sill will exceed 7% in 2018 and is setting up for a repeat in 2019. With the Elephant on the Move, India's star continues to rise.

Across the Pacific, the Latin nations' economies remain on track for their best year since 2014. (That is except for the recurring disappointments of Argentina and Venezuela.) Columbia should deliver GDP growth of 4.5% - 5.0% this year while Chile just reported year-over-year growth of 5.9% in April. Even Peru is expected to grow at ~4% this year. And the one sore thumb, Brazil, appears on the road to true recovery. While Brazilian GDP will take a hit in Q2 due to the national trucking strike, underlying Retail Sales growth is strong, with trailing 3 month core sales rising 6.5%, and FDI remains at high levels. The Brazilian Central Bank, COPOM, plans to remain on hold for the foreseeable future in order to allow the recovery to gain some momentum. This coupled with a stabilization and early signs of recovery in the currency, mean the financial markets should not interfere with the blossoms beginning to bud in the economy. With this backdrop for the continent, the Latin Beat sounds louder and louder.

For Sub-Saharan Africa, the continent appears on track to reclaim its title as the fastest growing geography in the world. With 1.3 billion people and a GDP of $2.2 trillion Nominal and $6.7 trillion using PPP (Purchasing Power Parity), the continent continues to become a force to be reckoned with. Despite inflation, corruption, and weak currencies, overall economic growth will accelerate this year. Ghana, the Golden Lion, after producing 9% growth in 2017 will leap further ahead with 6.5% - 7.0% growth this year. And while slower growth for the country, it still stands at levels equivalent to India and better than countries such as Malaysia, Indonesia, The Philippines, and Thailand. Elsewhere on the Continent, growth will accelerate. Kenya will grow 5%. Ethiopia, Gabon, Uganda, Rwanda, Zambia, Tanzania, and the Congo will all deliver faster growth this year between 5% and 9%. Even Nigeria will see acceleration in 2018, as the lagged impact of the collapse in oil prices fades. Overall, the Continent is expected to grow 4.5% - 5.0% or better in 2018. With this type of growth, The Lion Roars Again in Africa.

For Russia, despite sanctions from the US, economic growth continues to show solid underpinnings. As one of the largest producers of oil in the world, the country benefitted mightily from the rebound in prices. In addition, with the recovery in the EU and the depreciation of the Ruble against the Euro, Russian exports continue upward on a year-over-year basis. Despite US sanctions, Bear Spring appears to have come, as GDP growth is expected to accelerate to the 1.5% - 2.0% range in 2018 and will likely continue to accelerate next year, barring a major slowdown in Europe.

For Central and Western Europe, the growth news stands in stark contrast. Central Europe continues its torrid growth, with countries such as The Czech Republic, Romania, Poland, and Hungary expected to grow 4.5% to almost 7% in 2018. For Western Europe, a major growth slowdown derailed the party this year. The main culprit, net exports, lost its mojo, providing no growth impetus this year. And with net exports comprising half of the EU's 2017 growth, it's no show at the 2018 party dampened spirits considerably. However, the real risks for European growth lie ahead and fall into two categories. The first will impact Germany and Central Europe disproportionately. It comes from the US addressing its massive deficit in autos and auto parts. With the US only producing 46% of the value of the autos sold in the country, any moves to force a larger share of automotive manufacturing back to the US will negatively impact this major export area. And while many focus on the massive trade surplus Germany enjoys, the impact on the Central European economies could dwarf the impact on Germany. Auto exports account for 25% of all exports for The Czech Republic, Hungary, Romania, and Poland (CE-4). And for The Czech Republic and Hungary, they account for 23% and 18% of overall GDP, respectively. As such, they stand in the bullseye of the automotive target. Second, for the EU, the noise in Italy continues to rise to alarming levels. The Italians proposed issuing a mini-BOT to pay off individuals and companies that are owed money by the government. These mini-BOT would be non-interest bearing and tradeable securities which could then be used by recipients to pay taxes and buy any services or goods provided by the government, including goods such as gasoline or diesel at service stations owned by the state controlled oil company. As Claudio Borghi, the Economics Minister for the 5 Star League, stated, he would expect the mini-BOT to become widely accepted and used as a form of money to be "spent anywhere to buy anything". In other words, while technically securities, they would function as a parallel currency to the Euro. Lira anyone? Ultimately, the Italians likely would offer the Germans mini-BOT as payment for the billions in Euros owed to the Germans. Unsurprisingly, the value of the mini-BOT would collapse once these payments occurred, restoring the competitiveness of Italian industry. (For those unfamiliar with the negative impact of the Euro on Italy's manufacturing, the following data will put things into perspective. Italian Industrial Production, after growing at or above Germany's rate from 1970 – 1998 and stood at 140% of Germany's IP in 1998 just prior to Italy's entry into the Euro. Since then, it massively underperformed German IP growth from 1999 – 2018 and now stands at ~80% of German IP.) Of course, the Germans stand horrified as this would place Italy on the pathway to exit the Euro and leave them with Lira for the real goods they exported to Italy. For the Italians, it would sound like "Ciao Germania!", as the Italians laughed all the way to the bank. With these two risks staring Europe in the face, Old Man Realism is setting in.

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For the US, Q2 GDP Growth produced one of the best results since early in the recovery. Not only did the economy grow faster than 4%, despite a slowdown in Housing, but the underlying growth dynamic sets the economy up for strong results in the second half of the year. Housing, after driving the economy for 6 years, entered a consolidation period this year, much like in the late 1990s, handing off growth to Consumer Spending and Capital Investment. And this smooth handoff will find blockers downfield as the stimulus from increasing Government spending won't truly impact the US until sometime this fall. When it does, it will amplify the underlying growth dynamic.

A quick look at the events of the '90s will demonstrate how similar the events of today look to that time for Housing, Autos, and the economy. After enduring a similar Housing crisis from 1990 – 1993, known as the S&L Crisis back then, Housing staged a significant rebound from 1993 through 1998. Then housing entered a sideways period from 1998 – 2002. Housing staged a lookalike rebound from 2012 – 2017. Given the massive recovery in prices and the rise in mortgage rates, a similar sideways period would allow incomes to catch up to prices and the sector to adjust to higher interest rates. For Autos, it is much of the same. After rebounding strongly from 1991 – 1994, Auto sales went sideways from 1994 – 1998, before resuming their upcycle until the recession in 2001. This decade, Autos bottomed in 2010, rising through 2015. They have gone sideways since mid-2015 and, should a similar pattern emerge as the 1990s, will resume their upturn in 2019 as consumer incomes continue to rise.

In addition, just as in the 1990s, the economy transitioned from Early Cycle to Investment led over the past year, enabling the economy to continue its growth and compete in the International Growth Race. And should Investment truly accelerate, the US possesses much ground to make up. For the US suffers not from a lack of Consumption, but from a lack of Investment and from Manufacturing standing at less than 12% of the economy, well below normal for an economy such as the US. As the following two charts demonstrate, Manufacturing Orders Excluding Aircraft today stand no higher than in 2000 and Manufacturing Orders Excluding Aircraft relative to GDP plummeted since then:

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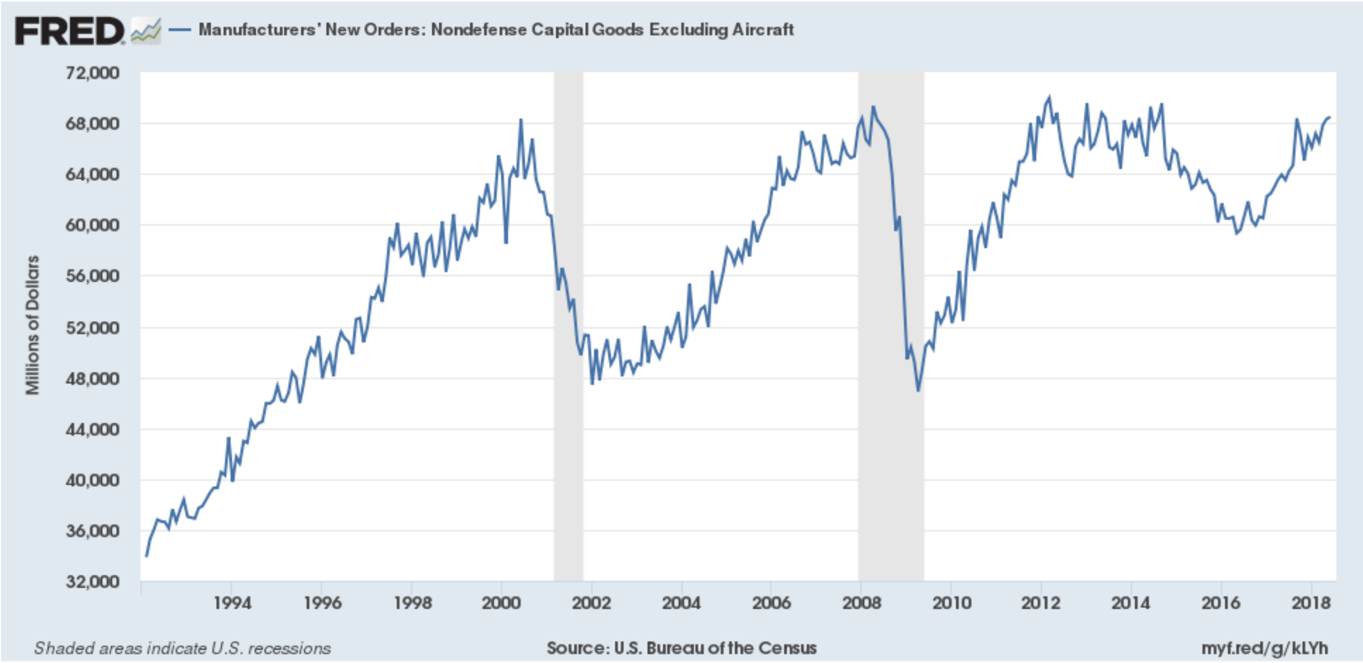

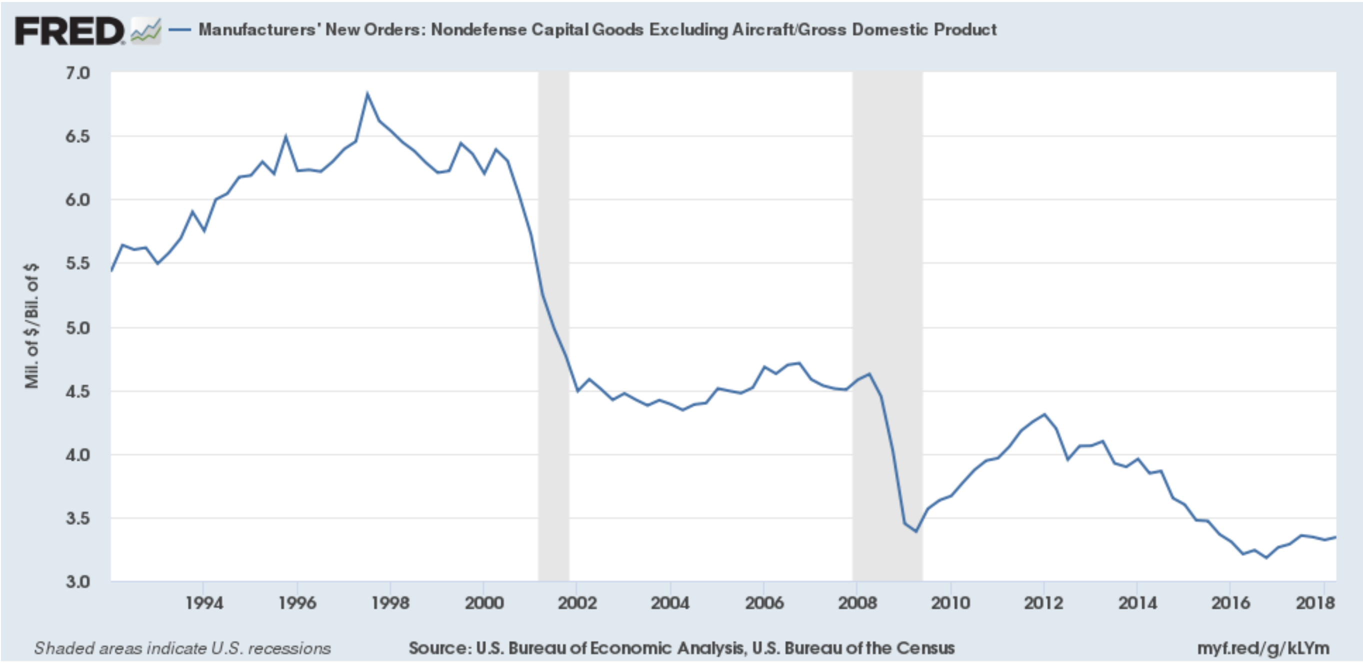

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In fact, by the end of President Obama's Administration, the New Orders to GDP Ratio stood below its nadir at the bottom of the Great Recession, despite 7 years of economic growth.

A true Investment cycle, that takes US Investment to GDP back to its traditional peaks and emphasizes increased domestic manufacturing, would provide the economy substantial runway. Private Investment to GDP stands 2% - 2.5% below its traditional peaks over the past 50 years, with the bulk of this shortfall residing in the manufacturing sector:

In addition, Public Investment to GDP stands at a similar deficit relative to GDP. Should both these turn upward, then a long-term Investment Cycle could drive the US economy for the foreseeable future.

The reason this stands as a critical national goal for the US comes down to Global Strategic Position and the need to grow Productivity given its key role in Long Term Sustainable Economic Growth. Today, numerous professional Economists claim the US cannot grow more than 2% due to a "Permanent" reduction in Productivity Growth. Productivity grew just 1 ¼% per year from 2008 to 2016 and projected Population growth indicates the US population will grow less than 1% over the long term. Thus, they argue Long Term Economic Growth cannot exceed 2% over the next decade or more. (We note that these same professional Economists predicted in 2009 the US economy would grow 3.5% -

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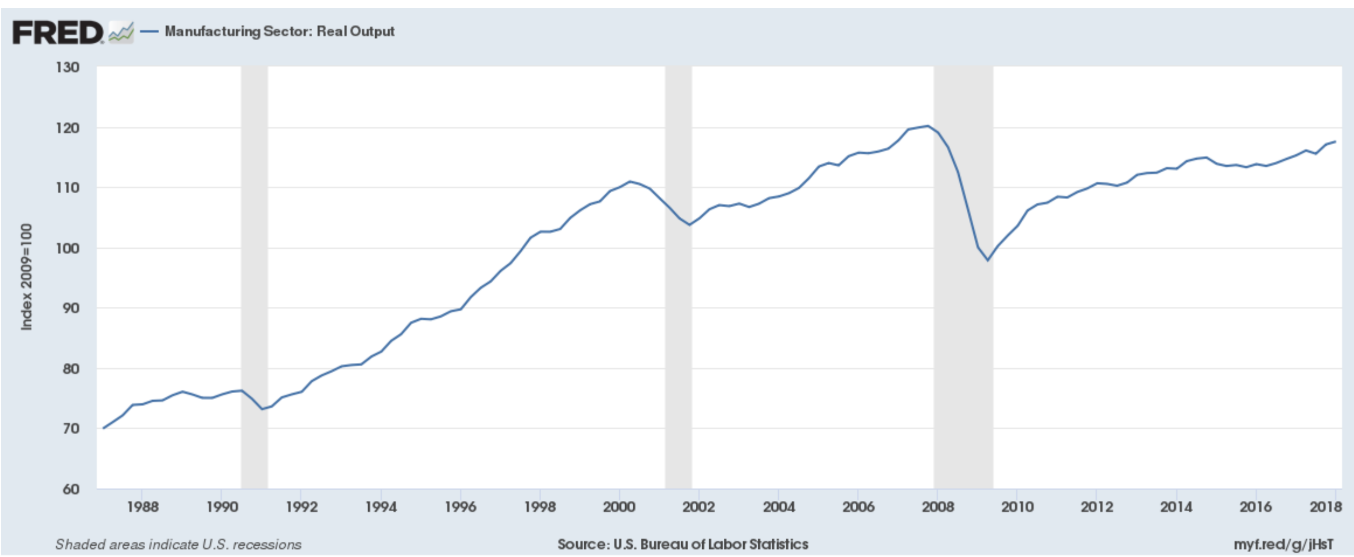
4.0% per year once the economy exited the Recession. So much for that prediction.) That Productivity Growth collapsed over the past decade and undermined US Long Term Growth every newspaper and TV station trumpets. But these same newspapers and TV Stations, coupled with the Global Elites that support them, deliberately avoid trumpeting the cause: US Imports and Trade. Unlike every other recovery since World War II whereby US Manufacturing Productivity Growth recovered then accelerated or held steady, Manufacturing Productivity Growth took a nose dive, after the initial bounce off the bottom in 2009. In fact, Manufacturing Productivity rose just 0.7% since 2011 in total or 0.1% per year. This contrasts with Retail Productivity which rose 3.4% per year over the same time frame. There exists a simple answer to the key question of "Why?": Import Substitution. In other words, as the US economy grew and demand for goods grew since 2009, foreign countries more than met this demand by constructing plant and depreciating their currencies to ensure their goods filled the increase in demand. The data clearly support this conclusion. According to the Federal Reserve, US Real GDP in 2007 equaled $15.8 trillion at the peak in Q4 2007. US Real GDP today equals $18.4 trillion at an annual rate based on Q2 2018 data. Despite US Real GDP standing 16% above its 2007 peak, the amount of goods the US produces, what economists call Real Manufacturing Output, still stands 2.5% below its peak in 2007:



With Productivity defined as Output over Costs, this gap explains simply and clearly the collapse in Manufacturing Productivity as well as the contrasting increase in Retail Productivity. For Retail, volumes rose allowing companies to spread costs over more units. But for the industrial economy, output fell and manufacturers managed costs. If Output does not rise, productivity growth collapses.

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The solution appears just as simple. Increase US Manufacturing Output restarting the Productivity Engine. This remains the focus by the current Administration.

The US came close to achieving this organically back in 2013 without government intervention, when US manufacturers became cost competitive with the world. US Manufacturing started to take off as the US stood as the low cost producer. For other countries, a truly competitive US manufacturing sector would endanger their companies and economic growth. The rest of the world solved this competitive issue by depreciating their currencies from 2014 to 2016. Unfortunately, the Obama Administration did nothing in response, producing an industrial recession for the US. Recently, China started down this road again in 2018 in response to the current Administration's proposed tariffs of 10%. To respond, the Trump Administration raised the proposed tariffs recently from 10% to 25%. In response, China began to depreciate its currency even more. With the current Administration in place, unlike the Obama Administration, a repeat will not be tolerated as the current Administration, while not quoting Otto Von Bismarck, espouses his Realpolitik approach to the world. The US Treasury likely will intervene in the currency markets forcefully, leveraging the global reserve currency status of the US Dollar, to prevent further depreciation of the Chinese currency against the US Dollar. Given every other country continues to manage their currencies against China to preserve their global competitive position, the US will have no choice. For China, this will mean the end of the line for using its mercantilist policy against the US and Europe and the Rest of the World. For the US, it will start the Manufacturing Engine. And by restarting the Manufacturing Engine, the US will continue to make The Quickening Climb. (Data from The Federal Reserve, JP Morgan, Bureau of Labor Statistics, Statista, the IMF, US Census Bureau, and corporate reports coupled with Green Drake Advisors analysis.)

<u>Equities: Where's the Cash?</u>

> "*The normal tendency of the marketplace, it is assumed, is to drive prices to extremes. When optimism is dominant, conceptions of value are liberalized, and prices rise steadily. Ultimately, it is recognized that the optimism was excessive, and prices react downward. As prices fall, caution turns to fear, and the price decline snowballs until it is finally recognized that the pessimism was overdone. At this point a price reversal occurs once again. The successful evaluator of common stocks, therefore, will try to avoid becoming overly optimistic or overly pessimistic. He will attempt to determine the approximate level around which the price tides will swell and ebb.*"

Investment Analysis and Portfolio Management
Chapter 5: Valuation of Common Stocks: A Framework
By Jerome B. Cohen and Edward D. Zinbarg, 1967

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"*The Stock market is essentially a 'market for income,' and prices tend in the long run, despite many variations, to coincide approximately with true worth. Temporarily, however, many factors are instrumental in bringing about enormous fluctuations in prices, sometimes as regards individual securities and at other times with respect to practically the entire list. Briefly classified, these price factors may be grouped under the following heads:*

1. The intrinsic earning power of the corporations whose securities are under consideration.
2. The condition of the money market.
3. Financial panics and business depressions.
4. Manipulation.
5. Rising commodity prices and other factors influencing the general level of prices over considerable periods of time.
6. *Current events, such as wars, conflagrations, etc., of a character not easily susceptible to discounting.*"

The Stock Market
Chapter XVIII The Money Market In Its
Relation To Security Prices
By S.S. Huebner, 1922

The US Equity Markets continues to grind upward, challenging the highs established in January. With the strongest economic growth since 2010 and tax cuts boosting net income, companies reported strong bottom line growth. In addition, with the opportunity to repatriate monies given under the tax bill, numerous corporations are bringing the cash home. They are using this to fund massive stock buybacks, estimated at ~$1 trillion this year. But for the investor, these bottom line results, with earnings rising over 20% coupled with increased share buybacks, did not lead to rapidly rising prices. The markets rose only 1.7% in the first half, although they did rise strongly in July. This brought the year to date returns to up 5.3% for the average equity investor, providing a chance that the year could turn into an average year for returns, with a return to normal volatility for the market. This, of course, assumes the Trade War between the US and China does not escalate into something else and that the Federal Reserve restrains its natural tendency to raise rates whenever unemployment is low.

Unlike the near term, which could provide reasonable returns, the long term looks much less rosy. This stems from the starting point for valuations and the likely reversion to the mean for many corporate financial health measures. These combined indicate that equity investors will earn much lower returns over the next decade. One of the best indicators of long term returns remains the P/E 10, also known as the Shiller P/E, which measures the market's value against the average of the past 10 years of earnings. The most recent chart of this indicator is flashing red for the long term:

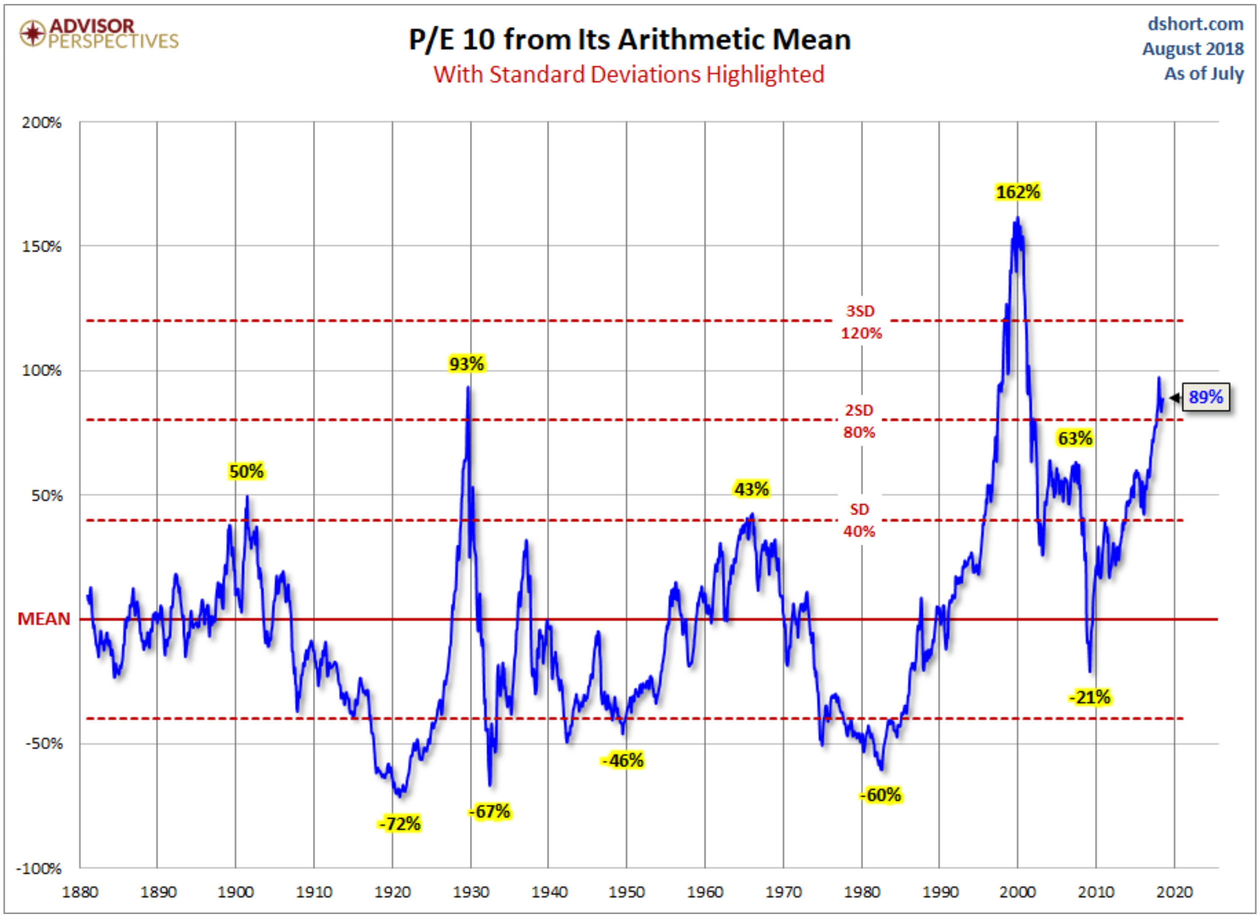

Chart Courtesy of Advisor Perspectives.

While the chart above shows percentage deviations from the mean, the current value of the Shiller P/E stands at 32.29, exceeded only in September 1929 when it registered a reading of 32.59 and in the Tech Mania from 1998 to 2001, during which it rose into the 40's for 18 months. (Data are available at Robert Shiller's website at Yale at http://www.econ.yale.edu/~shiller/data.htm .) Neither of those starting points delivered good 10 Year returns for investors. Other measures, such as the Q Ratio deliver a similar message. The following Table lays out the reading of the Q Ratio at key turning points in the market over time:

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Year	*Peak Value*	*Trough Value*
1907	*1.08*	-----
1922	-----	*0.30*
1929	*1.08*	-----
1932	-----	*0.30*
1937	*1.08*	-----
1953	-----	*0.32*
1968	*0.98*	-----
1982	-----	*0.28*
2000	*1.60*	-----
2009	-----	*0.54*
2018	*1.16*	-----
2030 – 2035	-----	*???*

As the above table makes clear, Tobin's Q Ratio is flashing red as well. Other indicators, such as Household Ownership of Equities could get added to the mix, but would only produce a similar conclusion. When combined, these statistically proven indicators demonstrate that Equity Investors should expect 10 Year Returns of less than 3% per year and the potential for 0% or less. How we got here matters less for the average investor than the reality that this is where we are.

The seeds of how the market may begin this journey away from peak valuations start with Corporate Profits. As the following chart illustrates, Corporate Profits to GDP stand well above any level recorded since World War II and even above the levels generated due to war time profits during that war:

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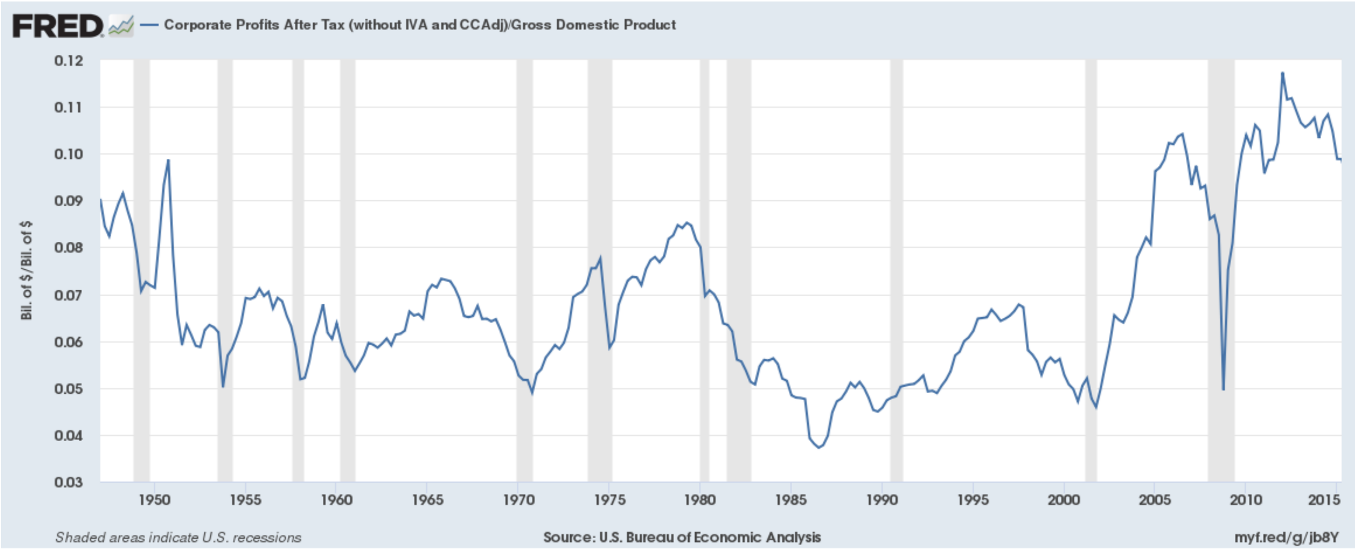
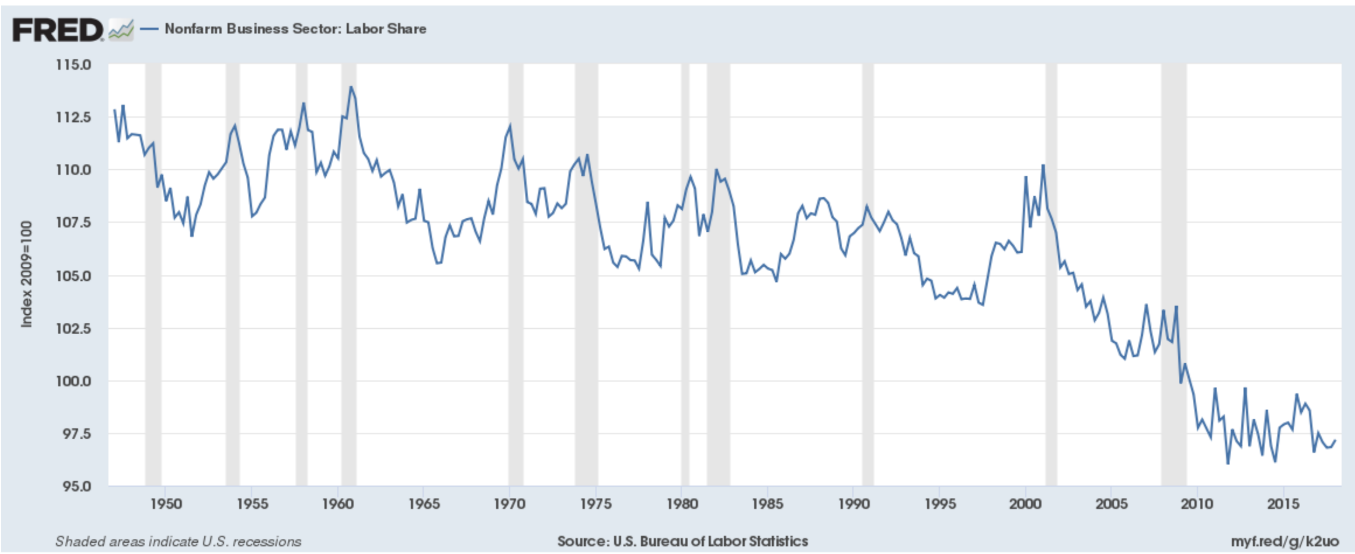


This level of profits would not be worrisome except for the way it got produced: at the expense of labor. This shows clearly in the following chart:



In other words, the record corporate profit margins came at the expense of labor income. While corporations possess vast resources which they can deploy to great effect in political causes to shape the

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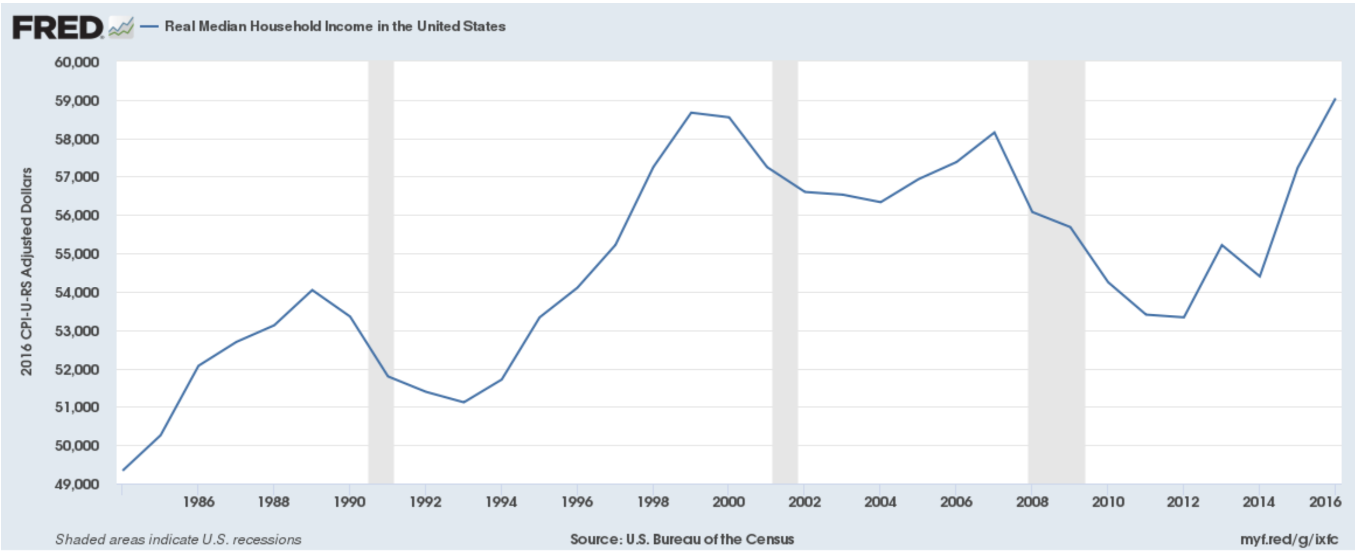
law to their benefit, they stand at one disadvantage: they do not get a vote. And the reality facing most voters is the following chart:



Real Median Household Income did not grow over the past 20 years. And the prime culprit appears a shift from workers to the corporate sector. As workers vote and clearly began to demand a larger piece of the pie starting in 2016, a shift back from corporations to workers of at least a portion of this income appears likely. And the easiest way to force this shift without any legislation appears in process: keep Unemployment low, Tariff foreign goods out of the marketplace to increase demand for domestic labor, and allow the economy to continue to grow at a rapid pace.

Even if these political forces did not exist, other economic forces appear in play that will impinge on this corporate largess in the form of business basics called Capital Expenditures and R&D. As the following table shows, originally printed in *The Cult of Indexing: All Hands on Deck, 1960s Ahead* in January 2018, Capital Expenditures to Revenue stand far below normalized levels prior to 2000:

Years	*Capital Expenditures to Revenue*
1990 – 2000	*7.2%*
2000 – 2017	*5.2%*

Data from Jefferies LLC for Industrial companies.

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Faster growth means normal productivity in a plant cannot meet demand. Thus, Investment must rise in the form of Capital Expenditures and R&D. Capital Expenditures for the S&P 500 rose 21% year-over-year in Q1. Should this continue for the full year, as indicated by many corporations, then Capital Expenditures would begin to consume a larger portion of Cash Flow in 2019. (2018 Cash Flow benefits from the tax cuts enacted by Congress.) For example, Caterpillar Inc. raised its Cap Ex from $900 million in 2017 to $1.3 billion this year. Spending is expected to continue to rise in 2019. Amazon, Google, and Facebook expect to increase their aggregate Cap Ex to $93 billion this year, up 47% from last year. This is after rising 26% in 2017. Interfor plans to raise its spending on Southern US sawmills from $95 million in 2017 to over $150 million in 2018. On the R&D side, Emerson Electric plans to increase R&D by 28%. Deere & Company raised R&D by 19%. The 10 largest Technology companies are expected to increase R&D by 24%.

Lastly, corporations benefitted from low interest rates engineered by the Federal Reserve since 2009. This allowed Interest Expense to fall as a percent of revenues for the S&P 500:

Years	*Interest Expense As Percent of Revenue*
1994 – 2009	*2.50% - 5.00%*
2010 – 2017	*1.75% - 2.25%*

Data from Yardeni Research, Inc.

Should interest rates return to levels held as recently as 2000 – 2009, then a portion of profits would disappear from the bottom line. With faster growth and inflation, this seems a likely occurrence.

For the Equity Markets, the party continues onward. But the battalions to force reversion to the mean for Corporate Profits and Free Cash Flow continue to march onto the battlefield. They include Labor, Capital Expenditures/ R&D, and Interest Expense. These forces gathered sufficient strength to end the advance over the past two years. Over the next decade, as they gather additional reinforcements, they will advance steadily across the battlefield, reclaiming lost ground. For the Equity Markets, their advance will mean lower valuations. And despite growing corporate earnings, this Molotov Cocktail of forces should lead to much lower Equity Markets returns than over the past decade. For the Equity Investor, it will be Where's The Cash? (Data from Jefferies LLC, Credit Suisse, Census Bureau, S&P, Yardeni Research, Inc, and Advisor Perspectives coupled with Green Drake Advisors analysis.)

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Counting Cranes, The Rocketing UK, Gassing Up, and The Bionic Human

Finally, we close with brief comments on Counting Cranes, The Rocketing UK, Gassing Up, and The Bionic Human. First, Commercial Construction rose 6.7% year-over-year in the first half of the year. Hotels led the charge, with construction up 7.9%. For the construction industry, it is Counting Cranes as the industry moves into boom times. Second, Lockheed Martin, in combination with the UK Space Agency (UKSA), plans to develop an orbital launch site in Melness, Scotland. This launch site would focus on the launch of small satellites, as the UK produces 44% of them today. In addition the UKSA is backing Virgin Orbit with its plane launched model to send these satellites into orbit. With this thrust behind it, we see The Rocketing UK. Third, LNG projects continue their growth with awards starting to accelerate. All the major Engineering & Construction companies, including Fluor, KBR, and McDermott International, indicate that major LNG awards are in the middle stages of FID with awards starting to occur. These awards are expected to accelerate over the next 12 months to meet the looming LNG shortage in the early 2020s. With numerous projects moving ahead and more to come, we see the world Gassing Up. And Fourth, scientists at the University Hospital Rangueil, Toulouse, France, developed a process to create custom-made implants for reconstructive chest surgery. This process addresses Poland Syndrome which impacts 1 in 30,000 births. We see this as another step along the way to The Bionic Human.

In Closing

Should you have any questions on how the above issues or the items discussed in our accompanying cover letter impact your family's financial position or your business's future as well as the potential actions you could take in response, please do not hesitate to contact us. We welcome the opportunity to discuss this with you.

Yours Truly,

Paul L. Sloate
Chief Executive Officer
& Senior Advisor

Steve Rodia
President
& Senior Advisor