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April 30, 2019

The Monthly Letter covers three topics this month. First, we look provide our Quarterly Global Economic Overview. Global Rebalancing continues apace against a background of stimulus in China. This stimulus should accelerate growth around the world as China's growth feeds back into its principle trading partners. Second, we take a look at the Equity Markets. With the Federal Reserve having indicated a change in strategy, global markets bounced back in 2019, much as they did after the 1966 bear market. They appear set to follow the pattern of the 1960s with the potential to hit new highs in 2020. In addition, the IPO market is heating up in a similar manner to the late 1990s, when companies with little profits or no profits came public with the thesis they would change the world. While some of them survived, even the most solid companies saw their stock prices take a decade or more to reach new highs once the market peaked in 2000. Third, we examine the case for a return to higher, sustainable, Long Term Growth for the United States. Despite a chorus of skeptics, this beacon stands as a realistic goal should the U.S. continue the turn toward a focus on economic growth and the policies to support strong Productivity Growth. And Fourth, as always, we close with brief comments of interest to our readers.

Global Economic Overview:
An Old World Order Returns

Global rebalancing continues to quicken. With the US and China effectively abandoning the WTO for a bilateral trade agreement, the WTO suffered a mortal blow. This blow clearly arose from the gaming of the system by China over the past 20 years and the WTO's inability to deal with the ensuing issues in real time. As a result, with the WTO no longer representing a vehicle that served US interests, a return to the world of the GATT became inevitable. In that world, countries dealt with each other directly over trade and international issues, bypassing third parties to create a result that served both sides interests. In addition, they felt no constraints from international organizations that sought to tell them how to enforce their laws or that an agreement with one country violated their deal with many others. And while the dismantling of the WTO stands in the first inning, as the ballgame moves forward, more and more countries will move to protect their interests over the objections of other countries.

As this occurs, the global economic order will more closely resemble that of the late 1800s, with numerous countries striving for global competitive and strategic advantage. Such an outcome means that many of the economic relationships that exist today will change as the traditionally more open economies of the West insist on a Quid Pro Quo for access to their markets. In addition, the traditional protectionist policies used by Emerging Market economies (EM), such as non-tariff barriers and

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requiring domestic production in key industries, will wend their way to the Developed Market Economies (DM). Furthermore, with the emergence of China's overt global ambitions, countries will ally to stymie its future dominance of the global economy. Despite its size, China still remains vulnerable to a disruption of its export engine, which overtly represents 20% of its economy and much more if its interlinkages with the rest of its economy are included. Thus, more countries taking a GATT-like approach to trade to ensure they receive fair treatment seems inevitable.

Dragon Stimulus

Against this backdrop, the global economy continues to struggle to regain its footings. Despite stimulus of 5% or more of GDP from China, Chinese growth barely rebounded over the past few months. In fact, at only 6.4% growth projected for 2019, China will grow at its slowest rate since the 1980s. This broad based stimulus included tax cuts, infrastructure spending, debt relief, more government subsidies, required reserve ratio cuts, VAT cuts, and social security contribution cuts. In addition, local government bond issuance exploded in Q1. The fundamental economic problem China faces comes down to, what economists call, declining marginal returns. In other words, to add a dollar, or in this case a yuan, of GDP, China must spend more and more money. A country can spend money to stimulate itself. And this is appropriate under certain circumstances, such as a recession. However, to use it to create more capacity in a country already awash in excess capacity, means the GDP cannot service the debt taken on to create it. And despite making global promises to rationalize its excess capacity in areas such as steel, it continues to add to its already abundant productive base.

Recent economic statistics make clear this problem. Despite the massive stimulus, Chinese Industrial Production growth slowed to 5.4% Year Over Year (YOY), Fixed Asset Investment (FAI) 6.1% YOY, and Retail Sales to 7.2% YOY. In other words, the stimulus only buffered the rate of slowdown and did not accelerate the economy. Of course, more stimulus will follow, with the government likely opening the floodgates of money. This will only serve to add more capacity and increase the property bubble. These Chinese actions will only stopgap the two fundamental problems China faces as the tide just peaked and started to go out. The first is the Global Inventory Cycle, which acts on a 3 – 4 Year Cycle. This Cycle last bottomed in 2016 and peaked in 2018. It likely will begin to bottom sometime in late 2019/ early 2020. Once it bottoms, it will resemble the moves towards low tide when the waves come into shore a little more, temporarily, and then resume its exit, making up for lost time. The second problem will come home to roost in the 2020s. Over 70% of export products manufactured in Asia ultimately end up the United States or the European Union (EU) as the final destination. With the US manufacturing less than 45% of the goods it consumes and facing a global rival, the strategic interests of the United States will dictate that more goods become manufactured in the US with some additional capacity allowed in Canada and Mexico. While China may attempt to divert these goods to the EU, when it attempted to do this with steel, the EU put in place significant tariffs to keep the Chinese steel

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out of the marketplace. This long term reality will harm Asia's export oriented economies and, in particular, China. Thus, China faces a significant long term drag on economic growth.

There stands one other potential factor that could compound this move towards low tide, creating a super low tide, as occurs when the Moon stands closest to the Earth. This would occur if the US comes down hard on China's theft of Intellectual Property (IP). The US could embargo all goods from China that contain stolen IP. It could then demand that other nations respect US IP and embargo all Chinese goods that contain stolen IP. A simple example illustrates the problem China would face under such a scenario. China stole Micron Technology's methodology to manufacture computer memory chips for Dynamic Random Access Memory (DRAM). This was well documented in an article on the front page of the business section in the New York Times, which showed the Chinese got caught red handed. For those unaware of its fundamental role in technology goods, DRAM is a critical component in every laptop, PC, server, … It permeates most technology goods. Should the US embargo all Chinese technology goods containing Chinese DRAM and demand the EU, Canada, Brazil, India, Japan, Mexico Southeast Asia, and Australia as well as nations in Africa and South America respect US IP and ban these goods, China's technology industry would suffer a major blow. And this blow would come at a time when the remainder of its economy suffered a significant long term slowdown in economic growth. Despite the fire of Dragon Stimulus getting hotter as the year progresses, a fundamental long term slowdown stands ahead with the laws of economics reasserting themselves.

The Setting Sun

For Japan, this long term slowdown in China and Asian export growth will produce significant risks to economic growth. Over the past decade, Japan's export oriented economy supplied the capital goods needed to build capacity in Asia for both Asian demand and for export to the rest of the world. With the rest of the world beginning to focus on serving their own demand with locally produced products, Asia must fill the lost export demand with local consumption. However, local standards of living across large parts of Asia will not support demand for many of the products being sold in the export markets. For Japan, with the focus on capital goods exports to create production capacity for these products, nothing good can come of this. In fact, the latest economic statistics bear this out. Japanese exports of machine tools fell over 33% in April. For Japan, this is just a taste of things to come in Asia. In addition to this headwind, the US began to make noises about the trade surplus and, in particular, the massive export of cars to the United States. While Japan produces over 8.0 million vehicles, it consumes less than 4.1 million, exporting another 4.1 million across the Pacific to the US. Labor costs in Japan do not stand below those in the US. Nor does it cost less to produce a car in Japan than in the United States. With Japan maintaining one of the most closed Western automobile markets, such a state of affairs will come under more and more pressure. With Japan facing serious obstacles to its long term economic growth, The Setting Sun appears at hand.

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Elephant Slowdown

For India, economic growth continues apace and remains on track for over 7% for 2019. Exports have bounced back into growth territory and domestic credit growth remains strong, at over 12%. However, the economy has come under some pressure due to internal factors. A large domestic auto lender collapsed, harming credit to this vital sector of the economy. India, like China, possesses a large non-bank financing sector for risks the traditional banks will not shoulder. With this portion of lending shrinking, Auto Sales turned negative year over year and Industrial Production growth slowed, turning slightly negative on a year over year basis in March at -0.1%. Reflecting this impact, India's Purchasing Managers Index continues to drop, hitting 51.8 in its latest reading. This is down from 54 in January and February and approaching the critical 50 level. With all this going on, the Royal Bank of India appears worried. They turned dovish and cut rates over the past couple of months. In addition to RBI actions, policy measures stand in the wings to support the economy. Already, the incumbent government recapitalized the banking system by 2.5% of GDP over the past few years. Should that not stem the tide, with a major election this year, action likely will occur to ensure growth remains on track. With an Elephant Slowdown in progress, watch for further actions by both the RBI and government to counteract this as the year progresses.

Latin Morning,

For Brazil, life provides mixed messages. While it is morning for the economy, it appears only partly sunny out. Economic data clearly indicate the economy is growing once more, whether in official government statistics, such as GDP or employment, and in company data, such as hypermarket sales or wireless phones. However, growth does not exhibit the typical bounce off the bottom seen after a long, deep recession that finally comes to an end. This does not appear due to any missteps by the current government, but due to the commodity nature of the economy coupled with the global inventory correction. With a large portion of the economy in commodity areas such as iron ore, international demand for these commodities impacts the economy significantly. And with a principle trade partner, China, experiencing real issues with its economic growth, this slowdown continues to create negative feedback for Brazil. In addition, with the global inventory cycle in a down leg, additional drag impacts the Brazilian economy.

Underneath all this drag, the government appears to be moving in the right direction to long term sustainable growth. The new government adopted pro-business policies and is attempting to shepherd social program reform through the Congress. Should the latter make it through the legislative gauntlet, even in a watered-down version, it would stabilize government debt to GDP near term and put the

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country in the position to lower this critical measure over the long term. This would lower the country's cost of capital and likely improve sustainable economic growth. With the weather partly sunny now, it could turn mostly sunny by lunch time.

On the other side of the Continent, Chile, Peru, and Columbia continue to grow steadily. Chile, probably the best run economy in South America, likely will produce another year of steady growth at 3%+. It continues to do this with relatively modest inflation of 2% and a balanced economy. Peru continues to surprise in a positive manner. After growing 4% in 2018, the country's growth should match last year's strong print. And in Columbia, economic growth appears on a steady keel as well. After delivering 3.4% growth in 2018, the economy should grow over 3% this year. All in all for South America, it seems a lovely, lazy Latin Morning.

The Old Man Askew and The Elephant In The Room

Across the world, Europe continues to exhibit a bifurcation of growth. The economies of Central and Eastern Europe as well as the UK, those not controlled by the Euro as their currency, continue to grow at a reasonable pace. On the other hand, the Euro area economies continue to struggle, toying with recession and a politically, unsustainable level of low growth. This bifurcation is apparent to the average European as the statistics show countries such as Hungary and Poland growing at 4% - 4.5% while countries in the Euro area, such as France, Italy, Belgium, Austria, and Germany, are growing at less than 1.5%. Even the UK is growing at 1.8% year over year, with growth accelerating, despite the noise from Brexit and the negative impact from EU companies holding up investment until the dust settles.

The fundamental problem lies in Germany. Germany's export dependence stands as both a blessing and a curse. When China industrialized over the past 20 years, it stood as blessing. China built plants and Germany supplied, along with Japan, much of the equipment that went into those plants. However, with China's economy now reaching a level of maturity, whereby China now services its own demand across the vast majority of the economy, and other countries putting roadblocks in the way of China's goal to grab additional global market share, such an economic strategy no longer works. And with China's economy experiencing indigestion, Germany's export orders turned negative last year, putting a drag on the EU's economy.

In addition to the loss of a fundamental growth driver, Europe faces a struggle over the succession at the European Central Bank (ECB). Mario Draghi, who has led the ECB successfully since 2011, will step down in October at the end of his term. Germany and France both have their own ideas and will need to sign off on the choice. Of course, that is like trying to get oil and water to mix. The front runner currently is Erkki Liikanen, the former head of Finland's Central Bank. He is considered a pragmatist

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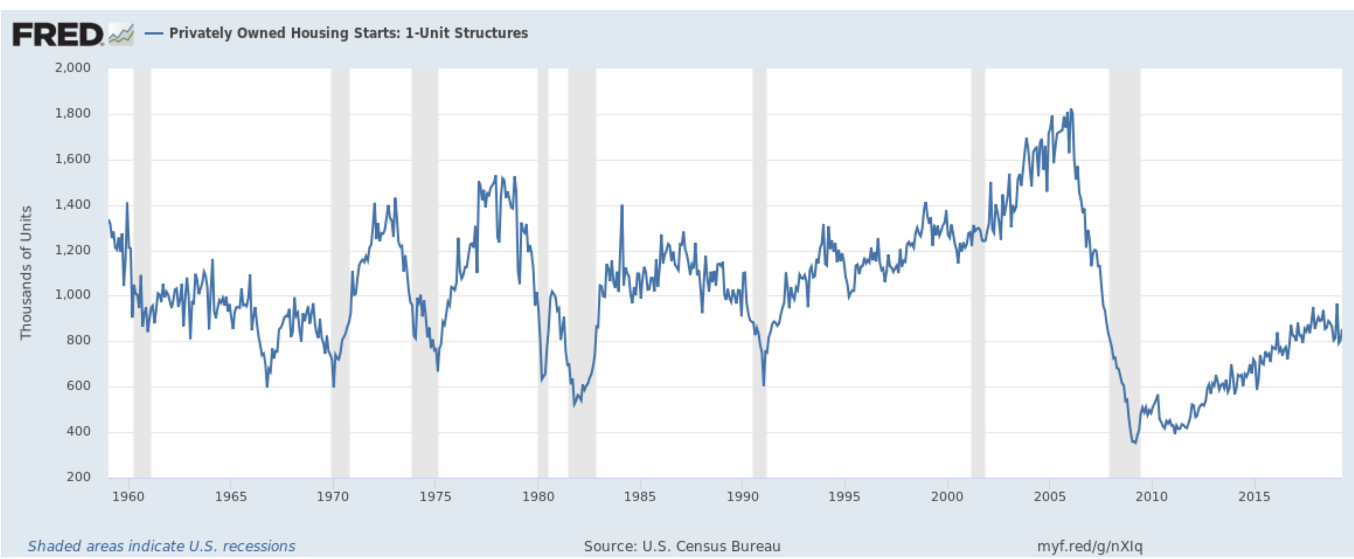
who likely would continue Mario Draghi's legacy. And while Mr. Liikanen stands for continuity, the ECB, even with continued QE, cannot solve the economic growth issue for Europe on its own.

For the EU, the real struggle will remain over the existence of the Euro in place of the lira, peseta, and drachma as well as every other currency that formerly existed. Italy experienced its worst streak of growth since the Great Depression over the last decade. It insists it will stimulate more and increase its budget deficit if the economy does not pick up. And with an Unemployment Rate of almost 11%, this would make sense. Spain saw its Unemployment drop from 26.3% in 2013 to a mere 13.7% today. And Greece's Unemployment Rate stands at 18%. But without the ability to control their own currencies, these countries will be caught between political demands of their citizenry and the economic policies of the bureaucracy at the European Commission. There is only one true solution to restore economic growth. And it does not countenance the continued existence of the Euro in its current form. With Europe Askew and the likely policy staring everyone in the face, it seems only a matter of time until the Elephant In The Room charges through one of the walls opening the pathway to true economic growth.

The Climb To The Peak

For the United States, the economy stands in a late cycle position. Autos and Housing no longer underpin economic growth. They have handed off the baton to Government, Capital Spending, and the Consumer. As the following chart shows, Single Family Housing Starts appear to have peaked for the cycle:



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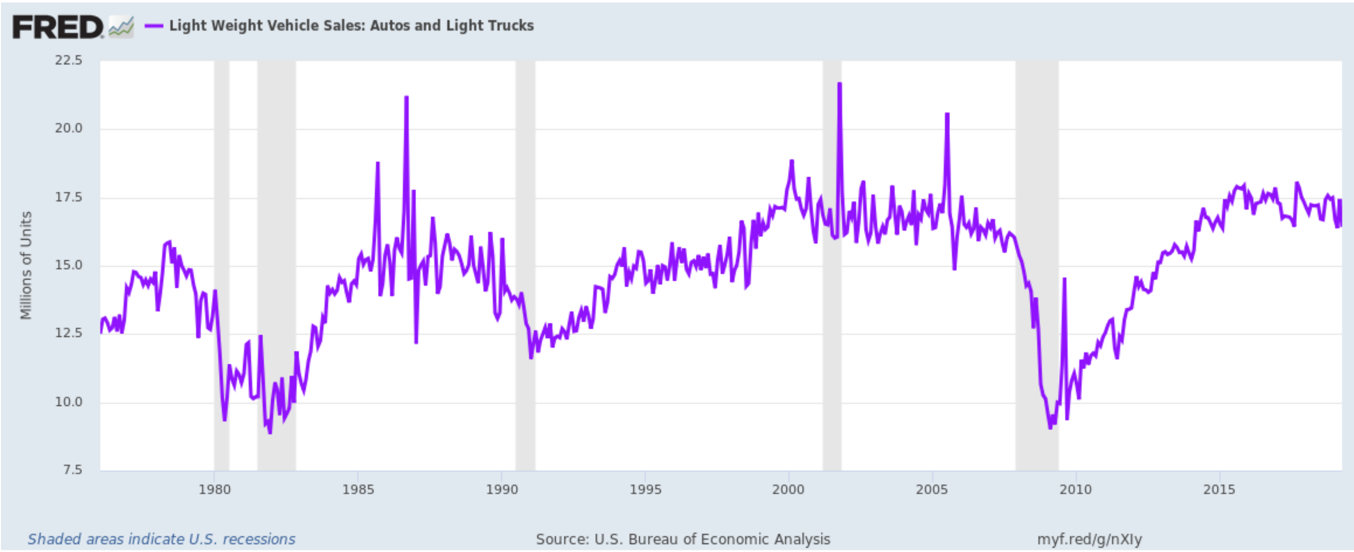
And Auto Sales have plateaued, as they typically do once they recover:



This leaves Capital Spending, the Consumer, and the Government to maintain economic growth. While the latter two continue to grow, with the Global Inventory Cycle in its downward phase, the US Purchasing Managers Index (PMI), published by the Institute for Supply Management, continues under pressure:

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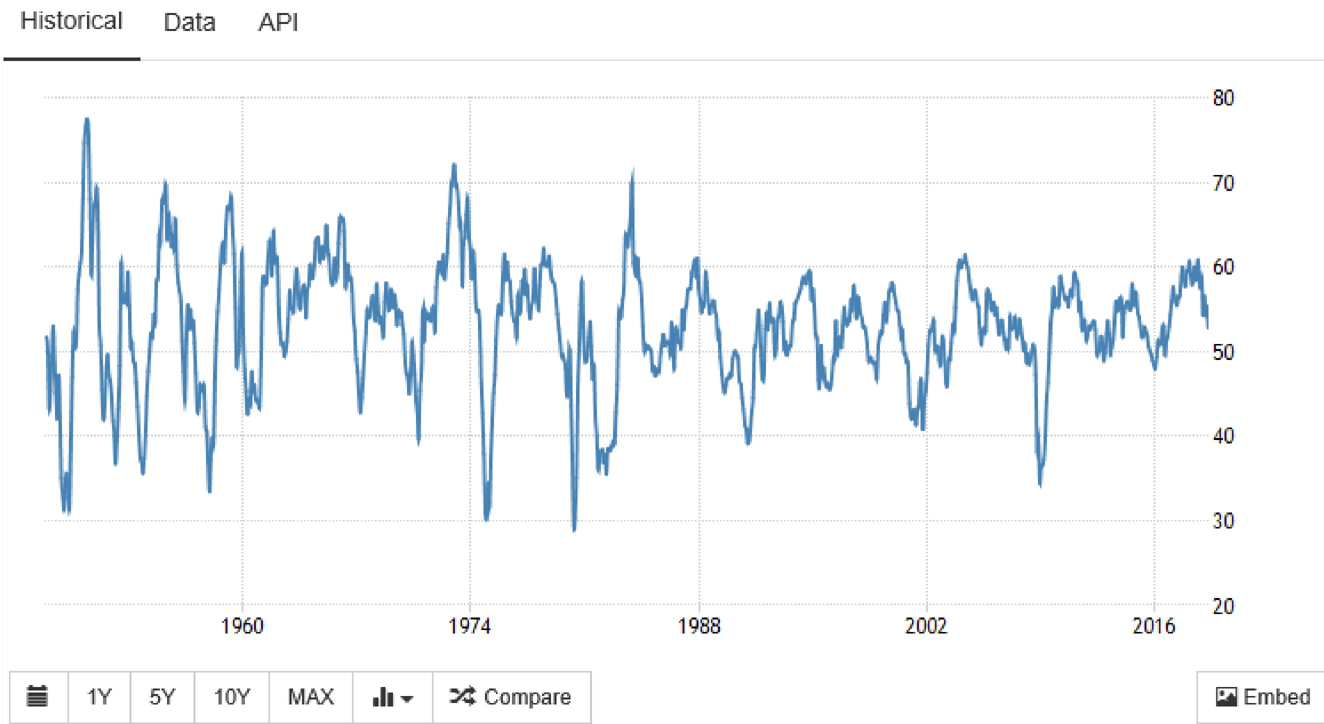

Chart courtesy of tradingeconomics.com

As the long term chart above demonstrates, the PMI will likely fall below 50 before turning upward. Hopefully, this will occur in a 1998 fashion as opposed to a 2008 plunge. And with China massively stimulating its economy and the rest of the world easing, this should occur.

Government continues to do its part. In typical late cycle fashion and with a Presidential election next year, public spending is soaring. Public Construction Put In Place is up over 9% for Q1 2019 compared to Q1 last year. Key categories show this pattern:

Area	***Q1 2019 Year Over Year Growth***
Highway and Street	*+14.0%*
Sewage and Waste	*+ 8.4%*
Water Supply	*+12.8%*
Conservation and Development	*+16.1%*

Data From U.S. Census Bureau, Construction Spending, May 1, 2019, Not Seasonally Adjusted.

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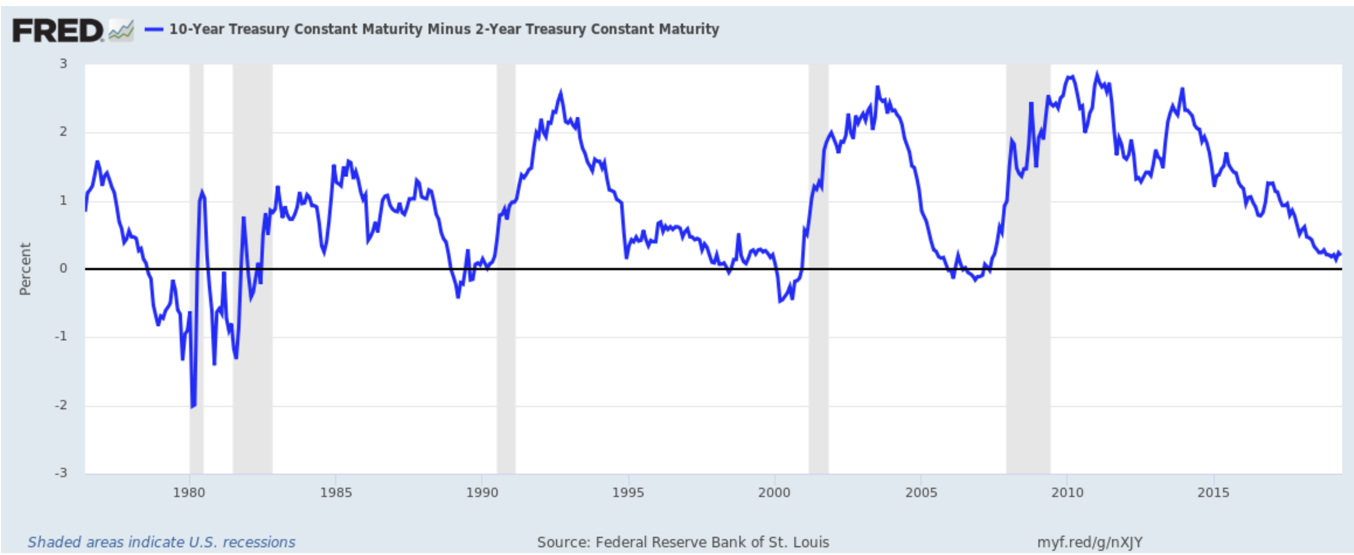
This strength should continue into 2021, as politicians focus on reelection next year. And despite the government shutdown in Q1, the Federal government did not really act as a drag on growth. Thus, government is serving in its typical late cycle fashion of growing the economy.

The one fly in the ointment continues to be the Federal Reserve. The Federal Reserve reversed course in Q1, stopping its tightening, but has yet to ease. The 10 Year less 2 Year Yield Curve continues to reflect this dichotomy:



It stands just above the Zero Line, waiting on the Fed. And the Fed continues to wait on the data, just like in Waiting For Godot. While Q1 GDP looked strong at 3.2%, part of it was inventory accumulation. Without that number, GDP grew only 2.5%. While the FOMC indicates it remains "data dependent", by the time the data in the economy indicates a real problem that requires Fed easing, typically it is too late. This time, the Fed might bail itself out by having a pre-emptive rate cut to offset the potential drag due to trade. The fixed income markets continue to believe this is the case. And the Q2 economic data continue to set up to show a much weaker economy than in Q1, providing the political cover needed for the Fed to do what the markets indicate it should already have done. If the Federal Reserve takes the opportunity to act in such a manner over the next few months, the economic cycle would continue for the next couple of years, as occurred after 1966 and 1998. In those cases, Recessions did not happen until 2 ½ years later as the Fed responded to economic developments. With the global economy set to accelerate, Global Central Banks easing, foreign economies stimulating, and the Federal Reserve poised to ease, the US should make The Climb To The Peak.

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Shades of 1999: Initial Public Offerings or Indications of the Public's Optimism?

"*Sell in May and go away.*"

Old Wall Street Saying

Despite the market rebounding over 30% since December 24 to reach its prior high, the market essentially stands exactly where it stood in January 2018. So, besides collecting dividends, the average investor, who now invests in index funds, would have received a 0% return on his holding of stocks. With a Dividend Yield of ~2.0% on the S&P 500, the average investor would have done better buying 1 Year Treasury Bills yielding between 1.95% and 2.73% or a midpoint of 2.35%. This should come as no surprise given the late cycle nature of the US economy as well as the starting valuation on the Equity Markets. The Shiller PE shows just how expensive the market remains on a long term basis:

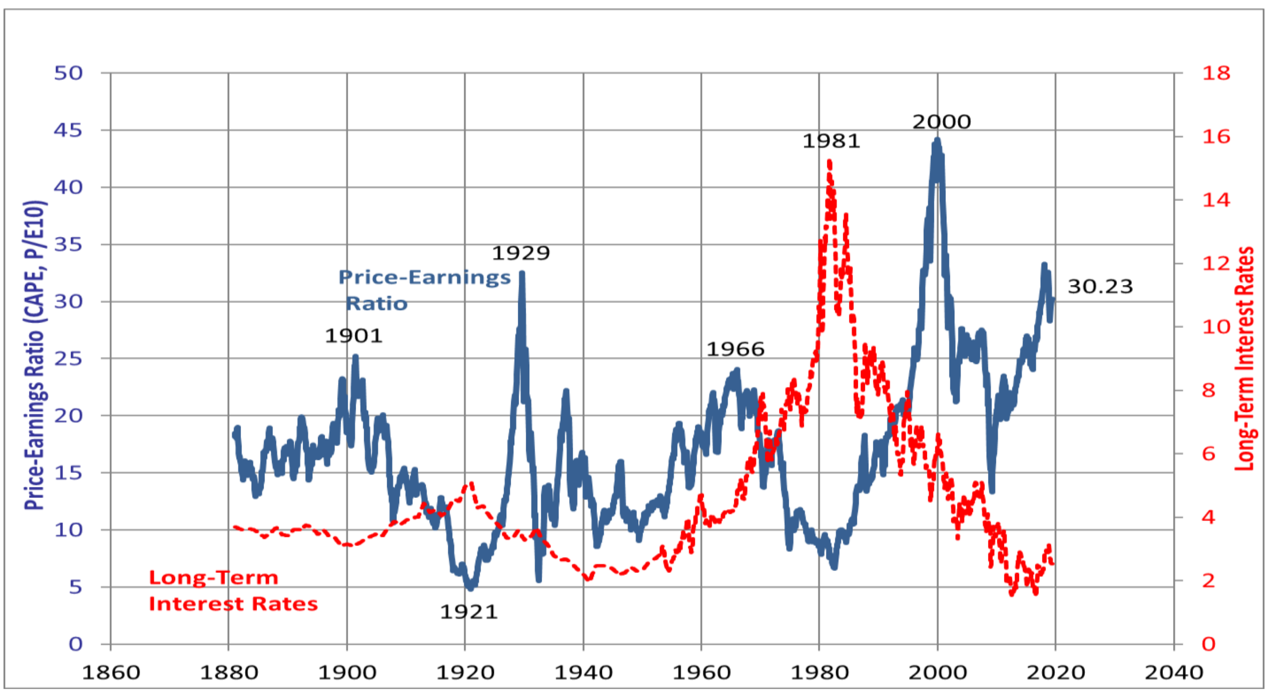

Chart courtesy of Robert Shiller, Yale University.

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While one cannot use this tool as a short term timing tool, this valuation, along with that indicated by equity ownership and market capitalization to GDP, indicates that long term returns from the Equity Markets will produce muted results for most investors, at best.

To understand why valuations stand where they do, two simple factors continue to play an undue influence. First, Central Banks around the world flooded the world with cheap money and manipulated long term interest rates downward. This drove the discount rate on the market down. In other words, instead of discounting a company's cash flow at 5% or 6%, the market is discounting these same cash flows at 3% or 4%. This justified a higher valuation on the market. Second, company operating margins have soared, leading to profit growth well in excess of revenue growth over the past decade. There is a curious fact connected to this miraculous rise. EBITDA margins have gone nowhere over the past 30 years. (EBITDA stands for Earnings Before Interest, Taxes, Depreciation, and Amortization.) In other words, corporate cash flow relative to revenue remains the same. Corporate margins soared as companies stopped reinvesting in their businesses, moving to a "Capital Light" model. Instead, they outsourced the production of products and the associated investment to companies in other countries and became assemblers of products. This allowed them to significantly decrease investment and not have to bear the associated depreciation of those assets. (This action also directly impacted U.S. Productivity Growth in a negative manner as overall Investment to GDP fell.)

However, with a change in Administration, it appears these factors have begun to reverse. First, U.S. Productivity Growth now stands over 2%. As a result, the U.S. appears headed for faster long term growth which likely will lead to higher interest rates, increasing the Discount Rate on the market and lowering valuation. Second, the U.S. government determined that domestic production stands as a priority. Thus, companies will need to build more product in the United States, forcing them to increase investment. Recent data support this move toward higher levels of investment. Capital Expenditures rose 12% year over year in Q4. In addition, according to the Census Bureau, manufacturing investment turned positive in 2018 and continues to grow in 2019. As this second factor slowly but surely reverses, leading to less free cash flow and more depreciation once again, the miraculous growth in operating margins will reverse leading to an equally "miraculous" contraction in operating margins over time. (Public Company managements might not agree with this last comment.)

With numerous private companies looking at this scenario, companies with little or no profits have started to come to the public markets to take advantage of the current valuations, much as occurred in the late 1990s. While companies such as Uber and Lyft stand as the most visible corporations to come public, numerous other companies that have joined them include Zoom, Pinterest, Fastly, Avantor, Luckin Coffee, and Beyond Meat. Waiting in the wings for their turn in the sunlight are Slack, Crowdstrike, Airbnb, Palantir, and WeWork as well as numerous other companies. Despite their valuations, most of these IPOs (Initial Public Offerings) have soared since their public debut. Zoom stands 150% above its IPO price while Beyond Meat rose from $25 at its IPO pricing to over $90, a greater than 250% increase. With this type of IPO performance, speculative juices appear to be running rampant on Wall Street. The last time such a wave of companies hit the markets in 1999 and 2000, they soared as investors could not get enough of their stocks. However, by 2003, valuations collapsed for companies with true business models that came along with profits, while a significant number of the hot IPOs, that could not produce profits, went out of business, making their stock certificates useful as wallpaper. While it is too early to make such a call, the hot IPO market, as in the past, reflects the high valuations in the public markets, as the markets have moved from "Fear" in early 2009 to "Greed" today. Unfortunately, the history of such periods usually ends with a large hangover once the Federal Reserve declares an end to the party.

With valuations high and IPOs soaring, the market stands in the 8th or 9th inning of the ballgame. While significant money can be made, the risk level continues to rise. History would indicate such periods are cyclical and do not last long. Investors merely need to look at the history of the late 1980s and late 1990s. However, the party is going strong and who wants to miss out on the next hot IPO. With such Indications of Public Optimism, investors must keep a close eye on the exit, as the Federal Reserve will call the end to the game. (Data from public sources and Robert Shiller coupled with Green Drake Advisors analysis.)

Productivity And The Long Term:
The Pathway to Higher Sustainable U.S. Growth

> "*Manufacturers, those of the finder kind especially, are more easily transported from one country to another than corn or cattle. It is in the fetching and carrying manufacturers, accordingly, that foreign trade is chiefly employed. In manufacturers, a very small advantage will enable foreigners to undersell our own workmen, even in the home market. It will require a very great one to enable them to do so in the rude produce of the soil. If the free importation of foreign manufactures were permitted, several of the home manufactures would probably suffer, and some of them, perhaps, go to ruin altogether, and a considerable part of the stock and industry at present employed in them, would be forced to find out some other employment. But the freest importation of the rude produce of the soil could have no such effect upon the agriculture of the country.*"

Of Restraints Upon The Importation From Foreign Countries of Such Goods
As Can Be Produced At Home
Book IV: Of Systems Of Political Economy
The Wealth of Nations
By Adam Smith, 1776

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Despite the endless negative narrative indicating the US will never grow again, recent data indicate the US once more could grow at its long term norm of 3% - 4%. The long term growth rate stemmed from basic fundamental factors that underpinned the economy. These fundamental factors enabled the U.S. to average this type of economic growth over every 5 Year and 10 Year period since World War II, except for the time from 2011 – 2016. While numerous skeptics remain of this possibility, including much of the media and Wall Street, there exists a clear path to achieve this outcome. This path includes a focus on Investment into the US and on ensuring the US produces more of the goods it consumes. Despite the noise from those who would find this inconvenient to their point of view, there exists a long line of economic research linking Manufacturing growth to Capital Spending to Productivity. Economists, whether on the right or the left, agree that Productivity stands as the linchpin of long term, economic growth and that Productivity plus Population Growth produce growth with reasonable inflation. Thus, should the US create Productivity Growth of 2%+ and grow its population 1%+, then long term economic growth could return to 3% - 4%, where it stood prior to 2011.

During the period from 2011 – 2016, Productivity Growth proved close to non-existent. It only averaged only 0.6%. With Population Growth of 1% or less, the press, the Federal Reserve, and even the Congressional Budget Office decided that US sustainable growth could not exceed 1.8% over the long term without causing massive inflation. Somehow, they threw out the prior 60+ years of economic growth and the data associated with it for a period of 6 years of data, as the following table shows:

Years	***Non-Farm Labor Productivity***
1947 – 2000	*2.26%*
2001 – 2010	*2.68%*
2011 – 2016	*0.61%*

Bureau of Labor Statistics, May 2019 data

No one considered that there could exist a simple explanation to the lower Productivity Growth for this six year time period. It came down to the collapse in US Capital Formation. The following graph shows this collapse in the last recession and the poor recovery since then:

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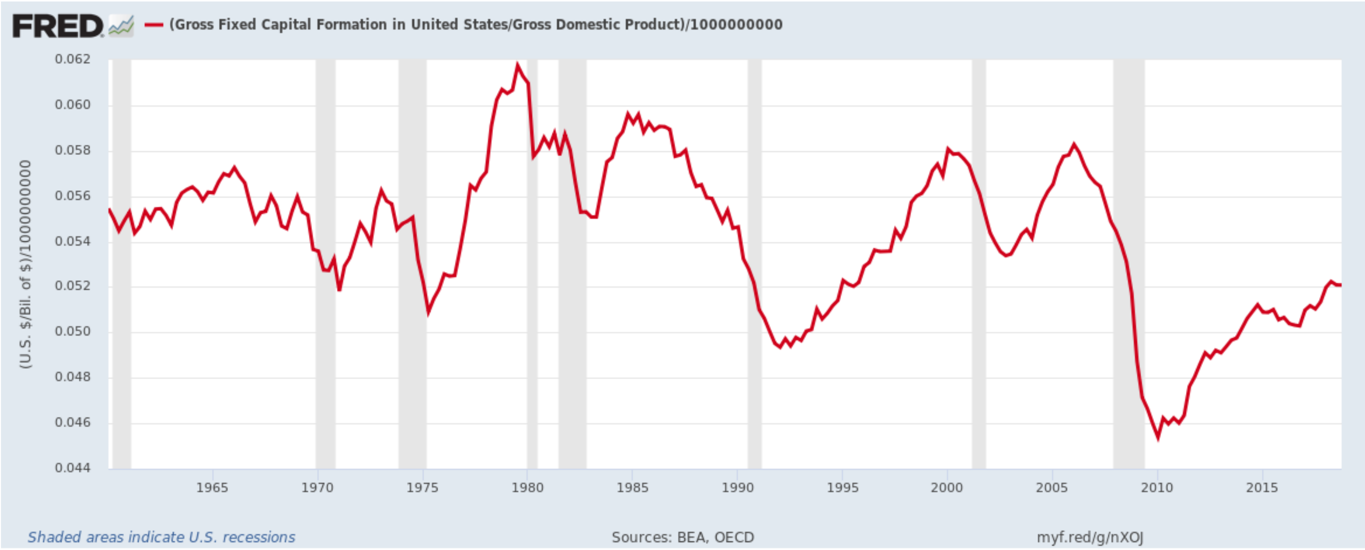

So, for the economic expansion from 2011 – 2016, US Capital Formation relative to GDP remained below the lows of most prior recessions since 1960. In other words, in plain English, the country suffered from a lack of Manufacturing Growth which led to a lack of Investment. And Productivity Growth, to no one's surprise, collapsed, as every economic model would indicate.

However, there appears light at the end of the tunnel. It appears that Capital Formation relative to GDP is beginning to recover, in a similar manner to the way the recovery played out from the inflationary 1970s. Recent government data on Productivity Growth bear this out as the following table demonstrates for Year Over Year Productivity Growth:

Years	***Non-Financial Corporate Productivity***
2016	*0.0%*
2017	*1.7%*
2018	*2.1%*
Q1 2019	*2.4%*

Bureau of Labor Statistics, May 2019 data

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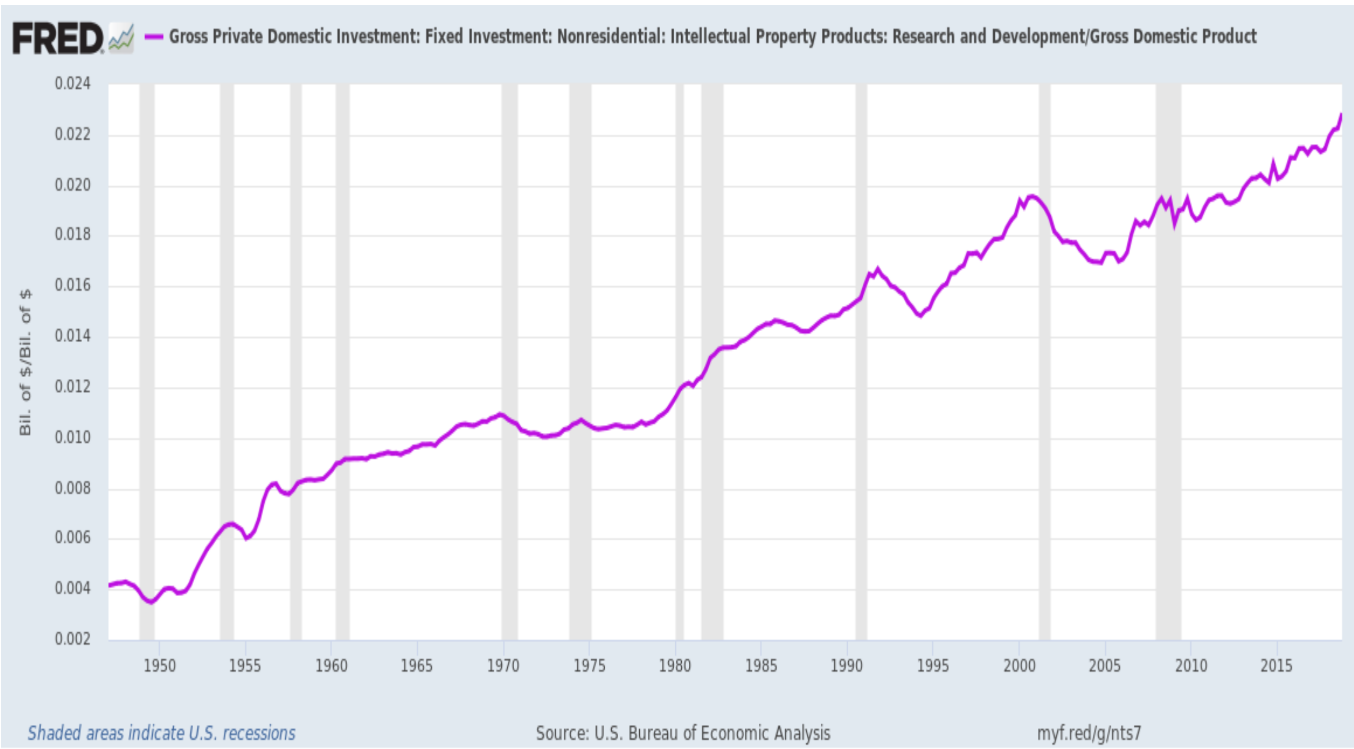
As the data demonstrate, it appears the US is headed in the correct direction. And such a change would make intuitive sense. With labor costs rising once more, there exists incentive for business to invest. And with the US beginning to protect its domestic manufacturers from subsidized and protected manufacturing overseas, there exists further incentive to invest.

There exist two more levers that have yet to come into play. With a rising global economic and strategic rival, national security likely will come to dominate technology and manufacturing discussions. The US remains an R&D powerhouse, as the following chart demonstrates:



Should the U.S. choose to require that this technology remain in plants and other facilities domestically, then it would provide the basis for significant Investment. For example, the US allowed Lucent, the telecom equipment arm of AT&T, that was spun off as a public company, to be purchased by Alcatel, the French telecom equipment company. The combined enterprise then was purchased by Nokia, the Swedish telecom equipment company. If one wonders why there is no US company to manufacture 5G telecom equipment, this answers the question. This lack of domestic capability now stands as a national security issue. New technologies, such as 3D Additive Manufacturing, will become key to global competitiveness. Should the US require this technology and others under development to remain in US

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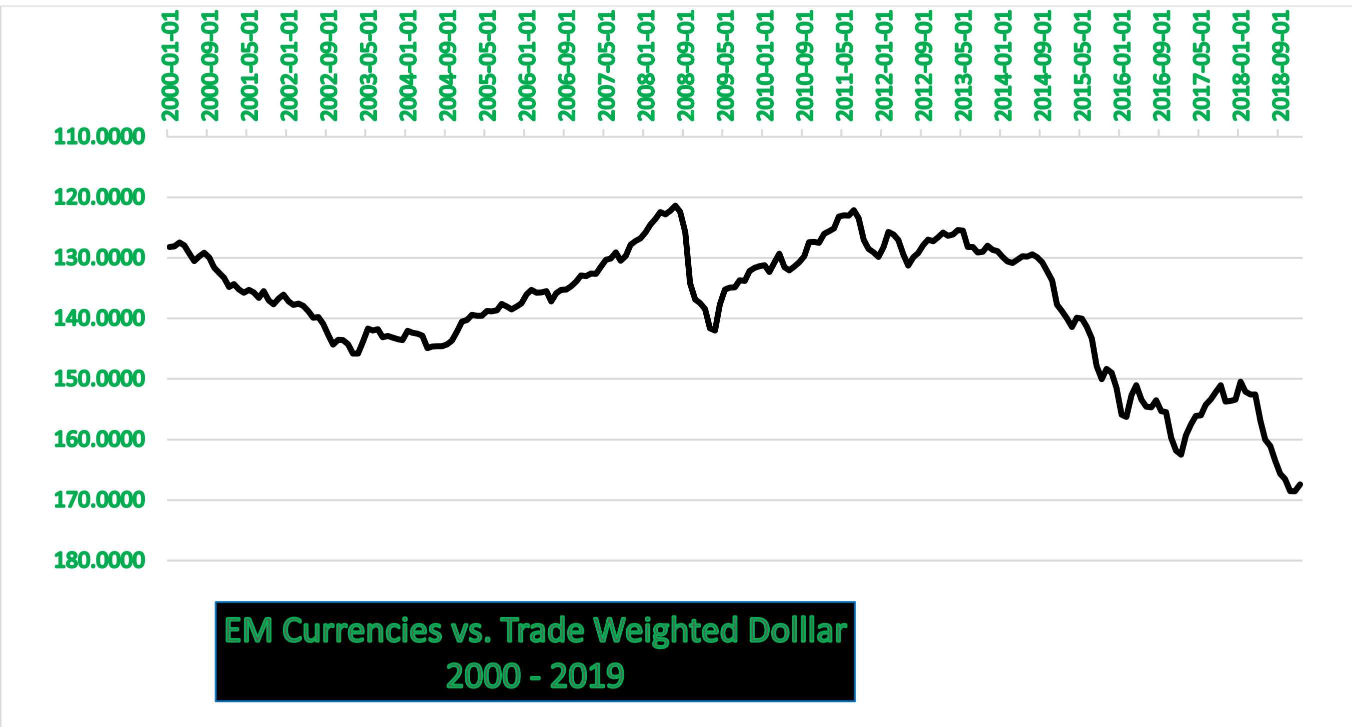
plants, it could change the balance of global cost competitiveness for the US, encouraging significant Investment into the country's domestic manufacturing capacity.

The last lever for the government to pull will shake global markets. For to address this lever will put the global economic model followed by a number of countries at risk. This lever relates to currencies. Numerous Emerging Market economies depreciate their currencies to maintain or create global competitive advantage. For US manufacturers, it becomes difficult to compete when your competitors can get their governments to lower their costs by 30% without spending an additional dollar on capital. The following chart illustrates this issue:



From 2013 – 2018, Emerging Market economies depreciated their currencies collectively over 30% against the US Dollar, on a trade weighted basis. Not only does this impact manufactured goods production, but it impacts other aspects of the economy, such as farming, chemical production, pharmaceutical production, mining, computer services, … In other words, it creates a well-known drag on US growth. In fact, there exist numerous econometric models that lay this out in great detail. These models collectively show an approximate 1% drag in the subsequent year and another 0.5% drag the year after, on average, for every 10% decrease in the value of foreign currencies against the US Dollar.

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So, the 30%+ drop in these EM currencies created a 1.5%+ per annum drag on the US economy over the past few years. Looking at reported GDP, based on the latest government data from April, 2019, as published by the US Bureau of Economic Analysis, would show the following:

Year	*Reported GDP Growth*	*Estimated Currency Drag*	*GDP Growth Without Drag*
2015	*2.0%*	*-1.0%*	*3.0%*
2016	*1.9%*	*-1.5%*	*3.4%*
2017	*2.5%*	*-1.5%*	*4.0%*
2018	*3.0%*	*-1.5%*	*4.5%*

Estimated Currency Drag – Green Drake Advisors estimates.

While these numbers stand as approximations, they represent directionally the amount of US GDP transferred to the rest of the world each year for the past 4 Years. With the US now in a contest with China for global economic dominance, the US national interest will dictate that the US reclaim a significant portion of this "leakage" and move to prevent such outcomes in the future. With the U.S. Dollar significantly overvalued compared to Emerging Market currencies, any correction in this imbalance will send shockwaves across the globe, causing anything from a minor tremor to a 9.5 Richter Scale earthquake, depending on the economy.

As the above data demonstrate, the period from 2011 to 2016 appears the anomaly, not the new norm. With the U.S. now producing less than 50% of the goods it consumes, there exists significant runway to reclaim goods production for domestic consumption. Furthermore, should the U.S. return to a Cold War mentality that restricts the export of technology to other countries, this newly developed technology, underpinned by heavy domestic R&D spending, would find itself applied in U.S. plants, boosting the country's competitiveness globally and enabling the country to compete effectively in new and older industries. Lastly, should the U.S. government confront the manipulation and undervaluation of Emerging Market currencies, a significant drag on U.S. growth would disappear, enabling the country to recapture the growth shifted overseas through this mechanism. While the United States began to address these issues over the past two years, there exists significant runway ahead as the government begins to put a coherent plan in place that utilizes all the levers at its disposal. And with higher Productivity Growth the benefit of all these policies, the Pathway to Sustainable Higher U.S. Growth lies ahead.

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(Data from U.S. Bureau of Economic Analysis, U.S. Bureau of Labor Statistics, and the Federal Reserve Economic Database coupled with Green Drake Advisors analysis.)

Down on the Farm, Not a Smartphone, Soylent Green, and A Makr Shakr in Every House

Finally, we close with brief comments on Down on the Farm, Not a Smartphone, Soylent Green, and the Makr Shakr. First, Corn plantings are way behind schedule. Corn is only 49% planted compared to the norm of 80% at this time of year. For US producers, it is Down on the Farm. Second, according to industry data, global smartphone sales fell in Q1 by 6% year over year. With most consumers already possessing their own, we see them saying: Not a Smartphone. Third, companies such as Beyond Meat have recently hit the market. The company, as well as its competitors, produce lab grown meat, no animals involved. With this rapidly coming to market, we see the world of Soylent Green fast approaching. And Fourth, for those tired of mixing their own drinks there is a solution. You can now buy a robot to do it for you. Straight from Torino, Italy comes a full blown robotic bar system. With technology advancing, it won't be long before we hear the following: A Makr Shakr in Every House.

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