

October 31, 2018

To Our Clients and Friends:

The Monthly Letter covers four topics this month. First, we provide our Quarterly Global Economic Review. Global Rebalancing continues to accelerate, with more countries, such as Italy, looking to change their existing global position. While the press treats Nationalism as a 4 letter word, Nationalism will continue to rise as more and more citizens demand action to restart the economic growth engine in countries left behind by the growth of the past decade. Second, given the Currency Wars being waged by the Developing Economies, which drove the Trade Weighted US Dollar back to its high of just a few years ago and above, we expect the US, potentially along with other Developed Economies, to act to drive the value of the US Dollar downward. This would look like the actions that occurred in 1985 under Ronald Reagan, who moved to undo the massive rise in the US Dollar engineered by other countries. And Fourth, as always, we close with brief comments of interest to our readers.

Dragon Moves, A Setting Sun, The Yin and The Yang, Elephant Times, The Party Revs Up, Old Man Turmoil, and The Continuing Climb

“These findings suggest an alternative rationale for the existence of tariffs, namely as a means of internalizing an externality – in this case, the cost of making markets. In other words, tariffs, at least to begin with, would not have been developed as a means of discouraging trade, but rather as a means of collecting the government revenue that would otherwise have been lost (i.e., by dealing with foreigners) – in short, to internalize the externality that is benefitting from markets without having contributed. The tariff, in this case, represents the user’s contribution to making markets.”

Chapter 3: The Theory of Network Trade
Interregional and International Trade: A Network Approach
By Bernard C. Beaudreau, 2008

“The central goal of government policy toward the economy is to deploy a nation’s resources (Labor and Capital) with high and rising levels of productivity. As I have discussed earlier, productivity is the root cause of a nation’s standard of living. To achieve productivity growth, an economy must be continually upgrading. This requires relentless improvement and innovation in existing industries and the capacity to compete successfully in new industries. New

business formation is necessary to create jobs for new persons entering the workforce, to replace any jobs freed up by productivity gains in other successful industries, and to replace jobs lost in less productive industries that become uncompetitive.

The proper role for government policy toward a nation's industry is to stimulate such dynamism and upgrading. Government's aim should be to create an environment in which firms can upgrade competitive advantages in established industries by introducing more sophisticated technology and methods and penetrating more advanced segments. Government policy should also support the ability of the nation's firms to enter new industries where higher productivity can be achieved than in positions ceded in less productive industries and segments.

One manifestation of an upgrading economy is the movement of less productive jobs to other nations via foreign investment and foreign sourcing. This is a healthy process if it is indeed the less productive jobs that are moving overseas. If high productivity jobs are lost to foreign rivals, as has been the case in a number of U.S., German, and British industries in the past decade, long-term economic prosperity is compromised."

Chapter 12: Government Policy
The Competitive Advantage of Nations
By Michael E. Porter, 1990

Global economic warfare continues to break out between countries. The United States finally responded to the attacks on its economy by China, with tariffs and embargoes. And while Wall Street sees a truce ahead, the truce resembles the 1940 Sietzkrieg or false peace. As in World War II, this truce likely will prove temporary as both sides position themselves for the warfare ahead. With China actually taking damage for the first time in the conflict, it pulled back to regroup its economy. The US strategy stands clear. Hamstring China's participation in the major trade networks across the globe while rebuilding US industry. Develop new technologies in 3D/ Additive Manufacturing that obsolete China's industrial base. And force industrial capacity back to the US by restricting the export of key industrial technologies. For example, ban the export of key semiconductor capital equipment needed by China to finish its \$100 billion investment into semiconductor plants, creating stranded investment for the country. Given the massive excess capacity in China built to feed its export machine, this strategy would undermine the Chinese economy. (Please see Strategy for American Leadership in Advanced Manufacturing from the National Science & Technology Council. The report may be found at: <https://www.whitehouse.gov/wp-content/uploads/2018/10/Advanced-Manufacturing-Strategic-Plan-2018.pdf>.) China, of course, will move to counter the US, attempting to buy economic influence with its Belt and Road Infrastructure Program (BRI) in order to export its excess capacity and keep its

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factories humming. But with the costs of the Chinese debt that come alongside the BRI “infrastructure gift” becoming apparent, countries across the globe began to rethink accepting this Trojan Horse over the past year, lest they become indebted to China and subject to becoming its vassal. This occurred with Sri Lanka when China forced the country to hand over control of a major port when it could not meet its debt to Chinese banks. This port just happened to position the Chinese strategically close to India and in a position to support their influence over the Indian Ocean. The Malay people threw out the existing government, which planned to allow Chinese BRI projects equivalent to more than 10% of its GDP. The new government cancelled major projects and the debt associated with it to avoid ceding control of key portions of its economy to China. And Pakistan, having accepted the infrastructure gifts, asked the US via the IMF and World Bank, to bail it out of the debt that came along with the “Gifts” as it realized its error. (The US made clear it would help, but that none of the monies could go to repay Chinese loans. They would need to be written off as part of an aid package.) With the economic stakes rising, the global rivalry accelerating, and the true costs of the BRI becoming clear, countries will need to start to take sides, in a conflict that likely will grow to include much of the globe.

In China, the economy clearly took some serious hits over the past year. The industrial sector, comprising almost half the economy, continues to slow. Fixed Asset Investment (FAI) continues to decelerate, falling to just 5.4% growth year over year, reaching its lowest growth in over 30 years. Consumer spending, that engine of the economy, also appears to have taken on some gas. Foreign companies report slowing growth in areas as diverse as water heaters, autos, and clothing. And Total Social Financing (TSF) fell to less than 11% growth year-over-year, as shadow bank lending continues to drop. The Chinese government’s actions, coupled with a ban on media reports of any negative economic issues, indicate the depth of the problems. Historically, when governments get in economic trouble, they move to control the press and the media in order to prevent the populace from knowing the reality of the situation and to forestall widespread social unrest. This media ban stands consistent with a number of Chinese economic moves that indicate significant issues despite the greater than 6% GDP Growth reported by the government. For example, the Government lowered Required Reserve Requirements (RRR) twice already in order to provide more lending to the economy, with expectations of a third cut over the near term. Each RRR cut is expected to provide over \$100 billion of stimulus to the economy. In a \$12 trillion economy, these cuts will equate to 2.5% of GDP. In addition to this stimulus, the government stepped on the Real Estate gas pedal to offset the slowdown in true industrial investment and prevent FAI from collapsing. Floorspace started rose over 30% year over year. These traditional actions seem to have put some brakes on the slowing in the Chinese economy.

However, contrary to policy focused on cleaning up its economy from inefficient investment, the Central Government reversed its stance on Local Government Debt issuance. This issuance almost doubled starting in August, in order to stimulate the economy through industrial investment and additional infrastructure. With China already producing 50% of the steel in the world and 57% of fiber optic cable,

the country now is building offshore rigs and other fixed assets to fill up its factories. Where these assets will find productive uses is anyone's guess. Local Government Debt fulfills one other key purpose: propping up existing companies. Chinese companies often back their loans with pledges of their publicly traded shares as collateral. In fact, estimates show this equates to \$550 - \$600 billion in stock or 10% - 12% of all publicly traded stocks on the A Shares market. When the Chinese market corrects and shares decline, companies face two issues. First, creditors sell the pledged shares to meet their collateral needs. Second, as the value of the shares falls, companies face liquidity issues as loan limits are lowered. By providing direct liquidity to companies and/or buying shares in the open markets, the local governments effectively rescue corporations from their liquidity squeeze. With both local and central government spending on the rise, the overall government budget deficit is expected to exceed 11% of GDP in 2019. And while stimulative, there exists a large "But". This "But" comes down to the following. With both government and private entities adding to their debt outstanding, the Debt to GDP Ratio will continue to rise. That ratio stands at almost 300%, up from ~200% in 2012. Despite this massive rise, Chinese GDP grew only 45% over the last 6 years. With the Chinese economy so vast and overcapacity already evident in almost every area of the economy, the ability of the government to create fundamentally sustainable growth via rising FAI and debt issuance remains a question, as the marginal impact of government spending continues to drop. Translated into English this means that China cannot continue to add debt to support growth because at some point it becomes unsustainable as what it is building cannot support the interest payments let alone repay the debt. A simple example will illustrate this point. The Chinese auto market sells 26 million cars per year. Yet, the country possesses capacity to build 60 million cars. In a normal economy, competitive pressures would force the closure of 40% or more of this capacity. Yet, China continues to add capacity through new Electric Vehicle plants. While these Dragon Moves may sustain economic growth short term, with China completing its build out of every industry by the early 2020s to meet its Made in China 2025 plans and Debt to GDP rising to critical levels, economic growth could grind to a halt, as overcapacity across its economy finds access overseas limited and there exists insufficient demand at home to absorb the vast quantity of goods its factories can produce. The potential for a full blown credit crisis continues to grow that would make the 2008 Housing Bust in the United State look small.

For Japan, linking its economy with China may provide little solace. Despite this or maybe due to this, its economy actually shrank in Q3. While commentators seek to blame typhoons and earthquakes, other forces appear ascendant that have little to do with the forces of nature. For example, Residential Investment shrank year over year. Industrial companies reported slowing growth in demand for key industrial parts. Both Fuji Electric and Yaskawa Electric cited weakness in Chinese capital spending. Auto suppliers found demand from China shrinking as consumer tax incentives there ended and demand for Chinese autos shrank. For Japanese companies it may be: When China sneezes, Japan catches cold. Furthermore, the Japanese government announced plans to fully implement the VAT scheduled for the second half of 2019. And while moves may occur to blunt its impact, this tax rise will slow the

economy. While Japan began to allow more foreign workers into the country this year in order to grow its worker base, this likely will not offset the VAT impact to consumption as these comprise mostly low skill workers. Furthermore, with the Japanese Yen now trading in a range similar to its level from 1997 to 2007 against the US Dollar and the US making noises about the trade deficit over all and especially in autos, Japan's ability to depreciate its currency and benefit from the improved terms of trade appears limited. With all these drags on the economy, it is time for A Setting Sun after a very, sunny day.

For Southeast Asia, there exists both good and bad. With the rise of China, numerous countries positioned themselves to become suppliers to the vast industrial base, piggybacking on both Chinese growth and the growth in Chinese exports. With China slowing and global export growth stalling, this likely will slow their fundamental economic growth. The salvation may be found in the rejiggering of supply networks as companies move capacity out of China to other locations. Southeast Asia, on a short term basis, at least, will benefit given the existence of large parts of the supply chain there already. Despite this, the longer term challenge for the region remains. This lies in the US moving to meet its own demand over time removing a large support to industry locally. For example, Foxconn will open the first LCD plant in the US in 2019 after two years of construction. Adidas opened a 3D Manufacturing facility for sneakers in 2017, displacing traditional products made in SE Asia. As other modern manufacturing facilities open over the next 5 years, this will represent a true challenge to the region, which will need to drive up its consumption to support its indigenous manufacturing. For these countries, the Yin and the Yang of this ebb and flow will dominate their futures.

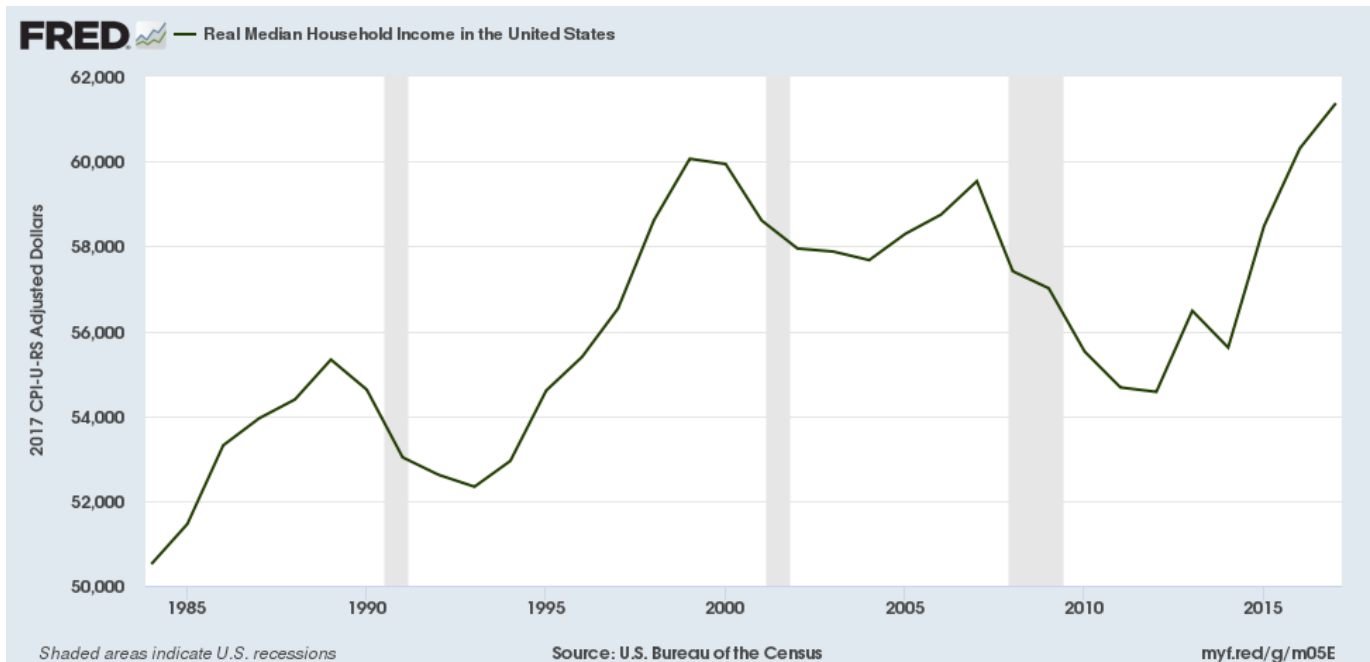
For India, growth continues to normalize with both 2018 and 2019 growth expected to exceed 7%. To understand why this makes sense, a quick look at where India's consumer stands today will illustrate this clearly. In 2018, Per Capita GDP for each Indian citizen should exceed \$1,700 per year. This equals where China stood a decade ago. If India just maintains its growth, this number will more than double over the next decade. With this rise up the income ladder, Indian consumers will want all the goods that every other consumer in China, Thailand, Indonesia, Malaysia, Thailand, ... possess currently. For example, the Air Conditioner (AC) possesses allure across all of Southeast Asia for obvious reasons. In China a decade ago, when its citizens possessed similar income levels to India today, AC penetration stood at 10x where it stands in India at present. Should India fix its grid reliability and incomes continue to rise, AC demand could explode from the 12.5 – 13.5 million units installed today to over 40 million units installed in a decade. Annual unit sales could grow at 20% for quite some time. And electric demand could explode upward as well. Just putting in place the basic production to create the consumer goods for its vast population along with the necessary infrastructure should drive Indian economic growth for the next couple of decades. With this dynamic, Elephant Times should continue for many years.

In Brazil, the salutary impact of significant Central Bank easing coupled with a massive, 50% devaluation of the currency finally took hold. Economic growth continues to accelerate. Whether related to industrials or commodities, life continues to look better as the party starts to get crowded. According to the latest statistics, Brazilian tractor demand rose 59% year over year and truck demand rose 74% year over year. With Brazil having just cut its labor costs globally in half compared to other countries as well as cut its factory costs, industrial growth turned positive year over year. In fact, it grew at 18.9% rate for the 3 months ending in August. Reflecting Brazil's improved global competitive position, Foreign Direct Investment will exceed 3% of GDP this year. Other sectors of the economy not related to trade, demonstrate strong growth as well, such as air travel and telecom. With economic policy finally delivering on the goods, Brazil's Q3 growth will likely exceed 4% and potentially approach 5%. With a growth rebound fully evident, for Brazilians, finally, The Party Revs Up.

For Europe, the hope for another decent year of GDP growth appears destined for disappointment. Trade growth ground to a halt, hurting German economic growth. In fact, for 2018, Germany may grow just 0.5%. This coupled with the turmoil in Italy, the fourth largest economy in Europe, and the upcoming exit by the UK, leaves Europe with many questions moving forward. At the end of the day, it pits national interests against the pan-European interests of the bureaucrats in Brussels and questions of national sovereignty. Do the citizens have the right to elect a government that represents their interest and that will take actions that the majority supports? At the end of the day, revolutions are born out of frustrated citizens who believe the government no longer represents them. The bureaucrats in Brussels appear to have forgotten this critical fact. With Italy likely to defy the EU on its budget, moving to set up a parallel currency in the BOT, and preparing its financial system for turmoil, relations will continue to deteriorate. And given the country endured the worst economic growth over the past decade since the Great Depression as a result of its entry into the EU coupled with giving up control of its currency, undoing these policies becomes a logical step to restore economic growth. Should Italy depart the EU in addition to Great Britain, the burden of carrying the EU will fall on French and German citizens as the budgetary contribution from London and Rome dissipate. To what extent will these citizens accept higher taxes and lower government benefits as more monies flow to Eastern Europe to make up for the departures? While Eastern European growth continues at 4% or better, at least 1.5% comes from the transfer of monies eastward. Another chunk comes from the supply of auto parts and other industrial components to Germany and France to export cars. With the Italian moves, the EU appears at risk of slowly but surely flying apart as Old Man Turmoil rises.

For the United States, the year 2018 will deliver the best economic growth since 2005. This will occur despite the slowdown in housing, the rise in the currency, and the continued increase in interest rates by the Federal Reserve. In fact, economic growth for the year looks set to exceed 3% as the US moves towards a late cycle posture driven by consumer spending, capital investment, and government spending, the traditional drivers of late cycle economic growth. For the average American, things

finally are looking up. Real Median Wages for a family finally sit above their level in 1999 and continue to climb, as the following chart demonstrates:



In addition, with an emphasis on reclaiming its economic growth, US capital spending finally exceeded its highs from the 2002 – 2007 recovery. Government data show US Industrial Equipment spending now stands 8% to 10% above 2007 levels and continues to rise. Other types of equipment spending have recovered back to their 2014 levels and stand almost 15% above their 2007 levels. In the key areas of technology investment, Information Processing Equipment continues to soar, standing 20% above its 2016 levels and over 100% above 2007 levels. Software Investment stands almost 200% above 2007 levels.

However, there is still one area of Investment still underperforming, Manufacturing Structures. Current real investment in these structures stands below where it stood in 2007 despite the economy standing 20%+ larger. And it is down in 2018 after falling in 2017. This is likely the result of the US Dollar rise, starting in 2014, that drove the US Dollar to record levels. With manufacturing intimately tied to Productivity Growth, addressing this Investment remains critical for the United States to restore its long

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term economic growth to pre-2008 levels of 3.5% - 4.0% in annual GDP growth. The following table illustrates the Productivity challenge:

Productivity Growth

1995 – 2005 3.00+%

2008 – 2018 1.25-%

Source: Bureau of Economic Analysis (BEA)

Nevertheless, improvement in this key metric started with the change in Presidents in 2017, as the US once more encouraged manufacturing domestically over abroad. This change in policy began to drive volumes upward in domestic plants, enabling Productivity Growth to start to move more in line with its long term averages:

Productivity Growth

2011 – 2016 0.6%

2017 1.5%

2018 Q1 – Q3 Average 1.9%

Source: Bureau of Economic Analysis (BEA)

As the above data demonstrate, US Productivity Growth continues to grind higher, despite the criticisms of the current US economic policy. Should Q4 come in better than 2%, the US would deliver its first year of 2%+ productivity growth, excluding the bounce from the recession, since 2006. With the addition of manufacturing investment, Productivity stands poised to sustainably move higher, which would underpin long term, faster economic growth.

For those who think this does not matter, imagine if the US grew at its historical economic growth rates from 2009 – 2018. The US economy would stand at \$25 trillion in size, not its actual size of \$20

trillion. This would mean \$500 billion in additional revenue to the US government, cutting today's deficit in half. This would mean \$250 billion in additional revenue to state and local governments, helping them to address their pension issues and increase infrastructure spending. This would mean an extra \$3 trillion in additional income for the average American or Real Incomes 15% above levels today, enabling them to bring their debt in line with longer term debt to income ratios along with enabling higher consumer spending. This would mean much higher levels of earnings for corporations, likely supporting much higher levels of corporate investment as well as pushing the equity markets to higher levels than exist today.

All of these salutary impacts, of course, don't exist. But imagine what it would mean for the US should it restore Productivity Growth to better levels. The biggest impact likely would occur at the Federal Reserve. With the Fed assuming the economy can grow only 2%, at best, over the long term, it tightened financial conditions over the past two years to slow economic growth. But, if Productivity Growth sustains at 2%, then Real Potential Growth for the US rises to 3% or more. This would force a major rethink of Federal Reserve policy and where inflation would really kick in. Despite a Fed tightening financial conditions and the rise in the US Dollar, which will slow exports next year, Productivity Growth appears set to change the US growth dynamic, enabling an offset to these drags on its economy. And with this fundamental change in the economy, the US should make The Continuing Climb. (Data from OECD, BEA, US Census Bureau, the Federal Reserve, and Company Reports coupled with Green Drake Advisors analysis.)

Currency Wars Part VI: Plaza Accord 2019

“We extend the analysis of the fixed price variable employment model with a brief discussion of the international implications of exchange depreciation and changes in net exports. We showed that a monetary expansion in the home country leads to exchange depreciation, an increase in net exports, and therefore an increase in output and employment. But our increased net exports correspond to a deterioration in the trade balance abroad. The domestic depreciation shifts demand from foreign goods toward domestic goods. Abroad, output and employment therefore decline. It is for this reason that the depreciation-induced change in the trade balance has been called a beggar-thy-neighbor policy – it is a way of exporting unemployment or of creating domestic employment at the expense of the rest of the world.

...

By contrast, when countries' business cycles are highly synchronized, such as in the 1930s or in the aftermath of the oil shock, exchange rate movements will not contribute much toward world full employment. The problem is then one of the level of total world spending being deficient or excessive while exchange rate movements affect only the allocation of a given world demand

between countries. Nevertheless, from the point of view of an individual country, exchange depreciation works to attract world demand and raise domestic output. If every country tried to depreciate to attract world demand, we would have competitive depreciation and a shifting around of world demand rather than an increase in the world level of spending. Coordinated monetary and/or fiscal policies are needed to increase demand and output in each country.”

Chapter 19: Trade and Capital Flows Under Flexible Exchange Rates

Macroeconomics, Second Edition

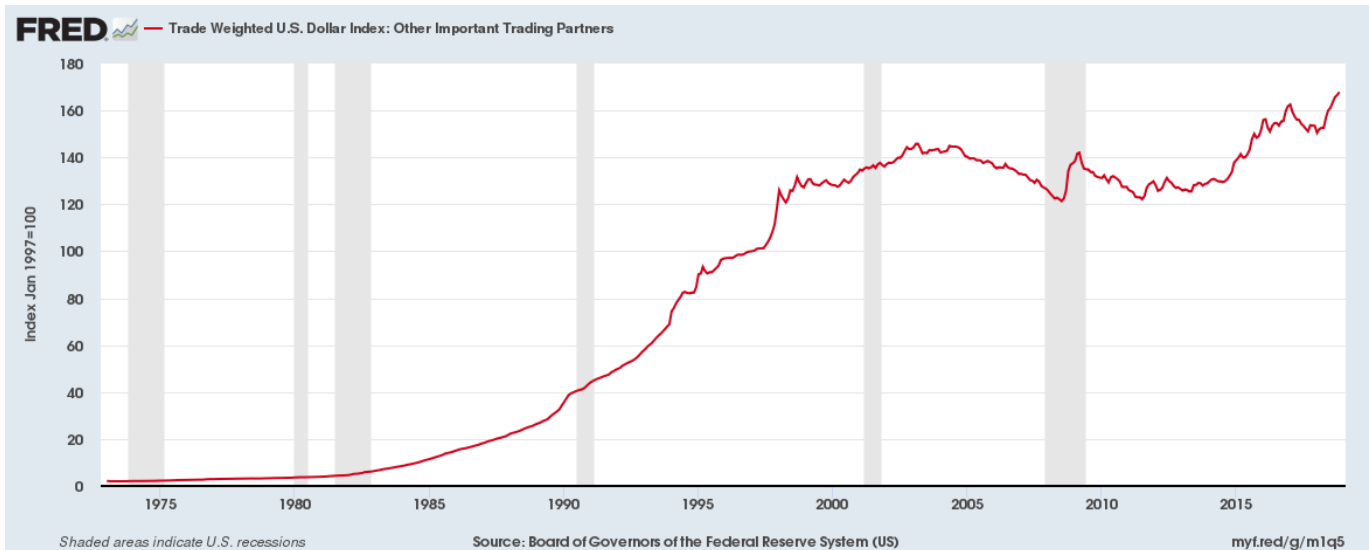
By Rudiger Dornbusch and Stanley Fischer, 1978

(Mr Fisher Served as Vice-Chair, Federal Reserve

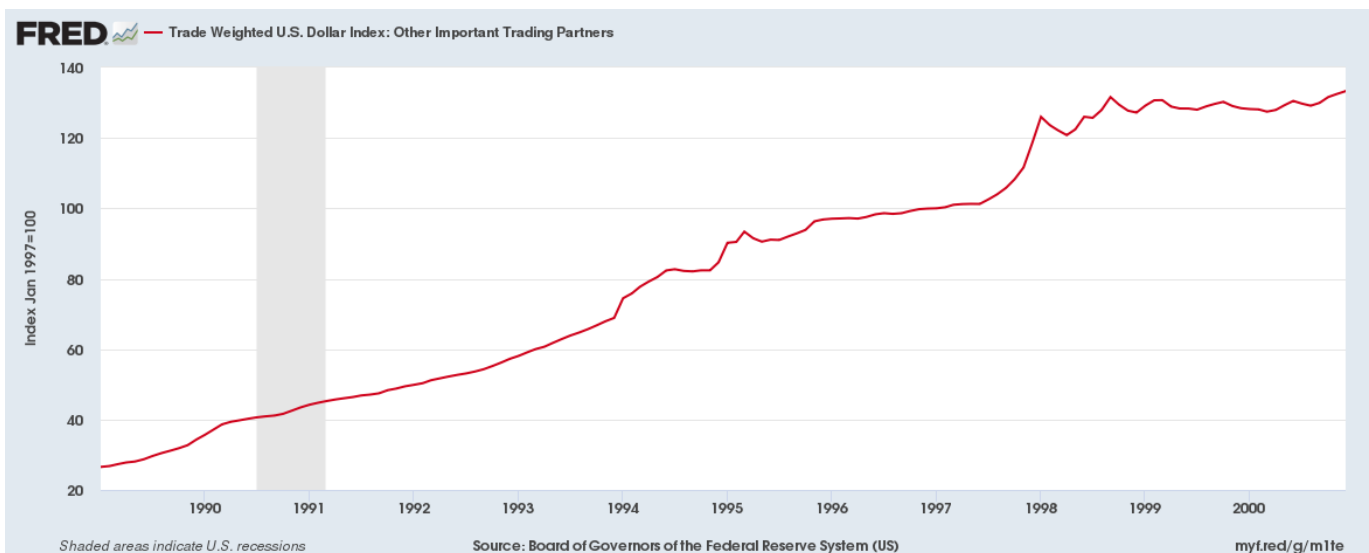
From 2014 – 2017)

For the United States, the last two decades proved difficult from an economic perspective. Fundamental economic growth lagged behind levels produced for the prior 50 years. This, of course, related to the creation of the World Trade Organization (WTO) that allowed Emerging Market (EM) Economies full access to Developed Market (DM) Economies without comparable access to their economies or any restrictions on their ability to manipulate the value of their currencies. With the resulting stagnation in real incomes for DM consumers as EM countries took a disproportionate share of global growth, anger arose against the elites who put such a system in place. This led over the past two years to significant changes in the political make-up of DM governments, that hitherto did little to change the rules of the game. With these changes in place and those on the horizon ahead, DM governments stand poised to alter these global arrangements that massively favored EM Economies over the past 20 years. And in doing so, the rules of the game will change significantly.

For EM Economies, depreciating their currencies proved the tonic to their economic growth issues. It produced hyper-competitive companies globally, enabling them to possess advantageous cost positions, and to grab global market share from established DM companies. This enabled their economies to grow at rapid rates, upgrading their industrial base and citizen’s income by leveraging access to DM consumer markets. The following chart demonstrates the massive drop in EM currencies against the US Dollar over the long term:



And the following chart focuses on the drop just from 1989 to 1998 in preparation for the commencement of trade under the WTO:

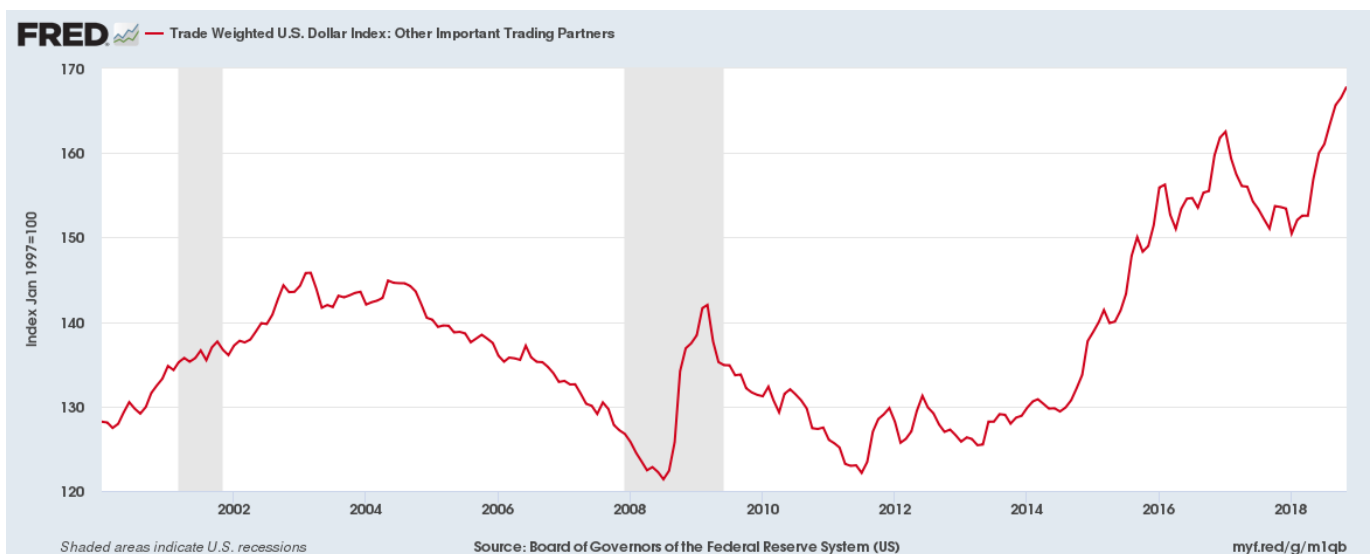


As can be seen in the chart, EM currencies dropped by over 80% from 1989 to 2000 as they positioned themselves for the WTO and access to new DM markets. This provided them many years of growth well above the levels sustainable with access only to their domestic markets. While countries such as

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Indonesia and Russia had currency crises in 1997 – 1998, as part of the Asian Financial Crisis, currency depreciation was steady over the decade as trade negotiations progressed. And countries unaffected by the currency crisis, such as China and India, took advantage of the turmoil to massively drop the value of their currencies. In addition to these currency moves, the EM governments limited access to their domestic markets, forcing DM companies to locate facilities locally and to transfer knowledge to local individuals and companies that would enable them to form competitive entities to the established players. This reinforced their growth, delivering levels even further above true sustainable growth.

However, after almost 15 years of strong EM growth, growth began to stall around 2014. With the rapid growth came real inflation in costs which slowly made them less competitive with DM companies. In fact, Boston Consulting Group came out with a famous study in 2013 indicating that costs in India and many other EM economies now stood above those in the United States. To solve this issue and to reaccelerate their growth, the large EM economies began another round of currency depreciation in 2014, as the following picture demonstrates:



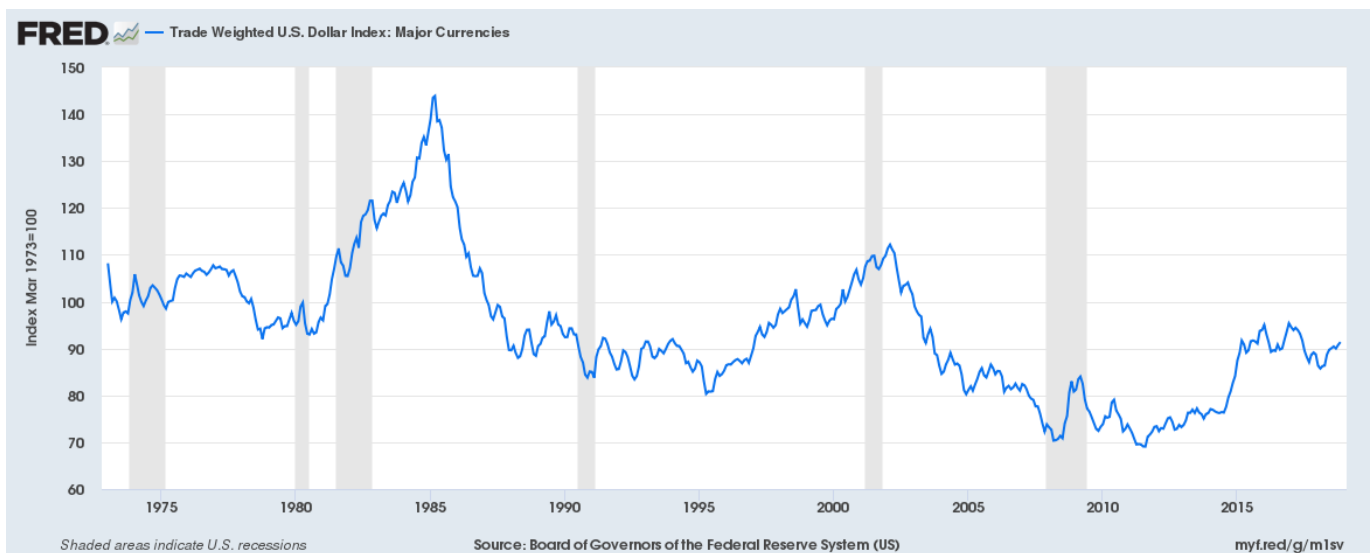
This ~30%+ depreciation of their relative cost base took these countries from costs 10%+ above DM levels to costs 15% - 20% below DM levels. This restored their global competitive advantage, positioning these countries for further growth at the expense of the DM economies.

However, for the DM economies, this created issues in delivering economic growth at levels that drove real incomes higher, after they just pulled their economies out of recession and began to grow again. In fact, for the United States, this depreciation created an Industrial Recession and a Nominal Growth

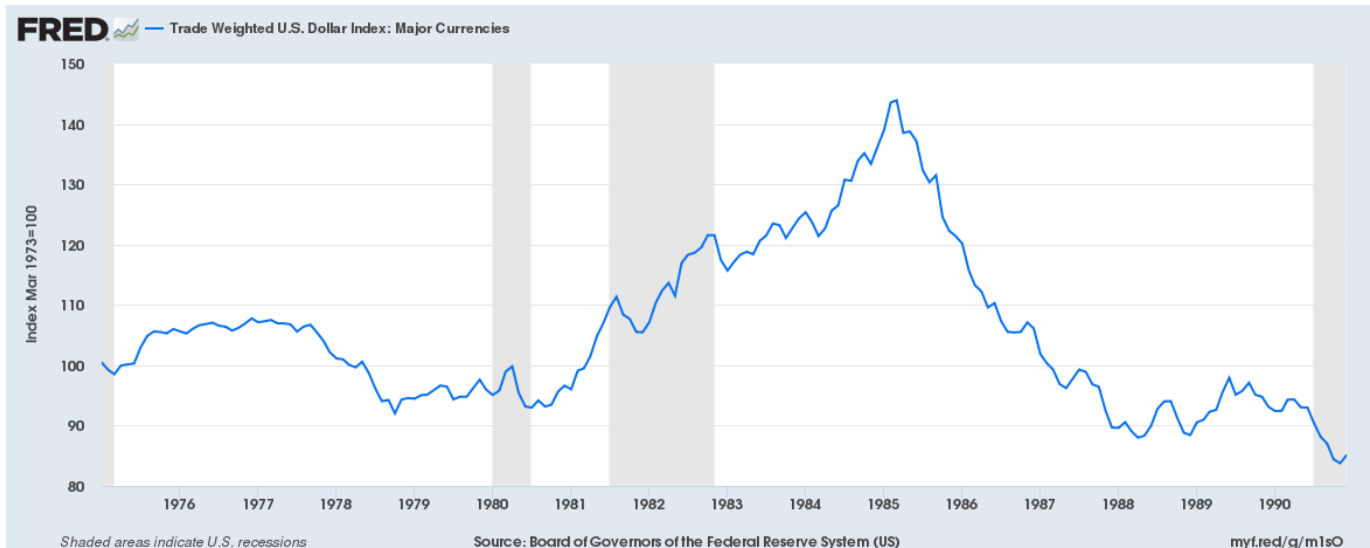
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Recession in 2015 – 2016. If the Industrial sector of the economy stood at its historical size prior to 2000 relative to the US economy, the US would have recorded an actual Recession.

This issue stands in contrast to the DM currencies. If one looks at the DM currencies over time, their value has fluctuated within a band since the late 1980s. In fact, the value of the US Dollar today, relative to the basket of these currencies, equals approximately its value then:



There is only one time frame when the US Dollar found itself outside this range, that occurred from 1981 – 1985, when the European countries depreciated their currencies against the US Dollar. This drove the US Dollar up 50% in value over just 4 years:



Ronald Reagan intervened in 1985 with the Plaza Accord in which these countries agreed to restore their currency values against the US Dollar in order to forestall actions that would have shut their companies' goods out of the US markets. By 1988, the US Dollar returned back to fair value.

The OECD (Organization for Economic Cooperation and Development) provides data on fair value of currencies using PPP, Purchasing Power Parity. (This data is available at www.oecd.org) This data makes clear the difference in the playing field between EM and DM currencies and what a manufacturer in the US or Europe sees when they attempt to compete globally against companies in the DM or in EM countries which have massively depreciated their currencies. Here is what the US manufacturer sees when he competes against companies in the DM:

<u>Currency</u>	<u>Exchange Rate</u>	<u>OECD PPP</u>	<u>Appreciation to Fair Value</u>
¥	113.8/US\$	98.2/US\$	15.9%
€	\$1.12/€	\$1.37/€	22.3%
£	\$1.29/£	\$1.42/£	10.1%
Average Undervaluation=			16.1%

While a US manufacturer may not jump for joy over this, the undervaluation of DM currencies sits well within the bands that have existed over the past 50 years.

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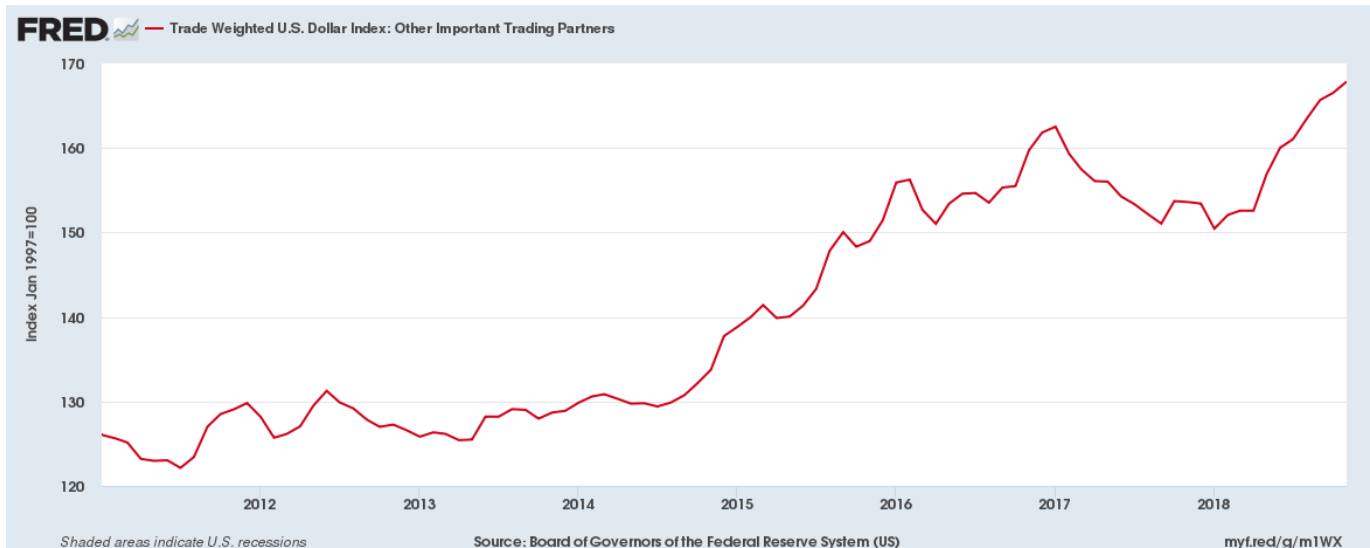
Here is what that same manufacturer sees when he competes against companies in the EM:

<u>Currency</u>	<u>Exchange Rate</u>	<u>OECD PPP</u>	<u>Appreciation to Fair Value</u>
<i>Brazil Real</i>	<i>3.73/US\$</i>	<i>2.06/US\$</i>	<i>82.5%</i>
<i>China Yuan</i>	<i>6.96/US\$</i>	<i>3.55/US\$</i>	<i>96.1%</i>
<i>Indian Rupee</i>	<i>72.9/US\$</i>	<i>17.8/US\$</i>	<i>309.6%</i>

		<i>Average Undervaluation =</i>	<i>162.6%</i>

As the above table makes clear, the DM manufacturer sees a difficult to impossible situation. Competing globally becomes a non-starter when the EM manufacturer benefits from massive undervaluation of the currency.

With the US moving to reclaim its manufacturing from China to underpin its economic growth, China's economy began to feel real pain over the past year. In order to offset the impact of the 10% tariff imposed by the US on \$200 billion of its goods, China depreciated its currency 10% against the US Dollar. Of course, China exports over \$500 billion of goods to the US. So, not only did it offset the tariff, it advantaged the other \$300 billion in goods by making them an additional 10% cheaper. With the US threatening to impose a 25% tariff against all its exports, China indicated it would just depreciate its currency by 25% against the US Dollar. This action would force other EM countries to depreciate their currencies, lest they lose competitive advantage globally. For the US and the DM, this looks just like the runup in 1981 – 1985 in the US Dollar:



For the US, such an outcome in China's favor, along with the EM, would become an unacceptable result. For Europe, which already saw a major slowdown due to the pressure on its exports, this would amplify the pressures building to tear the EU apart. And for Japan, which underwent a contraction in the economy in Q3, this would put acid on an open wound, harming its export-oriented economy. With all of the DM under tremendous economic pressure to raise living standards and grow their economies, the political will to intervene in the Currency Markets should manifest itself. For the first time since the formation of the WTO, the DM Governments would act collectively to prevent depreciation of the EM Currencies and to drive up their value towards fair value in a Plaza Accord 2019.

For a world trading system built on EM currency undervaluation to drive EM exports and economic growth, a shock equivalent to a magnitude 9.5 earthquake would occur. It would signal the opening shots in open economic warfare, whereby the DM would fight back to reclaim its economic growth ceded under the WTO. For EM economies grown fat on a diet of currency depreciation, a tsunami of incalculable proportions would wash ashore that wipes out their current economic model. In one fell swoop, such action would realign global growth, enabling the DM to reclaim a portion of its growth lost to trade. And, as the DM forced EM Currencies towards fair value, not only would trade realign, but Investment would shift back to DM markets, as manufacturers could once more compete globally. With a Plaza Accord 2019 ahead, the world stands poised on the cusp of a major realignment of economic growth. For the US and the other Developed Markets, economic growth will finally return to the levels of the 1980s and 1990s. But for the Emerging Markets, difficult times lie ahead as they adjust to a less generous world in which they must fundamentally grow and support their own economies. (Data from the Federal Reserve coupled with Green Drake Advisors analysis.)

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The Equity Markets: Policy Led to Policy Fed or It's 1966 Again

“However, the risk of paying too high a price for good-quality stocks – while a real one – is not the chief hazard confronting the average buyer of securities. Observation over many years has taught us that the chief losses to investors come from the purchase of low-quality securities at times of favorable business conditions. The purchasers view the current good earnings as equivalent to ‘earning power’ and assume that prosperity is synonymous with safety. It is in those years that bonds and preferred stocks of inferior grade can be sold to the public at a price around par, because they carry a little higher income return or a deceptively attractive conversion privilege. It is then, also, that common stocks of obscure companies can be floated at prices far above the tangible investment, on the strength of two or three years of excellent growth.

These securities do not offer an adequate margin of safety in any admissible sense of the term. Coverage of interest charges and preferred dividends must be tested over a number of years, including preferably a period of subnormal business such as in 1970 – 1971. The same is ordinarily true of common stock earnings if they are to qualify as indicators of earning power. Thus it follows that most of the fair-weather investments, acquired at fair-weather prices, are destined to suffer disturbing price declines when the horizon clouds over – and often sooner than that. Nor can the investor count with confidence on an eventual recovery – although this does come about in some proportion of the cases – for he has never had a real safety margin to tide him through adversity.”

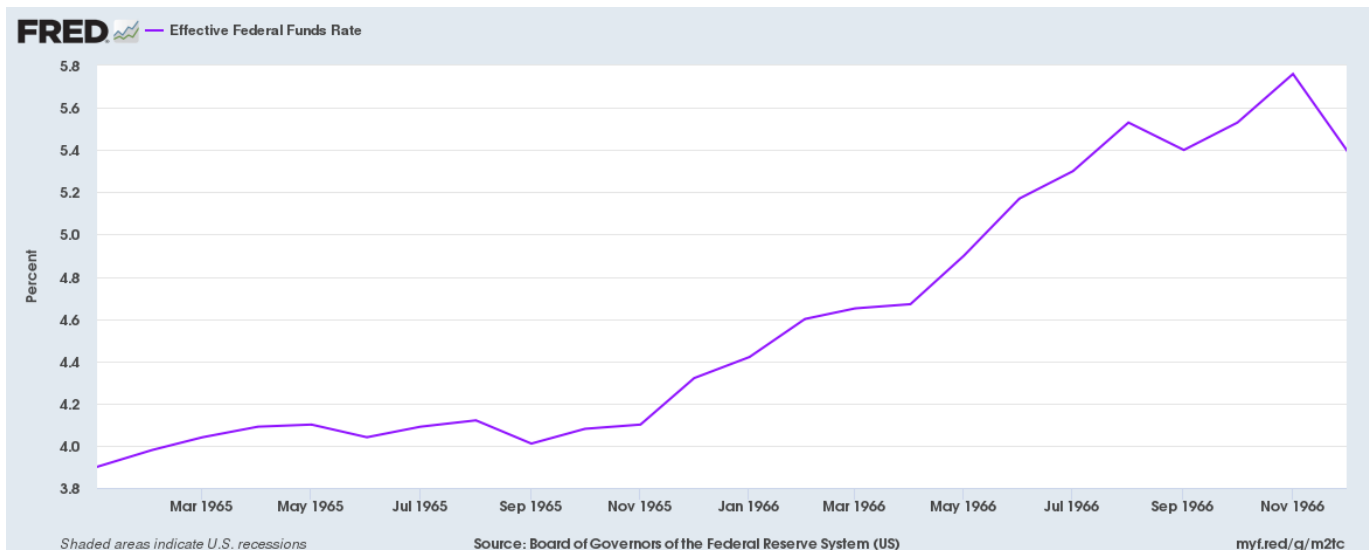
Chapter 20: “Margin of Safety” as the Central Concept of Investment
The Intelligent Investor, 4th Revised Edition
By Benjamin Graham, 1973

For investors, the Year 2018 started with much promise. Stocks soared in January, continuing their run from 2016 and 2017. However, as one might say, A Funny Thing Happened on the Way To The Forum as investors grew nostalgic for the markets of yesteryear. Unfortunately for investors, they actually returned, along with all their volatility. From its starting point of 2674 at the beginning of the year, Mr. Market soared to 2873 in January, only to plunge in February, sending investors on a rollercoaster ride for the rest of the year. Oh, the wonders of the past. And it has been quite a ride too. From Mr. Market’s low of 2582 in April, it soared to 2931 in September. Only to plunge again in October, ending the month at 2712. If an investor went on a 10 month vacation, he or she would have thought it a ho-

hum year as the market rose less than 2% since the beginning of the year with a projected total return for the year, including dividends, of just 4%. Below average, but after several good years, not bad.

However, hidden in the “Ho-Hum Year” and the effective sideways movement of the market stands a looming question. Does 2018 represent the future? Does 2018 represent the type of returns and inherent volatility that I can expect over the next 5 – 10 years in the public equity markets? And, if the answer is yes, do other asset classes, such as fixed income, real estate, ... represent alternative opportunities with competitive returns and less volatility over the next decade? While short term predictions of equity market movements sit in the trash can of history, as they have been proven wrong over and over again, longer term predictions, based on valuations, economic growth, and interest rates, demonstrate high levels of validity.

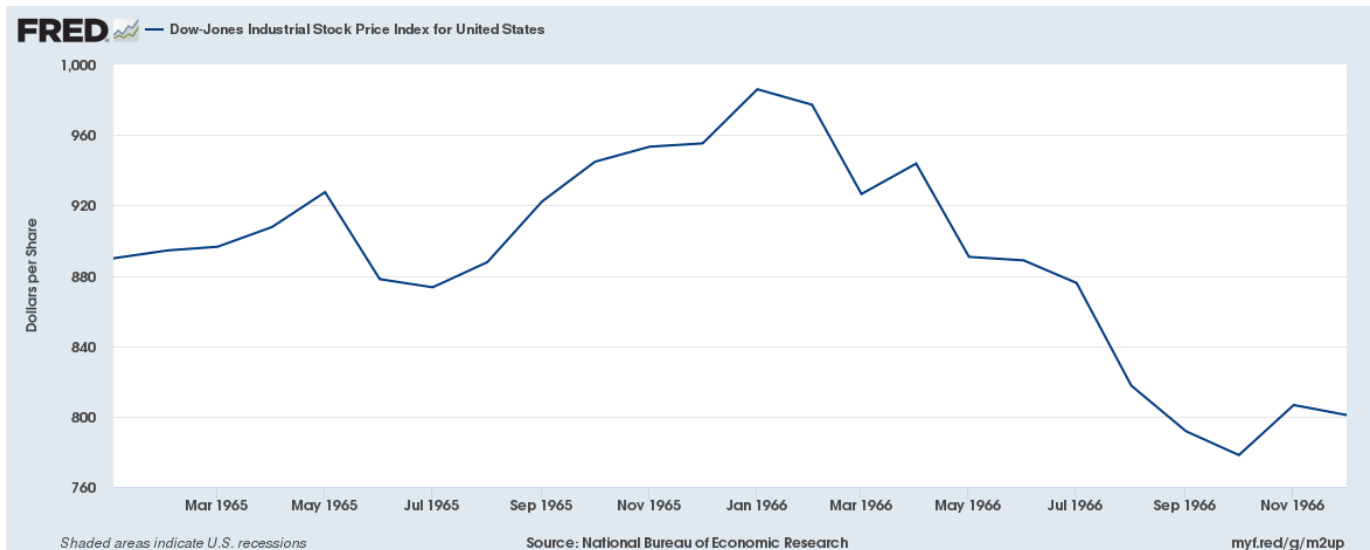
The easiest way to understand where the markets sit today involves a trip back in history to the 1960s. The economy enjoyed low inflation and strong growth through 1965. But the Federal Reserve became worried about inflation in 1965, due to the low unemployment and strong growth, embarking on a tightening campaign late in the year. Despite vocal protests from the President, Lyndon Johnson, William McChesney Martin, Chair of the Fed, raised rates until November 1966, increasing them from just 4.00% in September 1965 to 5.75% in November 1966:



The Federal Reserve’s goal was to slow the economy, which it did. Economic growth went from ~8% in 1965 to run rate of less than 4% by the end of 1966.

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The equity markets did not take the Fed's campaign well, as they needed to discount the expected slowing in economic growth as well as the impact on valuation of higher interest rates:



When the dust cleared, markets stood 21% lower in response to the Fed. Profits continued to grow at a reasonable clip, but the rise in interest rates forced stock valuations lower.

As the Fed then eased, markets rose once more, but not much above their January 1966 high before the Fed entered another tightening campaign, this time plunging the economy into the 1969 – 1970 Recession. Of course, the following 10 years proved disastrous for the Equity Markets, despite Real GDP growing almost 40% from \$4.9 trillion in Q1 1970 to over \$6.8 trillion in Q4 1979 or at a 3.3% compound rate. While reasonable economic growth occurred, despite the 1974 – 1975 Recession and the two massive increases in oil prices, the rise in inflation coupled with the significant increase in interest rates compressed stock valuations, creating negative real returns for equity holders.

If we move from the 1960s back to today, the real question comes down to the long term valuation of the markets coupled with the underlying rate of inflation. And most of the indicators, with proven track records, do not predict a rosy 10 years ahead. The most obvious one is Robert Shiller's Cyclically Adjusted Price Earnings Ratio (CAPE). This indicator possesses a long history of projecting returns 10 years hence. Here is what it shows for the markets:

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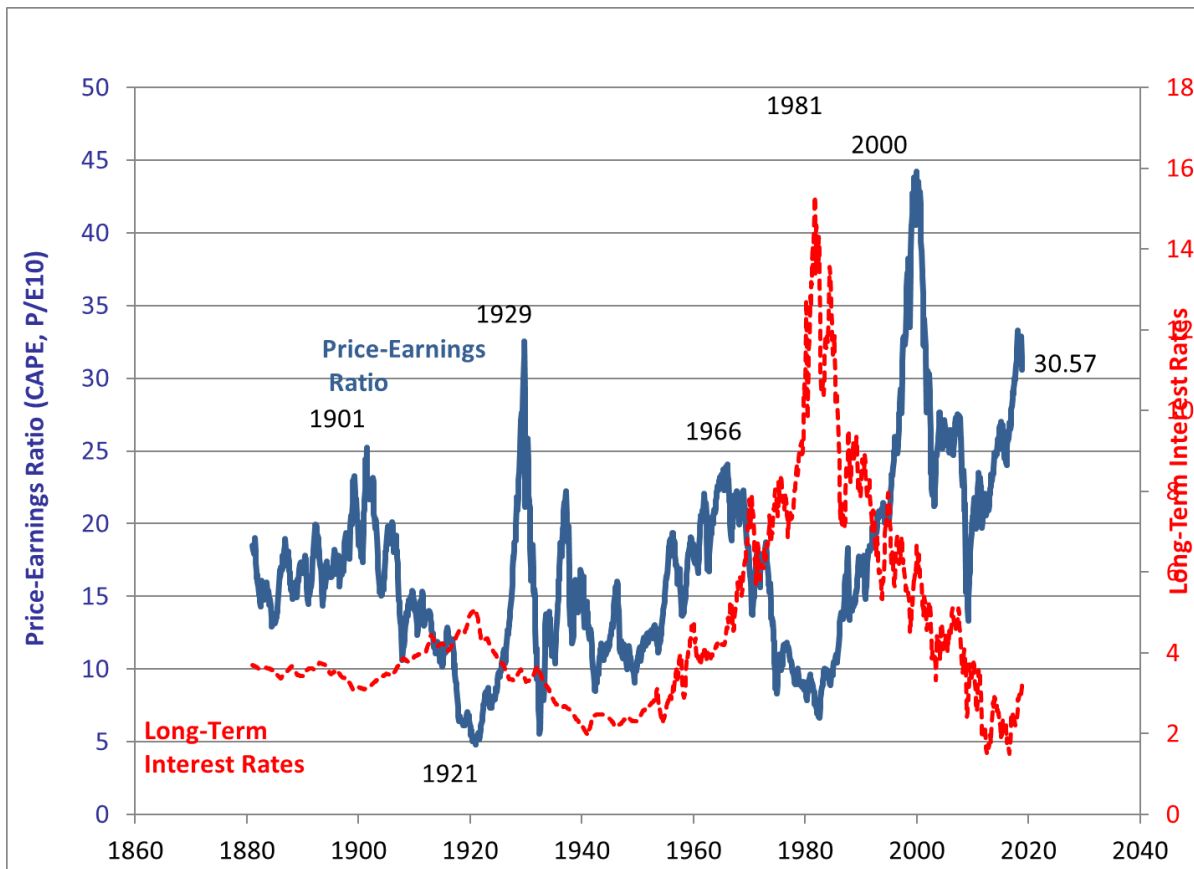
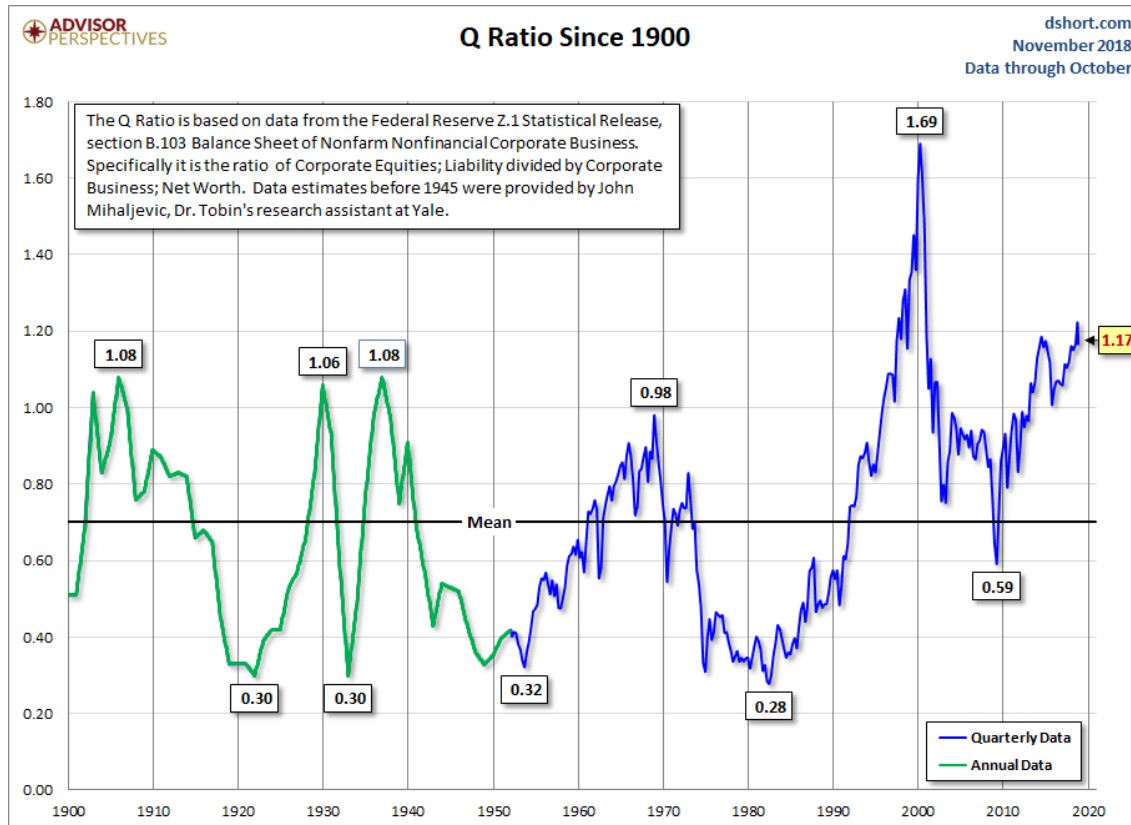


Chart courtesy of Robert Shiller at Yale available at <http://www.econ.yale.edu/~shiller/data.htm>.

As the above chart shows, valuations stand at levels similar to 1929 and were only exceeded in 2000 during the Tech Bubble. Ten Year Forward Returns were nothing to write home about from those starting points.

There are two other statistically valid indices that correlate well with Ten Year Forward Returns. They are Household Stock Ownership as a Percent of Financial Assets and Tobin's Q. The former makes intuitive sense as high levels of stock ownership should mean the public is "All In". Unfortunately, today's level of stock ownership sits at over 40%. This level is up from 20% at the bottom of the market in 2009 and above the 37.5% peak in 2007 and the 37.7% peak in 1968. And, not surprisingly, just as with the CAPE, it only was eclipsed by the peak in 2000. The following chart shows Tobin's Q:



Tobin's Q presents a similar picture. Stocks relative valuations stand at levels slightly above those seen in 1907, 1929, and 1968 but below the peak in 2000.

However the data presents itself, the Equity Market sits at valuation and household allocation levels that historically deliver mediocre to poor returns. With the Federal Reserve continuing to raise rates, Equity Valuations will continue to come under pressure just as they did in 1966, as they move from a Policy Led to Policy Fed environment. And, with the US Government's balance sheet in a shambles and unfunded social obligations spiraling upward, the odds of the government resorting to the printing press to solve its debt, as it traditionally does, continue to rise. (For an analysis of the US Government's unfunded social program obligations, please see *I Can Tell A Lie: Government Promises & The Pot Of Gold At The End Of The Rainbow.*) Should this occur, then inflation could take off just as it did in the late 1960s when inflation hit 6% at the end of the decade, up from 1.2% early on. With these two fundamentals in ascendance, it looks like It's 1966 Again. (Data from Robert Shiller, Federal Reserve, and the Census Bureau coupled with Green Drake Advisors analysis.)

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The Fashionable Cheetah, The Meter of It All, and Public Movement

Finally, we close with brief comments on The Fashionable Cheetah The Meter of It All, and Public Movement. First, after over a decade dedicated to denim fashion, there appears a shift consumer tastes. Women have begun to purchase clothing with neon, plaid, and animal prints. This shift to a more fashionable look is similar to shifts seen late in other economic cycles as a wholesale changeover in wardrobe occurs. With this shift in the look, we should all be seeing The Fashionable Cheetah all over. Second, municipalities finally have loosened their purse strings after a decade of repairing balance sheets. According to data from Badger Metter, municipal water meter sales are up over 10% year over year. For municipalities, it is The Meter of It All. And Third, public sector Non-Residential Construction started to soar this year. Spending rose 14% year over year according to the latest data from the Census Bureau. With the approved spending finally finishing the approval process, we expect more and more Public Movement.

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

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