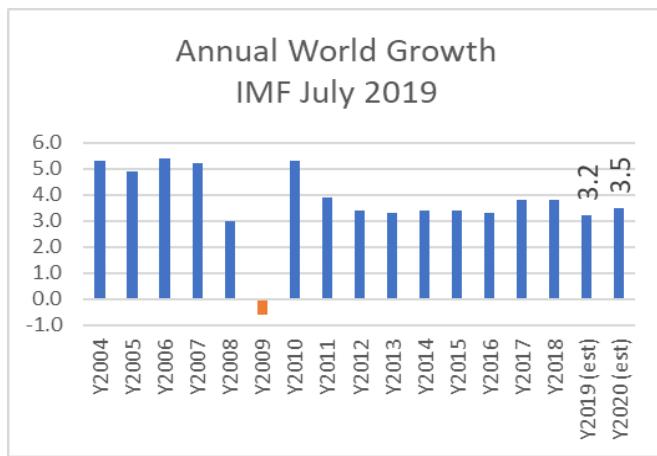




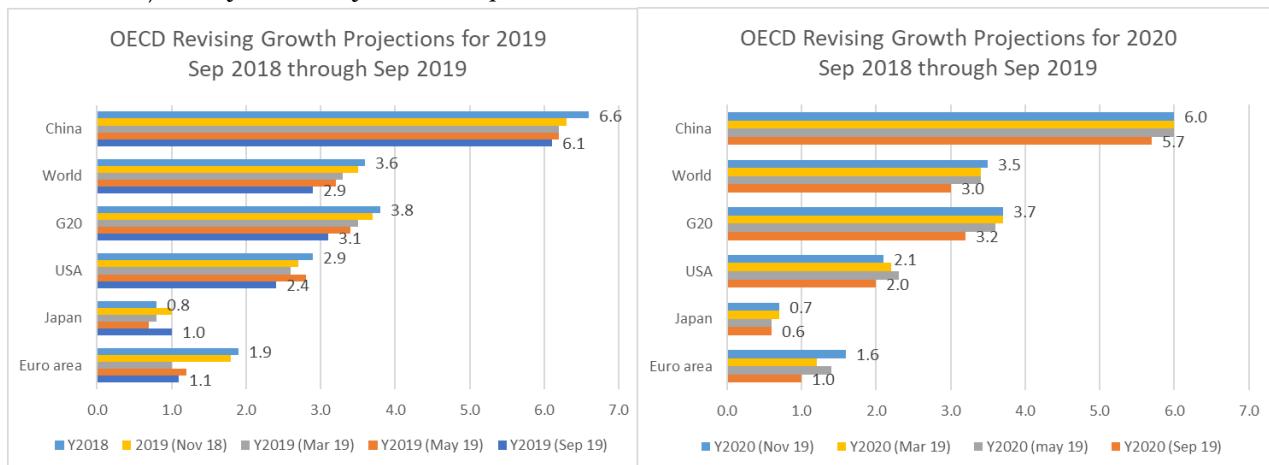
October 16, 2019

- **2% GDP** - World growth is slowing, and there are signs that the U.S. is also slowing. It is not clear though if this slowing is the economy's natural return to the New Normal from a fiscal-policy-infused high last year or if this is the beginning of a more serious slowdown.
- **Continued Expansion** - We do not forecast a recession in the next 6- to 12-months as the incoming data do not suggest an imminent contraction. With the unemployment rate at 3.5% and a robust consumer sentiment, these are not factors that precede an economic recession.
- **25bp Cut** - The Federal Reserve is likely to continue on its current rate cutting path with asset purchases to come. One more 25bp cut is fairly certain this month, and the Fed may pause and restart in 2020 with two to three more cuts in an attempt to support the U.S. economy from further global slowdown and trade war impacts. However, monetary policy has likely reached its effective limit. The continuing rate cuts and a renewed expansion of the balance sheet would not save us from trade war fallout, geopolitical risk or the natural economic cycle.
- **Trade War Easing** - For political and economic reasons, the Trump Administration may have to recalculate its ability to escalate the current trade war with China or other trading partners. Seeing the growing damage to the U.S. manufacturers and exporters and the support President Trump would need for his reelection campaign, the willingness to make a less comprehensive deal with China may be the reality. This would de-escalate uncertainty.
- **China Rising** - China is increasingly less likely to make the kind of concessions the U.S. has demanded. The trade war and the way the U.S. has fought it makes it difficult, if not impossible, for the two countries to return to the relationship of the past, and maybe it should not return. We expect to see the progression of a bipolar world led by the U.S. and a rising China, and the world order will be re-sorted with new alliances and new institutions to come. Ironically, the current trade war has hastened the rise of a more muscular and self-reliant China, the very aspects that the U.S. is attempting to prevent. The U.S. systematically turning more inward and allowing China to fill the global vacuum it created has given China the room to rise.
- **Sentiment is King** - We need to pay close attention to consumer sentiment. It is fickle, and we don't know what is the last straw that will break the consumer's back. If we can reduce self-imposed uncertainty and make consumers feel safe, this old expansion can continue.

## World Growth – synchronizing a slowdown



spillover effects on the rest of the globe. The World Bank/IMF annual meeting this month will likely usher in further downward adjustments to global growth as the two largest global economies, the U.S. and China, remain in a fight for supremacy (economic, political, technological, and, ultimately, overall dominance) thinly veiled by trade disputes.



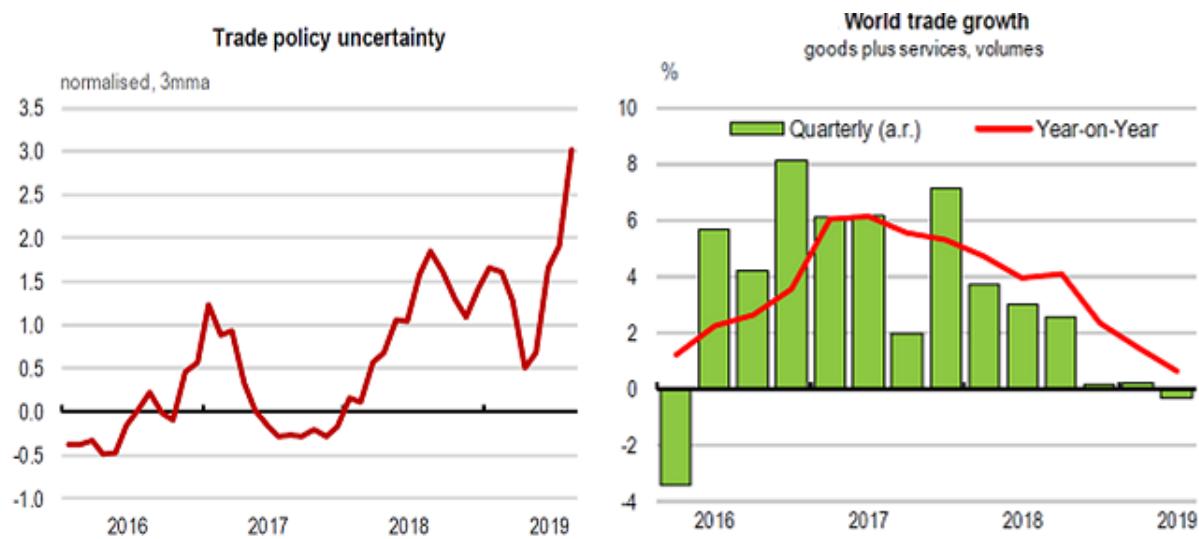
Last month, the Organization for Economic Cooperation and Development (OECD) also revised down their growth projections for the world. The upper left graph shows the 2018 baseline growth rate for China, the World, G20 (a group of 20 largest world economies), the U.S., Japan and the Euro area. Each OECD Interim Economic Outlook (March, September and November) and the annual May Outlook shows the gradual but definitive deterioration of global growth for 2019. The upper right graph plots the projections for 2020 and is not expected to improve much either.

One of the obvious victims of the 18-month plus trade dispute among global trading partners is the global supply chain. Cross border supply chains are shaped over years of refinement to optimize efficiency in capital, resource and labor flows. A disruption or significant increase in friction, such as tariffs, without a clear or timed path forward is not only significantly disruptive but costly. Uncertainties place a major strain on capital investment and economic activities, discourage risk taking and make long-term decisions difficult, which are all critical to business growth and ultimately impact

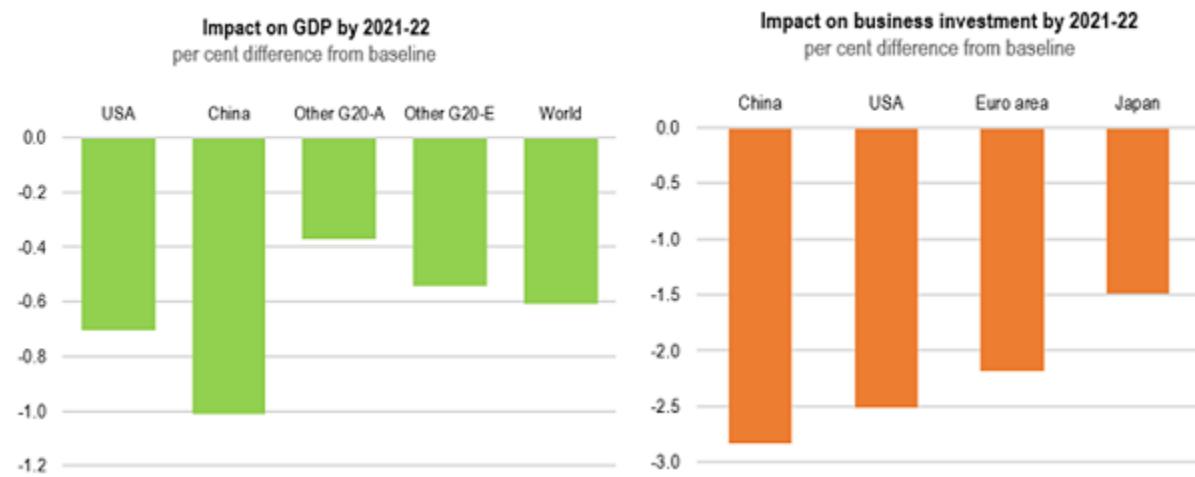
In July, the IMF again revised down its forecast for global growth by 0.1% for 2019 and 2020. The forecast for 2019, if realized, will be the slowest growth since the dark days of the Global Financial Crisis (GFC). The world economy was already slowing prior to 2017, then came the powerful last cycle fiscal stimulus (tax cuts) from the U.S. which boosted the global economy for two years. As the effect of this stimulus wears off, the world economy reverses. The downward trajectory is hastened by the uncertainty and disruptions brought on by trade disputes among the major economies with

productivity and living standard improvements. A sustained rising uncertainty will have a long-term impact globally.

OECD high-frequency indicators show that uncertainty, due to trade policy, has reached new highs and global trade is exceptionally weak with trade volumes for both goods and services flattened at the end of 2018 and now in decline.



OECD also projects the impact on GDP and loss in business investments from their prior baseline over 2- to 3-years of trade disputes. It is not surprising that the two biggest losers are the U.S. and China, but the fallout will impact the rest of the world economy.



### Lower for Longer, Much Longer

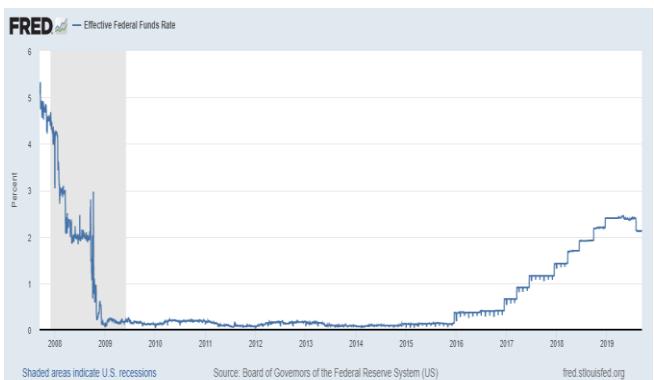
Since Fed Chair Powell's pivot the first quarter this year and his now famous and/or confusing mid-cycle adjustment of 25bp drop in interest rate each in July and September, global central banks have continued to ease. There are two explicit reasons for monetary authorities to begin lowering interest rates: (1) global growth is slowing and lowering rates is expected to push out recession risks and (2) to lessen the impact from trade disputes, the disruption of global supply chains and geopolitical risks.

Global growth has been slowing for many quarters, and the rate of slowing has been accentuated by trade frictions/tariffs. With the two largest global economies fighting, the rippling effect is significant, not to mention settled issues that could flare up quickly between the U.S. and Mexico/Canada (NAFTA II or USMCA), Japan (auto tariff still on the table), and Europe (German autos, French wine vs. digital tax, and Boeing vs Airbus, etc.), and also the never ending and constantly changing Brexit resolution. The persistent America First, self-imposed instability adds significant uncertainty to an already slowing globe.



money always seeks a higher return. This offers a temporary export (i.e. manufacturing and domestic labor and industry) advantage, after currency adjustment. President Trump has been very vocal about the U.S. dollar strength and tweets vigorously in an attempt to influence Chair Powell to cut rates aggressively, which would make U.S. goods more competitive.

## Chasing the Finicky R Star



rate. After the December 2018 25bp hike, the Fed took a pause and, in the July meeting, reversed course and initiated a 25bp rate cut for the first time since the Financial Crisis.

In conjunction with the “lift off” from its zero interest rate policy (ZIRP), the Fed, in June 2017, laid out a process to normalize its balance sheet<sup>1</sup> which significantly expanded due to the Large Scale Asset Purchase program referred to as Quantitative Easing or QE, and in October 2017<sup>2</sup>, the Fed began to

The one unstated, yet obvious, factor is competitive currency valuation when central bank policy turns more dovish. One transmission mechanism from interest rate movement is the country’s relative currency position. Although monetary policy decisions are domestic or inward focused, the ramifications are also external. By lowering interest rates, a country’s assets, on a relative basis, become less attractive since global

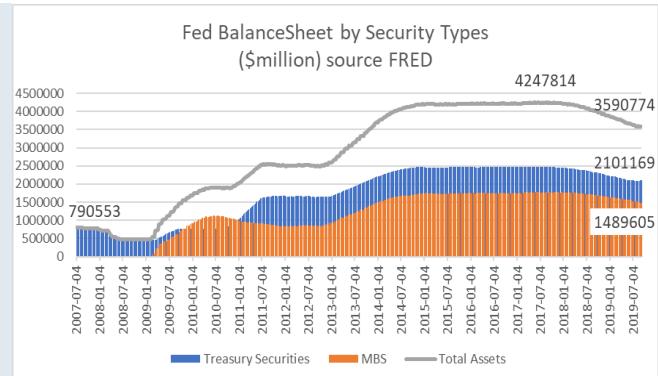
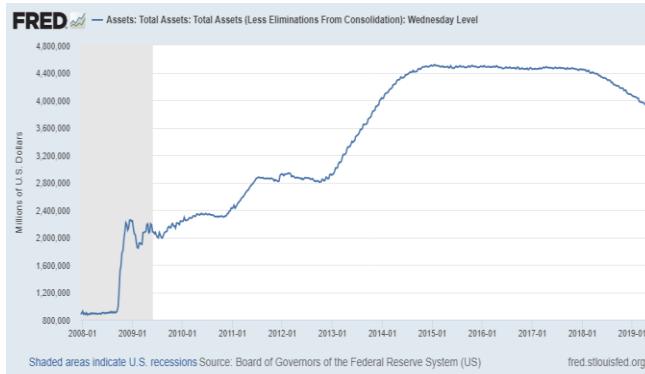
The Federal Reserve (Fed) is the most influential central bank in the world due to the U.S. Reserve currency status and the U.S. being the single biggest economy with unparalleled military might. For some time now, the Fed Chair is considered the chairman to the world central banks and Fed actions have rippling effects globally. Since December 2015, the Fed has hiked rates in 25bp increments as part of its rate “normalization” process of getting the rates back to the  $r^*$  neutral rate.

<sup>1</sup> <https://www.federalreserve.gov/newsevents/pressreleases/monetary20170614c.htm>

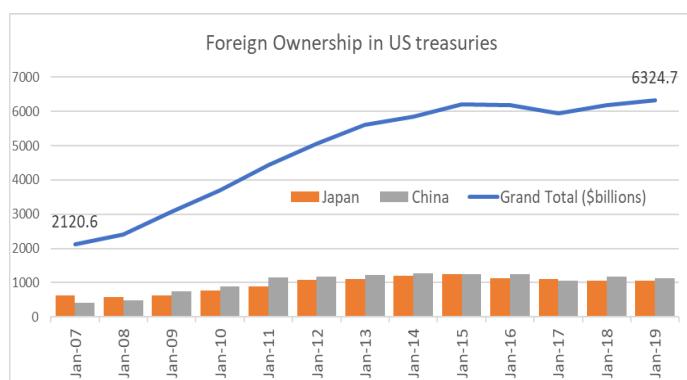
<sup>2</sup> <https://www.federalreserve.gov/monetarypolicy/files/monetary20170920a1.pdf>

normalize its balance sheet. In the Federal Open Market Committee (FOMC) March 20, 2019, Press Release<sup>3</sup> regarding Balance Sheet Normalization Principles and Plans, it stated the FOMC:

- (1) intends to conclude the reduction of its aggregate securities holdings in the System Open Market Account (SOMA) at the end of September 2019 and
- (2) intends to continue to allow its holdings of agency debt and agency mortgage-backed securities (MBS) to decline, consistent with the aim of holding primarily Treasury securities in the longer run.



During the July FOMC meeting, the press release stated that the balance sheet normalization process will end two months earlier than previously indicated. Although normalization has ended, mortgage-backed securities will continue to shrink while continuing reinvestment in U.S. treasury securities. As such, over time, we expect the balance sheet to expand again even without any new QE.



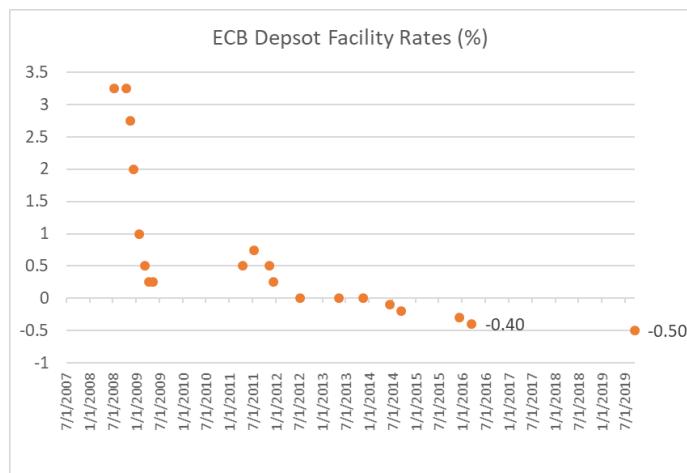
One of the Fed's responsibilities is to meet demand for cash in the economy. The rising demand for currency due to greater economic activity (i.e. a growing economy) since the Financial Crisis has created a need for a larger balance sheet. Also, Dodd-Frank's requirement for banks to increase capital and liquidity forces banks to hold more U.S. treasuries. Globally, since the Global Financial Crisis, there has been an increasing demand to hold safe assets and the

amount has increased 3-fold since January 2007, according to the U.S. Treasury. Further, the aging global demographic is clamoring for safe fixed income assets which drives an increasing appetite for U.S. government securities. All these factors place persistent pressure on interest rates to remain lower for longer periods and create a permanently expended Fed balance sheet.

<sup>3</sup> <https://www.federalreserve.gov/newsevents/pressreleases/monetary20190320c.htm>

## What Does It Take?

On May 2, 2013, Chairman Ben Bernanke first publicly mentioned the thought of gradually reducing or “tapering” the Federal Reserve’s monetary expansion. This rolled the markets over the following four months, now referred to as the “taper tantrums”. During the December 18, 2013, FOMC meeting, the Committee decided to begin normalizing its balance sheet by reducing the monthly reinvestments in mortgage and treasury securities. In January 2014, Chairman Bernanke’s last meeting, the reinvestment in maturing securities continued to reduce as the normalization process carried on. When Chair Yellen passed the chairmanship to Jay Powell, she raised interest rates (after a January 2018 pause) one more time to demonstrate a gradual and moderate approach to normalizing interest rates and the balance sheet, subject to incoming data. These are examples of how a departing central bank chair handed over the baton to the incoming chair that allowed the newly appointed chair the optionality to continue the existing policy or to change course.



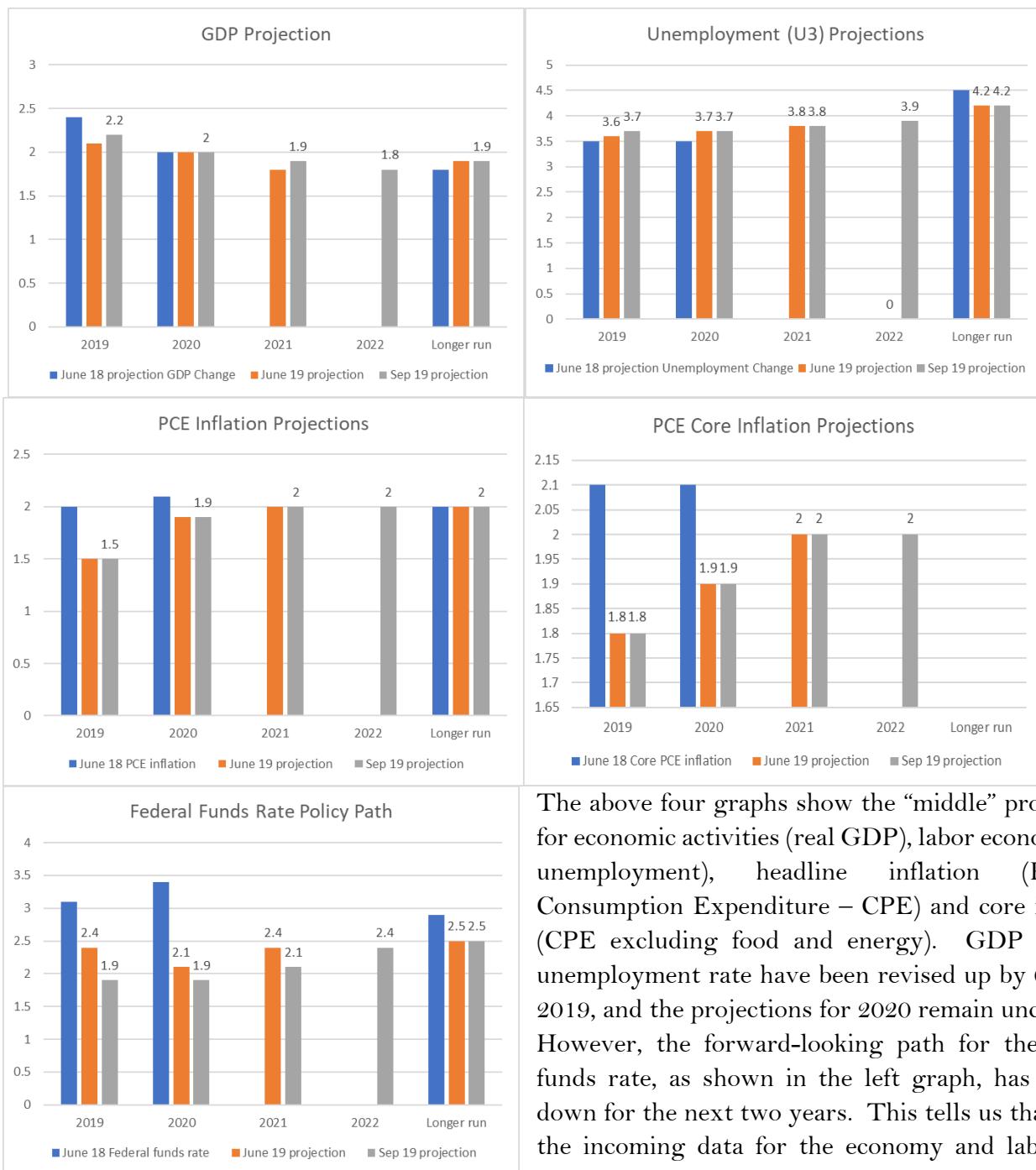
Thus, it is not at all a surprise when the outgoing ECB President Mario Draghi announced in his final press conference that the ECB is lowering rates further into negative territory and beginning a new round of quantitative easing (without an end date). This allowed the incoming President, Christine Lagarde, to not have to make tough decisions and reserve the optionality of reversing course or continuing the new monetary policy. With fiscal policy still not onstage, monetary action remains the only actor and has to continue to play all the parts to support a deteriorating economy and a weak inflation. We believe that serious fiscal spending will not be available until the bottom nearly falls out in Europe and Christine Lagarde will continue her predecessor’s “whatever it takes” policy.

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## Adjusting to the New (retreating) Neutral Rate

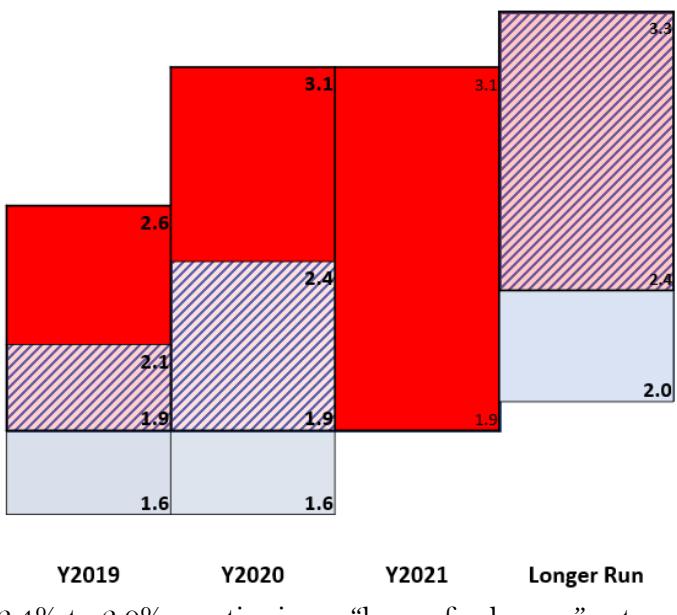
For the longest time, the FOMC press releases have affirmed that its decisions are data dependent. The relevant data often cited by Fed Chairs are employment (unemployment rate of U3, under-employment rate of U6, wage growth, and JOLTS data), inflation (although primarily core PCE, PCE, CPI, core CPI, PPI, and inflation expectation are also relevant) and the economy in general (GDP, PMI, and regional reserve bank data). The idea is to assess incoming or current data in order to calibrate, meet and maintain the natural rate of unemployment ( $u^*$ ) and the inflation symmetric objective of 2% ( $\pi^*$ ). When and if one or both natural rates are not met, the FOMC would decide if policy action is needed to calibrate the short-term interest rate to reach or exceed the neutral real rate of interest ( $r^*$ ). Beginning in the April 29, 2015, FOMC meeting, the conditions from international developments were added to information being considered when making monetary policy.

As part of the September meeting, FOMC released its quarterly economic projections of Federal Reserve Board members and Federal Reserve Bank presidents under their individual assessments of projected appropriate monetary policy.



The above four graphs show the “middle” projections for economic activities (real GDP), labor economy (U3 unemployment), headline inflation (Personal Consumption Expenditure – CPE) and core inflation (CPE excluding food and energy). GDP and the unemployment rate have been revised up by 0.1% for 2019, and the projections for 2020 remain unchanged. However, the forward-looking path for the federal funds rate, as shown in the left graph, has trended down for the next two years. This tells us that, while the incoming data for the economy and labor have remained constructive and inflation remains steady,

albeit below the 2% objective, the rate policy path suggests an economy that needs support.



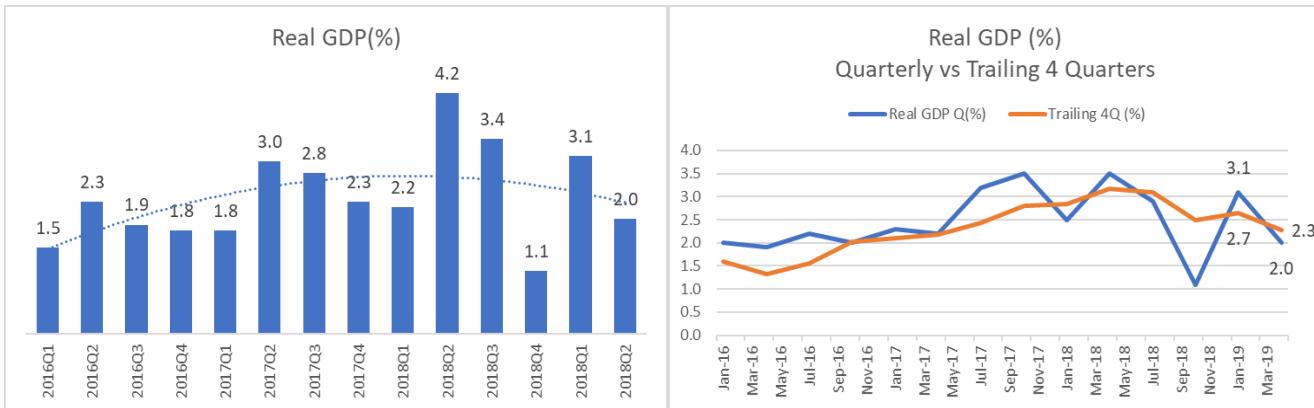
The left graph shows the entire range of rate expectations by all FOMC members. We compare the rate ranges for 2019, 2020, 2021 and longer run from the June to the September 2019 FOMC meeting. The light grey portion represents the lower ranges for September projections and the bright red portion represents the upper range for the June projections. The red striped areas represent the overlap from the two meetings. The September rates ranged from the low of 1.6% to the high of 2.1%, as compared to the low of 1.9% to the high of 2.6% in June. There is also a shift downward for the 2020 range from 1.9%-3.1% to 1.6%-2.4%. For the “longer run”, the lower bound has dropped from 2.4% to 2.0%, continuing a “lower for longer” rate path expectation.

10/11/2019		FOMC Meeting Date				
Rates		10/30/2019	12/11/2019	1/29/2020	3/18/2020	4/29/2020
50-75						0.10%
75-100					0.80%	1.50%
100-125				5.70%	9.20%	11.40%
125-150			12.50%	32.50%	34.70%	35.50%
150-175		75.40%	58.90%	49.10%	44.20%	41.40%
175-200		24.60%	16.60%	12.80%	11.10%	10.10%
200-225		0.00%	0.00%	0.00%	0.00%	0.00%
225-250		Before 10-30-2019 Rate Hike				

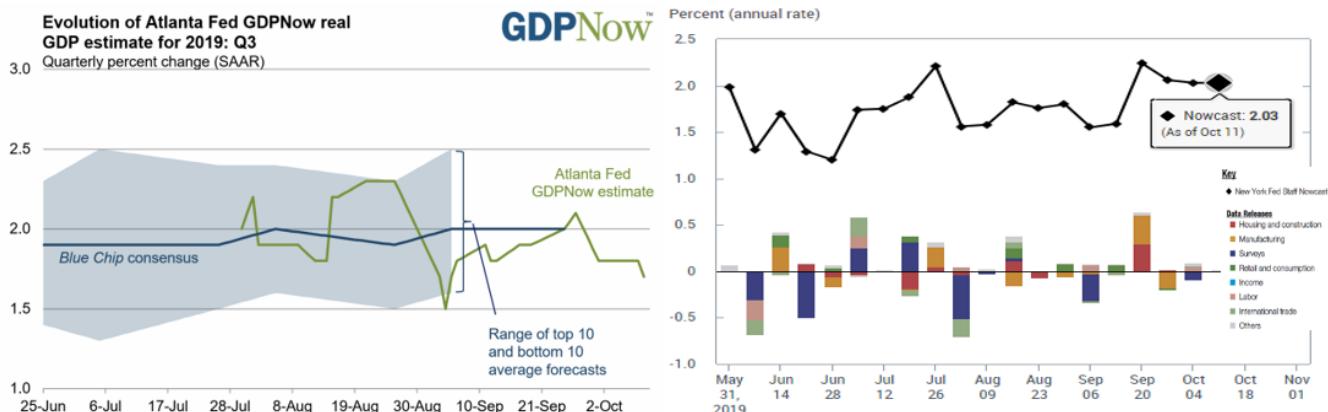
8/1/2019		FOMC Meeting Date					
Rates		9/18/2019	10/30/2019	12/11/2019	1/29/2020	3/18/2020	4/29/2020
0-75							0.10%
75-100						0.40%	1.00%
100-125					1.70%	4.20%	6.20%
125-150				6.60%	12.90%	17.60%	20.10%
150-175		0.00%	22.20%	30.50%	34.00%	34.70%	34.30%
175-200		51.90%	50.30%	43.60%	37.10%	32.10%	28.90%
200-225		48.10%	27.50%	19.40%	14.20%	11.10%	9.40%
225-250		Before 9-18-2019 Rate Hike					

To gauge the real time market expectation of the FOMC rate path, the two above charts (source: the CME group) show the August 1<sup>st</sup> probabilities (prior to the Sep 18 meeting) as compared to the October 11<sup>th</sup> (prior to the Oct 31 meeting) probabilities. The market has priced in a 75.4% probability of another 25bp cut for the October FOMC meeting. When compared to August 1<sup>st</sup> probabilities, the market expectation has certainly increased for more cuts to come. FOMC pays significant attention to market expectations and it is an indicator of how well the FOMC is operating its forward guidance. What the FOMC tries to avoid is the market misinterpreting its position and being surprised by its policy decisions.

## The Economy – still expanding, but slowly



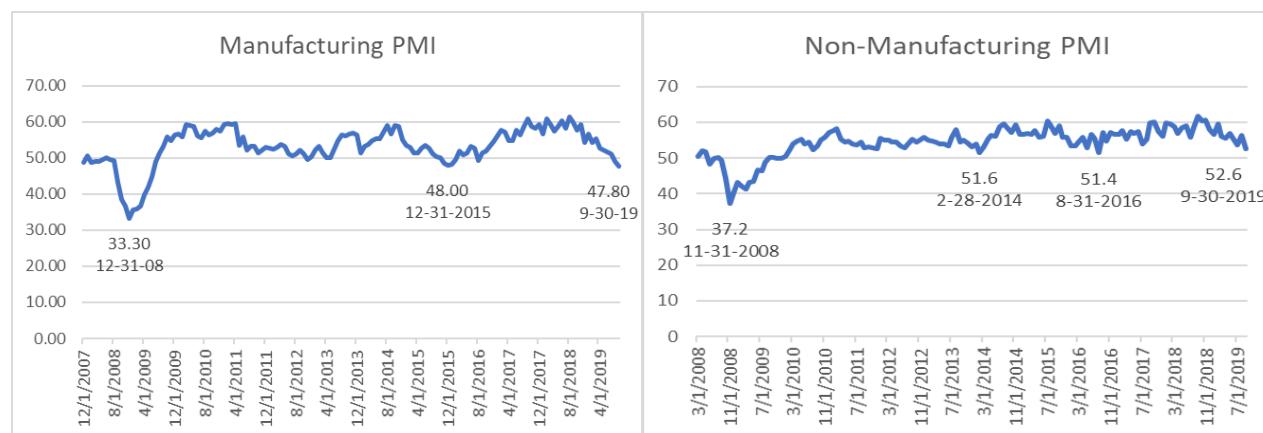
The final real GDP estimate came in at 2% for the second quarter as compared to the 4.2% Q2 a year ago. On a trailing 4 quarter basis, the economy is growing at a 2.3% rate which is down from the prior month's 2.7% rate. Since the first quarter 2015 through the second quarter this year (totaling 18 quarters), the economy was growing at an average rate of 2.3%. Interestingly, if we take an average of the real GDP growth rate since the first quarter 2010 (totaling 38 quarters), it is also at 2.3%.



According to the Atlanta Fed GDPNow<sup>4</sup> "nowcast" forecasting model, as of October 9<sup>th</sup>, the third quarter is expected to come in at 1.7%. Of course, this will continue to change as more incoming data is incorporated. The Blue Chip economist consensus is now at 2%. The New York Fed Nowcast was projecting the third quarter at 2.03% on October 11<sup>th</sup>. These different forecasts are due to different datasets used in their proprietary models and their weighting of importance within each model. Either way, the economy appears to be expanding at a slower pace. During the first half of this year, the economy was growing at a rate of 2.55%. If the remaining two quarters come in at 2% each, 2019 GDP would come in at 2.28%, which is right at the last 18- and 38-month average of 2.3%.

<sup>4</sup> <https://www.frbatlanta.org/cqer/research/gdpnow>

According to the Institute for Supply Management (ISM) manufacturing index<sup>5</sup> of the total 18 manufacturing industries, three reported growth in September: Miscellaneous Manufacturing; Food, Beverage & Tobacco Products; and Chemical Products. The remaining 15 industries reporting contraction — in the following order — are: Apparel, Leather & Allied Products; Printing & Related Support Activities; Wood Products; Electrical Equipment, Appliances & Components; Textile Mills; Paper Products; Fabricated Metal Products; Plastics & Rubber Products; Petroleum & Coal Products; Primary Metals; Transportation Equipment; Nonmetallic Mineral Products; Machinery; Furniture & Related Products; and Computer & Electronic Products. At 47.8%, the manufacturing sector is in contraction, but the goods sector represents only about 30% of the economy.



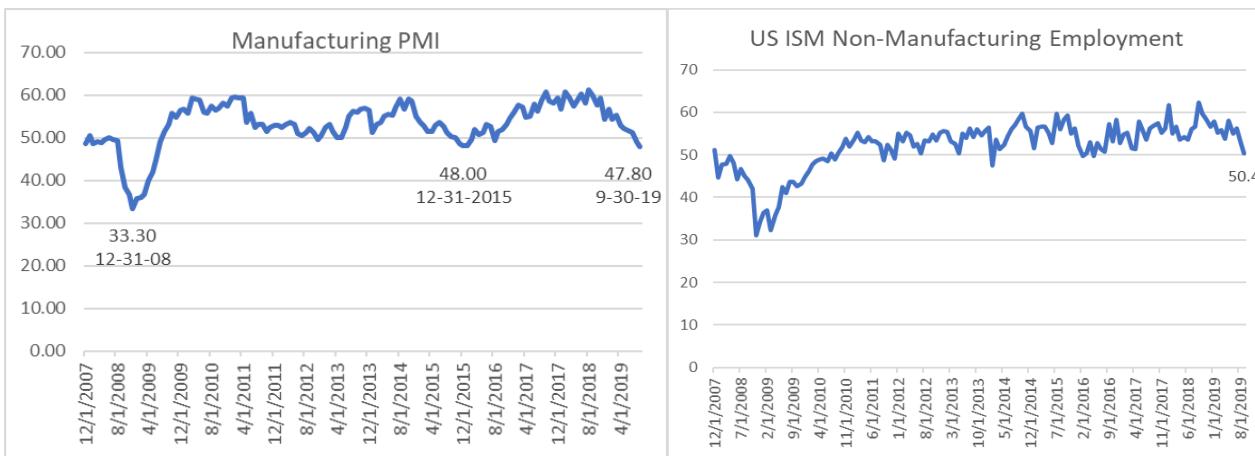
The ISM Non-Manufacturing (or services) Index<sup>6</sup> reported in September that 13 industries are reporting growth — listed in order: Utilities; Retail Trade; Construction; Mining; Agriculture, Forestry, Fishing & Hunting; Accommodation & Food Services; Public Administration; Management of Companies & Support Services; Finance & Insurance; Transportation & Warehousing; Information; Health Care & Social Assistance; and Professional, Scientific & Technical Services. The four industries reporting a decrease are: Educational Services; Other Services; Real Estate, Rental & Leasing; and Wholesale Trade. Although the reading is 52.6% and remains in expansion, the direction is heading in a slowing trend.

We need to keep a close watch on the service sector which is a key indicator for consumer spending. We expect the real GDP to be between 2.0% to 2.2% for 2019 and will likely be below this range in 2020.

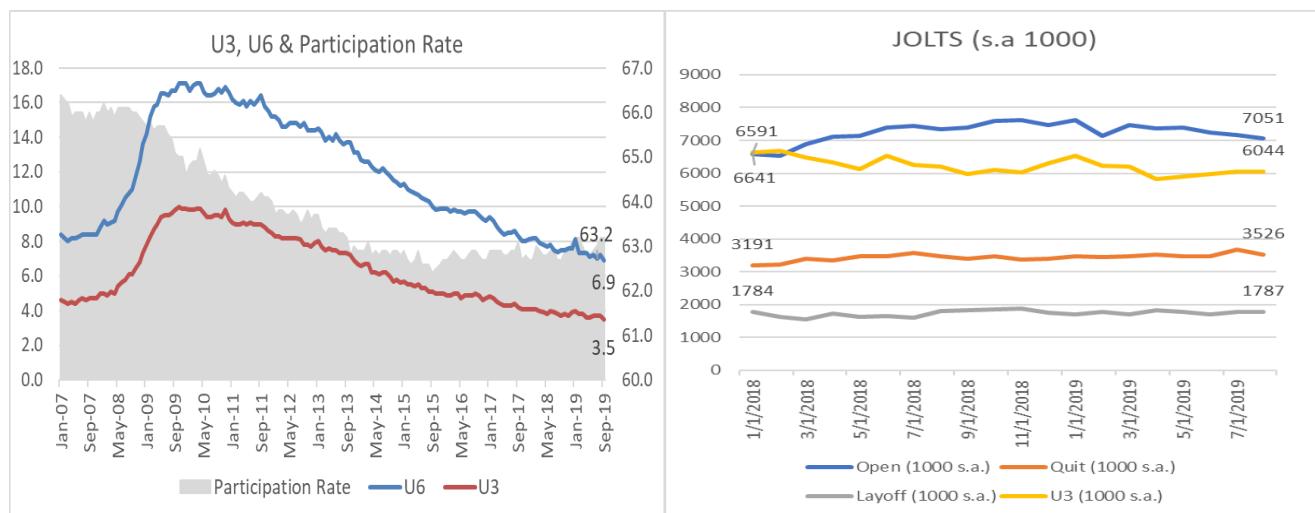
<sup>5</sup> <https://www.instituteofsupplymanagement.org/ismreport/mfgrob.cfm?SSO=1>

<sup>6</sup> <https://www.instituteofsupplymanagement.org/ISMReport/NonMfgROB.cfm?SSO=1>

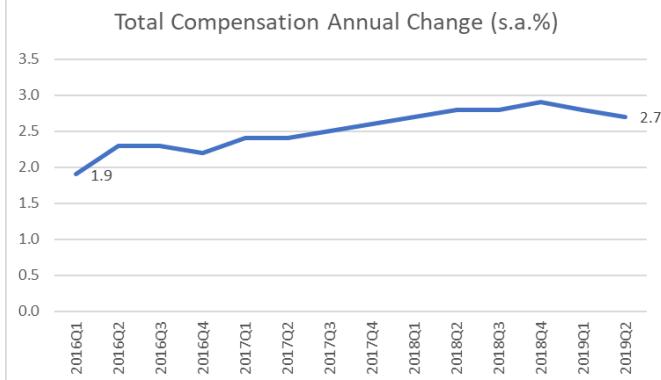
## Employment – still looking marvelous



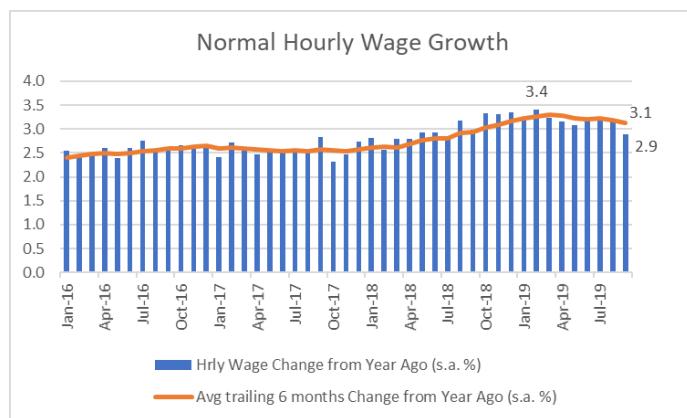
The September ISM data shows that manufacturing employment continues to drift down and is in contraction territory (below 50) while the ISM non-manufacturing (service) employment is close to contraction at 50.4.



At the same time, the headline unemployment U3 rate was 3.5% in September. The last time we saw this rate was in December 1969, 50-years ago. The wider unemployment U6 rate, which includes underemployed and marginally attached, has dripped down to 6.9%. The last time we saw this rate was in December 2000. At the same time, the labor participation rate is at 63.2%. This represents the percentage of Americans 16 years of age and older who are either employed or actively looking for work. Although this rate has moved up a bit since the low reached in September 2015 at 62.4%, we are barely better today at 63.2%. On the other hand, the latest JOLTS report shows that there are over 7.051 million job



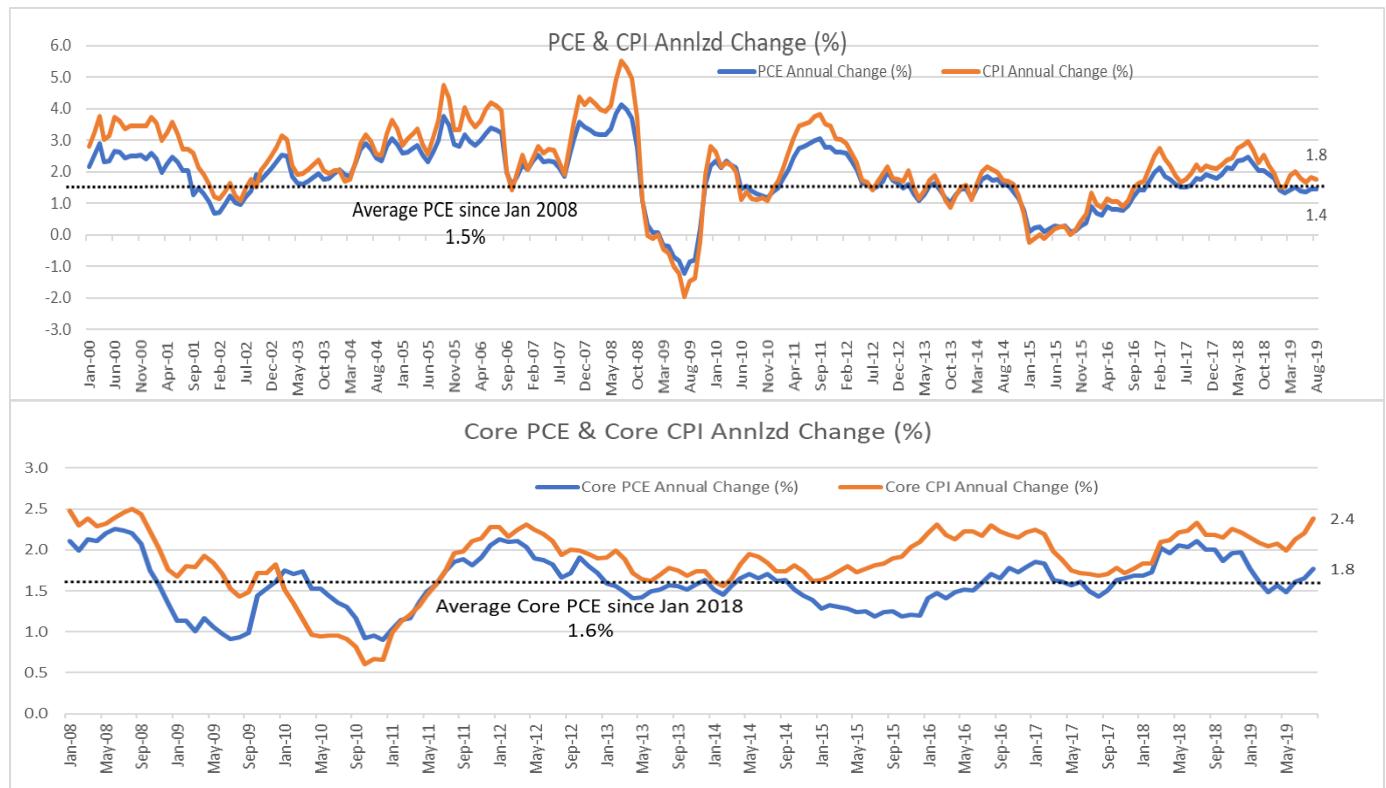
openings and the number of unemployed (according to U3) is 6.044 million. This lopsided relationship continues to show that there are more jobs than unemployed. This is a strong sign for the economy and continues to squeeze out any remaining labor slack. Since 2018, the quit (voluntary) rate has continued to escalate, suggesting that workers are more comfortable about a better paying job can be found in this 11<sup>th</sup> year of an economic expansion.



September hourly (non-inflation adjusted) wage growth on a 12-month annualized basis is 2.9%, down from prior three months at 3.2%. Since monthly annualized data can be noisy, the average 6-month trailing annualized growth is 3.1% which has been fairly stable over the past 6-months. The second quarter Employment Cost Index, representing “total compensation” by measuring the change in the price of labor and including wages, salaries and an extensive list of benefits, is at 2.7%. This has trended down a bit

since 2018 4<sup>th</sup> quarter. Even at 3.5%, the U3 unemployment rate today, we still have not observed significant wage pressure on an aggregate basis. This has been evidenced in the flattening of the Phillips Curve.

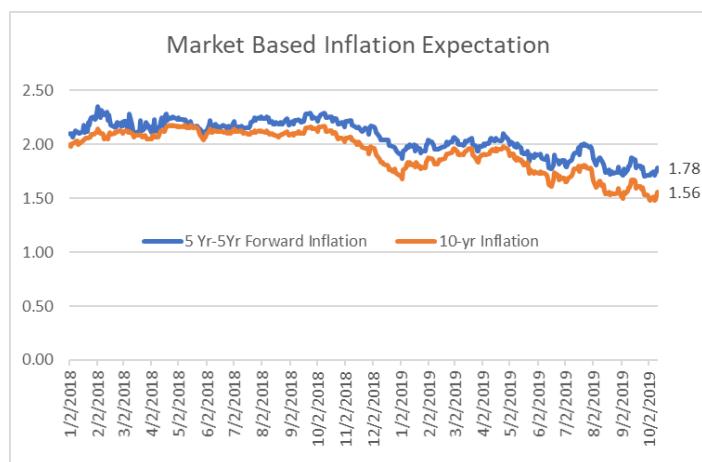
## Inflation In Waiting



Since the beginning of the Great Recession and Global Financial Crisis, the average (140 months since January 2008) Personal Consumption Expenditure (PCE) is 1.5%. This is 50bp below the 2% inflation expectation objective established by the Fed. As of August 2018, the CPI is at an annualized 1.8% change while PCE is at 1.4%. When the “volatile food and energy” prices are removed, the core PCE (the preferred measure for inflation for the Fed) is 1.8% in August and core CPI is 2.4%. The average core PCE since January 2008 is at 1.6%.

Even though the Fed prefers the core PCE as the primary measure of inflation, most consumers (and cost of living adjustments) are sensitive to the CPI. In this case, the core CPI is moving in an upward trajectory and the market is not pricing in the probability of a higher inflation rate forward.

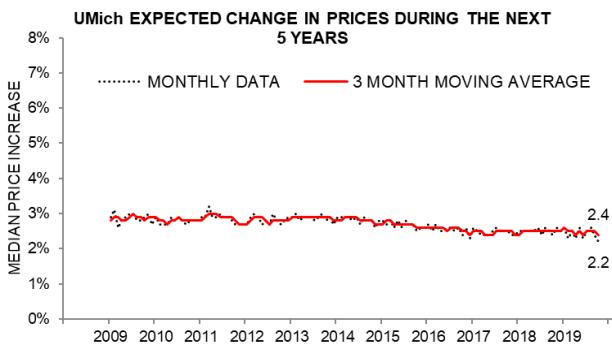
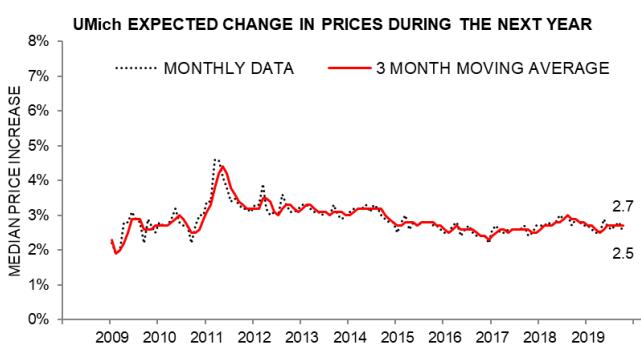
These are all backward looking data, and inflation expectation is about looking forward, perhaps anchoring in the past. There are two approaches.



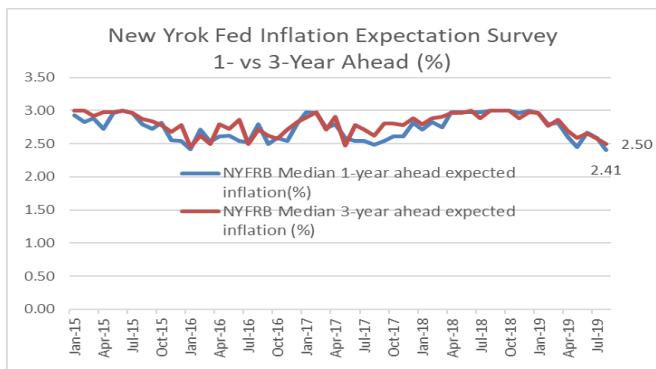
The first approach is a market-based or investors-based measure. The left chart compares two expectations. The blue line represents the 5-Year, 5-Year Forward Inflation Expectation Rate. This is a measure of expected inflation (on average) over the five-year period that begins five years from today. Simply put, this projects the investor forward 5 years and asks what the investor expects inflation to be 5 years thereafter. Currently, this is at 1.78%.

The orange line represents the 10-Year Breakeven Inflation Rate. This represents a measure of expected inflation derived from 10-Year Treasury Constant Maturity Securities and 10-Year Treasury Inflation-Indexed Constant Maturity Securities. This means what investors want to be compensated for taking a 10-year inflation risk. Currently, this is at 1.56%. Simply put, the market is expecting inflation or CPI will be at 1.56% 10-years from now. Both of these market-based measures are below the current core CPI of 2.4% and around or slightly below the current core PCE of 1.8%.

The second approach is survey-based. The University of Michigan surveys on the next page show that the 3-month moving average for inflation expectation for the next year is at 2.7% while the 3-month moving average for the inflation expectation for the next 5 years is at 2.4%. This means that the longer term expectation is dropping.



The New York Federal Reserve also conducts an inflation expectation survey for 1-year forward and 3-years forward. The August findings were 2.41% and 2.5%, respectively. Although there is some variation for next year's inflation expectation between the Michigan and the NY Fed findings, the longer terms of 3 to 5 years are very comparable. These are expectations that include the food and energy prices.



expectations are greater than the market-based measures. Moreover, the current core CPI is more closely aligned with the survey-based data. This means that the market could be mispricing inflation in the future. With the uncertainty of possibly more tariffs, inflation pressure (albeit a one-time adjustment) may come from the supply side. Thus far it appears that most producers, wholesalers and retailers have not passed on the full impact of tariffs, but this may not hold in the future if more tariffs are imposed from food to clothing items under the Section 301 Tariff actions<sup>7</sup>.

### Risk Management: Mid-Cycle Adjustment or a New Rate Cutting Cycle

We expect a 25bp rate cut in the October FOMC meeting. This would result in a total of 75bp cut since the Chair Powell pivot earlier this year. During the first 25bp rate reduction earlier this year, Chair Powell gave the mid-cycle adjustment explanation. This means that the then current interest rate appeared to be higher than the  $r^*$  neutral rate and an adjustment downward was appropriate to reflect the FOMC's expected forward economic environment view. It is without dispute that  $r^*$  is only a concept and there is no mathematical exactness as to where it is at any time. An  $r^*$  could be right for a period of time and as the conditions of the economy (and for that matter the global economy) shift,  $r^*$  should also shift and adjust accordingly. Some observers argue that the interest rate hikes in 2018 went too far and passed the  $r^*$ . This assumes we know what the  $r^*$  should be at that time. An alternative argument would be that the rate hikes, as a part of rate normalization efforts, were warranted through

<sup>7</sup> <https://www.regulations.gov/document?D=USTR-2019-0004-0001>

2018 when the economy was expanding nicely. Since then, the factors became less supportive, and now, the  $r^*$  moved and rate policy needs to be calibrated backwards and thus the current FOMC action is responsive. This would not mean that the FOMC went too fast or too aggressive in its normalization effort. In fact, there is a fraction of the FOMC that believes there was no need to lower rates this year. As the conditions on the ground change or new and incoming risks rise, the FOMC should be responsive and adjust to meet the new  $r^*$ . It is also true that no one believed that the first 25bp rate cut was a “one and done” FOMC action even though Chair Powell was noncommittal on further rate adjustments in his post-meeting question and answer session at the time.

The “forward guidance” or FOMC’s transparent disclosure of its monetary policy intent is now “to sustain the economic expansion” in a world of crosscurrents which present risks to FOMC’s outlook. Weak global growth, particularly in China and Europe, the possibility of a disruptive Brexit, and uncertainty around unresolved trade negotiations are the main contributors to increased uncertainties and muted inflation. While the FOMC baseline outlook remains favorable, the question is whether these uncertainties will continue to weigh on that outlook. Thus, the FOMC deemed additional monetary policy accommodation is appropriate to sustain the expansion with a strong labor market and inflation near its 2% objective.

Frankly, everyone knows that the Fed is “pushing on a string”. A drop of another 25bp or 75bp may be material to the investment industry and the psyche of the investing public, but it is probably not going to impact the average worker. The stock market shall remain buoyant with risk taking continuing to be encouraged. Japan and Europe have clearly shown that monetary policy has its limits and that lower lows in (and even negative) interest rates and expanding balance sheets by buying up more assets (both government and private) have not met their price stability targets. Chair Powell has repeatedly listed the increasing fragility of global growth, and the negative fallout from trade disputes are adding more uncertainty to our economic expansion. However, reducing interest rates is not likely going to turn the global economy around, prevent a slowdown in the U.S. economy or neutralize trade and tariff effects. These intended effects go beyond the boundaries and reach of monetary policies. Moreover, the current transmission mechanisms from monetary policy need reviewed and changed in order to possibly make more direct (intended) impacts.

### **Brexit - Stay Calm and Carry On?**

It is almost impossible to keep up with the twists and turns of Britain exiting the European Union (EU). Prime Minister Boris Johnson has said repeatedly that the U.K. is leaving the EU on October 31<sup>st</sup> with or without (hard exit) a deal. However, should he fail to make a Brexit deal by October 19<sup>th</sup>, a law passed by the Members of Parliament requires Johnson to ask for an extension. So, is the 31<sup>st</sup> really the last day? Will Johnson do a hard exit? Therefore, instead of spending significant time to conduct scenario planning and assigning odds of the likely path forward and the probable fallout and ramifications for Britain and the EU, a summary of the “backstop” challenge could shed light on the difficulties and complexity of Brexit.

On June 23, 2016, the electorate of the United Kingdom (the U.K. is made up of England, Wales, Scotland, and Northern Ireland) voted in a referendum with 51.9% electing to withdraw its membership from the European Union (EU), a 28-country trading bloc. This is commonly referred to as Brexit. The U.K. has been a member of the EU predecessor, European Economic Community or the "Common Market", since 1973. Although agreeing to be a part of the Economic and Monetary Union (EMU), the U.K. elected to maintain its own currency and not be a part of the new European Currency Unit - the euro - which became the common currency for 19 countries of the eurozone. As declared in the March 25, 1957, Treaty of Rome, the EMU acts as a trading bloc by establishing a common customs tariff and a common commercial policy towards nonmember countries while offering the four freedoms of movement of people, capital, goods, and services among its member countries.

After 30-years of conflict that included bombings and shootings, the Good Friday agreement was signed in 1998. A new government was formed through power sharing between Unionists (Protestants loyal to the English Crown) and Nationalists (Catholics interested in independence and joining the Republic of Ireland). Since then, there remained political disagreement and conflicts among the parties. Although elections were held on March 2, 2017, the two parties, the Democratic Unionist Party led by Arlene Foster and Sinn Fein, remained in dispute to form a new government. Now, Brexit is adding to the mix which could put even more political, economic and social strain on a fluid situation.

Republic of Ireland is a member of the EU, and Northern Ireland, which currently shares an invisible border, is a part of the U.K. and is committed to extricating itself from the EU on October 31, 2019. This raises the question of the necessity of an Irish customs border with associated checks and controls which would create significant economic and practical challenges. The U.K. has pledged to avoid such a border but has offered little alternatives. Hence, during the December 2017 European Council, a conditional agreement was reached by then U.K. Prime Minister May. Both parties recognized the cooperation between the Republic of Ireland and Northern Ireland as a central part of the Good Friday agreement and as being essential for achieving reconciliation and the normalization of relationships on the island of Ireland. Until a permanent solution can be reached, the EU government insisted on a "backstop" that Northern Ireland shall remain in the EU customs union and in "full regulatory alignment" with the single market. This resolves the need for a hard border, essentially eliminating the need for checks and controls at the Irish land border. Prime Minister Johnson opposes the backstop as he deems it antidemocratic and thinks it could trap the U.K. in the EU's customs territory.

At the December 2017 European Council meeting, the U.K. and EU adopted a joint report in which the U.K. pledged to avoid a hard border with Northern Ireland, but as the Brexit date approaches, the U.K.'s desire to prevent a hard border remains unresolved. On September 3rd, Prime Minister Boris Johnson lost his majority in the House of Commons and placed the Brexit date and the length of his premiership into greater uncertainty. Stay calm and carry on? I think carry on is for sure, but staying calm would be difficult for the market. Here is a [link](#)<sup>8</sup> to newspaper columnist Gary Bainbridge's poignant satirical explanation.

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<sup>8</sup> <https://www.thepoke.co.uk/2018/11/16/you-wont-find-a-better-metaphor-for-brexit-than-this-one-involving-cake/>

## The Middle Kingdom and the Parallel Universe

In 2015, the Chinese Premier Li Keqiang introduced the “Made in China 2025” initiative (i.e. Fourth Industrial Revolution, Chinese Style) which is the new industrial policy to move China from the factory floor of the world to dominance in global high-tech manufacturing. This also means that China recognized the necessity to become independent from foreign technology suppliers. To actualize this audacious mandate, China would unleash government subsidies, leverage state-owned enterprises, and acquire intellectual property. The U.S., on the other hand, views the success of the initiative would rely on discriminatory treatment of foreign investment, forced technology transfers, intellectual property theft, and cyber espionage.

There are 5 main U.S. grievances and the Trump Administration is using tariffs<sup>9</sup> and other means to force changes now:

1. Huge trade deficit as a result of unfair trade practices
2. Theft of intellectual property
3. Forced technology transfer
4. Practicing "state capitalism" through state sponsored or subsidized enterprises
5. Currency manipulation

To overcome these grievances would require China to change those laws and policies that produce unreasonable or discriminatory practices or actions that harm American intellectual property rights, innovation, or technology development. The U.S. is strong-arming China through the application of escalating tariffs to relinquish its economic model - Chinese industrial policy and the government subsidies – and significantly scale down Made in China 2025.

China will not commit to the demands of the U.S. to move from a command and control industrial policy to a market-oriented economy. The demands and the required actions to meet them would be an infringement on China's sovereignty and undercut the authority of the Chinese state and the power of the Communist Party.

The U.S. has also used other means to weaken China and to curtail its economic growth and influence globally. Huawei Technologies, for example, has become a target of the U.S. on national security grounds. More recently, eight Chinese technology companies have been blacklisted on human rights grounds. These companies are deemed to be in violation against Muslim minorities in the western province of Xinjiang.

China's ambition is clear, to be a global power, financially and militarily. It does not see itself replacing the U.S. but wants to have a respected seat at the world table. China wants to do business and understands that, in order to progress, it must conform to global standards of behavior in trade and diplomacy. On the trade front, China has demonstrated a willingness to make concessions and purchase American goods, such as commodities, corn, soybeans, sorghum, natural gas, oil, coal, chemicals,

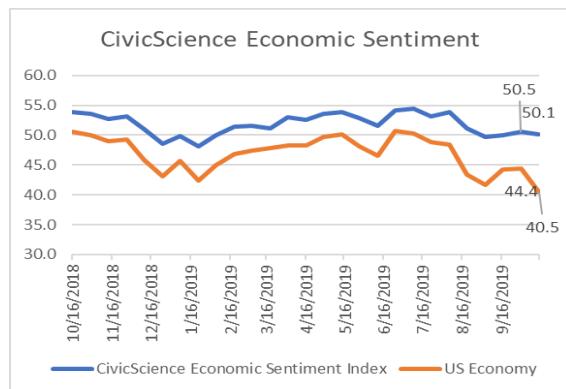
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<sup>9</sup> <https://www.china-briefing.com/news/the-us-china-trade-war-a-timeline/>

semiconductors, airplanes, etc. However, China has not demonstrated a willingness to make wholesale changes in domestic policy. Rather, it prefers to negotiate its way to a gradual but definitive road to openness and transparency by starting with banking, financial services, and currency. The fact that the Chinese currency has been a component of the currency basket is a recognition (and encouragement) of the changes China has and will need to make and the acknowledgement of the size, scope and reach of its economic power.

We expect this fundamental difference will fracture the world going forward as we permanently exit the U.S. centric unipolar world. As the U.S.'s influence shrinks (from America First policies, deglobalization efforts, disengaging from multi-lateral organizations that the U.S. founded and enforced, retreating from the leadership role that the U.S. has crafted and enjoyed with the combination of soft, hard and commercial power, looking at the world through the lens of scarcity rather than abundance, and other systemic and fundamental shifts of domestic and foreign policies) and allies are forced to find new allegiances, protection and cooperation, the unintended consequence is to speed up the independence and rise of China – exactly the direction in which the U.S. does not want to venture. A parallel universe of technology and influence will develop. This adds friction and inefficiency to global trade and innovation, and, in many ways, we are less productive and less able to optimize the allocation of capital and assets. Yes, there will likely be a phase 1, 2 and 3 of more trade pacts between the U.S. and China. But even if the U.S. is willing to back down from its demands or China is willing to concede on most of the central allegations, the mirror has cracked and a permanent seam is there between the two. The U.S. and China will not be reliable partners as trust has been broken.

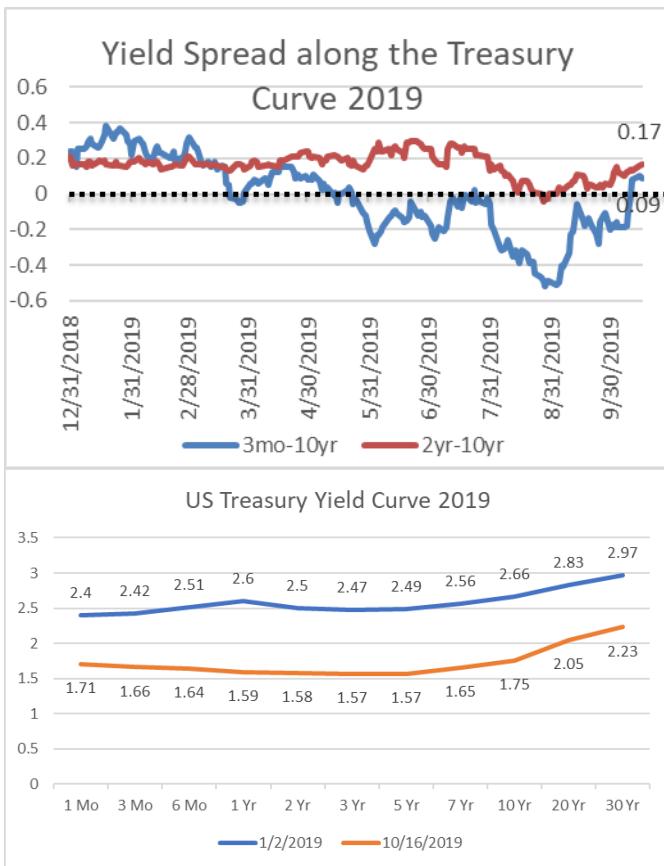
## It is all about how we feel – Sentiment



The largest component, or approximately 70%, of the U.S. economy is made up of consumer consumption. That's why unemployment and wages are important signs of how the general economy is doing. Even when we have a slowdown in manufacturing or even manufacturing jobs are on the decline, such factors are less significant than how consumers are doing. According to the Microsoft News – CivicScience Economic Sentiment Index<sup>10</sup>, the index was lowered in the first half of this month due to a drop in its Consumer Sentiment regarding the general

economy component. More exactly (the orange line), it has moved lower since the beginning of this summer. Although these retreating sentiments (which are forward looking) have not shown up in data yet, it may be a warning sign of consumers being concerned and may influence their consumption behavior. Certainly the sky is not falling here but we should all be on watch.

<sup>10</sup> <https://www.msn.com/en-us/money/news/confidence-in-us-economy-plummets-as-economic-sentiment-index-dips/ar-AAIMcc6>



Since March through this month, we have witnessed a treasury yield curve inversion where the 10-year US bond yield fell below the 3-month US treasury bill yield. Again in August, we witnessed a brief moment where the 10-year bond yield fell below the 2-year US Treasury bond yield causing that portion of the yield curve to invert. The 2-10 spread has been the indicator professional investors have relied on as an early warning sign of an impending economic recession (defined as back-to-back quarterly economic contraction) within 18 to 30 months.

The yields across the curve have dropped significantly since January and remain quite flat. This basically means that an investor does not get much of a yield compensation for taking on maturity risk. For example, the difference between a 2-year bond and a 10-year bond right now is only 17bp, and it is only 9bp between a 3-month bill and a 10-year bond yield.

Long-term yield has been falling for some time. There are many factors: demand for bonds is on a long term rise as the population ages; there is increased craving for “safe” assets globally as well; and 10-years of unconventional monetary policies globally have pushed investors and savers to accept more risks (e.g. duration) in seeking a higher yield. As more investors extend their duration risk by buying longer dated bonds in hopes of capturing higher returns, bond yield gets lower. At the same time, the FOMC has been on a rate normalization path since December 2015 and this has pushed the frontend of the yield curve higher. These two effects made the yield curve ever flatter and eventually inverse. So, the one thing we can't decipher is how much of the yield curve inversion is due to supply and demand forces and policy normalization on the one hand and how much the yield curve inversion is a sign of an impending recession.

At a 3.5% unemployment rate with a positive real wage growth, an accommodative monetary policy (supportive to borrowing and borrowers), and sentiment remaining positive on a whole, it is difficult to see a recession coming in the next twelve months. However, consumer sentiment is a fickle thing. It is difficult if not impossible to forecast what is that factor or that group of factors and events that would bring a rolling group of consumers to tighten their comforts about spending and investing or just pull back their economic activities. This would then lead to companies pulling back their capital expenditures and investments and begin to cut payroll and cause the next leg down in the economic sinkhole.

There is always a wall of worries. If it is not domestic, it is foreign, and if it is not politics, it is the environment. One thing that seems reasonable about sentiment is that the market and businesses in general would likely react negatively if one of the “socialist” leaning candidates begins to show strength in the final two-horse race to the White House in November 2020. In fact, many suggest that a Democratic presidential win will likely bring in a recession.

We remain positive for the next 6 to 8 months if the economy and the labor market remain supportive, consumer sentiment remains positive with no further major flare-ups occur in the trade war with China or Europe, and the world economy does not (and is not expected to) fall off the cliff. The risk is we have no idea what would be that last straw to break the consumer sentiment’s back.

Sincerely yours,  
**CHAO & COMPANY, LTD.**  
Philip Chao  
Principal & CIO

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