CHAO & COMPANY
FIDUCIA PERPETUA

July 15, 2019

- The ECB and the FOMC are both poised take action during their next meeting. The possible commencement of a new rate cutting cycle is giving a boost to the world equity market after a volatile May. Both central banks are citing prolonged trade disputes which may cause the already slowing global economy to take the next leg down. The central banks are again taking on the mantle of being the guardian to their economies.
- The Federal Reserve morphed from December's position of more rate hikes, to January through May of being patient and pausing rate hikes, to the June pivot of being open to rate cuts due to outlook uncertainty and the muted inflation. The market is betting 100% that there is a rate cut in the July FOMC meeting with more cuts to come throughout 2019 and 2020.
- After a 3.2% Q1 real GDP, Q2 is expected to be closer to 2%. This causes concern about our economy expansion. But the sugar high induced 3% to 4% quarterly GDP growth fanned by the 2019 tax cut is behind us. We are now coming down from those highs and settling back into the trend growth of close to 2%. This does not feel good, but this does not mean slowing; it is just normalizing.
- The labor economy continues to chug along, producing an average of 172,000 new jobs per month in 2019, even though it is down from a 2018 average of 223,000. We expect the U3 unemployment rate to continue to come down and approach a near 3% rate even if new job creations begin to descend somewhat further at this 10-year old expansion.
- Inflation, as measured by Core CPI and Atlanta Fed's Sticky CPI/Core CPI, is above the Fed 2% target while the PCE for May remains at 1.5%. Wages are continuing to grind higher as more labor slack is absorbed, and sooner or later, we will see even more wage inflation.
- China trade, and to a lesser extent new disputes with Japan and Europe (Germany), not only catch the headlines but are adding increasing uncertainties to the global economy. The disruption in global supply chain is creating confusion for businesses everywhere. However, we do not see an end to the friction between the U.S. and China anytime soon. The trade dispute masks a deeper political motive of keeping China from rising and rising quickly. This threat is almost existential to both countries and cannot be overcome easily.
- Although we do not deem a rate cut, let alone the beginning of a rate cut cycle, is warranted based on economic data, the FOMC will likely take action this year. By further reducing its policy bandwidth, FOMC will have few bullets left when the next recession comes.

8460 Tyco Road, Suite E, Vienna, Virginia 22182
T: 703.847.4380 F: 703.847.4384
pchao@chaoco.com
www.ChaoCo.com

HiPPPi in 6 months – Hike, Patient, Pause, and Pivot

Since the Great Recession, the unemployment rate has steadily come down and is now at a 50-year low. Although U.S. demographics have shifted since WWII and the composition of workers has changed, the prior natural rate of unemployment (u*) is now being questioned. Perhaps today's u* is lower than the past. Case in point is the unresponsiveness of inflation even under what is deemed a historically low unemployment rate (flattening or unresponsiveness of the Phillips's Curve[1]). Total non-farm payroll employment[2] (i.e. new job creation) continues to grow since October 2010, which suggests pockets of labor slacks remain in the economy. The domestic economy has continued to expand[3] as well and is now registered as the longest economic expansion in U.S. recorded history. Since December 2015, the Federal Reserve ("Fed" or the "FOMC") has begun to normalize its monetary policy by raising short-term interest rates and subsequently initiated the normalization of its bloated balance sheet. Based on incoming data, the Fed deemed the labor and general economy have sufficiently recovered and unconventional policies, such as zero bound interest policy ("ZIRP") and large-scale asset purchase program ("QE"), should be reversed or normalized. After all, we are no longer in extraordinary economic times, and thus it is not necessary to continue the extraordinary monetary policies.

ZIRP and QE were deemed to be necessary to: (1) shore up confidence in our financial system, (2) lay out a financial safety net for the markets so investors will take risk to spur economic growth, (3) accommodate businesses to borrow, invest and hire, and (4) create an environment that would foster the Fed's dual mandates of maximum employment and price stability. These unconventional monetary tools have been credited with keeping the economy from sliding further into a depression as fiscal policies were largely dormant after the initial response to the Global Financial Crisis. After the post Internet Bubble recession, then Fed Chair, Alan Greenspan, cut the target federal funds rate to or near 1% and kept it there until mid- 2004. This was the enabling factor for the housing bubble that ended badly 3-years later. It is well understood that a prolonged period of dovish monetary policy (lower interest rates for longer) has a tendency to set up asset bubbles. The temptation by the Fed to keep the market and economy happy for longer seems to be a tough lesson to learn. After all, Fed governors are humans too.

The FOMC September 2018 meeting Press Release removed "the stance of monetary policy remains accommodative" language which the market views as meaning the neutral interest rate (r*) has not been reached. During the press conference, Chair Power stated: "This change does not signal any change in the likely path of policy; instead, it is a sign that policy is proceeding in line with our expectations. We still expect, as our statement says, further gradual increases in the target range for the federal funds rate", and hiked rates by 25bp. The December 2018 meeting Press Release added the statement that the FOMC "will continue to monitor global economic and financial developments and assess their implications for the economic outlook" and hiked rates by 25bp. The September,

---

[1] https://www.frbsf.org/education/publications/doctor-econ/2008/march/phillips-curve-inflation/
[2] https://data.bls.gov/timeseries/CES0000000001?output_view=net_1mth
[3] https://www.bea.gov/system/files/2019-05/gdp1q19_2nd_0.pdf

November and December 2018 meeting Press Releases all affirmed the FOMC "expects further gradual increase in the target rate range based on sustained economic activity, strong labor market and the symmetric 2% objective in the medium term."

Just one month later, the FOMC January 2019 meeting Press Release states "[i]n light of global economic and financial developments and muted inflation pressure, the Committee will be patient as it determines future adjustments to the target rate range." This is widely interpreted as the Fed was placing rate hikes on pause after raising rates 100bp in 2018. This "patient[4]" language remained in the FOMC March 2019 meeting Press Release, and the FOMC recognized a possibly slowing economy. The FOMC May 2019 meeting reflected that economic activity rebounded and affirmed "the Committee will be patient as it determines what future adjustments to the target range for the federal funds rate may be appropriate to support these outcomes." Finally, the FOMC June 2019 meeting Press Release removed "patient", and the market interpreted this as the Fed signaling its willingness to drop interest rates in the meetings to come. The Press Release pointed out that, in light of the outlook uncertainties and muted inflation pressure, the FOMC will act as appropriate to sustain the economic expansion. For the first time under Chair Powell's leadership, there was a dissenting vote for rate decisions. Jim Bullard wanted to lower rates by 25bp.

In the January 2019 press conference, Chair Powell stated that inflation readings have been muted, and the recent drop in oil prices is likely to push headline inflation lower still in coming months. Also, while survey-based measures of inflation expectations have been stable, financial market measures of inflation compensation have moved lower. In his March 2019 press conference, he confirmed again that inflation has been muted, and some indicators of longer-term inflation expectations remain at the low end of their ranges in recent years. Again, in his May 2019 press conference, he pointed out that inflation has been somewhat weaker even though the economy continues on a healthy path. Core inflation unexpectedly fell as well, but the FOMC suspects that this is caused by transitory factors.

Finally, in the June 2019 press conference, Chair Powell reiterated that inflation remains muted. Some FOMC members were concerned about a more sustained shortfall of inflation, noting that market-based measures of inflation compensation have moved down and some survey-based expectations are near the bottom of their historic ranges. Further, weaker global growth may continue to hold inflation down globally. As a consequence, the case for additional accommodation has strengthened.

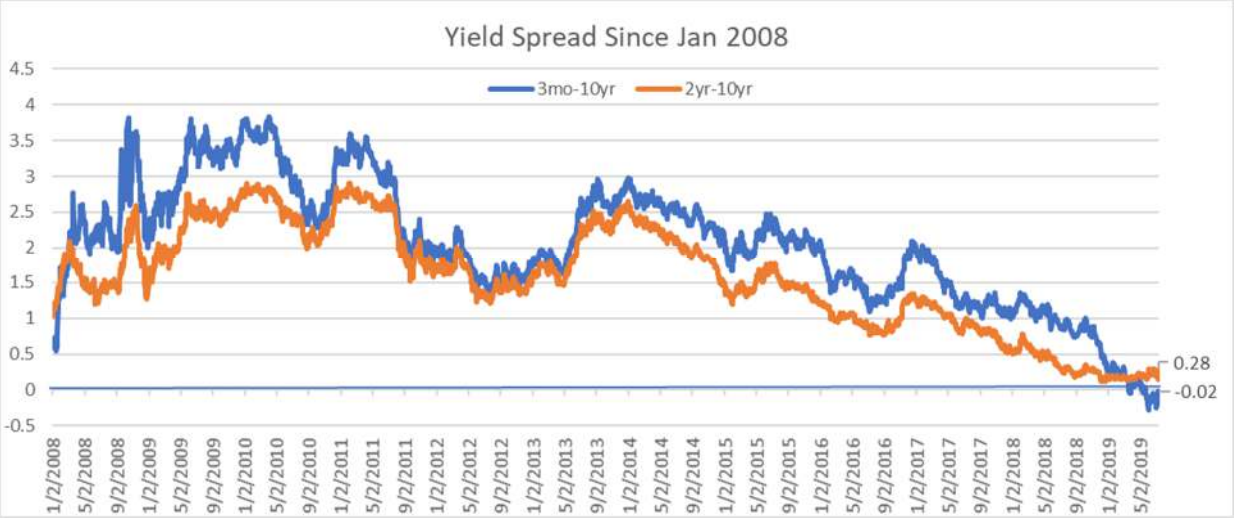
The FOMC's thinking since December 2018 has certainly evolved. Within 6 months from the decision to hike rates in December, keeping rate action on pause in January, and then removal of its patient stance in June, the Fed has ended up signaling the next move would likely be a drop in rates - the pivot. Even though the FOMC took no action in its June meeting[5], it has opened the door to

[4] March 2019 Chair Powell press conference prepared remarks stated "Patient means that we see no need to rush to judgment. It may be some time before the outlook for jobs and inflation calls clearly for a change in policy."
[5] https://chaoco.com/wp-content/uploads/2019/06/FOMC-2019-06-19-Language-Change.pdf

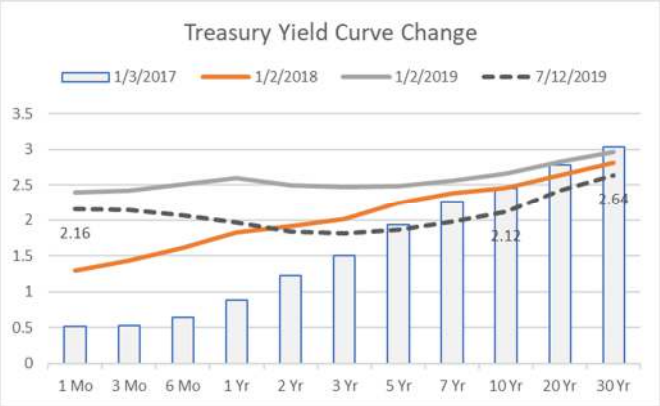
taking action in order to sustain the economic expansion and suggests that its policies will be more accommodative moving forward - lower rates for longer. We have seen this before.

Anticipation

The market and the President have been increasing their drumbeats in anticipating and seeking a rate cut. We are hanging on to every word in every speech of every member (voting or non-voting) of the Fed to see, not if but when, the FOMC will lower rates and would it be 25bp or 50bp.



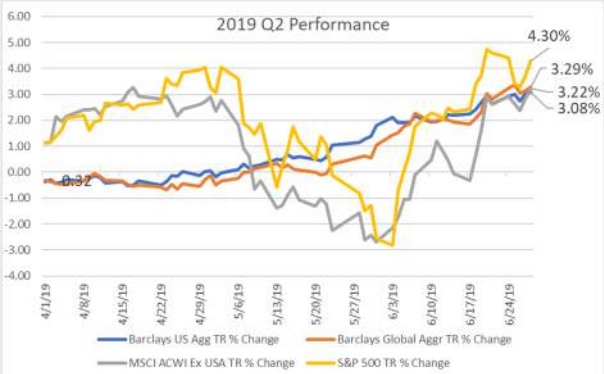
The yield spread (difference) between the front end (3-months) of the US treasury yield curve when compared to the 10-year first turned negative on March 22 this year and currently remains at the same 0.2% as of 7-12-2019. This has often been used as a reliable gauge for economic recession. The other yield spread that is often used is between the 2 and 10-year treasury. This 2-10 spread has not yet dipped into negative territory and remains at 28bp as of 7-12-2019.

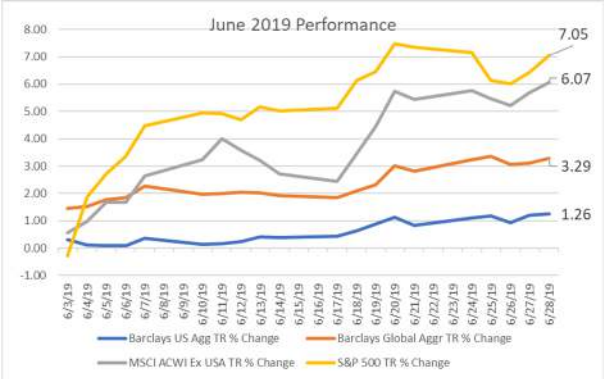


The FOMC dropped rates to near 0% at the end of 2008 and started its hiking cycle at the end of 2015. As of July 12th, the 1-month treasury is yielding 2.16% and is down from its recent high on Feb 14th at 3.45%, with market speculating at or pushing for a FOMC rate drop. The upper right graph shows the lowering of yield across all maturities since January this year.

According to the CME Fed Watch Tool[6], there is now 100% expectation that the FOMC will announce a rate cut in its July meeting. This Tool is based on CME Group's list of 30-Day Federal Funds Futures, prices of which incorporate market expectations of average daily Federal Funds Effective Rates during futures contract months. For the July meeting, there is a 77.5% chance of a 25bp cut and a 22.5% chance of a 50bp cut. By the end of the year, the market is betting on a 37.2% chance that there would be a total of 75bp cut. Three months ago (April 3rd) the probability of the FOMC on pause through October was over 58%..

4/3/2019			Future FOMC Meeting Dates						
Rates	5/1/2019	6/19/2019	7/31/2019	9/18/2019	10/30/2019	12/11/2019	1/29/2020		
125-150						0.10%	0.30%		
150-175				0.30%	0.60%	1.90%	2.90%		
175-200		0.50%	1.20%	5.10%	6.90%	12.50%	15.20%		
200-225	3.50%	17.50%	20.10%	32.30%	34.20%	39.20%	39.90%		
225-250	96.50%	82.00%	78.60%	62.30%	58.30%	46.30%	41.60%		
250-275									
7/12/2019			Future FOMC Meeting Dates						
Rates			7/31/2019	9/18/2019	10/30/2019	12/11/2019	1/29/2020	3/18/2020	4/29/2020
0-75								0.10%	0.30%
75-100							0.60%	1.70%	2.60%
100-125						2.30%	6.00%	9.10%	11.10%
125-150					6.00%	16.10%	21.70%	24.60%	25.90%
150-175				14.00%	32.20%	37.20%	36.40%	34.70%	33.30%
175-200			22.50%	56.80%	45.00%	34.20%	27.80%	23.80%	21.50%
200-225			77.50%	25.20%	16.70%	10.30%	7.60%	6.10%	5.30%
225-250						CURRENT			





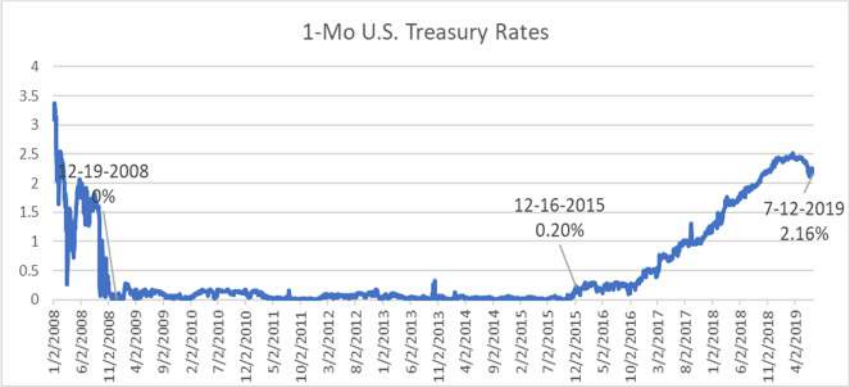
The top left chart shows the second quarter price change for the S&P 500, MSCI ACWI ex USA, and Barclays U.S. and Global Aggregate Bond indexes for the second quarter. The poor performance in May reflected the market digesting a slowing global economy and the escalating uncertainty regarding the trade disputes with China and elsewhere. Then beginning in June, as shown in the lower left graph, the U.S. and global markets rallied with the S&P 500 posting a 7.05% return and the global ex-US index at 6.07%.

It is important to note that, on a year-to-date basis, the investment grade bond index has gained an impressive 3.08%. What is troubling is that typically, when a bond index advances like this, it means the economy is not doing well and interest rates across the yield curve are going down which push the price of bonds up. Thus, if the economy is not expected to

[6] https://www.cmegroup.com/trading/interest-rates/countdown-to-fomc.html

do well, then earnings should be depressed or shrink. This should lead to a poor performing equity market. The fact that both stocks and bonds globally turned bullish suggests this is not likely to be sustainable – meaning that the positive correlation between risk-on and risk-off assets will likely revert. In the meantime, major central banks around the world are now poised to cut rates or take on more "unconventional" monetary policies in the name of "juicing" their respective economies. Speaking at the ECB Forum in Sintra, Portugal, during its latest policy meeting, President Mario Draghi made clear that, if the economic situation deteriorates in the coming months, the bank will announce further stimulus. According to Draghi's prepared remarks[7], "global headwinds continue to weigh on the euro area outlook. The prolonged presence of uncertainties, related to geopolitical factors, the rising threat of protectionism and vulnerabilities in emerging markets, is leaving its mark on economic sentiment." He stated that, in the absence of improvement such that the sustained return of inflation to the ECB's aim is threatened, additional stimulus will be required. Governor Kuroda, at the June 20th Bank of Japan's[8] regular meeting, stated that the following downside risks concerning overseas economies are likely to be significant: "U.S. macroeconomic policies and their impact on global financial markets; the consequences of protectionist moves and their effects; developments in emerging and commodity-exporting economies such as China, including the effects of the two aforementioned factors; developments in global adjustments in IT-related goods; negotiations on the United Kingdom's exit from the European Union (EU) and their effects." In this case, the BOJ is ready to ramp up stimulus without hesitation as global risks cloud the economic outlook. The upper left chart, provided by www.global-rates.com, shows the global central bank's last interest rate action and their current rates. It is clear that emerging and developing markets have much more policy room to cut, but developed markets' interest rates are paper thin and their effectiveness on the economy is questionable. (Even though, on a relative basis, the U.S. has a bit more room.)

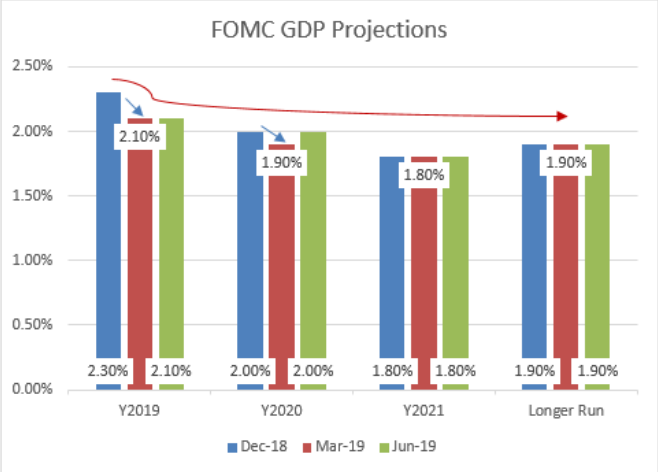
country/region	current rate	direction	previous rate	change	Expected
United States	2.500 %	↑	2.250 %	12/19/2018	↓
Australia	1.000 %	↓	1.250 %	7/2/2019	
Chile	2.500 %	↓	3.000 %	6/7/2019	
South Korea	1.750 %	↑	1.500 %	11/30/2018	
Brazil	6.500 %	↓	6.750 %	3/22/2018	
Great Britain	0.750 %	↑	0.500 %	8/2/2018	
Canada	1.750 %	↑	1.500 %	10/24/2018	
China	4.350 %	↓	4.600 %	10/23/2015	↓
Czech Republic	2.000 %	↑	1.750 %	5/2/2019	
Denmark	0.050 %	↓	0.200 %	1/19/2015	
Europe	0.000 %	↓	0.050 %	3/10/2016	↓
Hungary	0.900 %	↓	1.050 %	5/24/2016	
India	5.750 %	↓	6.000 %	6/6/2019	
Indonesia	6.500 %	↓	6.750 %	6/16/2016	
Israel	0.250 %	↑	0.100 %	11/26/2018	
Japan	-0.100 %	↓	0.000 %	2/1/2016	↓
Mexico	8.250 %	↑	8.000 %	12/20/2018	
New Zealand	1.500 %	↓	1.750 %	5/8/2019	
Norway	1.250 %	↑	1.000 %	6/20/2019	
Poland	1.500 %	↓	2.000 %	3/4/2015	
Russia	7.500 %	↓	7.750 %	6/14/2019	
Saudi Arabia	3.000 %	↑	2.750 %	12/20/2018	
South Africa	6.750 %	↑	6.500 %	11/22/2018	
Sweden	-0.250 %	↑	-0.500 %	12/20/2018	
Switzerland	-0.750 %	↓	-0.500 %	1/15/2015	
Turkey	24.000 %	↑	17.750 %	9/13/2018	

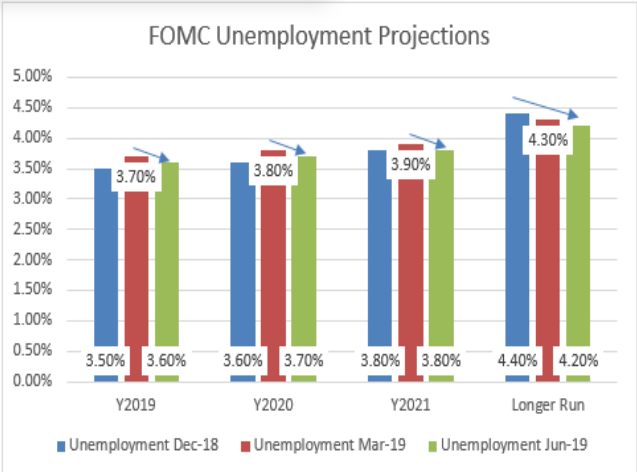


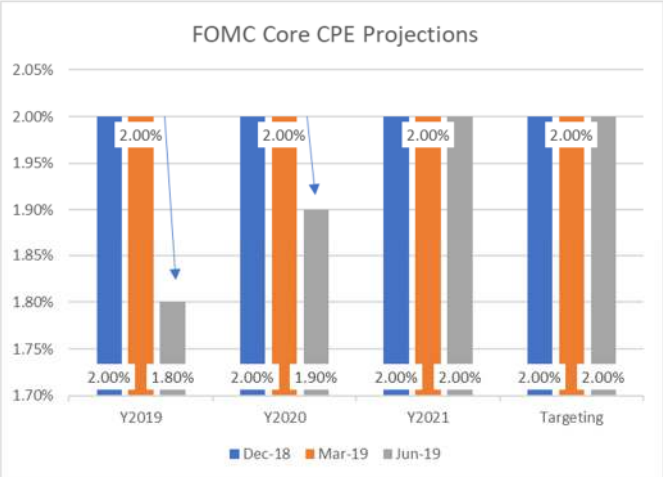
[7] https://chaoco.com/wp-content/uploads/2019/06/ECB-Press-Conference-2019-06-06-change-Final.pdf
[8] https://www.boj.or.jp/en/announcements/release_2019/k190620a.pdf

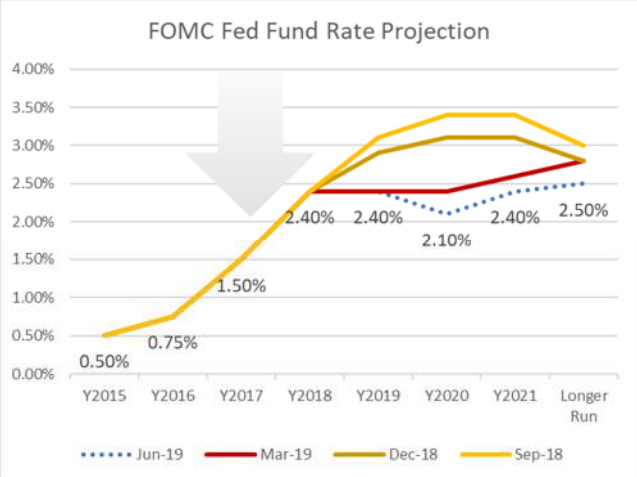
It is All about Monetary Policy

Four times a year, the FOMC publishes its Economic Projections. These are individual Federal Reserve Board members' and Federal Reserve Bank presidents' assessments of the economy (real GDP), unemployment (U3 rate) and inflation (CPE and Core CPE). In turn, these individual assessments become the basis for their projected appropriate monetary policy. It is important to note that these are individual projections and expectations should not be viewed necessarily as the future expected policy action of the FOMC as a whole. However, their individual projections do offer a snapshot of their collective leanings towards their likely policy direction. The Economic Projections are one expression of FOMC's data dependent view each quarter in making longer-term monetary policy projection.



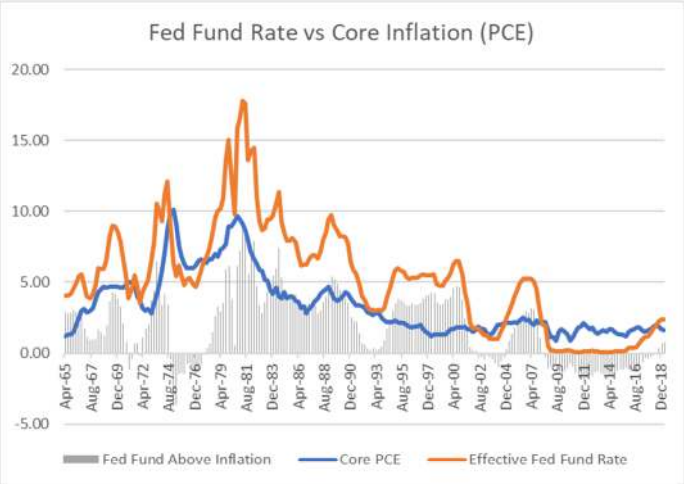




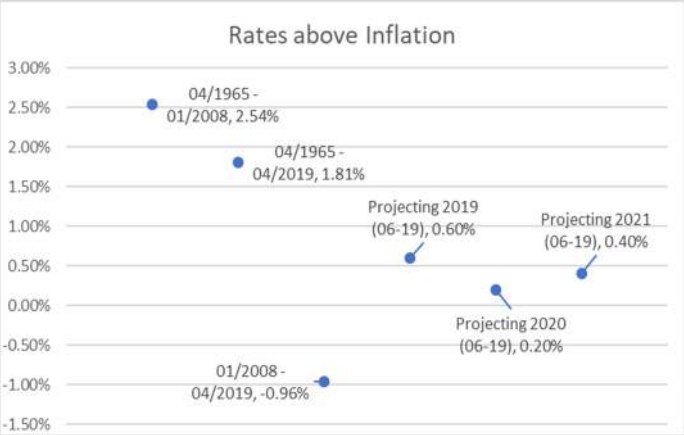


In sum, the June FOMC Economic Projection expects a 2.1% (flat) GDP from the December 2018 2.3% and an improving GDP in 2020 from March projection of 1.9% to 2%. This is POSITIVE. On the unemployment (U3) front, the projection is lower by 0.1% across the board. This is POSITIVE. In the case of core inflation, as measured by personal consumption expenditure, the projection is lower for 2019 and 2020 from March to June's projection. This continues to present a CHALLENGING environment for price stability. Based on this set of limited macro data, the FOMC

has lowered its projections for the Fed Fund rates consistently since September 2018 Economic Projections.



The left chart shows the relationship between inflation (as measured by the Personal Consumption Expenditure ex food and energy) and Federal Fund rate. With the exception of a short period in 1974 through 1976 and the post Financial Crisis period from mid-2009 through mid-2018, the real (inflation-adjusted) Fed Fund Rate has been positive. This means that the interest earned is higher than the underlying inflation rate.

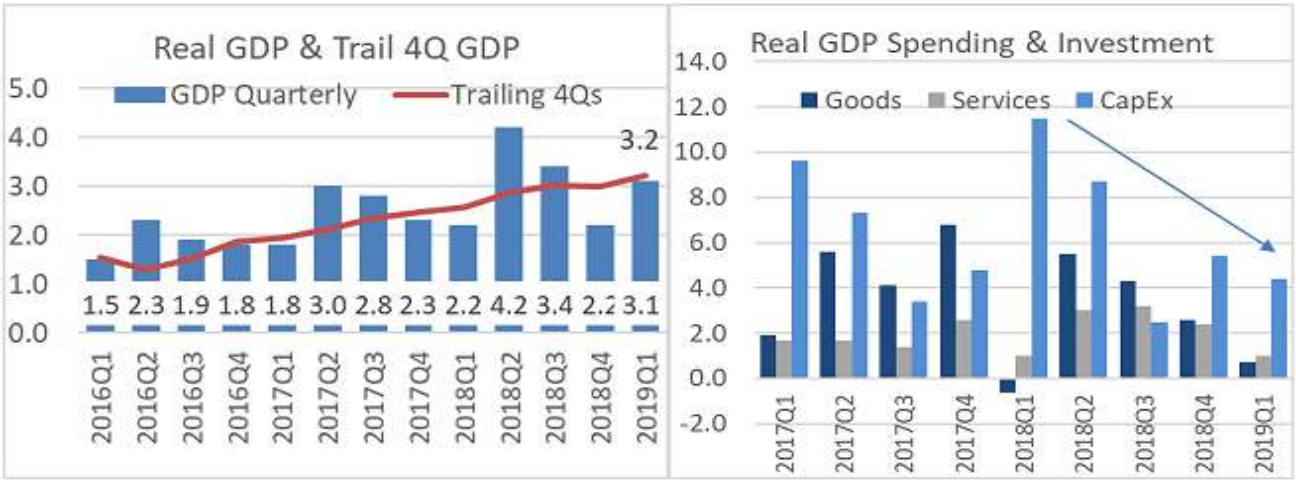


Periods	Rates above Inflation	# of Quarters
04/1965 - 01/2008	2.54%	172
04/1965 - 04/2019	1.81%	217
01/2008 - 04/2019	-0.96%	46
Projecting 2019 (06-19)	0.60%	2
Projecting 2020 (06-19)	0.20%	4
Projecting 2021 (06-19)	0.40%	8

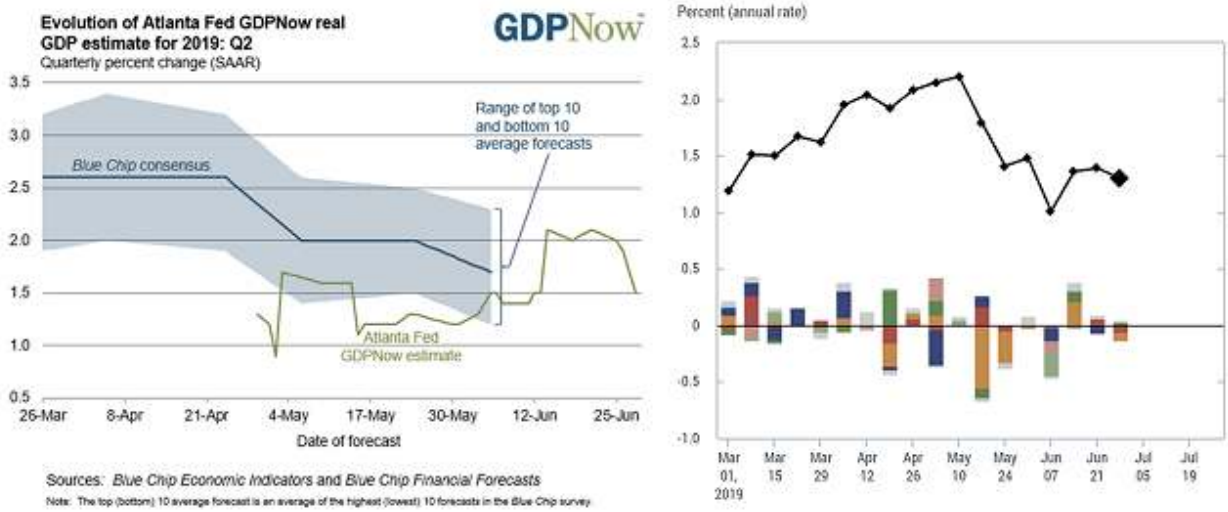
The middle left chart and the lower left table show the average real rate has been 2.54% since 1965 through Jan 2008 (172 quarters) and 1.81% if the post Financial Crisis period is included (217 quarters). The June 2019 Economic Projection suggests the real rate (i.e. the difference between projected Fed Fund rate and the projected core inflation rate) is 0.6% for 2019, 0.2% for 2020 and 0.4% for 2021. The real rate for April 2019 was 0.8%. These projections suggest that interest rates are projected to decrease from here along with projected inflation rates for the same period, even though the core inflation rate is only expected to be down 10bp in 2020 and then back to 2% thereafter. This suggests that the interest rate is expected to be lower in a disproportionate manner to the projected core inflation rate going forward. To put it another way, it supports the notion that the FOMC is looking to systematically lower interest rates to stimulate the economy in an effort to push the inflation rate higher (in meeting their price stability mandate).

Under current scenarios, financial repression continues where the low interest rates continue to reward the borrowers at the cost of the savers. That short-term interest rates are slightly above core inflation (PCE) appears to be temporary. Once the FOMC begins its lowering cycle, and if inflation rate holds close to 2%, we are back into a negative real interest rate environment again. But even then, we would still likely be delivering a better yield than what ECB and BOJ are offering.

How is the Economy?



According to the third and final estimate for 2019 Q1 GDP, the economy grew at an annualized rate of 3.1%. On a trailing 4-quarter basis, the economy grew at the rate of 3.2%, which is above trend. Since 2000, the average quarterly real GDP growth rate (72 quarters) is 1.9% through the end of 2017. The 2018 fiscal policy (i.e. tax cut) injected stimulus into the system, and it is transitory. The upper right graph shows a tapering of consumer spending on goods and services as well as dramatic slowing in capital expenditures by companies. This is dramatic because the effect from the fiscal boost is wearing off after two quarters. The spending and investments are simply returning to average.

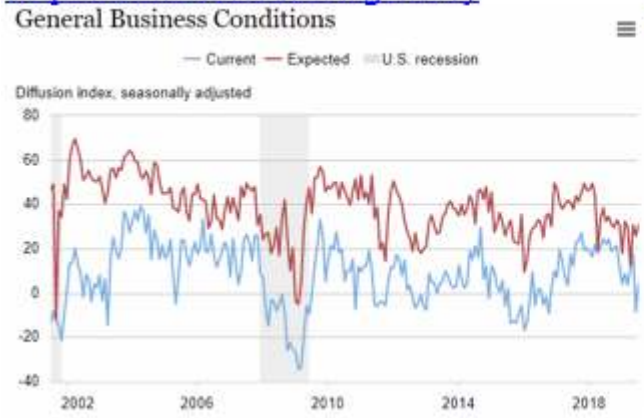


On June 28th, the above left graph is the Atlanta Fed GDPNow[9] comparing its computer model estimation of the second quarter GDP at 1.5% against the Blue Chip economist consensus. The above right graph is the New Year Fed's Nowcast[10] computer model projecting the second quarter GDP at 1.3% on the same day. If the second quarter real GDP comes in at 1.7%, the trailing 4-quarter average would be at 2.6%. As the economy moves forward, the out-of-sample large first and second quarter GDP would drop off, and the economy returns to the New Normal growth rate. The question is has

[9] https://www.frbatlanta.org/cqer/research/gdpnow.aspx
[10] https://www.newyorkfed.org/research/policy/nowcast

the U.S. economy begun to show signs of further slowing (not normalization landing back to the long-run 2% growth rate). One measure of economic activities is to see the regional manufacturing activities.

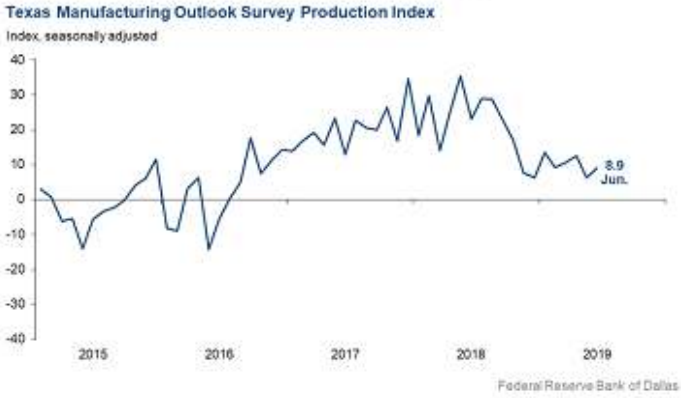
Empire State Manufacturing Survey



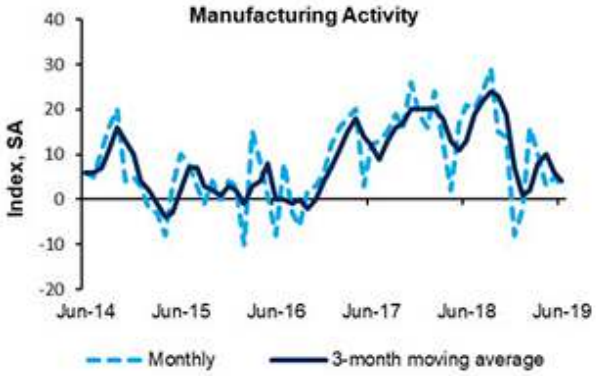
Philadelphia Manufacturing Business Outlook

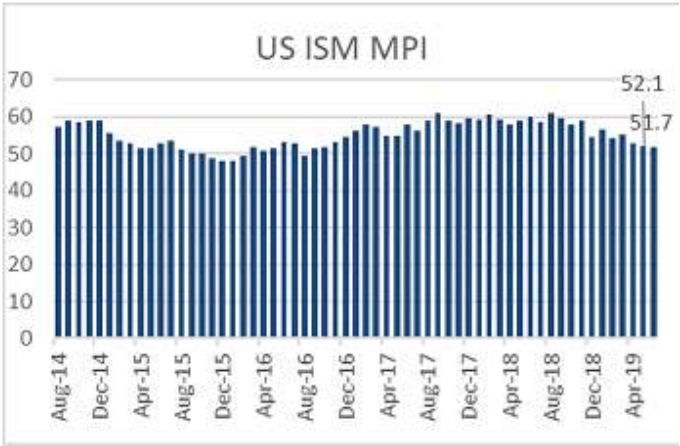
Kansas City Manufacturing Survey

Texas Manufacturing Outlook Survey



Richmond Survey of Manufacturing Activities

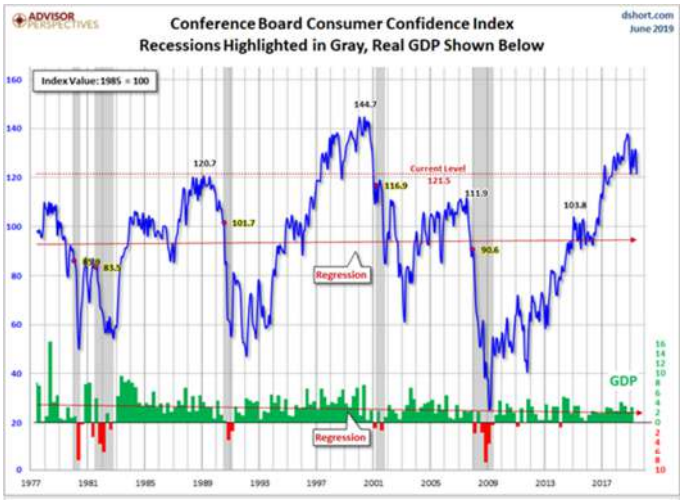


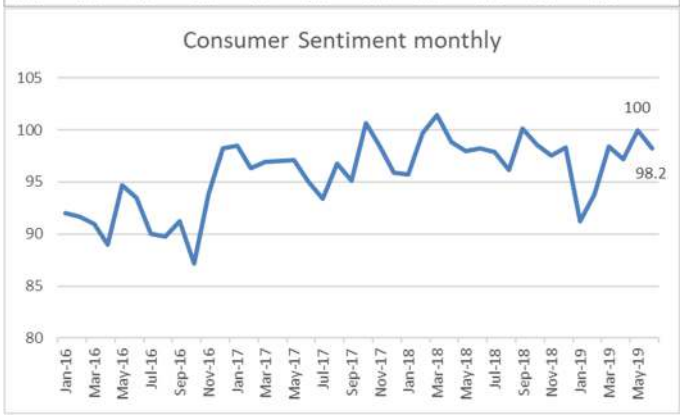


From the June report for the five Federal Reserve Regional Bank manufacturing surveys, it is clear that the activities are all off their highs and most are trending down. In fact, Empire State data is in negative territory. The Institute for Supply Management (ISM) Manufacturing Business Survey reported that the June PMI registered 51.7% percent, a decrease of 0.4% from the May reading of 52.1%. The New

Orders Index registered 50%, a decrease of 2.7% from the May reading of 52.7%. The Production Index registered 54.1%, a 2.8% increase compared to the May reading of 51.%. At the same time, the ISM Non-Manufacturing PMI dropped to 55.1% in June from 56.9% in the previous month and remains solidly (a reading below 50 is contraction) in expansion phase. This latest reading pointed to the weakest pace of expansion in the non-manufacturing sector since July 2017.

The U.S. consumer represents about 2/3rd of the U.S. economy, and thus consumer sentiment about the future is critical to maintaining the 10-year and counting economic expansion.



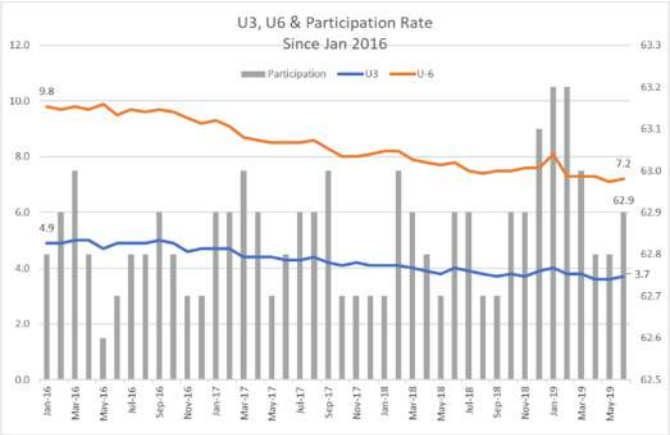


According to the Conference Board Consumer Confidence Index, it declined in June, following an increase in May. The Index now stands at 121.5 (1985=100), down from 131.3 in May, and is at its lowest level since September 2017 (120.6). The Present Situation Index – based on consumers' assessments of current business and labor market conditions – decreased from 170.7 to 162.6. The drop is attributable to the escalation in trade and tariff tensions. The Expectations Index – based on consumers' short-term outlooks for income, business and labor market conditions – decreased from 105.0 last month to 94.1 this month. The Conference Board states that the Index remains at a high level, but volatility, due to macro concerns, could begin to diminish consumers' confidence in the expansion.

University of Michigan's Consumer Sentiment Index suffered a small decline in June which is primarily due to consumers' concerns over tariffs. Both surveys point out that the consumer remains supportive of the economy but is beginning to worry about the potential impact of trade friction. We expect to see a more severe reduction in these readings if the Trump Administration does impose the full tariff on all Chinese imports and new tariffs against Japan and the eurozone.

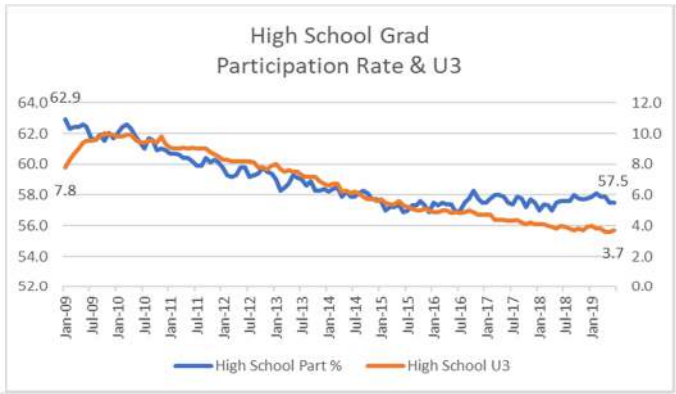
In sum, the tailwind of the 2017 tax cuts to the economy has dissipated. The current economic expansion should continue and be back to trend growth of 2.5% to 2% per year. The combination of a global economic slowdown and the trade tension heightens uncertainty and lessens confidence. We are hopeful that, as election year 2020 approaches, the self-interests of politicians will not derail the economy.

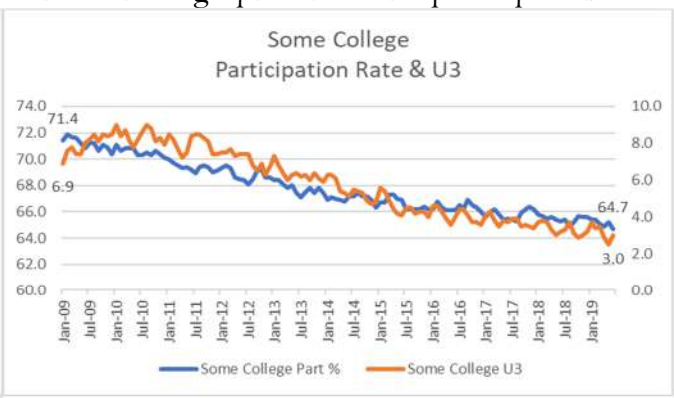
The Perpetual Bright Spot – Labor Economy

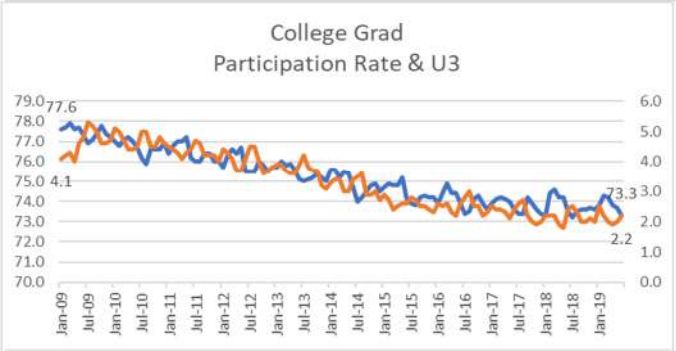


The headline unemployment rate (U3) is now at 3.7% heading towards 3.5% or below. The last time we witnessed this was 50-years ago in 1969. The broader unemployment/underemployment rate (U6) is now at 7.2%. This represents the unemployed included in U3 plus all marginally attached workers, and those employed part-time for economic reasons. U6 was at 17.1% during the 2009 through 2010 height of the Great Recession period.

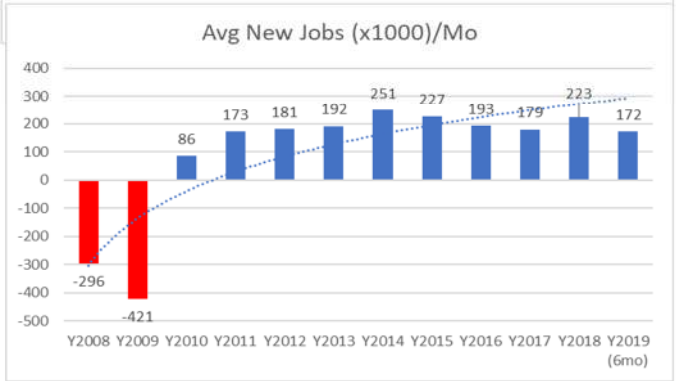
These three graphs show the participation rate







and unemployment rate based on education status. Although the unemployment rate is at recent decade lows, the participation rate has yet to recover from the high before the Great recession. This means that there is still some slack remaining in the labor force, even though we may be bordering on the structural unemployed (e.g. disabled, opiate-addicted, etc.).

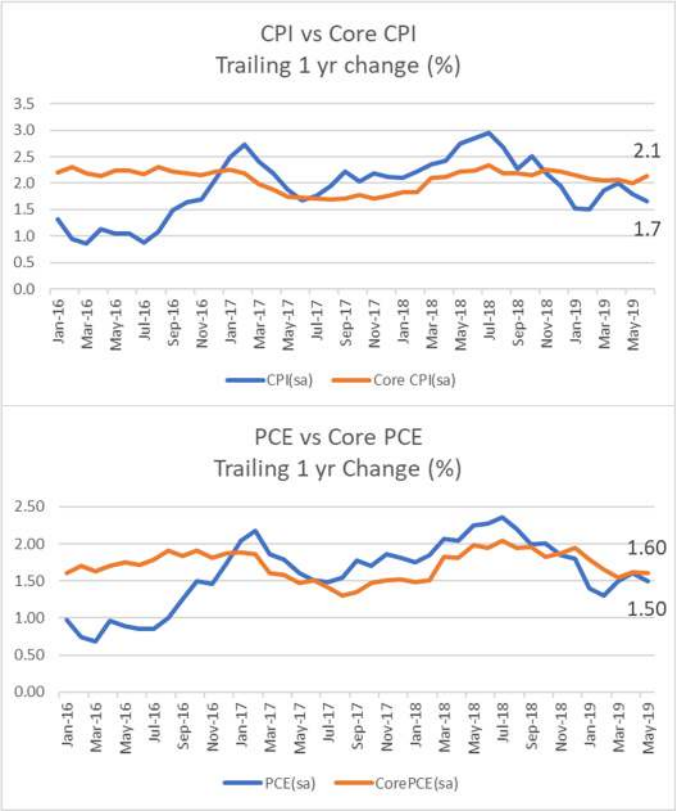


The left chart shows the average monthly new jobs created based on non-farm payroll. The economy is now generating at a pace of 172,000 jobs per month. Economists consider 100,000 new jobs required per month to meet new entrants to the labor force (e.g. recent graduates), and anything greater than this is driving unemployment down further. At this late stage of an economic cycle, we expect the average monthly new job creation to gradually decrease (i.e. less new jobs created).

Price Stability

According to Janet Yellen, inflation expectations are an important determinant of actual inflation because, in deciding how much to adjust wages for individual jobs and prices of goods and services at a particular time, firms take into account the rate of overall inflation they expect to prevail in the future.

Monetary policy presumably plays a key role in shaping these expectations by influencing the average rate of inflation experienced in the past over long periods of time. Well-anchored inflation expectations are a key measure of successful monetary policy because, in the long run, inflation is mainly determined by monetary policy. Inflation expectations drifting away from the central bank's implicit or explicit inflation targets can generate highly inflationary or disinflationary episodes.



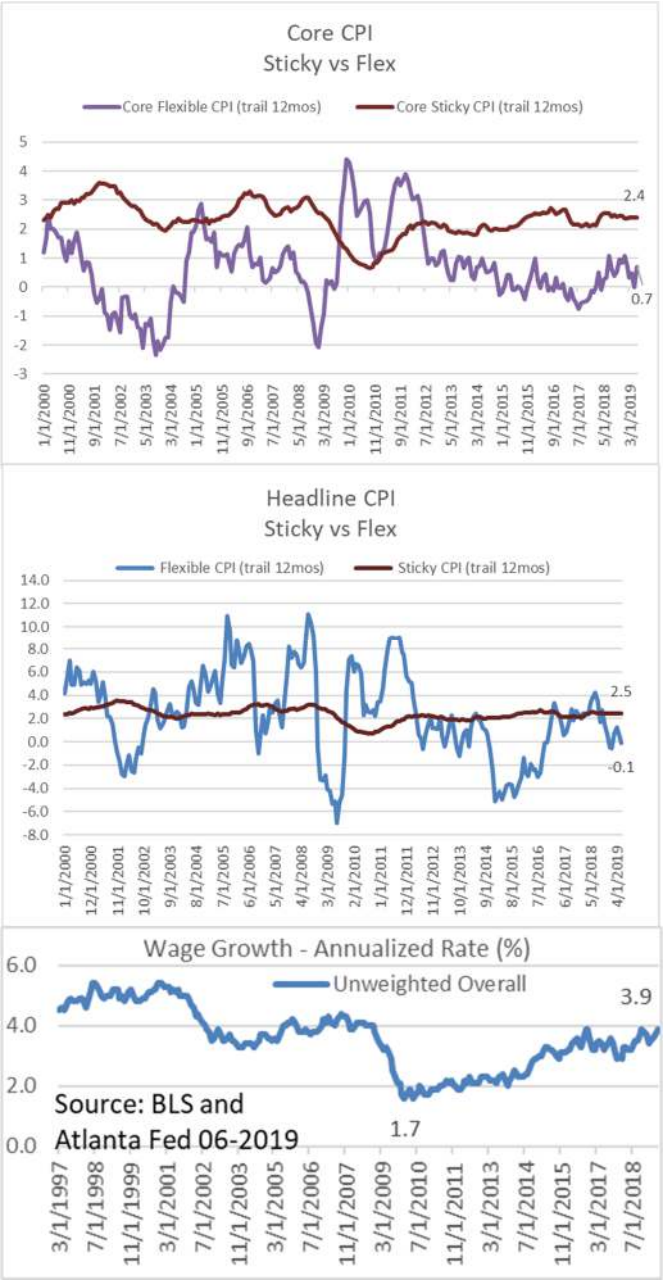
As of June, the CPI is at 1.7% while the CPI, minus food and energy prices (Core CPI), is at 2.1%. Core CPI has been fairly flat at above 2% since March 2018.

The PCE[11] is the preferred measure of prices (inflation) of the FOMC. The latest headline PCE (May 2019) is at 1.5% while Core CPE is at 1.6%. PCE has moved back up since trending down in the middle of last year. In the case of Core PCE, it has flattened since also trending down in the middle of 2018.

In January 2012, the FOMC adopted an explicit inflation target of 2%. Inflation doesn't have to be 2% statically, and an inflation target is meant to be reached over a longer period of time. The FOMC is concerned when inflation runs persistently above or below the inflation target. According to the Fed's 2019 updated Statement on Longer-Run Goals and Monetary Policy Strategy[12], communicating this "symmetric inflation goal clearly to the public helps keep longer-term inflation expectations firmly anchored, thereby fostering price stability and moderate long-term interest rates and enhancing the Committee's ability to promote maximum employment in the face of significant economic disturbances." Based on the recent Fed speeches and meeting communications, it is clear that they are concerned with inflation being persistently below the inflation target. Earlier this year, the FOMC initiated a one-year monetary policy review to assess how it conducts monetary policy. The reality is that the FOMC has a shrinking

[11] https://www.clevelandfed.org/newsroom-and-events/publications/economic-trends/2014-economic-trends/et-20140417-pce-and-cpi-inflation-whats-the-difference.aspx
[12] https://www.federalreserve.gov/monetarypolicy/files/FOMC_LongerRunGoals.pdf

toolkit on an absolute and relative (constrained by actions of other major central banks) basis. Unless we deem negative interest rates (like the ECB) as real options along with buying U.S. equities (like the BOJ) or targeting 10-year US treasury yields (like the BOJ) in an attempt to keep deflation at bay, the FOMC will likely rely on forward guidance (i.e. marketing and persuasion techniques). With the labor market booming (albeit wage increase is still catching up), the Fed is focused on price stability.



The Federal Reserve Bank of Atlanta (Atlanta Fed) offers different metrics to interpret the CPI in an effort to better understand the underlying components that drive the future of price stability. The Atlanta Fed uses the published components of the CPI to compute two sub-indexes[13]: (1) a sticky-price composite of the CPI and (2) a flexible-price CPI. Evidence indicates that the flexible-price measure is much more responsive to changes in the economic environment—slack—while the sticky-price variant appears to be more forward looking. Even though sticky price may not be as responsive to short-term economic conditions as a flexible price, it tends to be a better indicator of longer term inflation expectations, which is what the FOMC is concerned about.

The upper left graph charts the movement of Sticky and Flex Core CPI indexes. As expected, the flex component tends to be more volatile as compared to sticky.

The current Sticky Core CPI is at 2.4%, and the Flex Core CPI is at 0.7%. The lower left graph charts the movement of Sticky and Flex Headline CPI indexes. The current Sticky CPI is fairly comparable to Core CPI at 2.5%, and the Flex Core CPI is at -0.1%. One interpretation of the low Flex Core and headline CPI is likely due to "transitory" factors. The more reliable inflation gauge is likely the sticky CPI (Core of Headline). If we combined this with the Core CPI at 2.1%, it appears that we are at or even above the long-term Fed inflation target of 2%. However, this is not the case for PCE and Core PCE.

[13] https://www.frbatlanta.org/-/media/documents/research/inflationproject/stickyprice/sticky-price-cpi-supplemental-reading.pdf

According to BLS data, wage growth is showing sustainable growth, and as of June, the average (unweighted) wage growth is at an annualized rate of 3.9% with the service sector growing at 3.7%. Although Phillips Curve is still fairly flat, it is certainly not dead. As wages rise in this late economic cycle, we expect wages to continue moving upwards and there to be more pressure on inflation. Adding to this is the effect of tariffs. Trade tariffs are paid by the importers (U.S.) and not exporters or manufacturers (China). Thus far, the tariffs imposed on China have been strategically selected by the Trump Administration so that their impact is least felt by the consuming public broadly. Furthermore, the tax cuts that went into effect in 2018 offered significant benefits to corporate America. From lowering net effective tax to allowing repatriating cash held overseas with a significant tax discount, Corporate America has been using these benefits thus far to limit the amount of cost increases due to tariffs to the end consumer. As such, the impact on prices has not been widely felt. However, if more tariffs are imposed on all China imports and/or tariffs are imposed on European and Japanese imports (primarily autos), Corporate America is less likely to be able to absorb the cost and will pass on increases. This would sooner or later be reflected in the CPI and PCE. If one believes that the fight with China is long-term even if there is a trade agreement of some sort without eliminating all tariffs, then the price adjustment would be more permanent than transitory. The cost friction created will be ultimately paid for by consumers until the global supply chain is completely rerouted away from China. This is not likely.

In sum, we believe in the backward-looking lack of inflation being transitory and that we are or soon will be at the 2% to 2.5% inflation range even without any rate reduction by the FOMC.

Why Can't We Just get Along?

The objective of the Trump administration for China is to reduce the U.S. trade deficit, bring manufacturing jobs back to the U.S., put an end to unfair Chinese trade practices including forced technology transfer, intellectual property theft, and subsidies to state enterprises, and to open its market for American goods. I am in agreement with these basic tenants in general terms but disagree with using the trade deficit with China, or for that matter with any country, as the single measure for bilateral economic fairness. The disparity of trade should not draw the conclusion that China is "ripping us off".

First, China is the endpoint of many supply chains, especially after its ascension to the WTO. This means that any good that is 100% or 10% produced or packaged from China for export to the U.S. would have little differentiation in the eye of the Adnistration. The point is that exports from China are not necessarily made in China, and yet, there is no discrimination from the point of imposing tariffs. Second, the U.S. is an advanced economy and has well defined social safety nets for old age sickness and pension. This means that services have overtaken goods production and consumption (rather than savings) is promoted and desired to achieve a higher standard of living. As a consumption economy (representing over 2/3rd of the U.S. GDP), we buy primarily goods from the world, and since we are not a heavy goods producing country, the U.S.'s goods export is dwarfed by imports. This is not the case when it comes to service and intellectual property components (e.g. music, movies, software, finance, etc.) where our position is quite favorable. Moreover, our social safety net and access to

financial services encourage consumers to spend and acquire while emerging economies lack the privilege. (They tend to be bigger savers then spenders.) Thirdly, even if trade imbalance is the right metric to view any bilateral disparity, the current imposition of tariffs is merely addressing the symptoms and cannot be a cure. If the U.S. is able to reduce trade deficit by 2/5th and bring the trade between the two country into balance (i.e. basically buying less from China and not necessarily selling more to China), the global supply chain would change and morph. For example, as a result of the current trade tension with China, Vietnam is now the largest immediate beneficiary to the rerouted supply chain since there is no tariff imposed on goods from Vietnam. As long as the U.S. consumer continues to demand goods that are not produced domestically, then it is a matter where such goods can be sourced and imported most efficiently. There is no true reduction of trade disparity, simply trade rerouting. By breaking up the China manufacturing dominance, we have created a dispersed group of new or rising exporters globally. Again, shifting exports away from China does not actually bring back good jobs to America in the long run and tariffs will not dampen consumer enthusiasm for consuming, just not buying from China but from everywhere else. The alternative would be to impose tariffs on every trading partner and invoke mutual destruction.

Our base case is that the current trade dispute will not end soon and the economic cold war will likely go on for years to come, which will bring even more trade, military and other frictions between the two largest economies. This will take a toll on global growth as the well oiled globalization morph into a new reality of regionalism and elevated competition of words and action. There are two threads that run through the American needle. The first is more Trumpian. This being economic nationalism, self-promotion and the rhetoric of bring manufacturing jobs back to the U.S. for economic renaissance. Second is more political and is supported by conservative hawks. This being the need to slow down the rise of China in every way (discourage Chinese students and scholars from coming and staying in this country, to sow seeds of distrust about Chinese scientists and companies, discourage China investment in the U.S., solicit and pressure other trading partners from doing business with Chinese companies deemed to be not in the national interest of U.S., etc.) in an effort to maintain the unipolar dominance of Washington. These two threads share many common borders, and sometimes they are indistinguishable. These attitudes, when hardened and infiltrated into the public consciousness, become core sets of beliefs and will be hard to change.

In the near term, I expect Xi drag the trade dispute on without any agreement until at least the 2020 election. First, if China does do a trade deal with the Administration, history has shown that Trump is an unreliable partner. That means Trump could arbitrarily (or find a different angle to attack) change the agreement and place tariffs on Chinese goods again at any time. Second, The Administration will continue to use offensive rhetoric against China to secure his base and to show that he and he alone can bring China to its knees and overcome years of exploitation and injustice from China that took our jobs and stole our capital. This could elicit other non-trade related blowback against China. Putting up resistance against the U.S. would be a reasonable route to narrow the rhetoric. Third, just in case Trump loses in 2020 and a new president is elected, China has a more reliable and less caustic partner to work with. Fourth, if the Administration does invoke the additional tariffs on the rest of China

imports, this will negatively impact U.S. consumers and particularly his supporters at the time of his reelection campaign. And five, China does not want to be seen as weak and buckle to the U.S., externally or internally. With sufficient fiscal and monetary room available, China should be able to wait this out, even with some pain, longer than Trump can, Waiting seems to be in China's national best interest.

The U.S. has begun trade talks with Japan and application of auto tariffs is front and center. The U.S. currently imposes import taxes of 2.5% on passenger cars, 25% on trucks, and 2.4% on large motorcycles. Under TPP, the U.S. agreed to remove tariffs on passenger cars 25 years after the deal took effect and scrap most duties on auto parts immediately, with the rest to be brought down to zero in 15 years. Being out of TPP, the Trump Administration is looking to maintain and add to the current tariff by up to 25% on national security grounds under Section 232 of the Trade Expansion Act of 1962. Similar tariffs are being considered against the European auto sector, aimed primarily at Germany. For now, the Trump Administration has announced a 180-day imposition delay since May.

There are other trade and geopolitical challenges (e.g. a hard BREXIT) that the world is likely to confront. It is simply amazing to see risk assets continue to move higher globally. Are we all too reliant on central banks to lay out a thicker safety net and complacent about the short-term? Data interpretation is in the eye of the beholder. Our base case is that the U.S economy continues to expand without a recession with lower unemployment and more job creation in the foreseeable future. Moreover, inflation will be at or above the FOMC target of 2%. We will survive BREXIT, and we hope that trade negotiation is realistic and based less on posture. Pragmatism is better than ideology for the world economy.

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

This quarterly commentary represents the current views of Chao & Company, and they are subject to change. This Firm has no obligation or responsibility to update our views. The comments and views should not be deemed as Philip Chao, or any member of this Firm, offering personal or personalized investment advice. The quarterly commentary is informational only and is insufficient to be relied upon to make any financial or investment decisions or to make any changes to your financial condition.