



Third Quarter 2019 Economic Summary and Outlook

The U. S. economy grew at a 2.1% pace in the third quarter, based on the revised estimate by the Bureau of Economic Analysis. Second quarter growth was 2%. In the third quarter, consumer spending continued to drive GDP growth with only modest contributions by government spending. Net private investment continues to be dormant even though costs of capital are very low and firms have accumulated internal cash that could be put into real asset investment. While overall consumer confidence remains high, businesses are more cautious due to vitriolic politics, vocal anti-business sentiment, and uncertain global economic conditions.

The labor markets continue to shine with no downside in sight. Job creation in November was an astounding 266,000 new jobs following very strong payroll expansions in both October and September. The three-month moving average job creation ending in November was 205,000 per month. The unemployment rate fell to 3.5% while the labor-force-participation rate held steady. Wages continue to grow at a modest 3.1% but at a faster pace than productivity, resulting in higher unit labor costs. Profit margins are squeezed due to higher unit labor costs and an inability to raise prices in a globally competitive market. Even so, earnings announcements have surprised on the upside and equity values remain near all-time highs.

The long awaited recent passage of the United States, Mexico, and Canada Trade Agreement (USMCA) as well as the recent agreement to a limited China deal offer a more promising view of trade conditions going forward. Lower interest rates linked to Fed decisions in the second half of 2019 also offer support for continued expansion in 2020. Household budgets are in good shape and higher equity values have contributed to overall wealth. On the downside, as the workforce ages and gets closer to retirement the tendency to save rather than spend puts some downward pressure on consumption spending.

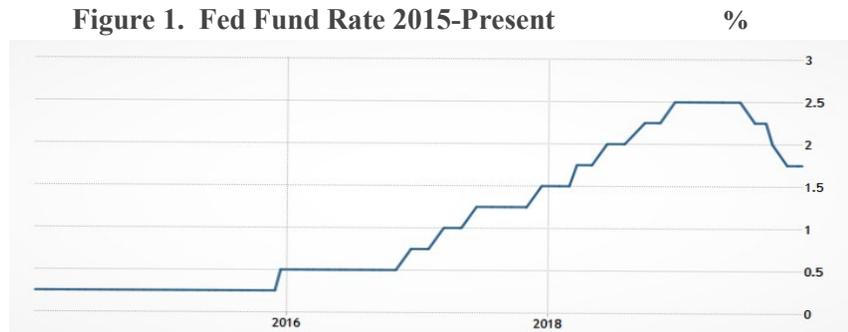
Manufacturing continues to struggle from more limited international trade markets, rising unit labor costs, and the strong U.S. dollar that hurts exports and makes competitive imports cheaper. Manufacturing fell 1.5% in October and capacity utilization fell to 76.78% compared to an all-time high of 89.39%. The PMI index, a forward looking indicator of production and manufacturing reached 52.6 in November following a 51.3 reading in October, suggesting expansion in factory activity. While the three month improvement in the index at the end of 2019 is not necessarily enough to suggest a turnaround in the manufacturing sector, it is promising.

Inflation remains low and below the Fed target of 2% for the Core PCE. On a year-over-year basis the Core PCE gained only 1.6% while the Core CPI increased 2.1%. The CPI normally runs ahead of the PCE. Low inflation rates offer the Fed room to keep interest rates low and continue to follow more expansionary policies. Global competition and the strong value of the dollar should keep a lid on inflation going forward, even though the 3.5% unemployment rate suggests a full employment economy.



The Fed Pauses

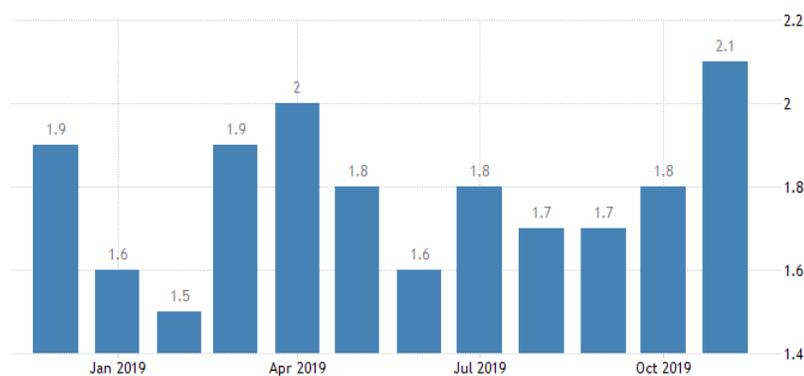
The U. S. Federal Reserve paused in its most recent meeting after lowering the Fed Fund rate target to 1.5% - 1.75% in the last meeting. The rate was 2.25% one year ago. Figure 1 below illustrates the path of the Fed Fund rate over the past five years. Given the lag in the economic response to changes in rates, the full impact of lower rates in 2019 should help economic activity early in 2020.



Source: Federal Reserve Bank of St. Louis Data (FRED)

While GDP growth is healthy, the Fed continues to see potential weaknesses due to the trade war, waning effects of the 2018 tax cuts, slow global growth, and political gridlock. The Fed is also sensitive to making moves that would have a significant impact on the economy going into an election year. There are some signs that inflation is picking up in the November PCE inflation report, but the Fed is not likely to focus on any one month of data. Figure 2 shows the pattern in monthly inflation on an annualized basis.

Figure 2. U.S. Annualized Inflation Rates by Month



Source: Bureau of Economic Analysis

The most likely scenario is for the Fed to wait until it sees clear signals of trending inflation before any reversal in interest rates takes place. The Fed has also signaled a tolerance for deviations from the 2% inflation target with more of an emphasis on trend growth. Meanwhile, lower interest rates have boosted stock prices but business investment continues to be stagnant, possibly waiting for a



clearer picture on the 2020 election landscape. Most analysts now believe that the Fed will remain neutral in 2020 by leaving rates alone.

Recent U. S. Government Events Affecting Markets

Recently, Speaker of the House, Nancy Pelosi, made two announcements on the same day. One, after a year of tabling the vote on the United States-Mexico-Canada Agreement (USMCA), the House voted to approve the renegotiated NAFTA agreement. Second, the House presented two articles of Impeachment against President Donald J. Trump. The first announcement is a victory for the president who has pushed for final approval of the USMCA and the second is another step in a long partisan process to depose the president.

Passage of the USMCA offers a more balanced reciprocal trade agreement that should support higher-paying jobs for Americans. Ultimately the agreement gained bipartisan support due to new features beyond the original NAFTA that benefit American workers, farmers, ranchers, and businesses. The agreement promises a more level playing field for American workers, more discipline on currency manipulation, modernization of agriculture trade, protections for intellectual property, anticorruption, opportunities for digital trade, and more opportunities for small and medium size businesses. In the short term, the primary benefit of USMCA will be seen in agriculture due to additional market access. In the medium term the agreement should create a movement of auto and parts manufacturing back to the U. S. On the down side, long term costs of auto and parts manufacturing overall in North America may hurt competitiveness.

Former president Gerald Ford, when he was a member of the House, defined an impeachable offense as “whatever a majority of the House of Representatives considers it to be at a given moment in history.” In anticipation of a purely partisan situation where one party controls the House of Representatives where impeachment charges are formed, the framers of the constitution put in place a requirement that 2/3 of the Senate must vote for impeachment to achieve a conviction. In the highly partisan political environment we have today, chances of a conviction in the Senate are slim to none. In fact, it is possible that the Senate has an early vote to simply dismiss the case when the opening arguments begin in January.

Confidence is waning in the ability of government to address healthcare, unsustainable entitlement costs, 22 Trillion dollars of national debt that is growing, immigration reform, fair trade issues, social reforms and economic stability. No matter what the outcome in the impeachment process, the rhetoric and wide range of potential changes in the business environment proposed in the 2020 election will likely hold back business sentiment and much needed private investment spending.

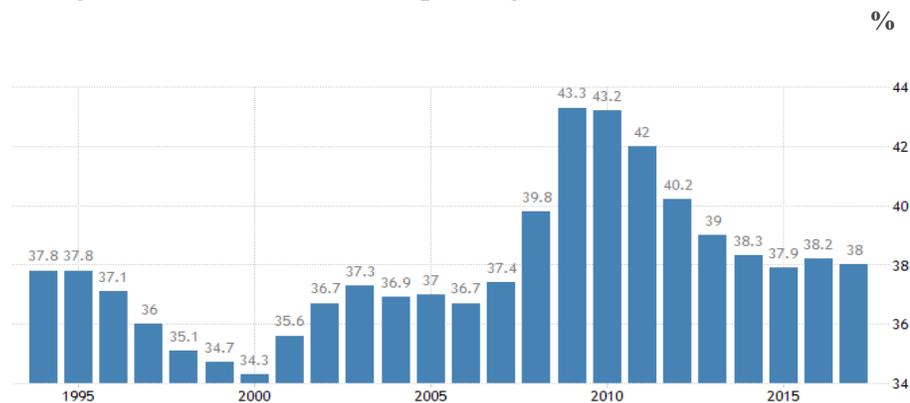
Finally, the government runs out of money on December 20 and a shutdown will again be possible if congress doesn't get a budget agreement. It is likely that a temporary resolution will be achieved to patch things up for a while, but the fundamental problem of an unenforceable budget ceiling will remain. Partisan conflict around funding for a wall along the southern border will be a key sticking point. A government shutdown is unlikely, but first quarter GDP could take a hit from any failure to work out a longer term budget deal soon.



IMF Global Stability Report

In an October 2019 report the International Monetary Fund highlighted a number of key vulnerabilities in the global economy. Forecasts for slower global economic growth continue to rest on an unintended consequence of prolonged misuse of Keynesian and Monetary policies. Rather than conduct deficit fiscal spending only as a counterbalance to slowing economies, permanent deficit accumulations have tilted the national debt burdens to unsustainable levels globally. For example, the figure below, based on data from the Bureau of Economic Analysis, illustrates the growth in government spending in the U. S. in relation to GDP growth. A purely Keynesian counter-cyclical model would predict a significant increase in government spending as a percent of GDP only in response to slumping economic activity. As the figure shows, the percentage of GDP spent by the government has grown both before and well after the 2009 recession. Currently, few countries have room for substantial fiscal stimulus if a need arises.

Figure 3. U. S. Government Spending as a Percent of GDP



Source: Bureau of Economic Analysis

At the same time, Monetary policy has also been excessively accommodative, resulting in historically low interest rates. Central bank policies already have interest rates so low that significant interest rate reductions would push rates into the negative bound territory. Even with rate reductions, limited lending responses by banks and dormant demand by investors almost certainly would occur, limiting economic stimulation. Past monetary and fiscal policies have poked large holes in any safety net that might have been available in response to a significant downturn in economic activity.

The IMF report outlines the following vulnerabilities that are widespread in the global economy.

- Rising corporate debt burdens - low costs of debt financing versus equity financing have tilted corporate capital structures toward higher risk profiles. The IMF estimates that a material economic slowdown (about half as severe as the global financial crisis) would put corporate debt-at-risk (interest on debt higher than operating income) as high as \$19 trillion. Debt-at-risk would be about 40% of total corporate debt in major economies.



- Holdings of riskier and more illiquid assets by institutional investors – the search for higher returns in a low interest rate environment has pushed investors into higher risk asset classes. High risk profiles amplify shocks during economic downturns.
- Reliance on external borrowing by emerging and frontier market economies – dollar denominated debt accumulated by emerging market countries has become unsustainable as the value of the dollar strengthens. Lenders facing low domestic rates sought higher returns on loans targeted to emerging market that now pose significant risks. Slow global growth has hurt the exports of emerging markets, which tend to produce raw materials used in production. The IMF estimates that the median external debt in emerging markets is now 160% of exports compared to only 100% in 2008.
- Address corporate vulnerabilities with stricter supervisory and macroprudential oversight - rather than rely on broad macroeconomic moves to address economic conditions, the use of targeted policies to help improve the economic performance in specific sectors may be needed. Revisions may be needed to taxes that favor debt over equity in order to reduce the vulnerabilities of corporations to downturns.
- Tackle risks among institutional investors through strengthened oversight and disclosures – while the regulatory reforms following the Great Recession improved capital requirements and investment practices of banks, added oversight may be necessary to insulate institutions from downturns without relying on macroeconomic policies. Improved lending practices and risk management are in order.
- Implement prudent sovereign debt management practices – government restraint in fiscal spending and subsequent mounting debt balances must be achieved.

The global economy has been resilient to drags on growth created by trade wars, unsustainable sovereign debt loads, slowing population growth, and political uncertainties. However, the IMF report points to significant fragilities in the global economy that have been building. Fueled by low interest rates and an appetite for risk, financial markets have performed well but at the risk of weaker protections from downturns.



Summary of Recent Economic Data

Gross Domestic Product - The economy slowed in both the second and third quarters as the boost from temporary fiscal stimulus faded. Tighter monetary policy by the Fed last year is also having a lagged effect on growth. Finally, trade tariffs continue to limit growth as U.S. trade deficits mount. Uncertainty from the trade tariffs, global slowdown, and political gridlock have all discouraged investment spending. Lower interest rates may begin to prop up spending and investment somewhat going into 2020, but slow growth around 2% continues to be the most likely outlook.

- According to the second revision by the Bureau of Economic Analysis, U.S. GDP growth remained slow in the third quarter with a revised 2.1% real growth rate following the 2% rate in the second quarter. Consumer spending continues to be the main driver of growth, even though consumer spending increased only 1.97% in the third quarter compared to the 3.03% growth in the second quarter. Inventory accumulation offered some support for growth but growth in investment, trade, and government spending were all lower from the second quarter to the third quarter. Final sales, which exclude the impact on GDP from inventories, rose 2% after rising 3% in the second quarter.
- Table 1 provides the quarterly GDP data for the last five quarters. For the last four quarters the economy grew at an annual rate of 2.1% based on the geometric mean of quarterly rates.

Table 1. Real GDP and GDP Components (Annualized Percentage Change)

	2019 Q3	2019 Q2	2019 Q1	2018 Q4	2018 Q3
Real Annualized GDP	2.12	2.01	3.10	1.09	2.93
Consumption	1.97	3.03	0.78	0.97	2.34
Fixed Investment	-0.18	-0.025	0.56	0.46	0.13
Residential	0.18	-0.11	-0.04	-0.18	-0.15
Non-residential	-0.36	-0.14	0.60	0.64	0.29
Inventories	0.17	-0.91	0.53	0.07	2.14
Net Exports	-0.11	-.68	0.73	-0.35	-2.05
Government	0.28	0.82	0.50	-0.07	0.36

Source: Bureau of Economic Analysis

- Headwinds to growth are likely to remain for the next calendar year. While China is struggling from trade tariffs and strained relations with the U.S., it is likely that only limited deals will go forward until after the election. Also, there will need to be a continuing resolution for a budget to fund government spending very soon. Currently, funding is extended through December 20, 2019 with a potential government shutdown just before Christmas.



- Real Gross Domestic Product per Capita offers a different perspective on the performance of the economy since it tracks economic performance in relation to the population, representing a measure of the U. S. standard of living. The last recorded figure for GDP per capita in the U. S. was \$54,541.70 in 2018, representing a 2.78% growth rate. GDP per capita in the U. S. averaged \$35,552.91 from 1960 to 2018. The U. S. value is 432% times the world average, according to World Bank data.
- Figure 4. below illustrates the yearly growth in GDP per capita. Note that if GDP grew at the same rate as the population, the ratio would be flat over time. The rising trend represents the increase in the standard of living in the U.S. since the Great Recession. The rising trend of per capital data represents an increasing rate of increase in the standard of living over time. While GDP growth is slow the standard of living continues to rise.

Figure 4 Per Capital GDP Growth in the U. S.



Source: World Bank

Consumer Income, Spending, and Saving – Consumers continue to drive the economy with little support from other components of GDP. Almost all of the economy's growth in the third quarter came from consumer spending and the economy would have contracted in the second quarter without the boost from the consumer. Some of the fuel for consumer spending is fading. Real disposable income fell in September and October. Employee compensation grew only 1.2% in the third quarter even though labor markets remain very tight. Consumer spending grew slower in the third quarter. In general, as more of the population approaches retirement there may be a modest shift from consuming to saving.

- Real disposable income, which is the key source of consumer spending, fell .3% in September and again in October. Disposable income represents what households have available for spending and saving after income taxes. Disposable income was revised significantly lower in the second quarter. On a year-ago basis, real disposable income grew 2.8% in October. The saving rate dipped slightly in October to 7.8%, suggesting higher consumer spending in the fourth quarter may come from saving as well as income.



- Table 2 provides the monthly percentage change in disposable income and the saving rate. The percentage change in disposable income is also given on a year-ago basis.

Table 2. Monthly Disposable Income, Year-ago Changes, and Saving Rates

	Oct. 2019	Sept. 2019	Aug. 2019	July 2019	June 2019	May 2019	Apr. 2019	Mar. 2019	Feb. 2019	Jan. 2019
Monthly % Change										
Nominal	-0.1	0.3	0.5	0.3	0.4	0.3	0.4	0.4	0.5	0.0
Real	-0.3	-0.3	0.4	0.0	0.3	0.2	0.1	0.2	0.4	0.1
Year-Ago % Change										
Nominal	4.1	4.6	4.5	4.4	4.6	4.7	4.8	4.7	4.8	4.7
Real	2.8	3.3	3.0	3.0	3.2	3.3	3.2	3.3	3.4	3.2
Saving Rate (%)	7.8	8.1	8.1	7.8	8.1	8.0	8.1	8.4	8.8	8.3

Source: Bureau of Economic Analysis

- Employee compensation, which is the largest part of personal income, grew 0.4% in October following a modest .1% in September. For the third quarter the annualized growth rate was 1.2%. Table 3 provides the monthly change in compensation data.

Table 3. Monthly Percentage Change in Compensation of Employees

	Oct. 2019	Sept. 2019	Aug. 2019	July 2019	June 2019	May 2019	Apr. 2019	Mar. 2019	Feb. 2019	Jan. 2019
Compensation of Employees	0.4	0.1	0.6	0.2	0.4	-0.1	-0.1	-0.1	-0.1	0.8

Source: Bureau of Economic Analysis

- Consumer spending slowed in the third quarter and remains tepid going into the fourth quarter. Overall, consumer spending is on track with the lower trajectory of the pre-tax cut trend. While spending is expected to grow at a slow pace for the remainder of 2019 and into the early part of 2020, consumers remain in good shape due to strong labor markets, wage growth, and strong overall household balance sheets. Household debt-to-income and debt service (percent of household income required to service debt) are at the lowest levels in decades.
- Personal savings rates remain around the 8% mark, which is relatively high. Much of the savings growth is fueled by a significant portion of the population that is moving toward retirement. Reduced spending is felt most in new vehicle sales.
- Retail sales grew slowly in November aided by healthy auto sales. Retail sales increased 0.2% after a revised gain of 0.4% in October. Sales rose at a more modest 0.1% excluding vehicle dealers. Overall, sales were 3.3% above their year-ago level. Core sales were also up 3.3% from last year.



Labor Market – Job expansion in the third quarter was very strong just as many analysts were expecting a slower rate of employment. The headline unemployment rate fell to 3.5% in November while the labor-force-participation rate held steady at 63.2%. Even with such strong job expansion, gains in average hourly wages remains modest with only a 3.1% gain on a year-over-year basis. Unit labor costs are rising as productivity is not keeping up with wages.

- Payroll expansion exceeded all expectations over the past several months. Employment increased by 266,000 in November with revised gains of 156,000 and 193,000 in October and September. The three-month moving average for expansion was a whopping 205,000 in November. While some of the expansion was due to the settling of the UAW strike, job creation in areas like healthcare set a rapid pace.
- The headline unemployment rate slipped to 3.5% in November from 3.6% in October. The U-6 rate, which accounts for part time and underemployed workers, fell to a cyclical low of 6.9%. The labor-force-participation rate held steady at 63.2%.
- Average hourly earnings increased to \$28.29, representing a modest 3.1% gain on a year-over-year basis. The average workweek held steady at 34.4 hours.
- The robust growth in jobs remains a bit of a mystery given slower growth in the economy, the end of fiscal stimulus, trade wars, tight labor market and overall uncertainty in politics. Table 4 outlines key labor market statistics for 2019.

Table 4. Monthly Unemployment and Job Expansion Data for 2019

Source: Bureau of Labor Statistics

	Nov. 2019	Oct. 2019	Sept. 2019	Aug. 2019	July 2019	June 2019	May 2019	Apr. 2019	Mar. 2019	Feb. 2019	Jan. 2019
Unemployment Rate (%)	3.5	3.6	3.5	3.7	3.7	3.7	3.6	3.6	3.8	3.8	4.0
Change in Non-farm Payroll (000s)	266	256	293	219	166	178	62	218	153	56	312
3-month Moving average change	205	189	193	188	135	152	144	142	174	198	245
Labor Force Participation Rate	63.2	63.2	63.2	63.2	63.0	62.9	62.8	62.8	63.0	63.2	63.2

- U. S. wages increased 4.89% in October on a year-ago basis. Wage growth averaged 6.2% from 1960 to 2019. Figure 5 shows the history of wage growth since 1995. The red line shows the average wage growth since the last recession in 2009. There has been less volatility in wage growth than in prior periods, even though growth has been slightly lower. Growth in wages remains slightly lower than in prior post-recession periods.



Figure 5. Annualized Wage Growth in the U. S.



Source: Bureau of Labor Statistics

Production and Manufacturing – The manufacturing sector remains in a downturn that began at the end of 2018. Capacity utilization is falling and unit labor costs are rising with low productivity. A resolution of trade conflicts and a weaker dollar would both promote more exports and production.

- U. S. Industrial production fell 1.1% on a year-over-year basis in October following a decline of 0.1% in September. The October decline in industrial output is the largest in the last three years. Key declines occurred in manufacturing (-1.5%) and utilities (-4.1%). Figure 6 illustrates the monthly growth in industrial production since 2015.

Figure 6. Growth in U. S. Industrial Production



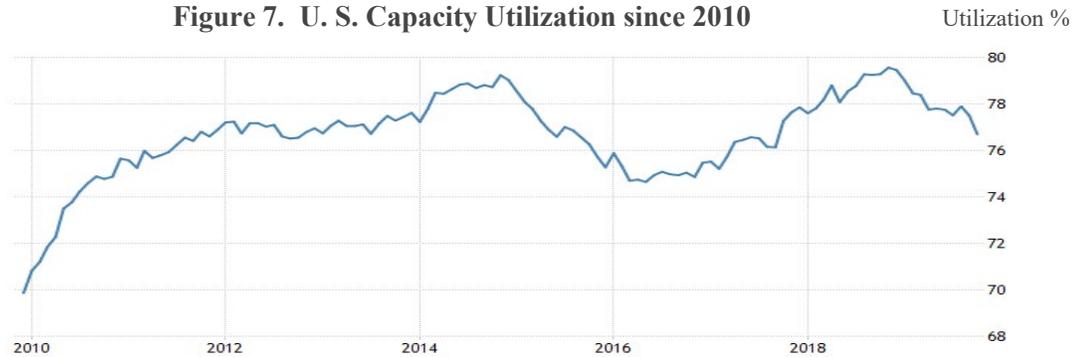
Source: Federal Reserve Bank

- Some of the slowdown in production is linked to trade wars, which may well be easing as we go into 2020. Both the USMCA and recent trade concessions between the U. S. and China may lead to a stronger performance from industrial production in 2020.
- While the labor market flirts with full employment, capacity utilization in the industrial sector is falling. U.S. utilization fell to 76.70% in October from 77.5% in September. Current utilization is the lowest since September of 2017. Capacity utilization reached an all-time high of 89.39 in January of 1967 and a low of 66.69 in June of 2009. The average



utilization rate from 1967 to 2019 was 80.23. Low utilization rates play a role in dampening private investment in plant and equipment unless obsolescence takes hold. Figure 7 illustrates the pattern of capacity utilization since 2010.

Figure 7. U. S. Capacity Utilization since 2010



Source: Federal Reserve Bank

- Overall Nonfarm business output increased 2.3% at an annualized rate in the third quarter while hours worked increased 2.5%. As a result, productivity (measured as output per hour) fell 0.2% at an annualized rate in the third quarter. Compensation per hour rose 2.3%. Growth in unit labor costs, defined as the growth of compensation per hour minus growth of output per hour, increased 2.5% for the quarter. Manufacturing productivity gained 0.1% at an annualized rate in the third quarter as output grew 1.3% and hours worked increased 1.2%. Table 5 summarizes the quarterly data on productivity, compensation and unit labor costs for both nonfarm business and manufacturing.

Table 5. Quarterly Productivity, Compensation, and Unit Labor Costs

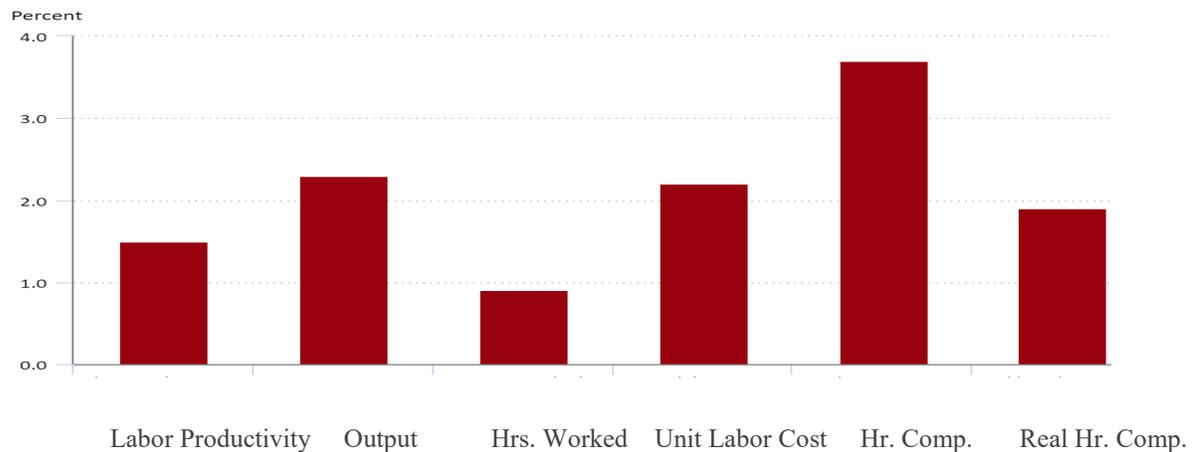
	Q III 2019	Q II 2019	Q I 2019	Q IV 2019	Q III 2019	Q II 2019	Q I 2019
Non-Farm Business							
Output per Hour	-0.2	2.5	3.5	0.1	1.2	1.8	0.9
Compensation per Hour	2.3	2.5	9.2	0.7	2.9	0.3	4.1
Unit Labor Costs	2.5	0.1	5.7	0.6	1.6	-1.6	3.2
Manufacturing							
Output per Hour	0.1	-2.5	1.2	0.9	0.4	1.4	-0.2
Compensation per Hour	3.1	2.6	8.2	3.4	2.4	-4.6	4.4
Unit Labor Costs	3.0	5.2	6.9	2.5	2.05	-6.0	4.7

Source: Bureau of Labor Statistics

- Measures of productivity are volatile from month to month or even quarter to quarter. Figure 8 shows more stable data by using the year-over-year growth in labor productivity, output, hours worked, unit labor costs, hourly compensation, and real hourly compensation.



Figure 8. Year-over-Year Growth in Productivity, Output, Hours, and Compensation

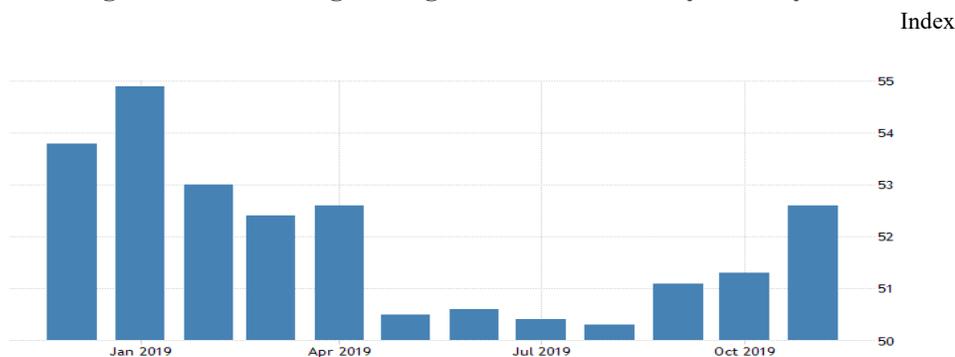


Source: Bureau of Labor Statistics

- Even though the growth of wages and compensation has been moderate for a full employment economy, unit labor costs are rising due to low productivity. Higher unit labor costs squeeze profit margins, especially in a low inflation environment where costs cannot be passed on through price increases.
- U. S. corporate profits increased by 1.3% in the third quarter reaching a total of \$1,881.2 billion following a 3.7% rise in the previous quarter. Undistributed profits (retained earnings) increased by \$31.2 billion (6.1%) and internal funds available for investment (net cash flow with inventory valuation adjustment) climbed by \$53 billion, (2.2 %) to \$2,457.1 billion. The lack of private investment in the economy is not due to an inability to finance projects with equity or lack of access to debt with historically low interest rates.
- The U. S. manufacturing Purchase Manager's Index (PMI) is a forward looking measure of business activity. The index is a survey of managers and supply management executives who are most attuned to the supply chains of their companies. In particular, manufacturers respond to changes in demand by either ramping up or scaling back on purchases of materials required to meet production. The ISM index has one of the earliest releases of data for the strength of manufacturing and production, making it a popular leading indicator.
- The November PMI reached a revised 52.6 following a 51.3 reading in October. This was the strongest indicator of expansion in factory activity in seven months. The manufacturing PMI averaged 53.64 from 2012 until 2019. An all-time high of 57.9 occurred in August of 2014 and a low of 50.30 took place in August of 2019. Figure 9 shows the "U" shaped movement of the PMI index this year.



Figure 9. Purchasing Manager's Index of Factory Activity



Source: Institute of Supply Management (ISM)

Inflation - The Federal Reserve doesn't have to fear a sudden rise in inflation any time soon. The target of a 2% core PCE inflation rate is not likely to remain above trend inflation in 2020.

- The headline PCE deflator, the Fed's preferred measure of inflation, rose 0.2% in October. On a year-ago basis, the headline PCE deflator increased only 1.3% in both October and September. The core PCE deflator, which excludes food and energy, increased 0.1% in October. On a year-ago basis, the core PCE deflator was up 1.6%, compared with 1.7% in September. All told, inflation pressures remain low and below the Fed's 2% target. Table 6 provides monthly and year-ago percent changes in the PCE deflator.

Table 6 . Monthly PCE Deflator Data

	Oct. 2019	Sept. 2019	Aug. 2019	July 2019	June 2019	May 2019	April 2019	Mar. 2019	Feb. 2019
Headline PCE	0.2	0.0	0.0	0.2	0.1	0.1	0.3	0.2	0.1
% change Year-Ago	1.3	2.3	1.4	1.4	1.4	1.4	1.5	1.4	1.3
Core PCE	0.1	0.0	0.1	0.2	0.3	0.1	0.2	0.1	0.0
% Change Year-Ago	1.6	1.7	1.8	1.7	1.6	1.5	1.6	1.5	1.6

Source: Bureau of Economic Analysis

- The consumer price index (CPI) increased 0.3% in November following a 0.4% gain in October. Excluding food and energy, the CPI increased 0.2%. For the prior three months, the headline CPI grew 2.6% on an annualized basis. The core CPI rose 2.1% annualized over the prior three months. The core CPI tends to run higher than the PCE deflator, the Fed's preferred measure of inflation. On a year-ago basis, the CPI rose 2%, a little stronger than the 1.8% gain in October. The core CPI rose 2.3% on a year-ago basis, matching the increase previously. Table 7 shows the CPI data for 2019.

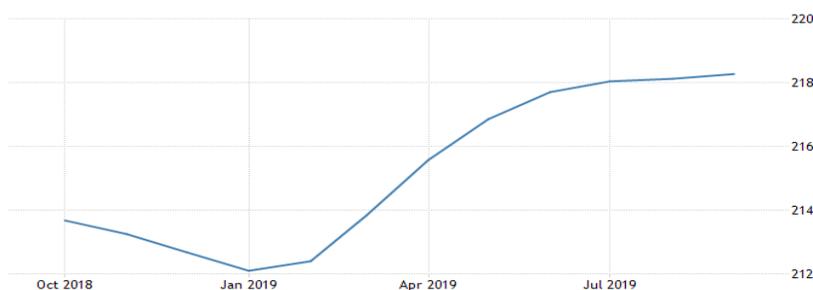
**Table 7. Monthly CPI Inflation Data**

	Nov. 2019	Oct. 2019	Sept. 2019	Aug. 2019	Jul. 2019	June 2019	May 2019	Apr. 2019	Mar. 2019	Feb 2019	Jan. 2019
Headline CPI	0.3	0.4	0.0	0.1	0.3	0.1	0.1	0.3	0.4	0.2	0.0
Year-Ago % Change	2.0	1.8	1.7	1.8	1.8	1.7	1.8	2.0	1.9	1.5	1.5
Core CPI	0.2	0.2	0.1	0.3	0.3	0.3	0.1	0.1	0.1	0.1	0.1
Year-Ago % Change	2.3	2.3	2.4	2.4	2.2	2.1	2.0	2.1	2.0	2.1	2.1

Source: Bureau of Labor Statistics

Housing – While housing prices continue to grow the rate is now much slower for the second half of 2019. Housing starts rebounded in October from a decline in September. Lower mortgage rates and sound household balance sheets have not translated into a booming market.

- US housing starts rose 3.8% from a month earlier to a seasonally adjusted annual rate of 1,314 thousand units in October 2019 following a 7.9% decline in September.
- The S&P CoreLogic Case-Shiller 20-city home price index rose 2.1% year-on-year in September, with little change from the prior month. The National Index, covering all nine US census divisions, increased 3.2% following a 3.1% gain in the previous month.
- The Case Shiller Home Price Index in the United States averaged 164.95 Index Points from 2000 until 2019, reaching an all-time high of 218.27 in September of 2019 and a record low of 100 Index Points in January of 2000. Figure 10 illustrates the movement of the home price index over the past year. While growth in prices at the start of the year was good, the growth of home prices began to slow in June.

Figure 10. U. S. Case Shiller Home Price Index

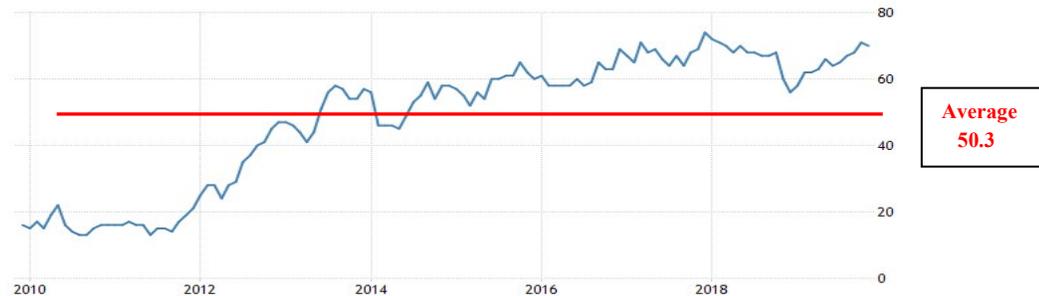
Source: Standard and Poor's

- The National Association of Home Builders and Wells Fargo (NAHB/Wells Fargo) housing index is based on monthly surveys of home builders. Respondents are looking out six months to provide scores that are used to construct the overall index. The index fell to



70 in November from 71 in the prior months. Meanwhile, the gauge for home sales over the next six months rose from 76 to 77. The index averaged 50.53 from 1985 until 2019. Figure 11 shows the movement in the index since 2010.

Figure 11. NAHM/Wells Fargo Home Builders Index

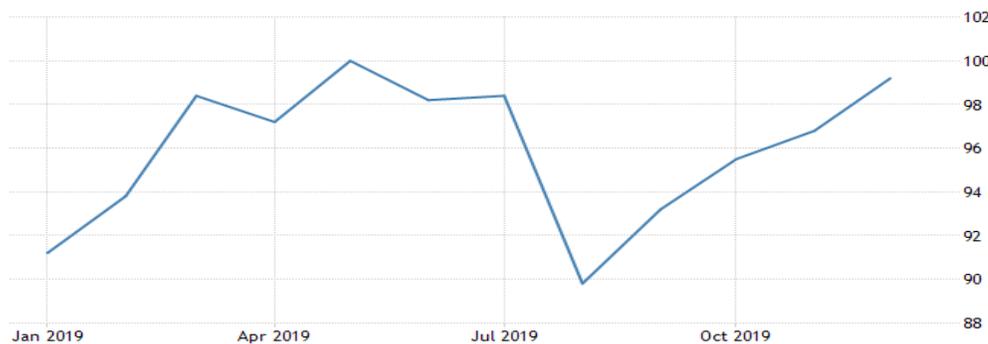


Source: NAHM/Wells Fargo

Confidence and Sentiment – Overall, consumer confidence remains strong with a positive trend. The Conference Board’s consumer confidence index weakened at the end of 2019 but the trend remains positive.

- The University of Michigan’s Consumer Sentiment Index grew to 99.2 in December from 96.8 in November. The December index is the highest since May of this year. Overall, the index has been rising since August. Figure 12 illustrates movement in the index.

Figure 12. University of Michigan Consumer Sentiment Index



Source: University of Michigan

- Consumer confidence, measured by the Conference board Consumer Confidence Index[®] fell a fourth consecutive month in November. Nevertheless, confidence levels remain high and do not suggest a major slowdown in spending.
- Normally the confidence index has a steady decline prior to a recession with something around a 30-point decline from the peak. Figure 13 shows the Conference Board Consumer Confidence Index movement before and after the last recession. The trend remains positive



even though it has been a decade since the 2008-2009 recession. The index is well above the pre-recession levels in the early 2000s.

Figure 13. Conference Board Consumer Confidence Index



Source: Conference Board

Global Issues - The World Bank estimates global growth in 2019 to slow to 2.6%, based on deterioration of trade and investment. Growth is projected to gradually rise to 2.8% by 2021 based on an improved recovery in emerging and developing markets.

- The International Monetary Fund (IMF) expects a 3.0% global growth rate for 2019. While the IMF estimate is higher than the World Bank's, it is the lowest since 2008–09. The IMF estimate is 0.3% lower than the April 2019 forecast. The IMF expects growth to improve to a 3.4% rate 2020 based on expected improvement in emerging and developing countries.
- The landslide victory of Boris Johnson's conservative party in England paves the way for the exit of the U.K. from the European Union. The vote to exit the European Union in 2016 has led to much uncertainty and wrangling that will now be settled by the conservative government. In the short run the U.K. economy should suffer during the transition but the long run economic consequences of independence and sovereignty remains to be seen. At a minimum, the conservative victory may well slow, if not dismantle, globalism initiatives of liberal parties in Europe.
- The recent passage of the United States, Mexico, and Canada trade Agreement (USMCA) after a long delay is expected to provide a short run boost to the U. S. economy. Talks with China look more promising, even though an actual vote on a trade deal will ultimately be held up until after the 2020 election.
- The World Bank Global Outlook offers a summary of economic conditions for various regions of the globe. Brief summaries appear below.



East Asia and Pacific – The World Bank projects growth in the East Asia and Pacific region to slow from 6.3% in 2018 to 5.9% in 2019 and 2020. This is the first time since the 1997-1998 that growth in the region has dropped below 6%. China’s growth is expected to fall from 6.6% in 2018 to 6.2% in 2019. Slower growth is expected due to slower global trade, flat commodity prices, and adjustments to low quality debt.

Europe and Central Asia – The region is expected to grow 2.7% in 2020 from a four-year low of 1.6% in 2019. Turkey is expected to have a mild recovery from a recession. Fiscal stimulus in Central Europe will begin to fade in 2020 leading to 2.7% growth overall. Eastern Europe is expected to recover to 2.7% growth. Growth in Central Asia is expected to be 4% with growth in the Western Balkans of 3.8%.

Latin America and the Caribbean – Regional growth is projected to be 1.7% in 2019. Several of the largest economies face difficult social and political conditions. Brazil, is expected to recover from 1.5% growth to 2.5% in 2020. Argentina is expected to achieve positive growth in 2020 as the effects of financial market pressures fade. Mexico is expected to achieve moderate growth uptick to 2% in 2020.

Middle East and North Africa - Regional growth for 2020 is projected to rise to 3.2% in 2020 due in large by a rebound in oil exports. Growth among oil exporters is anticipated to pick up to 2.9% in 2020.

South Asia – Growth in the region is expected to be 7% in 2020 and 7.1% in 2021. Growth is expected to be supported by monetary and fiscal policy, especially in India. Growth in India is projected to accelerate to 7.5% in fiscal year 2019/20. Pakistan’s growth is expected to slow to 2.7% in fiscal year 2019/20.

Sub-Saharan Africa - Regional growth is expected to pick up to 3.3% in 2020. Key assumptions backing this forecast include improved investor sentiment toward in the region, recovery of oil production by large exporters, and continued strong agricultural production and sustained public investment. Added growth is not expected to significantly reduce poverty in the region. In 2020, growth in South Africa is anticipated to rise to 1.5%; growth in Angola is anticipated to pick up to 2.9%; and growth in Nigeria is anticipated to edge up to 2.2% in 2020.

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