First Quarter 2019 Outlook and Review

The economy grew at a 3.1% rate in the first quarter despite headwinds from the government shutdown, weak consumer spending, delays in tax refunds, and a stock market slump. Growth exceeded analyst forecasts by a wide margin. Some of the second quarter's growth may have bled into the first quarter. Even so, the economy appears to be stronger than expected going into 2019. The economy has generally closed the output gap that persisted throughout the decade long "expansion." Growth is now back on a track matching trend growth of about 3%. Nevertheless, serious obstacles stand in the way of healthy growth going forward as global trade issues may come to a climax in the second and third quarters. The manufacturing sector continues to slide and wealth linked to the stock market and housing is not likely to grow as fast as in 2018. The 10-year Treasury yield continues to fall and is barely above 2%. Many economists believe it will go lower as the Fed uses preemptive cuts to keep the economy growing without fear of rising inflation.

The labor market remains tight with a 50-year low unemployment rate of 3.6%. The preliminary announcement of only 75,000 new jobs in May was unexpected following the robust reports of 263,000 jobs in April and 189,000 in March. May's report offers good news for the equity markets in that it most certainly keeps the Fed from raising rates anytime soon. The three-month average job growth of over 175,000 jobs a month is very healthy. As a frame of reference, monthly job gains of about 103,000 provides a match to the expansion of the work force. The labor force participation rate of 62.8% is in line with recent averages. Even with a tight labor market, wage growth remains slow. Wages grew 3.2% on a year-ago basis in April. Productivity blipped up in April but the average over the past five years is only 1.3%. Ultimately, sustained growth depends on healthy increases in both the workforce and workforce productivity.

Inflation is non-existent with the Fed's preferred PCE measure increasing only 1.5% on a year-ago basis in April. Fed Chairman Powell is clearly signaling a "stand pat" position on interest rates with a possibility of reversing field to lower rates if the economy falters later in the year. The strong value of the U. S. dollar and low rates on foreign bonds continue to drive a strong U.S. bond market. If investor confidence rebounds from worries over tariffs, low rates could help stimulate investment spending and growth. Long term fixed mortgage rates dipped below 4%, which may help stimulate the housing market.

For the next few quarters the labor market is likely to remain tight and inflation should remain below the Fed's target of 2%. Continued trade deficits, low inflation, and the strong dollar will all combine to keep long term interest rates low. Uncertainties about trade relations will weigh on investor confidence and may translate to lower consumer confidence and spending. The second quarter GDP growth is likely to fall back below 2% as tax cut stimulation wanes and uncertainty about the impact of trade issues remain. If the economy falters, the Fed is likely to ease credit conditions but the effectiveness of expansionary monetary policy in a downturn under current conditions is questionable.

Trade Tensions Threaten the Expansion

Now that the Russian collusion issue has faded, headline news revolves around trade tensions, especially with China and Mexico. Trade negotiations with China have been ongoing with almost daily shifts in expectations as to the outcome. Both sides have used bluster to strengthen negotiation positions and the resolution will require some backing away from trade threats. Without successful negotiations, the tariff on $200 billion in Chinese imports will rise from 10% to 25%. An additional threat is to impose 25% tariffs on the remaining $325 billion of Chinese goods imported into the U.S. annually. China threatens an increase from 10% to between 20% and 25% in the tariffs on $60 billion of U.S. goods imports. The higher tariffs would raise input costs for many U. S. producers and hurt the vulnerable manufacturing sector. While political resolve and egos are ultimately involved, a resolution is possible. China has more to lose in terms of monetary value but the U. S. is vulnerable to a potential economic slowdown with an election year coming in 2020.

The good news is that President Trump dropped threats of tariffs on billions of dollars of Mexican imports after negotiators reached a deal on measures by Mexico to slow the flow of migrants pouring into the U.S. from Mexico. This agreement represents a win on two counts. First, avoiding a devastating economic hit from tariffs is good for both countries. Second, there now appears to be room to address the illegal immigration crisis without the bipartisan congressional agreements on a border wall.

Why are U. S. Trade Deficits Chronic?

The U. S. balance of payments has long been based on current account (trade and services) deficits and capital account (borrowing) surpluses. Trading partners accumulate dollars by selling more goods and services to the U. S. than purchases of U. S goods and services. The excess dollars earned in trade flows back to the U. S. through investments in dollar denominated securities (U. S. borrowing). This condition persists as long as the saving rate in the U. S. is low and government spending exceeds tax revenues, requiring foreign capital inflows for the shortfall between investment and saving in the U. S. This condition over times hurts the U. S. real economy and boosts the U. S. financial markets.

A simple accounting identity from economics illustrates fundamental forces behind the U. S. trade deficit. The total value of all goods produced in an economy must equal the total value of the incomes generated by producing those goods. This set of relationships is often called the circular flow, outlined in the equations below.

$$C + I + G + X = \text{Value of goods produced}$$

$$C + S + T + M = \text{Distribution of income produced}$$

The notation of C represents consumption goods, I represents investment goods, G represents government goods, and X represents goods produced for export. Income from production is

distributed by consumption C, saving S, taxes, and spending on imports M. The accounting identity is given as follows:

$$C + I + G + X = C + S + T + M$$

With a little algebra, the following equation is obtained:

$$(X - M) = (S - I) + (T - G)$$

A chronic deficit in trade ($X - M < 0$) is a natural result of saving less than investing ($S < I$) and tax revenue less than government spending ($T - G < 0$). In this case capital inflows from abroad make up for the lack of saving to fund investment and lack of taxes to fund government. This is the chronic condition of the U. S. economy. This condition is not necessarily bad if the invested funds from abroad generate high net present value from investments in real assets in the U. S. A key concern is that government spending, which now absorbs much of the foreign capital inflow to finance the deficit, may not generate high net present value investment and crowds out private investment.

Free and fair trade requires free-floating of trading partner currencies as well as an absence of tariffs and quotas. Currently the focus in on the free trade aspects of barriers to trade, but without free-floating currencies central banks can easily manipulate the home country currency to gain trade advantages. A lower home currency value makes home country goods relatively cheaper. Any trade agreement without free floating currencies can easily be negated by currency manipulation. This was the case in the first iteration of NAFTA as the peso devaluation after the agreement quickly negated some of the U. S. expected advantages. The key point is that free and fair trade rests on a complicated set of relationships that are not easily resolved.

The Federal Reserve to the Rescue?

The Federal Reserve has backed off its "normalization" policy aimed at bringing short term interest rates up to a level consistent with neutral central bank involvement. Chronic low inflation persists with little need for additional contractionary policy on the part of the Fed. Attention now turns to a potential economic reversal in the wake of international trade roadblocks, low global growth, and a decade of unsustainable sovereign debt expansion. Federal Reserve officials, including Chairman Powell, have now clearly shifted attention to sustaining economic growth rather than fighting inflation. Financial markets, with a strong preference for low interest rates and good economic growth, have gained some reassurance from the Fed position. Nevertheless, concerns are growing over the potential trade disruptions, slumping manufacturing, and potential unwinding of the late stage expansion of a business cycle. Such a scenario would now be met by the Fed with interest rate cuts and monetary expansion.

The fallacy of "the Fed to the rescue" scenario is that recent experience suggests that the economy does not respond to lower interest rates in the way theory predicts. The last *Outlook* addressed the

history of central bank policy and "zero bound" interest rates. Interest rates around the globe are now so low that additional rate cuts to stimulate the economy are not likely to have much effect on economic growth. This is also true in the U. S. A case in point is the response to the 2009 recession when massive monetary expansion and dramatic reductions in interest rates had little impact on growth. In general, monetary policy is more effective in cooling off an economy than stimulating growth.

Fiscal policy is an unlikely alternative for economic stimulation at this point. Accumulated debt has already hit astronomic levels and the political mood in D. C. is not conducive to bipartisan initiatives to stimulate a slumping economy. With elections in 2020, the best that we can expect from elected officials is a debate on who is to blame for any economic woes. With both monetary and fiscal policy limitations, the economy must be very resilient to trade shocks for the healthy expansion to continue. The best-case scenario is that "bluster" in the negotiation process is a first step to negotiated resolutions of free and fair trade arrangements.

Summary of Recent Economic Data

GDP Growth - *The economy grew at an annual rate of 3.1% in the first quarter of 2019 following a 2.2% increase in the fourth quarter, based on the revised estimate by the Bureau of Economic Analysis. The revised estimate is slightly lower than the 3.2% advanced estimate. Growth in consumer spending and fixed investment slowed while inventory investment grew faster. A narrower trade deficit boosted growth. Higher than expected first quarter growth may come at the expense of second quarter growth, given the role inventory investment played in first quarter.*

Figure 1 illustrates the pattern of quarterly GDP growth in the U.S since July of 2016. While the economy is approaching a decade of expansion since the last recession, it is just now achieving an annual average that matches the trend potential of the economy (illustrated by the red arrow).

Figure 1. U. S. Quarterly GDP Growth (July 2016 – March 2019)

Source: Bureau of Economic Analysis

- The government shutdown detracted approximately 0.3% from first quarter growth, based on a Bureau of Economic Analysis estimate. Even so, the economy generated higher than expected growth in the first quarter of 2019, matching long-term growth potential of about 3.1%. Much of the unexpected growth came from inventory accumulation, improved international trade, and government spending. These components are likely to be smaller in the second quarter of 2019, suggesting slower growth going forward.

- Consumer spending added only 0.9% to growth, well below the 1.7% contribution in the fourth quarter. Fixed investment contributed 0.2%, down from 0.5% in the prior quarter. Trade added 1% to growth in the first quarter after being a drag on growth for most of 2018. Government spending, all from state and local sources, added 0.4% to growth while inventory accumulation added 0.6%. Table 1 outlines the growth in GDP components since the second quarter of 2017.

Table 1. U. S. Real GDP and Component Growth (Annual Percentage Change)

	I Q 2019	IV Q 2018	III Q 2018	II Q 2018	I Q 2018	IV Q 2017	III Q 2017	II Q 2017
Real GDP	3.1	2.17	3.36	4.16	2.22	2.29	2.82	2.99
Consumption	0.9	1.66	2.37	2.57	0.36	2.64	1.52	1.95
Fixed Investment	0.18	0.54	0.21	1.10	1.30	1.04	0.44	0.70
Inventories	0.60	0.11	2.33	-1.17	0.27	-0.91	1.04	0.23
Next Exports	0.96	-0.08	-1.99	1.22	-0.02	-0.89	0.01	0.08
Government	0.42	-0.07	0.44	0.43	0.27	0.41	-0.18	0.01

Source: Bureau of Economic Analysis

- The composition of GDP growth is not optimal, given the large inventory contribution. Nevertheless, when the impact from inventories on GDP is excluded the growth rate is 2.5% compared to a 2.1% adjusted growth rate in the fourth quarter.

- The savings rate edged higher to 6.7% from 6.5% in the last quarter of 2018.

- Corporate after-tax profits fell 0.82% in the first quarter after falling 0.42% in the fourth quarter. Losses occurred primarily in domestic nonfinancial industries while profits from operations in the rest of the world were lower. Lower margins reflect an inability to raise prices in a globally competitive economy.

- The U.S. economy clearly benefitted from the Federal Reserve's policy reversal away from normalization of interest rates. After four 25 basis point increases earlier in the year, analysts expected several more increases going into 2019. Now the consensus is that the Fed will stand pat with a good chance that the policy will reverse to interest rate cuts if the economy falters later in the year.

***Unemployment and Labor Market Conditions -** The unemployment rate fell to 3.6% in April, which suggests full employment given the return to trend GDP growth rates in the first quarter. The labor market created 263,000 jobs in April following a revised expansion of 189,000 jobs in March. The three-month moving average of job creation is consistently beating a benchmark of 103,000 jobs needed to keep up with increases in the working age population. Hourly earnings continued to increase slowly with a 3.2% gain on a year-over-year basis. Labor productivity is improving, but it has been dismal since 2014. Productivity increased a healthy 3.6% in the first quarter but the average is only 1.3% over the past five years. In general, demographic changes present significant challenges for productivity. The workforce is growing slowly and the share of the labor force that is 65 and older has doubled over the last decade. An older workforce tends to reduce productivity.*

- A contraction of the labor force (the denominator of the unemployment rate) played a role in achieving a 3.8% unemployment rate. The participation rate fell to 62.8%, which is on par with the rate one year ago. The employment to population ratio remained steady at 60.6% in April. Even so, monthly job expansion remains very strong with a three-month moving average of 169,000 in April.

- Table 2 summarizes the key results for the household survey on payrolls earnings, unemployment, and labor force participation.

Table 2. Payrolls, Hourly Earnings, Unemployment and Labor Force Participation Rate

	April 2019	Mar 2019	Feb 2019	Jan. 2019	Dec 2018	Nov 2018	Oct 2018
Nonfarm Payrolls Change (000s)	263	189	56	311	227	196	277
Nonfarm Payrolls Change (000s) 3-Mo MA	169	186	198	245	233	194	222
Average Hourly Earnings % Change	N.A.	0.1	0.4	0.1	0.4	0.3	0.2
Average workweek (hours)	N.A.	34.5	34.4	34.5	34.5	34.5	34.5
Unemployment Rate (%)	3.6	3.8	3.8	4.0	3.4	3.7	3.7
Labor Force Participation Rate (%)	62.8	63	63.2	63.2	63.1	62.9	62.9

Source: *Bureau of Labor statistics*

- While the data suggest a strong labor market, there were more workers who preferred full time jobs but take part time jobs. The U-6 unemployment rate, which includes underemployed and marginally attached workers, remained unchanged in April at 7.3%.

- U. S. productivity remains volatile from quarter to quarter. Nonfarm productivity increased 3.6% at an annualized rate in the first quarter, which is the strongest since 2014. Trend productivity has improved somewhat. Through the first quarter of 2019 productivity growth averaged 1.3% over the last five years compared with an average less than 1% since 2009.

- Hours worked rose 0.5% at an annualized rate in the first quarter. Total nonfarm unit labor costs fell 0.9% at an annualized rate in the first quarter. On a year-ago basis nonfarm unit labor costs increased only 0.1%. Real hourly compensation for nonfarm businesses rose 1.7% at an annualized rate in the first quarter.

- Manufacturing productivity increased 1.7% at an annualized rate in the first quarter while output fell 1% and hours worked declined 2.6%. Durable goods manufacturing productivity increased by 1.4% at an annualized rate while nondurable goods manufacturing rose 2.1%. Manufacturing unit labor costs were up 0.8% at an annualized rate in the first quarter, but this wasn't enough to make year-over-year growth positive. Real hourly compensation for manufacturing increased 1.5% at an annualized rate.

- Table 3 outlines key quarterly data on productivity and labor costs for nonfarm business, nonfinancial corporations, and manufacturing over the past eight quarters.

Table 3. Quarterly Productivity, Compensation and Costs (Annualized Percentage Change)

	I Q 2019	IV Q 2018	III Q 2018	II Q 2018	I Q 2018	IV Q 2017	III Q 2017	II Q 2017
Nonfarm Business								
Output per Hour	3.6	1.3	1.9	2.9	0.6	-0.3	2.3	1.6
Compensation per Hour	2.6	3.9	3.5	-.10	4.0	1.9	5.1	1.3
Unit Labor Costs	-.09	2.5	1.6	-2.8	3.5	2.3	2.8	-0.3
Nonfinancial Corporations								
Output per Hour	N.A.	3.2	6.2	-2.1	3.2	1.4	1.1	4.5
Compensation per Hour	N.A.	3.5	3.7	-0.2	4.7	0.3	2.8	-0.1
Unit Labor Costs	N.A.	0.3	-2.3	1.9	1.4	-1.1	1.7	-4.4
Manufacturing								
Output per Hour	1.7	1.1	0.6	1.2	-0.1	4.4	-5.0	3.5
Compensation per Hour	2.4	4.3	2.8	-5.0	4.6	1.6	2.4	3.0
Unit Labor Costs	0.8	2.2	1.8	-6.1	5.5	-2.7	7.8	-0.5

Source: Bureau of Labor Statistics

Personal Income, Consumption, and Sales – *Personal income continues to grow at a slow but steady pace with increases in wages and salaries of just below 4% on the year. Real disposable income is growing at close to 3% on an annual basis, offering room for healthy growth in consumption. The personal saving rate fell slightly in April but remains above 6%. While the tight labor market suggests continued improvement in personal income, trade disruptions and unusually harsh spring weather may cause headwinds for income in the second quarter. Retail sales in April were disappointing but were 3.1% higher than the year-ago level.*

- Nominal personal income grew 0.5% in April following increases of 0.1% and 0.2% in the prior months.

- Wages and salaries, which make up about half of personal income, grew 0.3% in April following a 0.4% gain in March. Wages and salaries grew at a 3.7% annualized rate in April.

- Real disposable income grew 0.1% in April following a dismal -0.2% in March and modest 0.1% increase in February. On a year-ago percentage change basis, real disposable income grew 2.2% in April.

- The personal savings rate ticked up from 6.1% in March to 6.2% in April. Table 4 provides monthly data on personal income, compensation, and disposable income.

Table 4. Monthly Change in Personal Income, Compensation, and Disposable Income

	April 2019	March 2019	Feb. 2019	Jan. 2019	Dec. 2018	Nov. 2018	Oct. 2018
Total Personal Income (% change)	.5	.1	.2	-0.1	0.9	0.2	0.3
Employment Compensation (% change)	.3	.4	.3	0.4	0.4	0.0	0.0
Real Disposable Income (% change)	.1	-0.2	0.1	-0.1	1.0	0.2	0.2
Real Disposable Income (year over year % change)	2.2	2.1	2.6	2.7	3.6	2.8	2.7

Source: Bureau of Economic Analysis

- Retail sales remain volatile from month to month. April's retail sales fell .2% following a gain of 1.7% in March. On a year-ago basis, sales were 3.1% higher in April and 3.8% higher than last March.

- Sales growth tended to be strongest in non-store retailers, restaurants and gasoline stations. Sporting goods hobby stores, electronics, appliance stores, furniture stores, and department stores experienced the biggest declines.

- Table 5 provides data on the monthly growth in retail sales.

Table 5. Retail and Food Services Sales (Percentage change)

	April 2019	Mar. 2019	Feb. 2019	Jan. 2019	Dec. 2018	Nov. 2018	Oct. 2018	Sept. 2018
Retail & Food Services Sales	-0.2	1.7	-0.3	0.8	-1.6	0.0	1.0	-0.2
Year over Year % Change	3.1	3.8	2.1	2.9	1.6	4.0	4.6	4.0

Source: Census Bureau

Production and Manufacturing - *U.S. manufacturing continues to lag behind the rest of the economy. Total capital goods orders and non-defense capital goods orders both fell in April and have had negative monthly changes in two of the last three months. Core capital goods orders, which represent business investment, fell in April for the first time in four months. Trend growth for business investment has been falling since 2017. The durable goods data line up with the recent ISM manufacturing survey index movements, which suggest weaker demand for manufactured goods. Durable good production and manufacturing will be hit hard by trade disruptions and tariffs if current tensions are not resolved.*

- New orders for durable manufactured goods fell 2.1% in April and March orders were revised lower. Orders fell in two of the last three months. April orders are 0.5% lower than one year ago.

- Defense capital goods orders increasing by 4.8% in April and by 28.9% on a year-ago basis. Excluding defense, total orders fell 2.5%.

- Total durable goods shipments decreased 1.6% while remaining 2.3% higher from a year earlier. Shipments excluding transportation were 0.2% lower, whereas those excluding defense fell 1.8%.

- Shipments of core capital goods were unchanged and those for March were revised lower. Shipments in this segment were 3% higher on a year-ago basis, but trend growth has been sharply decelerating since the fourth quarter of 2017. The trend in this measure is key to overall growth, as shipments are used to estimate equipment spending's contribution to GDP.

- Durable goods inventories rose 0.4% and have increased in nine of the last 10 months. They were up 5% from a year earlier.

- Table 6 summarized key monthly data on durable and capital goods.

Table 6. Durable and Capital Goods Orders and Shipments (Monthly Percentage Changes)

	April 2019	Mar 2019	Feb 2019	Jan. 2019	Dec. 2018	Nov. 2018	Oct. 2018
Durable Goods (Monthly Percentage Change)							
Total New Orders for Capital Goods	-2.1	1.7	-2.6	0.5	1.1	0.6	-4.3
Nondefense Capital Goods	-5.0	2.6	-5.9	4.0	2.8	0.2	-4.2
Total Shipments of Capital Goods	-1.6	-0.5	0.0	-0.1	0.3	0.9	-0.3
Total Shipments of Nondefense Capital Goods	-3.0	-0.9	0.1	-0.5	-0.3	1.6	-1.9
Durable Goods Inventory/Sales Ratio (percent)	1.7	1.6	1.6	1.6	1.6	1.6	1.6

Source: Census Bureau

- The ISM's nonmanufacturing index continued to signal strong growth for the sector that accounts for 88% of the economy. The index increased from 55.5 to 56.9 in May. Overall, the components of the index improved with the business activity index posting a 1.7% gain, new orders increased 0.5%, and employment improving by 4.4%. Price increases slowed.

- The only real negative indicator in the nonmanufacturing index data was a 1.5% weakening for new export orders, likely in anticipation of tougher trade conditions. Nevertheless, in the short run the nonmanufacturing sector is less affected by tariffs than the manufacturing sector.

- Table 7 shows the monthly data for the ISM Nonmanufacturing Composite Index.

Table 7. Monthly ISM Nonmanufacturing Composite Index

	May 2019	April 2019	Mar. 2019	Feb. 2019	Jan. 2019	Dec. 2018	Nov. 2018	Oct. 2018
ISM Nonmanufacturing Index	56.9	55.5	56.1	59.7	59.7	56.7	58.0	60.3

Source: Institute of Supply Management

- The ISM manufacturing index showed weakness in April and May. The index fell from 52.8 in April to 52.1 in May and has retreated from the 56.6 index in January of this year. Overall, the index has been improving since 2016. Manufacturing is not expanding in line with the rest of the economy but the ISM index remains well above the threshold of 50, which is the benchmark for expansion. Table 8 provides the monthly ISM index data.

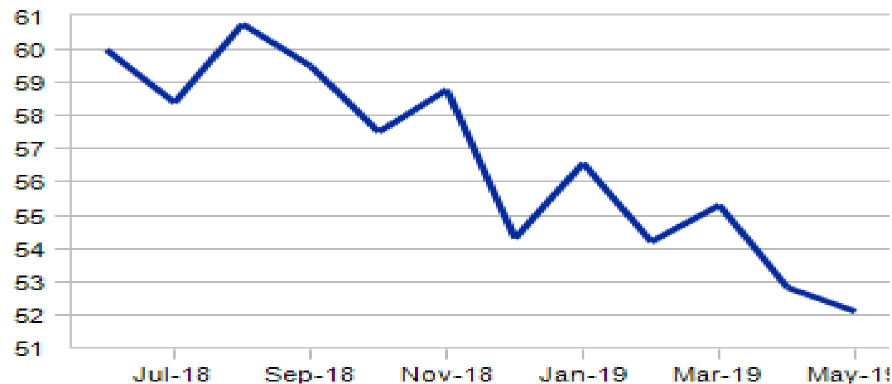
Table 8. Monthly ISM Manufacturing Composite Index.

	May 2019	April 2019	Mar. 2019	Feb. 2019	Jan. 2019	Dec. 2018	Nov. 2018	Oct. 2018
Composite ISM Manufacturing Index	52.1	52.8	55.3	54.2	56.6	54.3	58.8	59.5

Source: Institute of Supply Management

- Figure 2 below illustrates the deterioration of the ISM manufacturing index over the past year.

Figure 2. ISM Manufacturing Index over the Past 12 Months



Index > 50 signals expansion

- Industrial production declined in three of the last four months, in line with the most recent ISM survey. Inventories were up 0.3% in April, marking the seventh increase in the last eight months. The inventories-to-shipments ratio was 1.37, up from 1.36 in March.

- Total capacity utilization fell by 0.6% from 78.5 in March to 77.9 in April. Manufacturing capacity utilization fell to 75.7 in April, which is 0.5% below its long-run average. Falling capacity utilization suggests added slack, reducing incentives for investment spending.

Inflation - *Inflation remains dormant across all key measures. The year-over-year change in the PCE, the Fed's key target, was only 1.5% in April. The producer price index remains in line with prior months, suggesting little pressure on consumer prices going forward. Pending tariffs on Chinese goods will edge inflation higher, but the impact on the inflation measures is likely to be no more than .2% on an annual basis. While the economy appears to be at full employment with no output gap, excess demand inflation has yet to materialize. The U.S. Fed will need to see inflation rates above 2% on the PCE index to consider added increases in the federal funds rate.*

- The personal consumption expenditures (PCE) price index showed inflation on a year-ago basis of 1.5% for the headline rate in April and 1.6% for the core rate. Inflation has been below the Fed's target of 2% for the PCE index. Table 9 provides the year-ago inflation rates by month since last October.

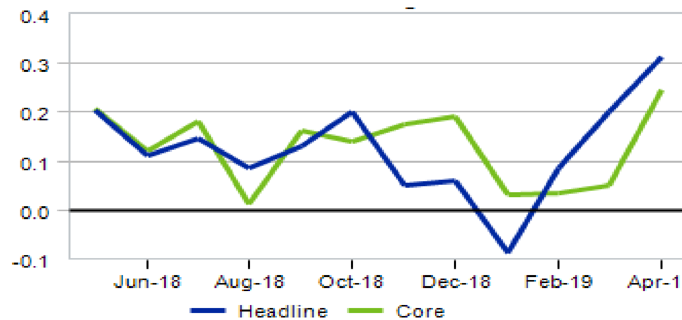
Table 9. Personal Consumption Expenditure (PCE) Deflator

	Apr. 2019	Mar. 2019	Feb. 2019	Jan. 2019	Dec. 2018	Nov. 2018	Oct. 2018
Core PCE (Year-ago % Change)	1.6	1.5	1.6	1.8	1.2	1.9	2.0
PCE (Year –ago % change)	1.5	1.4	1.3	1.3	1.8	1.8	2.0

Source: Bureau of Economic Analysis

- Inflation measured by changes in the PCE index ticked up in the last three months, as the figure below illustrates. The headline PCE deflator increased 0.3% in April following a 0.2% gain in March and a 0.1% rise in February. This trend is not expected to continue but upside pressure on inflation may come from trade conflicts and tariffs later in 2019. Figure 3 illustrates the monthly movement of the PCE measures over the last year.

Figure 3. Monthly Percentage Changes in the Core and Headline PCE Index



Source: Bureau of Labor Statistics

- The consumer price index (CPI) rose 0.3% in April. Energy prices edged up while food prices fell for the first time since January 2017. Spring flooding will likely lead to higher food prices later in the year. The core CPI, which excludes food and energy, gained only 0.1% in April. On a year-ago basis, the CPI increased 2% in April and the core index gained 2.1%.

- Table 10 provides the monthly CPI data for the last seven months.

Table 10. U. S. Consumer Price Index (CPI) and Core Consumer Price Index

	April 2019	Mach 20190.1	Feb. 2019	Jan. 2019	Dec. 2018	Nov. 2018	Oct. 2018
Core CPI (Monthly % change)	0.1	0.1	0.1	0.2	0.2	0.2	0.2
CPI (Monthly % change)	0.3	0.4	0.2	0.0	0.0	0.0	0.3
Core CPI (Year ago % change)	2.1	2.0	2.1	2.1	2.2	2.3	2.2
CPI (Year ago % change)	2.0	1.9	1.5	1.5	1.9	0.2	2.5

Source: Bureau of Labor Statistics

- The U.S. producer price index (PPI) increased 0.2% in April following a gain of 0.6% in March and 0.1% in February. The PPI increased 2.3% on a year-ago basis following the 2.2% rate in March. Higher energy prices lifted the index recently. Overall, PPI data in Table 11 show no significant pressure on headline or core PCE inflation rates.

Table 11. Monthly Producer Price Index (PPI)

	Apr 2019	Mar 2019	Feb. 2019	Jan. 2019	Dec. 2018	Nov. 2018	Oct. 2018	Sept. 2018
PPI (Final Demand - % change)	0.2	0.6	0.1	-0.2	-0.1	-0.1	0.6	0.2
PPI (Year-ago % change)	2.3	2.2	1.8	2.0	2.5	2.6	3.2	2.6

Source: Bureau of Labor Statistics

Housing – *House price appreciation slowed again in March, continuing a trend that began last spring. The primary drag on home prices has been reduced housing affordability in the lower priced segment of the market. The income distribution has skewed with below average income growth lagging behind housing price increases since the 2009 recession. Mortgage rates recently fell below the 4% threshold for the first time in well over a year, potentially providing stronger home buying demand going forward. The strong labor market and likelihood that the Fed will not raise interest rates both offer support for stronger housing demand.*

- House price appreciation slowed in March. Year-ago growth in the 20-city composite index fell to 2.7% from 3% in February. Likewise, year-ago growth in the 10-city composite index dropped to 2.3% from 2.5% in February. Table 12 provides the monthly home price index changes over the past four months.

Table 12. S&P CoreLogic Case-Shiller ® Home Price Index Percentage Change

	Mar 2019	Feb 2019	Jan 2019	Dec 2019	% Change yr. Ago	Peak
National Composite Index % Change	0.6	0.2	-.0.2	-0.2	3.7	July 2006
10-city Composite Index % Change	0.7	0.2	-0.3	-0.3	2.3	July 2006
20-city Composite Index % Change	0.7	0.2	-0.2	-0.2	2.7	July 2006

Source: Standard & Poor's/Corelogic, Inc.

- House price appreciate has largely been driven by a lack of supply. The supply of existing homes at the current sales pace is near a decade low of 4.2 months. A faster pace of new home construction is taking shape and may help reduce the pace of home appreciation going forward.

Consumer Confidence and Sentiment – *Consumer confidence faded in the final quarter of 2018 but rebounded in the first months of 2019. Both the Conference Board and University of Michigan sentiment surveys improved. The Conference Board's Index of Leading Indicators recorded gains in the last three months with broad based support from all components other than manufacturing.*

- The Conference Board's Leading Indicators Index posted gains in the last three months ending in April. All but three of the components of the index improved with only manufacturing components providing drags. The three-month moving average for he leading index was 0.2% in April.

- The leading indicator's six-month annualized growth rate was 1.3%. The coincident index's six-month annualized rate was also 1.3%. Both numbers are consistent with an expansion.

- The Conference Board Consumer Confidence Index increased from 129.2 in April to 134.1 in May. The index is slowly closing in on the cyclical high of 137.9 reached in October 2018.

- Consumers' assessment of present conditions and consumer expectations both improved between April and May. Table 13 provides the monthly movement in the Conference

Board Consumer Confidence Index over the last eight months. Recent trade issues with Mexico were not present when the last reading was taken on expectations, suggesting some pullback in June. The labor market component widened from 33.2 to 36.3, suggesting improving conditions. The index for consumers' expectations about future income slumped slightly but buying plans edged slightly higher.

Table 13. Conference Board Consumer Confidence Index (1985 = 100)

Index	May 2019	April 2019	Mar. 2019	Feb. 2019	Jan. 2019	Dec. 2018	Nov. 2018	Oct. 2018
Overall Index	134.1	129.2	124.2	131.4	121.7	126.6	136.4	137.9
Change in Overall Index	+4.9	+5.0	-7.2	+9.7	-4.9	-9.8	-1.5	-2.6
Expectations Index	106.6	102.7	98.3	103.8	89.4	97.7	112.3	115.1
Change in Expectations Index	+3.9	+4.4	-5.5	+14	-8.3	-14.6	-2.8	+2.6

Source: Conference Board

- Consumer sentiment measured by the University of Michigan Consumer Confidence Index improved in May but survey data collected after trade war tensions (around mid-May) were weaker. The index rose to 100 in May following an index of 97.2 in April. The gain from April was largely concentrated in the components of the index measuring expectations, which reached a 15-year high.

- Inflation expectations also rose in May as the median one-year inflation expectation increased from 2.5% in April to 2.9%. Five-year expectations rose to 2.6% from 2.3%. Table 14 provides key monthly data from the University of Michigan Confidence survey over the past eight months.

Table 14. University of Michigan Consumer Confidence Index

	May 2019	April 2019	Mar. 2019	Feb. 2019	Jan. 2019	Dec. 2018	Nov. 2018	Oct. 2018
Overall Index	100.0	97.2	98.4	93.8	91.2	98.3	97.5	98.6
Change in Overall Index	2.8	-1.2	+4.6	+2.6	-7.1	0.8	-1.1	
Expectations Index	93.5	87.4	88.8	84.4	79.9	87	88.1	89.3
Change in Expectations Index	+6.1	-1.4	4.7	4.5	-7.1	-1.1	-1.2	
Expected Inflation (1 year)	2.9	2.5	2.5	2.6	2.7	2.7	2.8	
Expected Inflation (5 year)	2.6	2.3	2.5	2.3	2.6	2.5	2.6	2.6

Source: University of Michigan

***U. S. Trade** – The U. S. trade deficit increased to $50 billion in March following a $49.3 billion deficit in February. The trade deficit in March is only slightly below the 12-month average. The U. S. economy is relatively strong compared to trading partners, making the demand for imports stronger than the demand for U. S exports. The stronger U. S. dollar also works against the U. S. trade balance, making U. S. exports more expensive to foreign consumers and imports relatively cheaper to U. S. consumers. These factors working against the U. S. trade balance are not likely to change anytime soon.*

- The nominal goods deficit widened to $72.4 billion from $71.9 billion in February. The services surplus fell $187 million to $22.4 billion. The net trade deficit of $50 billion in March followed a $49.3 billion deficit in February.
- Total nominal exports rose 1%. Goods exports increased 1.4% on a monthly basis after adding 1.6% in February. Services exports edged up 0.1% to hit a record high.
- Table 15 summarizes the monthly U. S. trade in goods balances. While the deficits are chronic, the size of the deficit has been slowly declining.

Table 15. U. S. International Trade in Goods (Billions of $s)

	Mar. 2019	Feb. 2019	Jan. 2019	Dec. 2018	Nov. 2018	Oct. 2018	Sept. 2018	Aug. 2018
Goods Balance	-50.0	-49.4	-52.1	-59.8	-50.3	-56.3	-55.4	-54.4
Exports	212.0	209.8	207.4	205.4	209.1	210.4	210.6	207.5
Imports	262.0	259.2	259.5	265.3	259.4	266.7	266.0	262.0

Source: Bureau of Economic Analysis/Census Bureau

***International Economic Conditions –** Global growth has slowed. Rising debt and trade tensions continue to be the dominant threats to global growth. China is clamping down on "shadow loans" and low credit quality of debt. Sovereign debt spreads have expanded, hurting investment in countries like Italy. Auto makers in Europe are dealing with new emission standards that have slowed production. Brexit uncertainties have slowed business investment and sentiment in the U.K. and Europe. Overall, the World Bank projects global growth of 2.6% for 2019 with growth of 2.8% in 2021. The United Nations estimates are slightly higher.*

In a recent study sponsored by the *Economist* magazine, ten key risks to global growth in 2019 were identified. That list appears below in no particular order.

- A US - China trade conflict evolves into a full-blown global trade war
- US corporate debt burden turns a moderate economic downturn into a recession
- Contagion from countries like Turkey and Argentina spreads to create a broad-based emerging-markets crisis
- China suffers a disorderly and prolonged economic downturn
- Supply shortages lead to a globally damaging oil-price spike
- Territorial disputes in the South or East China Sea lead to an outbreak of hostilities
- Cyber-attacks and data integrity concerns cripple large parts of the internet
- There is a major military confrontation on the Korean peninsula
- Political gridlock leads to a disorderly no-deal Brexit
- Political and financial instability lead to an Italian banking crisis

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