



## Outlook and Market Review – Third Quarter 2018

*The U. S. economy grew at a 3.5% rate in the third quarter of 2018 following a 4.2% growth rate in the prior quarter, according to the revision by the Bureau of Economic Analysis. Consumer spending was the key driver of growth followed by inventory investment. Tax cuts and “under withholding” by the IRS are working to stimulate the economy but these effects are likely to wane in 2019. The “quality” of GDP growth was not as strong in the third quarter given the significant contributions from inventory accumulation rather than fixed investment. Final sales, which exclude the impact on GDP from inventories, rose only 1.2% after climbing 5.4% in the second quarter. The economy is on track to expand slightly above 3% on the year, which is the strongest annual growth rate in the last decade. Fourth quarter growth should be around 2.5% on a seasonally adjusted basis. If lower oil prices continue, the economy would grow at a slightly higher pace.*

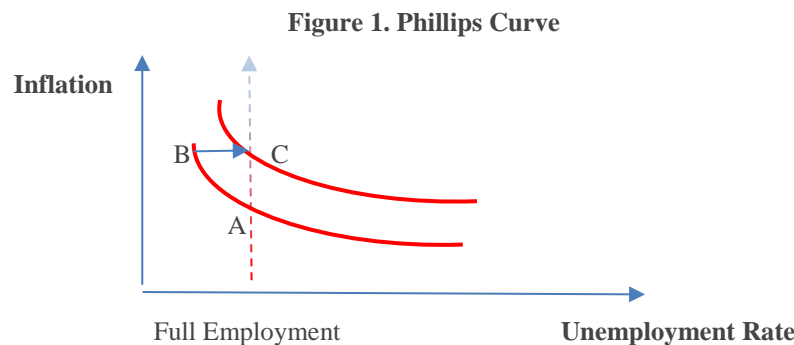
*The economy is growing above trend with only 3.7% unemployment and payroll expansion remains healthy with an average over 200,000 new jobs per month. The labor-force participation rate is up slightly reaching 62.9%. Inflation pressures are low and headline measures remain close to the 2% Fed target. Even with sustained short-term interest rate increases engineered by the Fed, 10-year Treasury interest rates remain close to 3%, which is still about 200 basis points below the long run average. Wages are now on a steady growth trend but productivity is picking up, keeping unit labor costs down. Economic performance is as good as it gets but many economists believe that current conditions are not sustainable. Fiscal stimulus from tax cuts and slightly higher government spending will begin to wane by the end of 2019. Expectations for a slower economy and lower equity valuations will grow if optimism over a deal with China fades and pending trade agreements with Mexico, Europe, and Canada do not get final approval. The housing market is now cooling off and automakers are re-tooling to larger SUVs and trucks with expected plant shutdowns. The stock market reversal this fall destroyed a significant amount of expected wealth that may affect spending going into 2019 unless there is a sustained market rebound. Finally, there is a behavioral tendency to fear the worst since the last recession was nearly a decade ago, adding to volatility.*

*The Fed is likely to increase the Fed Fund rate target in December to 2.5%. The Fed’s adjustment to short-term interest rates combined with the strong value of the dollar continue to flatten the yield curve. Even so, Fed Chairman Powell recently offered a more dovish perspective on the Fed’s progress toward a neutral monetary policy position, making it likely that Fed Fund hikes in 2019 may be below the expected 100 basis point increase. Before Powell’s recent speech, analysts uniformly expected four rate hikes of 25 basis points each. Fed policy now tends to be data driven without the urgency to increase short-term rates back to a predetermined level. The Fed remains committed to preemptive moves to get sustainable growth rate without inflation but it now also wants to avoid Fed policy as the impetus for downward swings in growth or the equity markets. Equity markets have been volatile and returns are now negative for 2018. Interest rate fears, trade fears, and a behavioral sense that the economy has been too good for too long may tip the market downward if the Fed is overly aggressive with liquidity reduction moves.*



## Is the Phillips Curve still Relevant?

The Phillips Curve is a long-standing paradigm in macroeconomics linking inflation and unemployment. The prediction is that at some threshold of unemployment, normally close to full employment, additional reductions in unemployment lead to accelerating rates of inflation. Consistent with the Phillips curve is a form of wage-price spiral. When the economy is stimulated to achieve unemployment below the long run natural rate a tight labor market leads to higher wages to attract more workers into the labor market (A to B in Figure 1 below). Higher wages push inflation to higher rates. Eventually, workers realize that real wages (net of the higher inflation) are actually lower and the unemployment rate rises (B to C in Figure 1 below). Added rounds of stimulus to achieve unsustainable rates of unemployment drive an inflation spiral. Ultimately, the economy has spiraling wages and inflation without achieving unemployment below the threshold for the long run rate of full employment. Policies to prevent the inflation spiral require cooling off the economy before reaching the wage-price spiral.



Unemployment is currently 3.7% and heading lower while inflation remains close to the target of 2% for the core PCE inflation measure. The Fed estimate of full employment at the beginning of Fed tightening was 5%. The Phillips curve relationship has not materialized because wage growth is well below expectations given the low rate of unemployment. Possible explanations for slow wage growth include global competition, outsourcing, and wider labor market slack than expected for the narrow unemployment rate. Added room for lowering the unemployment rate exists until wages grow at a faster rate to become an inflation factor. Until then there is no real connection between low unemployment and accelerating inflation. Data suggest that the economy has room to grow without inflation and the feared wage-price spiral.

This Fed's new data dependent view, expressed by Chairman Powell in a November 28, 2018 speech to the Economic Club, signals a major shift in Fed Policy. The prior Fed approach adopted a gradual path to a neutral monetary policy focusing on successive increases in the Fed Fund rate to a neutral rate, often estimated to be in the 3% to 3.5% range. Even without signs of inflation above the announced 2% PCE target, the Fed's path was clear. A preemptive strike against rising prices was more important than economic expansion. The labor market is strong with robust job growth and falling unemployment rates. If a wage-price spiral should take hold and shape inflation



expectations the Fed's job would be harder later if preemptive tightening did not take place. Basic tenants from the Phillips curve paradigm support this line of thinking.

The lack of significant growth in wages and inflation along with continued reduction in the unemployment rate prompted a new look at monetary policy. Higher interest rates are slowing the housing market and equity markets leading to reductions in consumer wealth. The strong dollar linked to tighter liquidity from Fed policies aggravated emerging market attempts to acquire dollars to service debt and flattened the long-term end of the yield curve. A data dependent view considers the consequences of Fed moves and allows pauses when higher rates are detrimental to GDP growth and equity values without significant benefits on the inflation front.

### **A Recession is Coming – When and How Much?**

The last recession in 2009 is now nine years old, prompting many to expect another recession soon. Above trend growth in GDP, monetary policy tightening, trade disruptions, political gridlock, and a large and growing national debt all feed into this scenario. The stage for a full blown recession in 2020 is set as the tax stimulus fades in late 2019, unemployment reaches an unsustainable rate approaching 3.4%, wages begin to grow rapidly without commensurate productivity gains, higher interest rates choke off housing, and global weaknesses in emerging markets become critical. The only missing component of a traditional late expansion is high inflation, but this can be explained. The global economy has a demand problem linked to aging populations, unsustainable debt, and both political and economic transitions in emerging markets. There is no supply problem due to technological innovation and implementation in both production and service sectors. The balance of supply and demand in this case in combination with global competition prevents price increases.

It is difficult to argue against the traditional view that the late stage expansion is ending. To some extent, such dominant views of a recession become a self-fulfilling prophecy. Investors are all on the fence looking to be the first ones to jump off when the downturn begins. This destruction of wealth based on relatively little new information leads to lower sentiment, lower consumer wealth, and overall herding to safe havens.

While the traditional view of a pending recession remains the most probable forecast, there is reason to believe that the U. S. is in a different type of cycle. The current expansion is the second longest since the World War II era, but it is also the weakest. Only in the last year has the economy been growing like a normal expansion. The past nine years of cumulative growth is less than half of cumulative growth gained in the expansions under Reagan or Clinton. The current nine-year expansion could last another four or five years to match the growth of either of these two expansion periods. The slow growth phase may translate to a later and less severe downturn than many pundits expect. An added factor to the mild recession scenario comes from the growth in the service sector, which should help smooth out the highs and lows of fixed investment and inventory spending in manufacturing.



## Summary of Recent Economic Data

**GDP** – Real GDP grew 3.5% in the third quarter of 2018 following a 4.2% gain in the second quarter, according to the second estimate by the Bureau of Economic Analysis. Growth remains above trend without significant inflationary pressures. Inventory accumulation accounted for almost two-thirds of third quarter growth, suggesting slower growth in the fourth quarter. Drags on third quarter growth included trade, residential investment, and investments in structures. Consumer spending provided the key stimulus to growth, accounting for 2.4% of third quarter growth. Fourth quarter growth is likely to be in the 2.4% to 2.7% range.

- Consumer spending provided a large boost to third quarter growth with a 2.45% increase following a 2.57% increase in the second quarter.
- Inventory investment grew 2.27% in the third quarter following a decline of 1.17% in the second quarter. Inventories remain volatile from quarter to quarter with a relatively large increase in inventory investment in the third quarter. Final sales in the third quarter, which exclude the impact on GDP from inventories, rose 1.2% after climbing 5.4% in the second quarter.
- Net exports provided a significant drag on GDP growth in three of the last four quarters.
- Table 1. provides a summary of the revised third quarter data from the Bureau of Economic Analysis compared to the prior seven quarters. Red represents declines and green represents increases in the table.

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

	III Q 2018	II Q 2018	I Q 2018	IV Q 2017	III Q 2017	II Q 2017	I Q 2017
<b>Real GDP</b>	3.50	4.16	2.22	2.29	2.82	2.99	1.79
<b>Consumption</b>	2.45*	2.57*	0.36	2.64*	1.52*	1.95*	1.22*
<b>Fixed Investment</b>	0.25	1.10*	1.34*	1.04*	0.44	0.7	1.60*
<b>Inventories</b>	2.27*	-1.17	0.27	-0.91	1.04	0.23	-0.80
<b>Next Exports</b>	-1.91	1.22*	-0.02	-0.89	0.01	0.08	-0.10
<b>Government</b>	0.44	0.43	0.27	0.41	-0.18	0.01	-0.13

Note: \* indicates key drivers of growth for the quarter. Source: Bureau of Economic Analysis

- On a year-over-year basis, real GDP grew 3% from the third quarter of 2017.
- Real disposable income climbed 2.4% in the third quarter following a revised 1.8% increase in the second quarter. The personal saving rate declined to 6.3% from 6.7% in the prior quarter. Despite the downward revisions, high saving remains a positive for the spending outlook for the fourth quarter.





- Gross domestic income, an alternative measure of the size of the economy, increased 4% after increasing 0.9% the prior quarter.

**Labor Market** – *Low unemployment coupled with strong payroll growth now appears to be driving higher average hourly earnings. With an increase in hourly wages of 3.14% per year over the past two years, labor markets are now tight. However, the low participation rate and lack of inflationary pressures suggest that the economy is not yet at full employment. Many analysts now believe that the unemployment rate could drop as low as 3.4% by the end of 2019. Currently, the unemployment rate remains steady at 3.7% and job growth continues to average around 200,000 per month. Labor productivity data are mixed. Over the past five years, productivity increased only 1% but it is improving slowly. Increased business investment, which helps accelerate productivity, appears to have stalled and is likely to continue this pause as the new congress takes shape.*

- Payroll gains in October were strong with 250,000 new jobs following a much more subdued gain of 118,000 in September. Overall, payrolls continue to expand at a healthy pace, averaging over 200,000 per month. Payrolls gains should moderate as the unemployment rate declines.
- Average hourly earnings increased 0.2% in October with an annual increase of 3.14%. The tight labor market is slowly causing improved wage growth for workers. The average workweek remains stable with a slightly higher 34.5 hours per week in October.
- The labor-force participation rate edged higher to 62.9% in October. The unemployment rate was unchanged at 3.7%.
- The median duration of unemployment increased to 9.4 weeks.
- The four-week moving average for initial unemployment insurance benefits claims reached 223,500 at the end of November. The four-week moving average for continuing unemployment insurance benefits increased from 1.648 million to 1.667 million. Nevertheless, the insured unemployment rate remained steady at 1.2%.
- Table 2 below offers a summary of key labor market measures by quarter for the last seven months of data.

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

	Oct. 2018	Sept. 2018	Aug. 2018	July 2018	June 2018	May 2018	April 2018
Nonfarm Payrolls Change (000s)	250	118	286	165	208	268	175
Average Hourly Earnings % Change	0.2	0.3	0.4	0.3	0.2	0.3	0.2
Average workweek (hours)	34.5	34.4	34.5	34.5	34.6	34.5	34.5
Unemployment Rate (%)	3.7	3.7	3.9	3.9	4.0	3.8	3.9
Labor Force Participation Rate (%)	62.9	62.7	62.7	62.9	62.9	62.7	62.8

Source: Bureau of Labor Statistics



- Nonfarm business productivity in the third quarter grew by 2.2% at an annualized rate following a 3% improvement in the second quarter of 2018. Productivity continues to be volatile from quarter to quarter and year to year, but trend growth is picking up slightly.
- Nonfarm compensation per hour gained 3.5% in the third quarter with a modest increase in unit labor costs of 1.2% at an annualized rate. On a year ago basis, unit labor costs were up 1.5%. Real hourly compensation for nonfarm businesses increased only 0.1% on a year-ago basis.
- Output per hour in manufacturing rose 0.5% at an annualized rate in the third quarter with manufacturing output increasing 3.4% at an annualized rate. Compensation per hour in manufacturing lagged compensation in nonfarm business with only a 1.5% annual increase.
- Table 3 provides quarterly data on productivity, compensation, and labor unit costs for the last seven quarters of data.

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

	III Q 2018	II Q 2018	I Q 2018	IV Q 2017	III Q 2017	II Q 2017	I Q 2017
Nonfarm Business							
Output per Hour	2.2	3.0	0.3	-0.3	2.3	1.6	0.4
Compensation per Hour	3.5	1.9	3.8	1.9	5.1	1.3	4.7
Unit Labor Costs	1.2	-1.0	3.4	2.3	2.8	-0.3	4.2
Nonfinancial Corporations							
Output per Hour	NA	-0.9	3.0	1.4	1.1	4.5	3.1
Compensation per Hour	NA	1.8	4.4	0.3	2.8	-0.1	8.1
Unit Labor Costs	NA	2.7	1.4	-1.1	1.7	-4.4	4.9
Manufacturing							
Output per Hour	0.5	1.2	-0.8	4.4	-5.0	3.5	-0.3
Compensation per Hour	1.5	1.3	4.6	1.6	2.4	3.0	3.9
Unit Labor Costs	0.9	0.1	5.5	-2.7	7.8	-0.5	4.2

***Industrial Production** – Data on durable goods orders and shipments reflected weak conditions in both October and September. The data suggest that capital spending may soften in the last quarter of 2018. New orders of durable goods fell in three of the last four months. Trade fears seem to be the key catalyst for the weaknesses in durable goods. Inventory may turn from a boost to a drag on growth in the final quarter of the year.*

- Total orders for durable goods fell 4.4% in October, marking the third loss in four months. Defense capital goods represented a weak component of total orders in October by falling 4.2%. Even so, defense capital goods increased 2.5% on a year-ago basis.
- Excluding transportation, total orders for durable goods increased 0.1% in October and grew by 4.5% from a year earlier. Capital goods orders fell 6% in October but increased 5% on a year-ago basis. New transportation orders fell 12.2% with new motor vehicle and parts orders growing at 0.2%.



- In terms of durable good sales, shipments fell 0.6% while remaining 6.8% higher from a year earlier. Shipments excluding transportation increased 0.1% while shipments excluding defense fell 0.7%.
- Durable goods inventories were unchanged in October and were 4.3% higher from one year ago. Monthly data on durable goods orders and shipments appear in Table 4 below.
- The inventory to sales ratio for durable goods has been remarkably stable at 1.6.

**Table 4. Monthly Durable Goods Orders and Shipments (Monthly Percentage Changes)**

	Oct. 2018	Sept. 2018	Aug. 2018	July 2018	June 2018	May 2018	Apr. 2018
Durable Goods (Monthly Percentage Change)							
Total New Orders for Capital Goods	-4.4	-0.1	4.7	-1.2	0.9	-0.3	-1.0
Nondefense Capital Goods	-4.2	-3.1	7.4	-3.7	2.2	-2.3	-6.7
Total Shipments of Capital Goods	-0.6	1.0	0.9	-0.1	1.7	0.2	0.0
Total Shipments of Nondefense Capital Goods	-2.4	2.5	3.0	-4.0	2.3	3.4	-4.7
Durable Goods Inventory/Sales Ratio (percent)	1.6	1.6	1.6	1.6	1.6	1.6	1.6

*Source: Census Bureau*

- The business inventory-to-sales ratio fell slightly to 1.34 in October from 1.37 ratio in September. The low ratio for this cycle was 1.25 and the high in the recession was 1.49.
- The ISM nonmanufacturing composite index fell from 61.6 in September to 60.3 in October. Even so, the index remains very strong and consistent with expansion. The ISM nonmanufacturing index represents about 88% of GDP, making it an important measure of economic performance.
- The table below provides the monthly data for the Composite ISM index.

**Table 5. Monthly ISM Nonmanufacturing Composite Index**

	Oct. 2018	Sept. 2018	Aug. 2018	July 2018	June 2018	May 2018	April 2018
Composite ISM Index	60.3	61.6	58.5	55.7	59.1	58.6	56.8

*Source: Institute of Supply Management*

- Total U.S. construction spending in September was \$1.33 trillion, unchanged from August and 7.2% higher than one year ago.



***Consumption and Sales** – Real disposable income growth accelerated in the third quarter while the saving rate fell from 6.7% in the second quarter to 6.3%. Consumer optimism and higher disposable income due to the tax cut both fueled strong spending in the third quarter. Fourth quarter spending should be strong if oil prices remain low, consumer confidence remains high, and there are no shocks from foreign events like emerging market currency collapses or a difficult Brexit. Recent sales data suggest a stronger trend going into the third quarter as consumers are currently focused on the strength of labor markets more than on uncertainties regarding a potential trade war, rising interest rates, or the political environment.*

- Real consumer spending growth increased to 0.4% in October following lower rates of 0.1% in September and 0.3% in August. The service sector led real spending with the fastest growth coming in financial services.
- Lower gasoline prices will likely boost spending in the third quarter but the potential for lower equity values may represent a drag on spending due to wealth effects.
- Retail sales rebounded in October after two months of declines. October sales rose 0.8% following a revised 0.1% in September. Sales in October were 4.6% higher on a year-ago basis.
- Gasoline stations led sales in October with a 3.5% increase that added 0.3% to growth. Other sales leaders include department stores, vehicle dealers, and building supply stores. Sales fell in October at furniture stores and restaurants.
- Despite risks from potentially higher interest rates, failed trade agreement, collapse of emerging market currencies, and Brexit fallout the fundamentals for sales growth are good. Robust disposable income since the tax cut helped replenish consumer savings from the low at the end of 2017. Low financial debt obligations suggest that households are able to spend and obtain credit if needed to maintain spending. Wage growth is slow but trending up and the job market shows no signs of slowing down. Without a major shock, the consumer sector can continue to lead economic growth in the short term.

***Inflation-** Inflation in the third quarter, measured by the personal consumption expenditures price index (PCE), increased by 1.5% following a 2% increase in the second quarter. Excluding food and energy, core inflation was only 1.5%, down from 2.1% the prior quarter. On a year-ago basis, the core PCE deflator increased 1.8%. Inflation forces are low with only a 76.5% capacity utilization rate. Pressure on the Fed to pause with interest rate hikes will intensify if inflation remains low and the economy slows.*





- The Fed’s favorite inflation measure, the Personal Consumption Expenditure Deflator (PCE), continues to hover around the Fed target of 2%. The core PCE inflation rate was 1.8% on a year-over-year basis in October following a 1.9% rate in September and August. The headline PCE, including volatile energy and food prices, reached 2% in October on a year-ago basis. Oil prices should soften over the fourth quarter of 2018, leading to low headline PCE for the remainder of the year.
- Table 6 provides the year-ago percentage change in the PCE and Core PCE index over the past seven months. The monthly trend signals lower inflation pressure on the economy either due to preemptive moves by the Fed or chronic deflationary conditions.

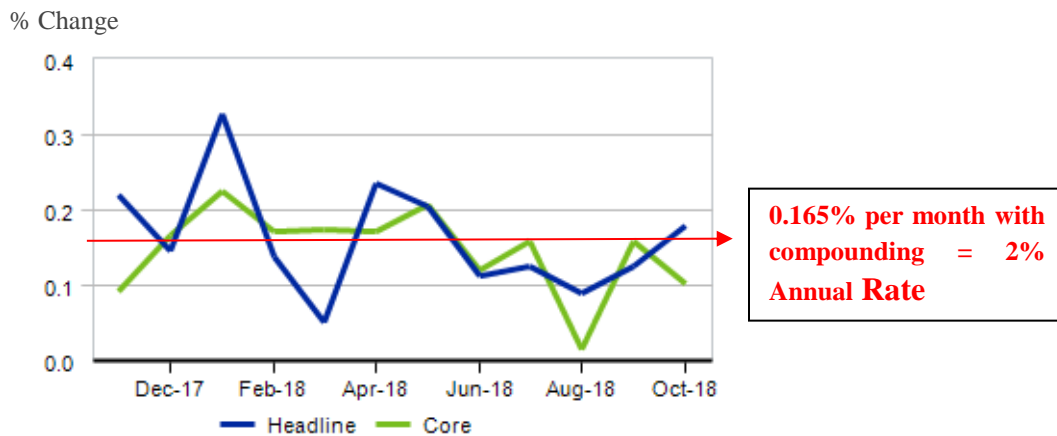
**Table 6. Personal Consumption Expenditure (PCE) Deflator**

	Oct. 2018	Sept. 2018	Aug. 2018	July 2018	June 2018	May 2018	Apr. 2018
Core PCE (Year-ago % Change)	1.8	1.9	1.9	2.0	2.0	2.0	1.9
PCE % (Year-ago % change)	2.0	2.0	2.2	2.3	2.3	2.3	2.0

Source: Bureau of Economic Analysis

- Figure 2 below illustrates the monthly movements in the Headline PCE and Core PCE over 2018 through October. A monthly rate of 1.65% is consistent with a 2% annual rate (with compounding). The monthly trend since June has been below the 2% annual inflation rate.

**Figure 2. Monthly Personal Consumption Expenditure (PCE) Inflation in 2018**



- The Consumer Price Index (CPI) trends higher than the PCE index overall. In October, the CPI increased 0.3% with a 2.5% year-ago annual rate. The core CPI increased 0.2% in October with a 2.2% year-ago inflation rate.
- Table 7 shows the monthly percentage change in the CPI and Core CPI along with the year ago percentage change in the indexes. Energy prices were the key driver of the higher CPI over the last year while higher service prices provided the key source for the higher core CPI.

**Table 7. U. S. Consumer Price Index (CPI) and Core Consumer Price Index**

	Oct. 2018	Sept. 2018	Aug. 2018	July 2018	June 2018	May 2018	April 2018
Core CPI (Monthly % change)	0.2	0.1	0.1	0.2	0.2	0.2	0.1
CPI (Monthly % change)	0.3	0.1	0.2	0.2	0.1	0.2	0.2
Core CPI (Year ago % change)	2.2	2.2	2.2	2.3	2.2	2.2	2.1
CPI (Year ago % change)	2.5	2.3	2.7	2.9	2.8	2.7	2.4

Source: Bureau of Labor Statistics

- The Producer Price Index (PPI) increased .6% in October following 0.2% and -0.1% changes in prior months. The average gain in the PPI over the prior three months was only 0.03%. Table 8 shows the monthly movement in the PPI.

**Table 8. Monthly Producer Price Index (PPI)**

	Oct. 2018	Sept. 2018	Aug. 2018	July 2018	June 2018	May 2018	April 2018
PPI (Final Demand - % change)	0.6	0.2	-0.1	0.0	0.3	0.5	0.2
PPI (Year-ago % change)	2.0	2.7	2.8	3.2	3.3	3.1	2.7

Source: Bureau of Labor Statistics

- If talks with China do not end in an agreement, inflation pressure from tariffs will begin to weigh on consumer prices. Going into the third quarter, most of the tariffs targeted producer capital and material inputs. Recent tariffs on Chinese imports fall on consumer goods.

**Housing** – Housing prices for the rest of 2018 will rise at a more modest pace as higher mortgage rates and lower affordability weigh on appreciation. Overall, the rate of growth in housing prices is slowing. Growth in the national house price index fell to a 5.5% year-ago rate in September following a 5.7% rate in August. The 30-year fixed mortgage rate is now around 5.2%, which is more than 100 basis points higher than one year ago. A lack of housing supply continues to be a key driver of upward pressure on housing prices.

- Housing prices measured by the S&P CoreLogic Case-Shiller index were flat in September and August. Overall, the rate of price increase has declined for seven consecutive months. The national composite index increased 5.5% on a year-ago basis in September following a year-over-year rate of 5.7% in August.

**Table 9. S&P CoreLogic Case-Shiller® Home Price Index Percentage Change**

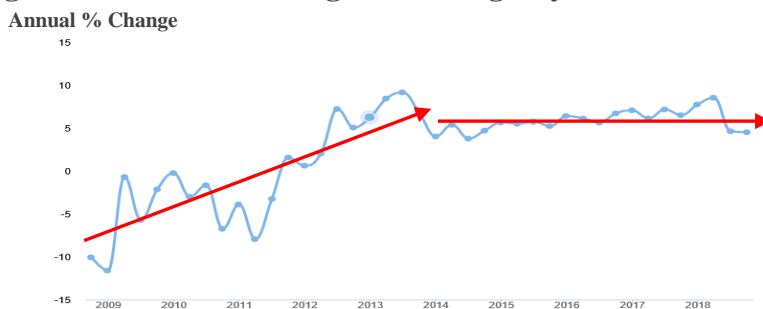
	Sept. 2018	Aug. 2018	July 2018	June 2018	% Change from a year ago
National Composite Index	0.1	0.2	0.4	0.8	5.5
10-city Composite Index	0.0	0.0	0.3	0.5	4.8
20-city Composite Index	0.0	0.0	0.3	0.6	5.1

Service: Standard and Poor's/Corelogic, Inc.



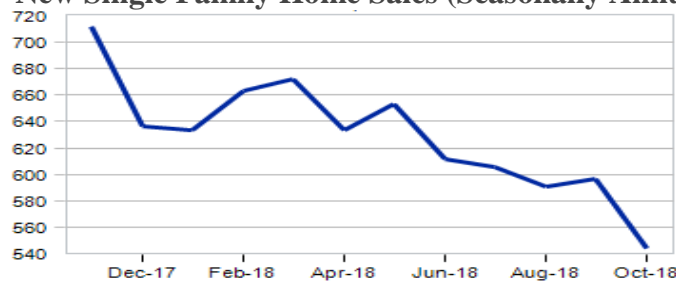
- The National Association of Realtors reported that the pending home sales index fell by 2.6% to 102.1 in October on a month-over-month seasonally adjusted basis. Pending home sales now stand at the lowest level in more than four years. The national pending home sales index is still 6.7% below its year-ago level.
- The Census Bureau reported that new-home sales softened in October with an 8.9% revision, leaving sales 12% below their October 2017 level. The median new-home price also fell in October and is now below its October 2017 level.
- Growth in housing prices peaked in early 2014 with stable growth since then. However, the most recent data suggest softening in the rate of growth of housing prices. The Figure below illustrates the pattern of price growth over the last decade.

**Figure 3. Federal Housing Finance Agency Purchase-Only House Price Index**



- Seasonally adjusted annual new-home sales came in at 544,000 in October, down 8.9% from the revised September total and down 12% from October 2017. Figure 4 illustrates the monthly changes in new home sales over the past year.

**Figure 4. New Single Family Home Sales (Seasonally Annual Adjusted Data)**



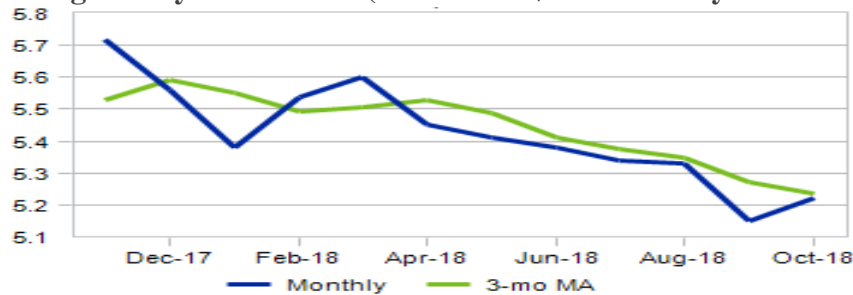
Source: Census Bureau

- The median home sales price (not seasonally adjusted) in October was \$309,000, down 3.1% from October 2017.
- The seasonally adjusted median price for single-family homes was \$261,700, which is 4.3% higher than last October 2017.
- The average number of days an existing home is on the market was 33 in October compared to 32 in September.



- Existing-home sales appear to have already peaked due to the combined effects of tight markets, lower affordability, and rising interest rates. Unlike the new home market, the inventory to sales ratio for existing homes is at a cyclical low. Figure 5 illustrates the monthly and 3-month moving average of home sales over the past year.

**Figure 5. Existing Family Home Sales (Millions of \$s. Seasonally Annual Adjusted)**



Source: National Association of Realtors

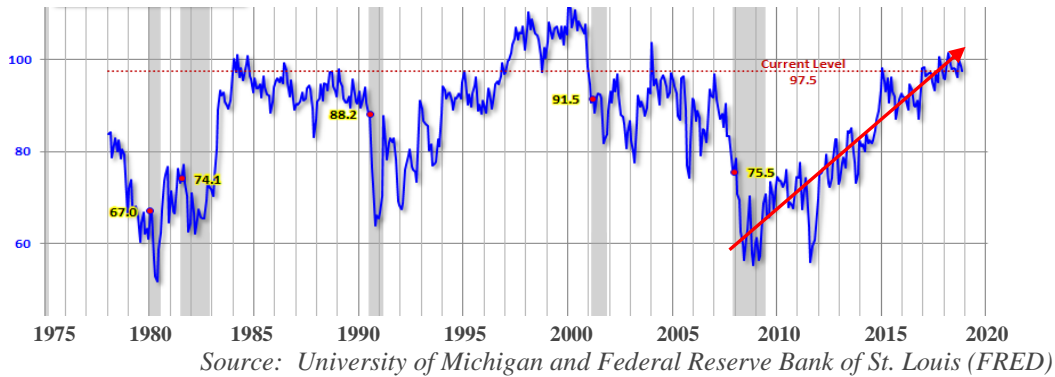
**Confidence and Sentiment** – Both consumer and business confidence remains strong. While consumer confidence is near a twenty year high, business confidence is off recent highs due to concerns over a trade war. The University of Michigan Consumer Sentiment Index in November reached 95.7, which is at the middle of an eleven-month range.

- The University of Michigan Consumer Sentiment survey fell to 97.5 in November, which is the lowest level since August. The overall measure is high but about one-third of those surveyed expected an improvement in the business climate over the next year.
- Figure 6 shows the relationship between the University of Michigan Consumer Sentiment Index and U. S. recessions. The same pattern exists for the time series of leading indicators. Downturns in the sentiment index are necessary but not sufficient for a recession. Every recession follows a significant downturn in the sentiment index but not every downturn in the index signals a recession. Not all recession cycles are alike. For example, the recessions in 1990 and 2009 occurred after choppy movements of the index without a trend. On the other hand, the 2001 recessions occurred after a relatively long upward trend in the index. Currently, we are seeing another long trend in the index since 2009.





**Figure 6. University of Michigan Consumer Sentiment Survey (2008 to Present)**



- The Conference Board Consumer Confidence Index fell 2.2 points in November, reaching 135.7. While the present economic situation index improved slightly it was not enough to offset the forward-looking part of the survey. While November's overall index fell from 137.9 in October, the index level remains near its highest level since 2000.
- Consumer expectations were the primary negative in the Conference Board report, losing 4.1 points to 111. Only 22.5% of the survey projected improving business conditions in the coming months, which is a decline of 3.8% from October.
- The Conference Board Leading Economic Index® for the U.S. improved by 0.1% in October to 112.1 following a 0.6% increase in September and 0.5% increase in August. The pace of improvement in the index is slowing but the overall signal remains positive for an expansion.

***U. S. Trade** - Fear of adverse effects from a trade war with China currently pose the biggest downside threat to economic performance. Volatility in the markets largely reflect relatively small changes in information on either the trade front or interest rates. In reality, trade news is mixed. The U. S. balance on the trade account continues to be a drag, but not beyond the normal magnitude. Expectations for higher trade deficits in the future hinge on the U.S. - China relationship. Negotiations with Canada, Mexico, and Europe have been successful. The wild card is whether the U.S. - China deal will be completed. A failure in talks will slow GDP growth in both countries, nudge inflation higher, and elevate uncertainty.*

- If current talks between the U.S. and China fail, cumulative tariffs on the value of Chinese imports will expand to almost half the value of Chinese imports in 2017. Tariffs imposed in late October will increase from 10% to 25% on January 1, 2019. These tariffs apply to about \$200 billion of Chinese goods. If there is no deal, an added round of tariffs will be placed on an added \$267 billion of Chinese goods. The impact will be slow growth in both countries.



- The nominal goods deficit increased to \$77.2 billion in October following deficits of \$76.3 billion in September and \$75.4 billion in August. The trade deficit has gotten worse for six months in a row. Nominal goods exports fell 0.6% in October after gaining 2% in the prior month. Nominal goods imports rose 0.1% in October following a 1.7% gain in September. On a year-ago basis, nominal goods exports were up 7.8% and imports gained 10%. Table 10 provides the monthly trade balance, import, and export data for the U.S.

**Table 10. U. S. International Trade in Goods (Billions of \$s)**

	Oct. 2018	Sept. 2018	Aug. 2018	July 2018	June 2018	May 2018	Apr. 2018
Goods Balance	-77.2	-76.3	-75.4	-72.0	-67.9	-64.7	-67.4
Exports	140.5	141.3	138.5	140.2	142.5	144.2	140.6
Imports	217.8	217.6	213.9	212.3	210.4	208.9	208.0

*Source: Bureau of Economic Analysis*

- The U. S. dollar gained strength in the first three quarters of 2018, making U. S. exports more expensive and imports less expensive. The broad weighted dollar exchange rate appreciated more than 5% since January.
- So far, the trade war's impact has been largely on U. S. agricultural exports. Chinese tariffs effectively eliminate a major market for U.S. soybean exports and significantly reduced U.S. agricultural exports.

### Brief Overview of Global Issues

- **Eurozone** – The euro zone trended downward in 2018 with third quarter annual GDP growth of 1.7%, the weakest in four years. The European Central Bank (ECB) is likely to end asset purchases soon, given recent increases in the inflation rate. The unemployment rate held steady at 8.1% in October, the lowest rate since November 2008.
- **U. K.** - The U.K. third quarter GDP data revealed broad based weakness in both the service and manufacturing sectors. Growth in 2019 is likely to continue to lag growth in the Euro zone overall and in other regional countries. The Bank of England left rates unchanged in November after raising rates in August, which was only the second increase in a decade. The Brexit deadline is nearing and business investment is likely to stall until a deal occurs.
- **China** - GDP growth in China for 2018 should be about 6.6%. Policy choices for China are complex. Managing smooth deleveraging in the face of a trade war and slowing domestic demand represents a challenge. The yuan lost more than 6% this year and the Shanghai Composite is down 20% year to date. The People's Bank of China cut the reserve requirement ratio for banks by 250 basis points this year to stimulate the economy without much impact. Other initiatives include tax cuts and plans for infrastructure spending.



- **India** - The Reserve Bank of India increased its policy rate by a cumulative 50 basis points so far this year. Added hikes will likely occur in 2019. The rupee weakened significantly so far this year losing 14% due to current account balance problems.
- **Reuters Survey** – In a November survey of 150 global economists, the majority pointed to two key triggers for the next global downturn. U.S.–China trade tensions and tightening financial conditions in the U.S. have the potential for deep selling in global equities and rapid increases in government bond yields. Equity markets have already tumbled with only faint real information on the progress of the trade negotiations. Fed tightening, relatively high real interest rates and the strong dollar have already aggravated the currency problem in emerging economies as they struggle to obtain dollars to repay debt. A majority of economists covering the U.S. economy also believed the U.S. economic policy toward China over the next few years would become more confrontational.
- **IMF Global Forecast** - The IMF reduced its overall economic growth forecast for 2018 and 2019 to 3.7%, which is 0.2% below prior estimates. The forecast primarily reduced growth in advanced economies based on rising trade concerns. The table below summarizes the IMF growth estimates for advanced and emerging economies. Declines in the IMF forecast for 2019 relative to 2018 are in red. Higher expected growth in 2019 than 2018 appear in green.

**Table 11. Summary Data from the International Monetary Fund Growth Forecast**

	2017 Actual	2018 Forecast	2019 Forecast
Global Growth	3.7	3.7	3.7
Advanced Economies	2.3	2.4	<b>2.1</b>
United States	2.2	2.9	<b>2.5</b>
Euro Zone	2.4	2.0	<b>1.9</b>
United Kingdom	1.7	1.4	<b>1.5</b>
Japan	1.7	1.1	<b>0.9</b>
Emerging Economies	4.7	4.7	4.7
China	6.9	6.6	<b>6.2</b>
India	6.7	7.3	<b>7.4</b>
Russia	1.5	1.7	<b>1.8</b>
Brazil	1.0	1.4	<b>2.4</b>
Crude Oil Price	\$52.81	\$69.38	\$68.76
CPI – Advanced Economies	1.7	2.0	<b>1.9</b>
CPI-Emerging Economies	4.3	5.0	5.2

Source: IMF Global Forecast

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