Outlook and Market Review – First Quarter 2018

The U. S. economy grew at a 2.2% rate in the first quarter of 2018, according to the first revision from the Bureau of Economic Analysis. Fourth quarter 2017 growth was 2.89%. Slower first quarter growth is partly due to seasonal adjustments and slower consumer spending. The tax reform act stimulated business investment to overcome part of the slack in consumer spending. Most analysts project an accelerated GDP growth rate above the long run trend for the second and third quarters as tax cuts and government spending under the new budget take hold.

Many analysts believe the economy is now testing the non-inflationary rate of unemployment. The unemployment rate fell to 3.8% in May from 3.9% in April and 4.1% in March. The unemployment rate declined in part due to a lower labor-force participation rate of 62.7%. Nevertheless, payroll expansion remains strong with an increase of 223,000 jobs in May following a long trend of payroll expansion above 150,000 per month. Worker compensation continues to lag behind the strong labor market but the trend for better compensation is picking up. On a year-over-year basis in April, wages and salaries increased 2.7% while benefits increased at a 2.6% rate. Both of these measures exceeded the inflation rate, reflecting an improved position for workers. Labor productivity, an important ingredient for growing wages, remains below trend with only a 1.3% year-over-year growth rate in May.

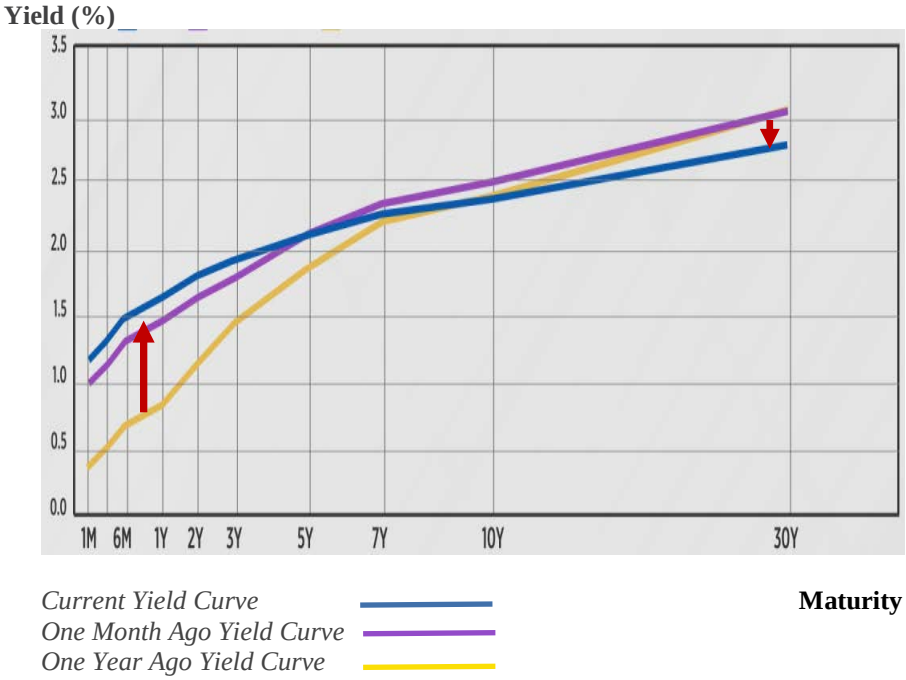
Industrial capacity utilization reached 78% in April. Capacity utilization at full employment normally reaches a bit over 80%, suggesting that there may be added room for growth without typical bottlenecks. A positive aspect of growth in 2018 is that relatively more spending is going into core capital assets that expand capacity. Even so, inflation pressures are likely to build for the remainder of 2018. Currently, the economy is on the threshold of exceeding the Fed's 2% target for the PCE index and should overshoot the target in 2018. The all-items PCE measure increased 2% on a year-over-year basis in April while the core PCE index increased 1.8%. The consumer price index (CPI) increased 2.5% in April with the core CPI rising 2.1%. The producer price index (PPI) increased 2.6% in April with a core PPI increase of 2.5%. Inflation in the remainder of 2018 should pick up as both consumer and government spending rebound.

When taken as a whole, the U. S. economy continues to expand with prospects for improved growth beyond 3%, healthy job creation, higher worker compensation, and higher inflation. The long-term downside is a continuation of low productivity and the decade long pattern of government deficits and growth in the federal debt. Other threats to growth include uncertain Euro Zone expansion, trade war bluster, and geopolitical risk. The Fed recently raised the target for the fed fund rate to the 1.75% – 2% range. Most analysts expect two to three more rate increases in 2018 on the way to an expected neutral rate of about 3% by 2020. Long-term yields on Treasury bonds are hovering just below 3%, but the yield curve should become steeper as inflation expectations gain momentum.

An Inverted U. S. Treasury Yield Curve?

The current slope of the U. S. Treasury yield curve is very flat with only a 43 basis point difference between the 10-year and 2-year Treasury yields. Figure 1 illustrates the movement of the U. S. yield curve over the last year and the narrowing of the term spread (shown with the red arrows). Normally, this spread is closer to 225 basis points. We addressed some of the issues of the flattening of the yield curve in prior *Outlooks*, but the current concern over the potential for an inverted yield curve (short-term rates higher than long-term rates) deserves another look.

Figure 1. U. S. Treasury Yield Curve



The Expectations Theory

Normally, an inverted yield curve signals market expectations of a recession. In fact, the yield curve inverted just before each of the last seven U. S. recessions. Prior to a recession the market expectations for a weak economy with lower inflation and lower interest rates induces money to flow into longer term bonds now before rates fall (moving long-term bond prices up and yields down). A similar logic applied to the short-term end of the yield curve prompts investors to sell short term bonds today (expecting lower reinvestment rates when the bonds roll over at maturity) causing short term prices to fall and yields to rise. The net result is a flat or inverted yield curve when the prospects/expectations of the future are especially bad. This is the "expectations theory" that tends to dominate traditional thinking with respect to yield curves. Nonetheless, it is difficult to see that today's investors are expecting lower inflation and lower interest rates that would explain the observed flat yield curve.

Segmentation Theory

An alternative yield curve theory emphasizes the supply and demand conditions in different segments of the maturity structure. The market segmentation theory begins by recognizing separate maturity clientele groups. Investors in the short-term maturity segment tend to stay in that segment rather than ride up and down the maturity length of the yield curve. Investors in the longer maturity segment tend to stay in the long-maturity segment. Supply and demand conditions in each segment determine the price/yield relationships. The segmentation theory, which has no link to expected recessions, best explains the current flattening of the yield curve.

At the short-term end of the yield curve, the Fed gradually moved the short-term rates up by over 125 basis points during the last year. At the same time, a strong dollar and relatively higher U. S. rates than bond investors can find in other countries supported high demand for long-term bonds, keeping prices higher and rates lower. In terms of supply, the Treasury seems to prefer to issuing short-term issues of Treasury bills and short-term notes to finance deficits, keeping prices low and yields high at the short-term end of the curve. Likewise, the Fed's slow and modest approach to trimming the balance sheet of long-term bonds has had little impact on long-term supply, keeping prices high and yields low. It is important to note that decisions by the Fed and the Treasury Department go a long way in explaining the shape of the yield curve when analyzing supply and demand conditions.

Misinterpretation of the Flat Yield Curve

Both the expectations and segmentation theories are relevant and both explain movements of the yield curve at different points in time. Nevertheless, it would be a mistake to make too much of the flat yield curve as a predictor of a recession under current conditions. Both the Fed and the Treasury could introduce steeper or flatter yield curves today with adjustments to supply and demand in their portfolios. The expectation theory of a pending recession from flat yield curves does not apply to the yield curve until we see evidence of investors making dramatic shifts to lengthen the duration of fixed income portfolios in response to expectations of lower interest rates and lower inflation.

Should the Fed Continue to use Interest Rates as Operational Targets?

The yield curve discussion is also at the heart of the debate of whether the Fed should use the fed fund rate as an operating instrument. If the Fed is actively moving the yield curve around (for example, like Bernanke's operation twist where the Fed actively flattened the yield curve) the information from the yield curve no longer transmits market information. Goodhart's law applies here. The idea is that when any measurement becomes a policy target it no longer serves as a good measure. If the Fed manipulates interest rates to hit inflation targets then interest rates no longer carry pure market information. There may be a limit of just how low interest rates can go to combat a deflationary

economy, as our experience with the 2009 recession illustrated. With constraints on fiscal policy from existing high levels of spending and continued growth of the national debt, the Fed may be the only policy option to cushion the blow of the next recession.

The Business Cycle – Where is the U. S. Economy?

Business cycles have long been an important description of an economy's performance over time. Cycle "theory" describes a regular and predictable set of relationships contributing to an economic expansion that ultimately wane leading to a downturn. The amplitude (trough to peak) of the cycle and depth of the downturn vary, but the pattern persists. Normally, the phases of the expansion last longer than the phases of the downturn. According to the NBER, the average duration between the trough and peak of the 11 cycles in the U. S. since 1945 has been 38.7 months. The average length of time between the peak and the trough is 17.5 months. The classic debate between "Neoclassical" and "Keynesian" economists revolves round whether the cycle is self-correcting due to market forces or if active fiscal and monetary policy can moderate the depth and duration of downturns. Some economists, such as the late Nobel Laureate Milton Friedman, suggest that active monetary and fiscal policies make the cycles worse due to poor timing.

Phases of the Business Cycle and the U. S. Economy

Economists use categorizations of four different phases of a business cycle: expansion, peak, contraction, and trough. In the early expansion phase, an economy has consistent growth in GDP that eventually builds above long run trend growth, which would be above 3% for the U. S. economy. Pent up demand from the previous contraction begins to kick in with strong durable good sales. In the early expansion, interest rates and inflation are low due to combined weakness in demand and easy monetary policy hanging over from the trough. Payrolls expand and unemployment rates fall. Asset prices begin to recover while the stock market enters a bull phase, centered on higher expected earnings. In the late stages of an expansion, the economy reaches full employment while wage and price pressures take hold.

For the U. S. economy, the full employment mark is likely to be 3.5% with inflation slightly above 2%. At this stage, the policy mix calls for neutral to restrictive fiscal (budget surpluses) and monetary policies (Fed Fund rate of approximately 3%). The ultimate goal is to maintain the level of economic performance at the peak (late expansion), but government policies and market expectations seldom follow the script for a sustained expansion. Asset pricing bubbles often occur at this point driven by irrational exuberance. Overheating, with high inflation and high interest rates prompt contractionary monetary policies. If not timed correctly, these policies can tip the economy into contraction.

The downturn in economic activity generally begins with slower sales and inventory accumulation followed by layoffs and higher unemployment. Expectations become negative and asset prices fall rapidly from overpriced levels. Both income and wealth of consumers decline while business investment stalls due to lower expectations of future cash flows. Capacity utilization declines and

a contraction sets in as unemployment rises. Fiscal policies generally respond with increased government spending, lower taxes, or some combination of the two. The Federal Reserve expands the money supply and reverses policies that were in place to cool the expansion. However, monetary policy is generally more effective in cooling off an economy than in stimulating economic activity during the downturn. Deviations of the economy from the long-term sustainable growth path are a combination of randomness and systematic overreaction. This combination results in a type of autoregression (trend reversion) process that we see as a business cycle.

Are we nearing the End of a Traditional Business Cycle Expansion?

Most analysts and pundits in the popular press note that the economy is in the ninth year of an expansion. However, the U. S. economy's performance since 2009 does not fit a normal cycle. The trough took place in the second quarter of 2009, according to the NBER. Unemployment reached 9.5% and a long period of disinflation set in. Since 2009, the economy failed to reach an annual growth rate as high as the long run trend growth rate of 3% to 3.5%, prompting some economists to believe that the U. S. hit limits to growth. The strength and duration of the expansion is inconsistent with cycle theory. Private core investment to stimulate productivity and growth did not occur and government deficit spending grew rather than receded. Monetary policy remained easy in both the expansion and the contraction. Four years into the expansion, the unemployment rate was still above 7%. The U. S. economy has yet to exceed annual trend growth in the expansion period, suggesting that there is room to grow before reaching a peak. Strong investment in core capital goods over the last two years provides additional capacity and growth potential (see Figure 2 below).

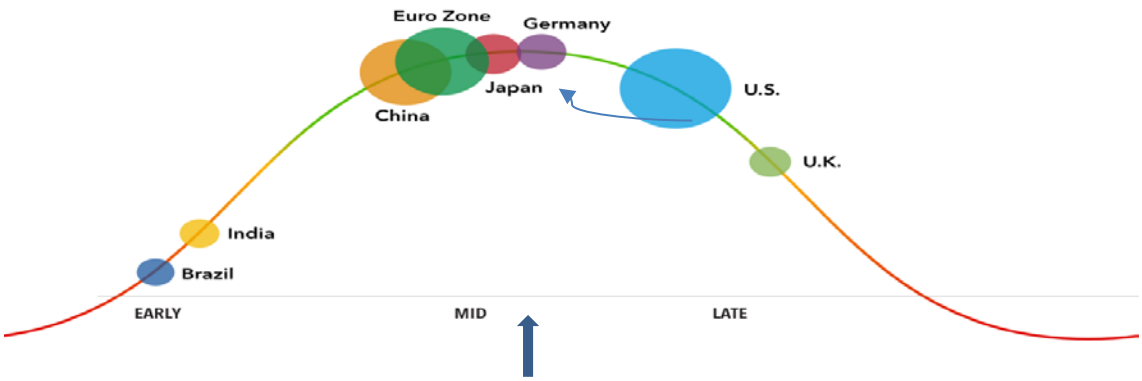
Figure 2. Core Capital Goods Orders (Minus Defense and Aircraft)

Source: Fred, Commerce Department

The IMF View of the Business Cycle

Figure 3 illustrates the IMF's interpretation of positions for various economies in relation to a business cycle, although it seems more likely that the U. S. economy remains in the expansion stage. The U. S. economy is further along in the cycle than other countries and the U. S. initiated a reversal in monetary policy well before other countries did. By following traditional business cycle logic, many economists predict a recession to occur in or around 2020. In 2018, the U. S. is approaching long-term trend growth and inflation indicators are picking up. Fiscal stimulus from the new budget package as well as tax cuts in the tax reform act should lead to added expansion in the short term. The Fed is on track to reach its goal of a fed fund rate of about 3% by the end of 2019. The potential for a trade war and breakdown of trade agreements may provide additional downward pressures on the economy, but not right away. A final point to the 2020 recession scenario is that a long period of a bull market and economic expansion ultimately increases the perception that it cannot last forever. This leads to a "group think" propensity to overreact when expectations of economic fundamentals weaken.

Figure 3. The IMF's View of the Business Cycle for Key Countries



Note: The size of the oval represents the relative size of the economy.

Full Employment
High wages
High Inflation
High Interest Rates
High Capacity Utilization
Above Trend GDP Growth
Monetary Tightening
Fiscal Surplus / Deficit Reduction

Summary of Recent Economic Data

Real GDP Growth: *The economy grew 2.2% in the first quarter of 2018, based on the revised estimate by the Bureau of Economic Analysis. Growth slowed relative to the fourth quarter rate of 2.9%, but first quarter growth normally tends to be lower due to seasonality. Slower first quarter growth resulted in part due to sluggish consumer spending, which fell from 4% to 1% growth. Tax reform helped spur real disposable income growth to 3.3% following only 1.2% in the fourth quarter. With slower spending, the first quarter saving rate increased to 3.1% from 2.7%. A summary of recent GDP data appears in Table 1. Analysts expect much stronger GDP growth in the second and third quarters.*

Table 1. GDP Growth and Contributing Components since the First Quarter 2017

	I Q 2018	IVQ 2017	IIIQ 2017	IIQ 2017	IQ 2017
Gross Domestic Product					
Real GDP (Annual % change)	2.17	2.89	3.16	3.06	1.24
Implicit price deflator	1.95	2.35	2.09	1.01	2.00
Contributions to Real GDP					
Consumption	0.71	2.75	1.49	2.24	1.32
Fixed Investment	1.05	1.31	0.40	0.53	1.27
Inventories	0.13	**- 0.53**	0.79	0.12	**- 1.46**
New Exports	0.08	**- 1.16**	0.36	0.21	0.22
Government	0.20	0.51	0.12	**- 0.03**	**- 0.11**

Note: Data are Seasonally Adjusted
Source: Bureau of Economic Analysis

Labor Market: *The labor market remains tight with unemployment falling to 3.8% in May. Payrolls continue to expand at healthy monthly rates while hourly earnings, personal income, and wages and salaries are all growing at a steady by moderate rate. On a year-ago basis, wages and salaries increased 2.7% in April while benefit costs increased 2.6% over the same period. Growth in wages and salaries in the prior year reached only 2.1%. Going forward, the fiscal stimulus in the new federal budget should allow for continue improvement in the labor market. Shortages in some markets are likely to pick up in the second half of 2018. Nevertheless, moderate wage growth does not suggest that the labor market is overheated yet. Table 2 provides recent labor market*

Table 2. Labor Data

Labor Market Data	Units	May 18	April 18	Mar 18	Feb 18	Jan 18
Unemployment Rate	%	3.8	3.9	4.1	4.1	4.1
Increased Payrolls	000s	223	159	155	324.0	176.0
Average Hourly Earnings	m/m %	0.3	0.15	0.22	0.11	0.1
Personal Income	m/m %	N.A.	0.3	0.2	0.3	0.4
Wages and Salaries	m/m %	N.A.	0.4	0.2	0.5	0.5

S Source: Bureau of Labor Statistics

Productivity and Employment Costs: *Productivity for nonfarm labor in the first quarter grew 0.4%, revised down from 0.7% (see Table 3). Productivity measures are volatile from quarter to quarter but the year-ago productivity growth of 1.3% was unchanged. Productivity continues to*

be below the historical average (see the Outlook for IV Quarter 2017). Nonfarm unit labor costs rose 2.9% at an annualized rate in the first quarter and were up 1.3% on a year-ago basis, both revised up slightly from the initial estimate. Real hourly compensation for nonfarm businesses slipped 0.2% at an annualized rate in the first quarter. Overall, productivity remains below trend while unit labor costs continue to track below inflation.

Table 3. Productivity, Compensation, and Unit Costs

	Q1 18	Q4 17	Q3 17	Q2 17
Nonfarm Business				
Output per hour	0.4	0.3	2.6	1.7
Compensation per hour	3.3	2.9	3.6	0.5
Unit labor costs	2.9	2.5	1.0	**-1.2**
Nonfinancial Corporations				
Output per hour	1.9	1.2	0.3	3.6
Compensation per hour	3.8	2.6	3.6	0.5
Unit labor costs	1.8	1.4	3.3	**-3.0**
Manufacturing				
Output per hour	**-1.2**	4.3	**-5.0**	3.5
Compensation per hour	3.9	4.5	0.7	2.3
Unit labor cost	5.2	0.2	6.0	**-1.1**

Source: Bureau of Labor Statistics

Consumption and Sales: *Consumer spending was the key driver of growth in the slow expansion since 2009. In the first quarter of 2018, consumer spending slowed to only 1.1% from 4% growth in the fourth quarter of 2017 (see Table 4). Business investment, which remained dormant during the past nine years, picked up the slack in 2018. Slower spending at the start of 2018 likely stems from unsustainable spending levels in 2017 due to pent up demand. Part of the stimulus for higher spending in 2017 also stems from concern for higher inflation and higher interest rates in 2018. Spending picked up following January, suggesting stronger consumer expenditures in the second quarter. (See Table 4 below)*

Table 4. Sales and Consumption Data

Consumption and Sales Data	Units	April 18	Mar 18	Feb 18	Jan 18
Retail Sales @	m/m %	0.2	0.7	0.1	**-0.10**
Retail Sales ex Autos @	m/m %	0.3	0.35	0.4	0.8
Personal Consumption ^	m/m %	0.6	0.5	0.0	0.1

Source: @ U.S. Census Bureau
^ Bureau of Economic Analysis

Industrial Production: *Industrial production and manufacturing data provide mixed results in the most recent data. Both the Philadelphia Fed Survey and the ISM Manufacturing Survey slumped in March with a modest rebound in the ISM Index in May. On the other hand, industrial production increased 0.7% in April for the third straight month of growth. For the first quarter of 2018,*

output increased 2.3% at an annual rate. On a year-ago basis production grew 3.5% in April. U. S. production grew at a 3.73% average annual rate from 1920 to 2018.

Durable goods orders slumped by 1.7% in April, but most of this decline can be attributed to a decline in Boeing contracts. For example, durable goods orders minus transportation increased 0.9% in April, which is the third straight month of growth. Capacity utilization for the industrial sector climbed 0.4% in April to 78.0%, a rate that is 1.8% below its long-run (1972–2017) average. Table 5 provides recent data on production and manufacturing.

Table 5. Production and Manufacturing Data

	Units	May 18	April 18	Mar 18	Feb 18	Jan 18
Philadelphia Fed Survey	Index	N.A.	N.A.	22.3	25.8	22.2
ISM Manufacturing	Index	58.7	57.3	59.3	60.8	59.1
Industrial Production @	m/m %	N. A.	0.7	0.7	0.1	**-0.1**
Manufacturing	m/m %	N. A.	0.5	0.0	0.3	0.1
Business Equipment	m/m %	N. A.	1.2	0.1	**-0.1**	0.9
Durable Goods Orders @	m/m %	N. A.	**-1.7**	2.7	4.5	**-4.2**
Core Capital Goods	m/m %	N. A.	1.0	**-0.9**	1.1	**-0.2**

Note: Data are seasonally adjusted. NA represents not available.
Source: @ Commerce Department

Consumer Confidence: *Overall, consumer confidence remains strong. The Conference Board Consumer Confidence Index reached 128 in April from 125.6 in May. The University of Michigan Consumer Sentiment index fell in April to 98.8, but the level of the index remains strong on an historical basis. The expectations component of the Confidence Index suggests strong performance in the near term. (See Table 6.)*

Table 6. Confidence and Sentiment

	May 18	April 18	Mar 18	Feb 18	Jan 18
Conference Board Consumer Confidence Index					
Overall Index (1986 = 100)	N.A.	128	125.6	130.8	124.3
Change in the Index	N.A.	2.4	**-5.2**	6.5	1.2
University of Michigan Consumer Sentiment					
Overall Index (1966 Q1 = 100)	N.A.	98.8	101.4	99.7	95.7
Change in the Index	N.A.	**-2.6**	1.7	4.0	**-0.2**

Inflation: *After nine years of economic expansion fueled with low interest rates, monetary expansion, and unprecedented fiscal deficits it is not surprising that inflation is finally picking up. Inflation pressure is building due to rising energy costs, higher home prices, tight labor market and a strong U.S. and global economy. While the inflation rates shaping up for 2018 are low by historical standards, overall inflation pressures show up in all the conventional measures outline below in Table 7. Excess demand inflation pressure is likely to increase as the economy pushes below a sustainable non-inflationary rate of unemployment later this year.*

The Producer Price Index (PPI) for final demand rose 0.1% in April and increased at a 2.6% annual rate for the 12 now months ended in April. The PPI for final demand minus foods, energy, and trade services also edged up 0.1% in April with a 2.5% annual increase for the 12 months ending in April.

The Consumer Price Index for All Urban Consumers (CPI-U) increased 0.2% in April on a seasonally adjusted basis after falling 0.1% in March. Over the last 12 months, the all items index rose 2.5% before seasonal adjustment. The indexes for gasoline and shelter were the largest factors in the seasonally adjusted increase in the all items index. The core index, for all items less food and energy, rose 0.1% in April. The all items CPI-U rate has been mostly trending upward since it was 1.6% 12-month period ending June 2017. The index for all items less food and energy rose 2.1% for the 12 months ending in April.

The PCE price index, the Fed's preferred inflation measure, increased 0.22% on a month-over-month basis in April and rose 1.97% year-over-year. The latest Core PCE index (less Food and Energy) increased 0.16% on a month-over-month basis and 1.8% year-over-year. The PCE measure of inflation is lower than the PPI, but inflation pressures are likely to put the PCE above the Fed target of 2% later in the year.

Table 7. PPI, CPI, and PCE Inflation Measures (January 2018 – April 2018)

	Unit	April 2018	March 2018	Feb. 2018	Jan. 2018
PPI Final Demand	month/month %	0.1	0.3	0.2	0.5
PPI, Core Goods	month/month %	0.1	0.4	0.4	0.4
CPI	month/month %	0.2	**-0.1**	0.3	0.5
CPI, ex. Food & Energy	month/month %	0.1	0.2	0.2	0.3
PCE	month/month %	0.2	0.0	0.1	0.4
PCE, ex. Food & Energy	month/month %	0.16	0.2	0.2	0.3

Housing: *Seasonally adjusted housing data continue to support a strong market scenario. Housing starts moderated slightly but existing home sales picked up in April. Sales are likely to be motivated by expectations of higher borrowing rates later in 2018. The S&P / Case-Shiller Housing Price Index grew at an annual rate of 5.72% in the first quarter. Strong growth in housing prices should continue as the inventory of available housing remains low (Table 8).*

Table 8. Housing Sales and Prices

	Units	April 18	Mar 18	Feb 18	Jan 18
Housing Starts	000s., AR	1,287	1,336	1.290	1,334
Existing Home Sales	000s, AR	1,800	1,640	1,580	1,520
New Home Sales	000s., AR	662	672	659	633
S&P / Case Shiller Housing Price Index					
Index	Year 2000 = 100	N.A.	198.938	197.289	196.465
% change in the Index	(month/month)	N.A.	0.836	0.419	0.14

Note: Units in 000s represents thousands of units and AR represents annual rate.

Financial Markets: *The fed fund rate took another 25 basis point bump on June 13 as the Fed slowly moves toward a more neutral fed fund rate of about 3%s. Most analysts expect at least two more 25 basis point increases in 2018. Currently the fed fund target is 1.75% - 2%. The 10-year Treasury note is just below 3%. The yield curve remains relatively flat with a spread of only 43 basis points between the two and 10-year Treasury notes.*

Table 9. Financial Markets

Financial Market Data	Units	June 12	May 18	April 18	Mar 18	Feb 18	Jan 18
Fed Funds Target	%	1.63	1.63	163	1.38	1.38	1.38
10YR Note	%	2.96	2.98	2.87	2.86	2.86	2.58
Prime Rate	%	4.75	4.75	4.75	4.50	4.50	4.50
30YR FRM	%	4.75	4.81	4.71	4.65	4.59	4.33
S&P500	Index	2,789.43	2,701.5	2,653.6	2,724.3	2,705.2	2,789.8
Nominal Trade Weighted Dollar	Index	122.32	121.46	118.17	118.11	117.57	117.22
Yield curve: 10-yr minus 2-yr Treasury	Bps	43.0	46.6	48.5	56.7	68.4	55.2

Note: All series are daily except for FRM (fixed rate mortgage), which is weekly.

U. S. International Trade: *U.S. exports reached a record high in April and the trade deficit narrowed to a seven-month low of $46.2 billion. Higher energy prices helped spur U.S. oil exports. The services surplus held steady at $22 billion as higher services exports offset an increase in imports. The course of U. S. trade policy and pending tariffs may well disrupt the trade picture going forward. For example, tariffs on aluminum and steel have a much higher impact on U. S. firms that use these as inputs than on U. S. manufacturers of steel and aluminum. Potential trade wars may materialize but there is a good chance that all the posturing will eventually lead to a set of compromises. For now, trade should provide a boost to second quarter GDP.*

Table 10. U.S. Trade Balance

	Apr 18	March 18	Feb 18	Jan 18
Trade balance	**-46.2**	**-47.2**	**-55.5**	**-52.9**
Exports	211.2	210.7	206.1	202.5
Imports	257.4	257.9	261.6	255.4
Goods	**-68.3**	**-69.3**	**-76.7**	**-74.5**
Services	22.1	22.1	21.2	21.6
Petroleum	**-4.9**	**-4.8**	**-6.7**	**-6.9**

Global Summary

While the outlook for global growth remains positive, slower growth in Europe and emerging markets dampens the outlook for expansion over the rest of 2018. Financial stress in the emerging markets, chronic problems with troubled loans in Italy, potential contagion of debt problems in Spain, higher energy prices, and continued bluster over tariffs and trade relations all pose threats to global growth. The U. S. is much deeper into an expansion than other economies, exhibited by lower unemployment, higher interest rates, and monetary restraint. Euro zone risk from a Brexit contagion appears to be easing somewhat, but a populist movement in Italy along with debates over a second currency remain. A reflection of Eurozone weakness occurs in the bond market where Germany's 10-year government bond yield fell to 0.37%, which is 255 basis points below the 10-year U.S. Treasury yield.

Tension with U. S. trade partners represents a cloud on the horizon. The U.S. is imposing a 25% tariff on imported steel and 10% tariff on imported aluminum from Mexico, the EU and Canada. Immediate retaliation includes Mexico's imposition of tariffs on agricultural products to include pork bellies, apples, grapes, cheeses. Canada imposed matching tariffs on flat steel from the U. S. The European Union responded with tariffs on jewelry, bourbon, automotive glass, telecom equipment, personal care items, and blue jeans. The larger issue is where trade policies will go from here with renegotiation of NAFTA and initiation of new trade talks.

The central bank in India raised the key interest rate by 25 basis points to 6.25% at its June policy meeting, prompted by strong GDP growth and signs of inflation pressure. GDP growth in India was 7.7% on a year-over-year basis in June. Overall, the economy in India appears to be on the mend from the effects of demonetization and a goods and services tax.

The Chinese economy had a slow start to 2018. Profits fell dramatically and efforts to limit credit growth reduced spending and investment. China's 7% year-over-year investment in fixed assets during the first four months of 2018 is the weakest since 1999.

Table 11 summarizes the recent global growth estimates of the World Bank. The IMF estimate for U.S. growth is likely to be too low. Most analysts see much stronger U. S. for the remainder of 2018 and most of 2019.

Table 11. World Bank Report – Real GDP Growth Rates

	2015	2016	2017	2018_f	2019_f	2020_f
World	2.8	2.4	3.1	3.1	3.0	2.9
High-income / advanced countries	2.3	1.7	2.2	2.2	2.0	1.8
Developing countries	3.7	3.8	4.6	4.7	4.8	4.8
Low-income countries	4.9	4.8	5.5	5.7	5.9	6.3
Emerging /developing (EMDEs)	3.7	3.7	4.3	4.5	4.7	4.7
Commodity-exporting EMDEs	0.5	0.8	1.8	2.5	3.0	3.0
Other EMDEs excluding China	5.2	4.9	5.3	5.1	5.1	5.1
East Asia and Pacific	6.5	6.3	6.6	6.3	6.1	6.0
United States	2.9	1.5	2.3	2.7	2.5	2.0
Euro Area	2.1	1.8	2.4	2.1	1.7	1.5
Japan	1.4	1.0	1.7	1.0	0.8	0.5
China	6.9	6.7	6.9	6.5	6.3	6.2
Indonesia	4.9	5.0	5.1	5.2	5.3	5.4
Thailand	3.0	3.3	3.9	4.1	3.8	3.8
Europe and Central Asia	1.1	1.7	4.0	3.2	3.1	3.0
Russia	-2.5	-0.2	1.5	1.5	1.8	1.8
Turkey	6.1	3.2	7.4	4.5	4.0	4.0
Poland	3.8	2.9	4.6	4.2	3.7	3.5
Latin America and the Caribbean	-0.4	-1.5	0.8	1.7	2.3	2.5
Brazil	-3.5	-3.5	1.0	2.4	2.5	2.4
Mexico	3.3	2.9	2.0	2.3	2.5	2.7
Argentina	2.7	-1.8	2.9	1.7	1.8	2.8
Middle East and North Africa	2.8	5.0	1.6	3.0	3.3	3.2
Saudi Arabia	4.1	1.7	-0.7	1.8	2.1	2.3
Iran	-1.3	13.4	4.3	4.1	4.1	4.2
Egypt	4.4	4.3	4.2	5.0	5.5	5.8
South Asia	7.1	7.5	6.6	6.9	7.1	7.2
India	8.2	7.1	6.7	7.3	7.5	7.5
Pakistan	4.1	4.6	5.4	5.8	5.0	5.4
Bangladesh	6.6	7.1	7.3	6.5	6.7	7.0
Sub-Saharan Africa	3.1	1.5	2.6	3.1	3.5	3.7
Nigeria	2.7	-1.6	0.8	2.1	2.2	2.4
South Africa	1.3	0.6	1.3	1.4	1.8	1.9
Angola	3.0	0.0	1.2	1.7	2.2	2.4