Outlook and Market Review – Fourth Quarter 2017

The U. S. economy grew 2.5% in the fourth quarter of 2017 according to the second estimate by the Bureau of Economic Analysis. For all of 2017, real GDP increased 2.3% compared with an increase of 1.5% in 2016. Job growth remained strong in the fourth quarter of 2017 and continued into the first months of 2018. The unemployment rate held steady at 4.1% and the labor force participation rate ticked up slightly to 63%. The three-month moving average for wages and salaries increased .4% per month through January, representing a 4.9% annual rate of increase. After a long lag, wages are now starting to reflect the tight job market.

Inflation in 2017 did not exceed the Fed's target of 2% for the core PCE. The Headline PCE for 2017 increased 1.7% with a core PCE increase of only 1.5%. Nevertheless, higher inflation in 2018 is likely due to fiscal stimulus from the tax cut, increases in the debt ceiling, relatively easy monetary policy, strong job growth, higher import prices from lower values of the dollar, tariffs, and full employment in the U.S. economy. Moderating factors for inflation include excess production capacity in both production and manufacturing. The Fed has already announced the intention to increase the Fed Fund rate three times during the remainder of 2018. If there are signs of an overheated economy with more rapid increases in wages and prices, the Fed will be more aggressive.

The consensus of forecasters calls for 2018 GDP growth near the long run potential path. Growth in the first half of 2018 should be close to 3% with slower growth closer to 2.5% in the second half. Analysts generally attribute higher growth in 2018 to higher spending linked to the tax cut. Growth will likely slow in 2019 as fiscal stimulus from lower taxes fades and as adverse effects of tariffs kick in. Households are in good wealth positions with rising wages, rising home equity values, and relatively low financing rates. Even so, the major downward correction in U.S. and global equity markets during the beginning of February demonstrates that the relationship between financial markets and the economy remains on edge. Increased volatility and increased correlations within and across asset classes provide a fragile condition where any downward movement results in a large slide. Market and economic fundamentals look strong for 2018, but the potential to turn on a dime also exists, as the February market correction demonstrated.

Both consumer and business sentiment remains high. Tax cuts sparked more enthusiasm for economic growth than pessimism for longer run fiscal deficit impacts on the economy. In the midst of so much good news, many market participants are starting to question whether the confluence of low interest rates, low inflation, good economic growth, fiscal stimulus, and monetary neutrality can be sustainable. Economic theory suggests a tradeoff between inflation and unemployment and between fiscal stimulation and low interest rates. It is natural for analysts to question how long the laws of economics can be suspended. Good economic news is not always good for the markets if the news suggests that the economy is overheating, as February jobs data illustrated. Interest rates should rise in 2018 due to both monetary policy normalization and higher inflation expectations over the longer term.

Summary of Recent Economic Data

GDP Growth: *The economy grew 2.5% in the fourth quarter of 2017, based on the revised data from the Bureau of Economic Analysis. Almost all of the growth came from consumer spending with modest contributions from investment and government spending. Both inventory accumulation and international trade were drags on growth in the fourth quarter. The fourth quarter 2.7% savings rate is the lowest since 2007. The implicit price deflator edged up to 2.33% from 2.09% in the third quarter.*

	IVQ 2017	IIIQ 2017	IIQ 2017	IQ 2017
Gross Domestic Product				
Real GDP (Annual % change)	2.54	3.16	3.06	1.24
Implicit price deflator	2.33	2.09	1.01	2.00
Contributions to Real GDP				
Consumption	2.58	1.49	2.24	1.32
Fixed Investment	1.29	0.40	0.53	1.27
Inventories	**- 0.70**	0.79	0.12	**- 1.46**
New Exports	**- 1.13**	0.36	0.21	0.22
Government	0.49	0.12	**- 0.03**	**- 0.11**

Notes: Data are seasonally adjusted.

Labor Markets and Incomes: *Headline unemployment remains stable at 4.1%. Job growth is strong with a whopping 313,000 jobs created in February. Average hourly earnings continue to grow. Hours worked fell in January, largely due to weather conditions, but the rebound in February made up for the slow January. Steady growth in wages and salaries should continue into 2018. The 0.4% average monthly growth in wages and salaries over the last three months translates to a 4.9% annual increase.*

Labor Market Data	Units	Mar 18	Feb 18	Jan 18	Dec 17	3 mo. MA
Unemployment Rate	%		4.1	4.1	4.1	4.1
Increased Payrolls	000s		313.0	239.0	175.0	167.0
Average Hourly Earnings	m/m %		0.3	0.1	0.4	0.2
Aggregate Weekly Hours	m/m %		0.9	**-0.4**	0.4	0.2
Personal Income	m/m %			0.4	0.4	0.4
Wages and Salaries	m/m %			0.5	0.4	0.4

Notes: Data are seasonally adjusted. MA represents a moving average.

Industrial Production: *Production surveys bounced back in February from lower January expectations. Production slumped in January, especially for durable and capital goods. The ISM Purchasing Manager's Index is well above the level (50) that signals an expansion, suggesting much better production numbers going forward in 2018.*

	Units	Mar 18	Feb 18	Jan 18	Dec 17	3 mo. MA
Philly Fed Survey	index		25.8	22.2	27.9	26.3
ISM Manufacturing	index		60.8	59.1	59.3	59.0
Industrial Production	m/m %			**-0.1**	0.4	0.7
Manufacturing	m/m %			0.1	0.0	0.6
Business Equipment	m/m %			0.9	**-0.3**	1.0
Durable Goods Orders	m/m %			**-3.7**	2.6	1.2
Core Capital Goods	m/m %			**-0.2**	**-0.6**	1.1

Note: Data are seasonally adjusted. MA represents a moving average.

Consumption and Sales: *January's weather slowed spending on durable goods and retail sales overall, even after seasonal adjustment. On a three month moving average basis, personal consumption remains strong, even though consumption slumped in December and January.*

Consumption and Sales Data	Units	Mar 18	Feb 18	Jan 18	Dec 17	3 mo. MA*
Retail Sales	m/m %			**-0.3**	0.0	1.2
Retail Sales ex Autos	m/m %			0.0	0.1	1.0
Personal Consumption	m/m %			0.2	0.4	0.7
Durable Goods	m/m %			**-1.5**	0.5	1.5

Notes: Data are seasonally adjusted. MA represents a moving average.

Inflation: *Pressures from a strong economy may finally move inflation above the Fed's 2% target for the PCE index in 2018. The core PCE and the core CPI averaged .2% in the last three recorded months, which translates to a 2.43% annual rate of inflation. Import prices, excluding petroleum prices, also increased at this rate. Strong jobs growth in February and optimistic estimates of GDP growth for the remainder of the year could signal higher inflation overall, freeing the Fed for more aggressive Fed Fund increases.*

	Units	Mar 18	Feb 18	Jan 18	Dec 17	3 mo MA
Import Prices	m/m %			1.0	0.2	0.6
Import Prices, ex Petroleum	m/m %			0.5	0.0	0.2
PPI Final Demand	m/m %			0.4	0.0	0.4
PPI, core goods	m/m %			0.2	0.2	0.2
CPI	m/m %			0.5	0.2	0.3
CPI, ex Food & Energy	m/m %			0.3	0.2	0.2
PCE	m/m %			0.4	0.1	0.3
PCE, ex Food & Energy	m/m %			0.3	0.2	0.2

Note: Data are seasonally adjusted, except for import prices.

Consumer Confidence: *Confidence abounds in both the consumer and business segments of the economy. Consumer confidence measured by the Conference Board Consumer Confidence Index improved in February to post the highest reading since 2000. The business component of the index was also very strong. The only pessimistic result in the Conference Board survey was auto purchase plans. The University of Michigan Consumer Sentiment index rebounded in February from three successive months of declines. Overall sentiment remains strong. The 99.7 index reading in February is the second highest since 2004.*

	Feb 18	Jan 18	Dec 18	Nov 18	Oct 18
Conference Board Consumer Confidence Index					
Overall Index (1986 = 100)	130.8	124.3	123.1	128.6	126.2
Present Conditions (1986 = 100)	162.4	154.7	156.5	154.9	152.0
Expectations (1986 = 100)	109.7	104.0	100.8	111.0	109.0
University of Michigan Consumer Sentiment					
Overall Index (1966 Q1 = 100)	99.7	95.7	95.9	98.5	100.7
Change in the Index	4.0	-0.2	-2.6	-2.2	5.6
Expected Inflation (1 year average)	2.7	2.7	2.7	2.5	2.4

Housing: *Housing mortgage applications and housing starts held up well in the winter months. Home sales in January lagged prior months somewhat, but the numbers still suggest a strong housing market. On a year-over-year basis, the CoreLogic house price index increased 6.6% in January.*

	Units	Mar 18	Feb 18	Jan 18	Dec 17	3 mo. MA
MBA Mortgage Purchase Applications	Index	238.3	240.2	253.0	240.2	233.8
Housing Starts	mil., AR			1.33	1.21	1.24
Existing Home Sales	mil., AR			5.38	5.56	5.53
New Home Sales	mil., AR			0.59	0.64	0.65

Note: AR represents the annual rate and mil. represents millions of units. All data are seasonally adjusted.

	Jan 18 m/m %	Dec 17 m/m %	Nov 17 m/m %	Oct 17 m/m %	% Change Year Ago	3 mo. MA
CoreLogic House Price Index						
Single-family	0.5	0.2	0.4	0.3	6.6	0.37
Single-family minus distress sales	0.4	0.2	0.4	0.3	5.9	0.33

Note: AR represents the annual rate and mil. represents millions of units. Data are seasonally adjusted.

Financial Markets: *The Fed Fund rate is just below the Fed's current 1.5% target and will likely move up another 75 basis points by the end of 2018***.** *The 10-year Treasury note is rising, but remains far below the long run average of about 5.5%. Mortgage rates are also on the rise and will likely reduce the price appreciation in housing somewhat. The value of the dollar slipped in January and February, but rebounded in March. The yield curve became slightly steeper since January, reflecting higher expected inflation.*

Financial Market Data	Units	Mar 18	Feb 18	Jan 18	Dec 17
Fed Funds Target	%	1.38	1.38	1.38	1.27
10YR Note	%	2.86	2.86	2.58	2.40
Prime Rate	%	4.50	4.50	4.50	4.39
30YR FRM	%	4.65	4.59	4.33	4.20
S&P500	Index	2,724.3	2,705.2	2,789.8	2,664.3
Nominal Trade Weighted Dollar	Index	118.57	117.57	117.22	119.96
Yield curve: 10-yr minus 2-yr Treasury	Bps	62.0	68.4	55.2	55.9

Note: All series are daily except for FRM (fixed rate mortgage) and ARM (adjustable rate mortgage) rates, which are weekly.

International Trade: *The U.S. trade deficit widened in January, adding fuel to the debate on "chronic trade deficits" and potential remedies with tariffs. The deficit widened for the fifth straight month. A lower deficit would stimulate economic activity but would also put upward pressure on interest rates by reducing the demand for U.S. securities by foreign countries.*

International Trade (billions of $s)	Jan 19	Dec 17	Nov 17	Oct 17	Sept 17
Trade Balance	-56.6	-53.9	-50.9	-49.1	-45.3
Exports	200.9	203.6	200.2	195.7	195.9
Imports	257.5	257.5	251.1	244.8	241.2

Global Summary: *Global growth for 2018 should be in the 2.8% to 3% range, but there are significant downside risks. Recent U. S. tariffs could limit global growth if a trade war breaks out. While the Euro zone economies are improving, concerns remain over Italy's debt management and transition issues with Brexit. Developed economies, led by the U. S., should experience bounces from fiscal stimulus even though normalization of monetary policies will gradually raise interest rates. China should experience lower growth as debt restructuring continues. Emerging markets are still in recovery mode but credit flows should be sufficient to aid the recovery. Japan is recovering with low but positive growth. Japan's dependence on international trade makes it vulnerable to trade interruptions due to tariff induced trade wars.*

Professional Forecasters – Solid Growth in 2018 but Slower Long Run Growth

A strong economy in 2018 leading to slower long run growth is a common theme found in many forecasts. Tax cuts will promote growth in 2018 but the stimulus will fade. The added debt burden, impact of tariffs, monetary normalization, overheated labor market, and potential political power reversals will all retard growth during the end of the decade, according to this view.

The Conference Board outlook calls for growth of 3.3% and 3% in the first two quarters followed by lower estimates of 2.7% and 2.6% in the following quarters. The Conference Board's Leading Economic Index increased in January and the prior two months. While the Confidence Index slipped in December, it rebounded in January and remains at a high level. Forecasts for the first half of 2018 reflect this momentum. Consumer spending is the key component expected to slow in the second half of 2018. Table 1 outlines the Conference Board's outlook for 2018 and 2019.

Table 1. The Conference Board Economic Outlook 2018 and 2019

	2018 QI Q2 Q3 Q4	2019 1st half / 2nd Half
Real GDP	3.3 / 3.0 / 2.7 / 2.6	2.4 / 2.4
Real Consumer Spending	2.8 / 3.0 / 2.8 / 2.7	2.6 / 2.6
Residential Investment	2.8 / 2.7 / 2.6 / 2.5	2.5 / 2.5
Real Capital Spending	5.3 / 6.2 / 5.5 / 5.4	5.2 / 5.0
Exports	3.9 / 4.2 / 4.1 / 4.1	4.1 / 4.0

The consensus of 36 forecasters in the Philadelphia Federal Reserve Bank's Survey of Professional Forecasters calls for 3% growth in the first half of 2018 and 2.7% in the second half. While the second half of 2018 forecasts are slightly higher than in the Conference Board forecasts, the overall view on the economy is similar. The revised GDP estimates are higher than in prior forecasts, likely due to the passage of the tax reform. Forecasters expect unemployment to dip below 4% at the end of 2018. Estimates of monthly payroll expansion suggest very strong job creation, but the revised forecast of fourth quarter payrolls is lower. Table 2 provides the prior and revised quarterly forecasts for GDP growth, unemployment, and payroll expansion.

Table 2. Survey of Professional Forecasters Quarterly GDP Growth, Unemployment, and Payroll Expansion Estimates for 2018

	IQ 2018		IIQ 2018		IIIQ 2018		IVQ 2018	
	Prior	**New**	**Prior**	**New**	**Prior**	**New**	**Prior**	**New**
Real GDP (%)	2.3	**3.0**	2.4	**2.9**	2.1	**2.8**	2.3	**2.5**
Unemployment Rate (%)	4.1	**4.0**	4.1	**4.0**	4.1	**3.9**	4.0	**3.8**
Payrolls (000s per month)	164.9	**183.3**	167.0	**171.1**	157.1	**168.7**	155.6	**151.8**

Note: Data in green represent upward revisions from the prior forecast and data in red represent downward revisions.

The consensus from the Survey of Professional Forecasters calls for 2.5% growth in 2019 followed by only 2% growth in 2020. Professional forecasters believe unemployment rates will continue to fall through 2020 with job growth averaging an annual rate of 174,100 per month. Table 3 summarizes the most recent consensus estimates for annual GDP, unemployment, and payroll expansion from the Survey of Professional Forecasters.

Table 3. Survey of Professional Forecasters' Annual GDP, Unemployment, and Payroll Expansion Estimates (2018 – 2021)

	2018		2019		2020		2021	
	Prior	**New**	**Prior**	**New**	**Prior**	**New**	**Prior**	**New**
Real GDP (%)	2.3	**2.8**	2.1	**2.5**	1.9	**2.0**	N.A.	1.7
Unemployment Rate (%)	4.1	**4.0**	4.0	**3.8**	4.1	**3.9**	N.A.	4.0
Payrolls (000s per month)	163.4	**175.1**	N.A.	150.3	N.A.	N.A.	N.A.	N.A.

Note: Data in green represent upward revisions from the prior forecast and data in red represent downward revisions.

The revised consensus (median) forecasts by the Survey of Professional Forecasters provides higher inflation estimates for the first quarter of 2018. The headline CPI forecast for the first quarter of 2018 is 2.7%, compared to the prior estimate of 2.1%. The headline PCE estimate for the first quarter is 2.1% compared to the prior 1.7% forecast. Inflation estimates are lower than the Fed's target of 2% for all of 2018. Such low inflation seems inconsistent with the forecasts of unemployment below 4% for the final quarters of the year (Table 2). Table 4 shows the inflation forecasts for 2018 by quarter to include the prior and revised estimates.

Table 4. Survey of Professional Forecasters Quarterly Inflation Estimates for 2018

	IQ 2018		IIQ 2018		IIIQ 2018		IVQ 2018	
	Prior	**New**	**Prior**	**New**	**Prior**	**New**	**Prior**	**New**
Headline CPI (%)	2.1	**2.7**	2.0	2.0	2.2	**2.3**	2.1	**2.2**
Core CPI (%)	2.0	**2.2**	2.1	2.1	2.1	**2.2**	2.2	2.2
Headline PCE (%)	1.7	**2.1**	1.8	**1.9**	1.9	1.9	1.9	1.9
Core PCE (%)	1.7	**1.8**	1.8	**1.9**	1.8	1.9	1.9	1.9

Note: Data in green represent upward revisions from the prior forecast and data in red represent downward revisions.

Estimates of the core PCE measure of inflation beyond 2018 are at or below the Fed target of 2%, suggesting little or no need for aggressive Fed moves to calm inflation. Unemployment forecasts for 2019 and 2020 are very low (Table 3), suggesting higher inflationary pressures. Table 5 provides the prior and revised estimates for both the CPI and PCE inflation indexes.

Table 5. Survey of Professional Forecasters Consumer Price Index (CPI) and Personal Consumption Expenditure (PCE) Estimates (2018 – 2020)

	2018		2019		2020	
	Prior	New	Prior	New	Prior	New
Headline CPI (%)	2.1	2.1	2.3	**2.2**	N.A	2.3
Core CPI (%)	2.0	**2.2**	2.2	**2.3**	N.A.	2.4
Headline PCE (%)	1.8	**1.9**	2.0	2.0	N.A.	2.0
Core PCE (%)	1.8	**1.9**	2.0	2.0	N.A.	2.0

Note: Data in green represent upward revisions from the prior forecast and data in red represent downward revisions.

A More Hawkish Fed Perspective?

Federal Reserve Chairman Powell recently provided more hawkish views on monetary policy than Janet Yellen provided in her final comments. Powell's posturing suggests the potential for a more aggressive sequence of higher Fed Fund rate increases. The Federal Open Market committee now seeks a balance between achieving a 2% inflation target and avoiding an "overheated" economy. The fiscal stimulus from the tax revision will begin to show up in higher growth during the second half of 2018. The stimulus linked with already easy monetary policy conditions may push inflation over the 2% target. Year-over-year growth in the first quarter was the fastest in more than two years. Current unemployment of 4.1% is in line with full employment and excess demand pressure should build. Wage and price pressures are not yet showing up in the data but conditions are changing. Wage growth is rising and housing prices are trending higher. Global economic recovery, a weaker dollar, and tariffs are putting upward pressure on U. S. import prices, adding to inflation pressures.

While inflation pressures will be higher in 2018, there are buffers in place that may moderate the increase. In prior periods when the economy hit full employment, wages and salaries were growing more rapidly than they are now. The labor force participation rate has also been much higher in prior periods before inflation kicked in. If higher wages attract more workers back into the labor force there is a potential for expanding labor without as much wage pressure. Capacity utilization rates are now much lower than in other periods of inflation. Both the manufacturing (76%) and industry (77%) utilization rates are well below the 80% mark that normally accompanies increases in inflation rates. While labor markets are tight, there is ample production capacity available before production bottlenecks occur. Nevertheless, when all factors are considered, it is possible for the Fed to increase the Fed Fund rate four times in 2018, rather than the three increases that analysts expect. Such a development would be a large incremental increase in short-term rates from the current target of 1.5% to 2.5%. This would put the Fed close to its announced longer run Fed Fund rate target of 2.75% and closer to the long run average of about 3%. Meanwhile, monetary policy remains relatively easy compared to the long-term norm for liquidity conditions.

Growth Constraint: Increasing the Number of Productive Workers

Low unemployment, healthy payroll expansion, and early stages of wage growth all suggest a strong economy for 2018. Nevertheless, there are problems ahead for longer run economic growth. Ultimately, real economic growth rests on a combination of a growing number of workers and strong labor productivity of workers. Over the past fifty years, the U. S. economy grew at about 3.5% per year with approximately 1.3% of that growth due to an expansion of workers and the remaining 2.2% due to annual increases in worker productivity. In contrast, U. S. economic growth averaged about 2% over the last decade with only a 0.5% growth in workers and 1.5% increase in productivity. Declining U.S. productivity was as topic in the last *Outlook* (Third Quarter 2017). Slow growth in the number of workers is the topic in this section.

The eligible labor force includes people in the population over the age of 16. The percentage of this eligible labor force that is either working or actively looking for work represents the labor force participation rate (LFPR). The threat to a high growth scenario for the U.S. comes from slow population growth and a diminishing rate of participation of eligible workers in the work force over the past seven years. The net result is low growth in the number of workers contributing to economic growth. A low unemployment rate, normally the measure of a strong economy, is less relevant for economic growth than the number of workers.

Remedies for low population growth link to social issues on birth control, the economics of family size, and immigration reform. It is not likely that dramatic changes will occur in any of these areas outside of immigration reform. Even so, there is significant opposition to merit based approaches to immigration designed to increase the productivity of immigrants. Policies for increases in the number of immigrants without a merit system also have significant opposition. These opposing forces make it unlikely to have a near term solution that promotes productive population growth from healthy immigration.

Remedies for the declining LFPR are also unlikely. Non-participants in the labor force are eligible for work but are not working and are not looking for work. This group includes people over the age of 16 who are students, homemakers, non-civilians, institutionalized, retirees, and persons on public assistance. Baby boomers, who are either retired or retiring, represent a large portion of non-participants. This group is likely to grow in the near-term rather than decline. Changes that will move more potential workers out of homemaking, post-secondary education, retirement, or public assistance are unlikely. Finally, non-participants who lost jobs after the 2009 recession and remained unemployed before dropping out of the labor force may not have skills required to move back into the labor force.

When taken as a whole, U. S. GDP growth is limited to a 2.5% to 3% potential growth path without inflation pressures from a fully employed labor force. Higher sustainable growth rates without high inflation will require a combination of enhanced worker productivity and higher growth in the number of workers. Given the demographic constraints for population growth and the difficulty of increasing the LFPR, an emphasis on enhanced worker productivity would seem to be the critical factor for improvement. Unfortunately, increasing labor productivity takes time for enhanced capital investment, education, and production innovations.

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