

Short Range Outlook April 2017 Survey

Country: United States

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Country Profile

	MEMBER'S INPUTS					
	2013	2014	2015	2016	2017	2018
General Economic Indicators, y-o-y % growth						
Gross Domestic Product	1.7	2.4	2.6	1.6	2.3	2.4
Industrial Production	1.9	2.9	0.3	-1.0	1.5	2.4
Capital Formation						
Equipment and Machinery	3.2	5.7	4.5	-2.9	1.9	
Construction	1.4	8.2	6.9	1.3	2.8	
Other						
Imports	2.2	3.2	5.2	0.6	3.4	
Exports	3.2	4.0	1.6	0.3	2.6	
Apparent Steel Use, crude steel equivalent (ACSU)						
in million tonnes	106.300	121.600	108.333	102.261	105.298	108.336
change in million tonnes		15.300	-13.267	-6.072	3.037	3.038
y-o-y % growth		14.4%	-10.9%	-5.6%	3.0%	2.9%
% compound growth (2017-2018)						2.9%
Conversion Coefficient (ASU/ACSU)	0.900	0.880	0.887	0.896	0.896	0.896
Apparent Steel Use, finished steel products (ASU)						
in million tonnes	95.700	106.957	96.131	91.626	94.347	97.069
change in million tonnes		11.257	-10.826	-4.505	2.721	2.722
y-o-y % growth		11.8%	-10.1%	-4.7%	3.0%	2.9%
% compound growth (2017-2018)						2.9%
Real Steel Use, finished steel products (RSU)						
in million tonnes	95.900	106.231	97.582	92.533	94.075	96.887
change in million tonnes		10.331	-8.649	-5.049	1.542	2.812
y-o-y % growth		10.8%	-8.1%	-5.2%	1.7%	3.0%
% compound growth (2017-2018)						2.3%
Change in Stocks (ASU-RSU), million tonnes	-0.200	0.726	-1.451	-0.907	0.272	0.182
Steel Using Sectors, y-o-y % growth						
	Steel Weights	Year the steel weights refer to:				
Construction	41.0					
Domestic Appliances	4.0					
Electrical Equipment	3.0					
Mechanical Machinery	14.0					
Metal Products	11.0					
Automotive	25.0					
Other Transport	2.0					
SWIP	100.0					

UNITED STATES OF AMERICA
SHORT RANGE OUTLOOK
 SPRING 2017

General Economic Indicators % change*	2013	2014	2015	2016	2017f	2018f
Real Gross Domestic Product (GDP)	1.7%	2.4%	2.6%	1.6%	2.3%	2.4%
Industrial Production (IP)	1.9%	2.9%	0.3%	-1.0%	1.5%	2.4%
Disposable Personal Income	-1.4%	3.5%	3.5%	2.7%	2.3%	2.7%
Personal Consumption Expenditures	1.5%	2.9%	3.2%	2.7%	2.7%	2.5%
Non-Residential Fixed Investment	3.5%	6.0%	2.1%	-0.4%	3.0%	3.9%
Net Exports (billion 2009 dollars)	-405	-426	-540	-562	-621	-678

*All forecasts, unless otherwise noted, are consensus forecasts from the February 2017 *Blue Chip Economic Indicators*®.

Executive Summary

The U.S. economy posted its seventh consecutive annual increase in 2016 even as the rate of growth remained slow by historical standards. Real GDP grew at a modest 1.6 percent pace in 2016, but underlying strength appeared to build as the year wore on. Meanwhile, the labor market continued to tighten, with new job creation totaling more than 2.2 million for the year and the unemployment rate sliding to 4.7 percent by year-end.

Expectations are for an acceleration of the pace of economic growth in 2017 and 2018 amid the emergence of stronger fundamentals, increasing business and consumer confidence and a new presidential administration that is seen favoring growth-oriented economic policies.

Nonetheless, forecasters have remained cautious due to a high degree of policy uncertainty. The February 2017 *Blue Chip* consensus anticipates real GDP growth of 2.3 percent in 2017 and 2.4 percent in 2018.

The industrial economy slumped for a second straight year in 2016 as industrial production contracted by one percent from 2015. The sector's performance mirrored that of the broader economy, though, as industrial production firmed in the second half of the year after a weak first half thanks to improvements in mining (including crude oil and natural gas) and manufacturing output, developments which are expected to persist through the forecast horizon.

A growing consensus, though, holds that a prolonged cyclical upswing in the light vehicle sector is showing signs of a plateau. A number of factors suggest that U.S. sales and production will see a modest downdraft in the near term. Despite a softening sales outlook in North America's largest market, overall NAFTA-region light vehicle production is forecasted to edge higher in both 2017 and 2018, with growth in Mexico expected to more than offset declines in the United States and Canada.

Following several years of robust growth, construction activity decelerated in 2016, with slower-paced increases expected to persist into 2017 and 2018. Residential construction continues to rebound from a deep trough. Projected improvements in the labor market, together with the coming of age of the millennial generation, are expected to further an ongoing recovery in household formation, underpinning future increases in housing demand.

Consultancy FMI Construction forecasts the percentage growth in the value put-in-place of nonresidential construction as largely stable in 2017 and 2018 in the mid-single-digit range, while nonbuilding construction swings from a modest contraction in 2016 to growth in the forecast period. A large question mark looms over the outlook for infrastructure construction segments, though, given the uncertainties surrounding a potentially large, but as yet ill-defined, federal infrastructure spending program.

Investment in crude oil and natural gas exploration and production began to show signs of recovery in the second half of 2016 following a steep downturn beginning in 2014. This has had the predictable effect of stimulating production and investment. Rig counts and investment in mines and wells are up after bottoming out in 2016. Nonetheless, downward pressure is likely to remain on investment since producers became much more efficient during the downturn. The value of construction put-in-place for power facilities—a broad category that includes electricity generation, transmission and distribution facilities, as well as oil and gas transportation, storage, and distribution networks—grew an estimated 6 percent in 2016, according to FMI, and is expected to expand approximately 8 percent per year in 2017 and 2018.

A. General Economic Situation

The U.S. economic expansion soldiered on in 2016, as output growth posted its seventh consecutive annual increase. Nonetheless, the rate of economic growth has remained slow by the standard of the post-World War Two era—a consequence of the long lingering aftermath of the Great Recession and structural weakness stemming from adverse demographic trends and weak productivity growth, factors that cannot be explained by cyclical causes alone.

Real GDP grew at a 1.6 percent pace in 2016, its slowest annual increase since 2011. Nonetheless, the economy advanced at a markedly faster pace in the second half of the year, when real GDP growth averaged slightly less than 3 percent at a seasonally adjusted annualized rate (SAAR), than in the first half of the year, when growth inched forward at just over 1 percent SAAR. While fourth quarter growth of 1.9 percent SAAR was slower than recorded in the third quarter, a number of developments suggest underlying economic momentum continued to

build heading into 2017. Consumer spending on durable goods advanced at a double-digit rate for the second consecutive quarter. Business equipment investment increased for the first time in more than a year, and business inventory investment extended a firming trend that began the previous quarter.

The labor market continued to tighten in 2016. New job creation averaged nearly 190,000 per month, totaling more than 2.2 million for the year, while the unemployment rate fell to 4.7 percent by year-end. Coupled with stepped-up wage growth, the current level of the unemployment rate suggests the economy is nearing the point where virtually everyone willing and able to work is employed. Nonetheless, the labor force participation rate, a measure of “willingness and ability” to work, remained near a multi-decade low in 2016 averaging 62.8 percent, up slightly from 62.7 percent in 2015. The increase, though, provides evidence for the hypothesis that rising wages and improved employment prospects stemming from a consistently growing economy are drawing heretofore discouraged workers back into the labor market and, ultimately, into gainful employment.

Expectations are for an acceleration of the pace of economic growth in 2017 and 2018. Measures of consumer and business confidence have moved decisively higher in recent months, suggesting that long dormant “animal spirits” may be reasserting themselves for the first time since the housing and financial market crash of the last decade. The new presidential administration is seen favoring growth-oriented economic policies such as tax cuts, a substantial infrastructure spending program, and regulatory relief.

Of course a high degree of uncertainty surrounds the details, timing, and political achievability of these policies. Consequently, economic forecasters have remained cautious, and most consensus forecasts were only slightly higher in early February 2017 than they were prior to last November’s elections. According to the results of February’s installment of a monthly survey of more than 60 economists conducted by the *Wall Street Journal*, though, upside potential outweighs downside risks over the next 12 months. The February 2017 *Blue Chip* consensus anticipates real GDP growth of 2.3 percent in 2017 and 2.4 percent in 2018, with the unemployment rate expected to fall to 4.6 percent in 2017 and 4.4 percent in 2018.

The Federal Open Market Committee (FOMC), the Federal Reserve system’s interest rate setting body, increased the target range for the federal funds rate in December 2016 for only the second time in more than ten years. The midpoint of the range currently stands at 0.625 percent. Tightening labor market conditions, coupled with creeping inflation (core consumer prices rose 2.2 percent on a year-over-year basis in December 2016), point to the likelihood of two to three increases in the federal funds rate in 2017 alone. The release of the minutes of the most recent

FOMC meeting, as well as recent hawkish statements by senior Fed officials, have engendered speculation that the next rate hike may come as early as March.

The industrial economy slumped for a second straight year in 2016. Industrial production contracted by one percent from 2015 after increasing a scant 0.3 percent from 2014. The sector's performance mirrored that of the broader economy in 2016, as industrial production firmed in the second half of the year after a weak first half. Mining sector output (which includes crude oil and natural gas production) increased by 3.4 percent in the third quarter and nearly 12 percent in the fourth quarter, interrupting a sharp fall that had extended through the first half of the year. Meanwhile, manufacturing output increased 0.6 percent in the third quarter and 0.8 percent in the fourth quarter, its first consistent gains in several quarters. The *Blue Chip* consensus is for industrial production to increase 1.5 percent in 2017, with growth climbing to 2.3 percent in 2018 as both the mining and manufacturing sectors slowly continue to rebound.

B. Steel-Using Sectors

Automotive

U.S. light vehicle sales reached a record level of 17.5 million units in 2016, following an unprecedented seventh consecutive year of growth. Sales have increased nearly 70 percent on a cumulative basis from a cyclical trough of only 10.4 million units in 2009 during the depths of the Great Recession. Gradual recovery in employment and income prospects, improvement in household finances, easing credit conditions, a high degree of pent up demand, and, more recently, a moderation in fuel prices, all contributed to the consistent gains of the last several years.

A growing consensus, though, holds that this prolonged cyclical upswing is showing signs of a plateau. Despite reaching a record level in 2016, annual light vehicle sales growth slowed to only 100,000 units in 2016, far below the average increase of well over one million units per year from 2009 to 2015. A number of factors – market saturation, rising interest rates and vehicle transaction prices (coupled with loan terms that are already at historic lengths and incentive programs that are at elevated levels), adverse demographic trends, slower job creation, and a firming in oil prices – suggest that sales may see a modest downdraft in the near term. Indeed, industry consultancy Ward's Automotive projects light vehicle sales will decline by 200,000 units in 2017 to 17.3 million units.

Despite flat to declining sales in North America's largest consumer market, overall NAFTA-region light vehicle production is forecasted to edge higher in both 2017 and 2018. Following a seventh consecutive annual increase in 2016 to 17.8 million units, Ward's forecasts North

American output of 17.9 million units in 2017 and 18.2 million units in 2018 as overseas exports more than compensate for slackening U.S. demand. Mexico is expected to see a near-term increase in light vehicle production, with Ward's forecasting output to rise from 3.5 million units in 2016 to 4.1 million units in 2017 and 4.4 million units in 2018 as the nation captures an increasing share of the small car market. Canadian production, in contrast, is forecasted to decline from 2.4 million units in 2016 to 2.2 million units in 2017 and 2.1 million units in 2018. Ward's also forecasts a near-term decline in U.S. output to 11.6 million units in both 2017 and 2018, down from 11.9 million units in 2016, even as the U.S. increasingly focuses on high-margin luxury cars and light trucks.

Recent political developments inject an unusually high degree of uncertainty into these projections. The new administration in Washington campaigned in part on a platform of bolstering the American manufacturing base and has been highly critical of NAFTA, among other international trade arrangements. How this may translate to specific trade policies and/or restructuring of existing production patterns across North America remains unclear. In recent months, FCA, GM, and Toyota have announced significant investment and hiring plans in the United States, while Ford has scrapped plans for a new production facility in Mexico. Given information available at this point, it appears unlikely these announcements will have a large impact within the relatively short two-year forecast horizon considered here.

In January 2017, the outgoing U.S. administration finalized its mid-term review of EPA/NHTSA corporate average fuel economy (CAFE) and greenhouse gas (GHG) regulations first enacted in 2012, keeping in place corporate average fuel economy (CAFE) rules embodying significant increases in the required miles per gallon of vehicles through 2025. The new administration has signaled its intent to reopen the review process, but is unclear how and on what timeline this may happen. Regardless, materials competition is likely remain intense for the foreseeable future as OEMs continue to evaluate the use of lower density materials, like aluminum, magnesium and carbon fiber, to help in light-weighting as they strive to meet increasing fuel economy targets.

Construction

Following several years of robust growth, construction activity decelerated in 2016, with slower-paced increases expected to persist into 2017 and 2018. Dodge Data and Analytics reports that construction project starts slowed to an estimated 1 percent increase in 2016 on a dollar denominated basis. Although Dodge forecasts a modest pickup in growth to 5 percent growth in 2017, that is considerably lower than the double-digit percent increases recorded annually from 2012 to 2015.

Industry consultancy FMI Construction reported slower estimated growth on a value-put-in-place basis in two of the three broad construction aggregates it tracks. Residential construction growth slowed from a 17 percent increase in 2015 to an estimated 7 percent increase in 2016. Nonresidential building construction growth more than halved – from 13 percent in 2015 to 6 percent in 2016. Construction of nonresidential structures improved from a 2 percent decline in 2015 to a 2 percent increase in 2017. Nonresidential structures, though, is the smallest of the three aggregates, accounting for less than 20 percent of estimated total construction put-in-place in 2016.

Residential construction continues to claw back in fits and starts from a deep trough. After falling by nearly three-quarters from more than 2 million units in 2005 to approximately 550,000 units in 2009, housing starts have more than doubled to nearly 1.2 million units in 2016. Projected improvements in the labor market, together with the coming of age of the millennial generation, are expected to further an ongoing recovery in household formation, underpinning increases in housing demand. The *Blue Chip* consensus forecast is for housing starts to reach 1.26 million units in 2017 and 1.35 million units in 2018. These figures represent increases in the 7 percent to 8 percent range per annum, in line with the 6 percent gain in 2016, but slower than the average growth rate of more than 15 percent recorded from 2012 to 2015.

The early years of the homebuilding recovery was dominated by growth in the multi-unit segment (which is more steel intensive per dollar of construction than the single-unit segment) amid demographic shifts, household financial considerations in the wake of the Great Recession, and a resurgence in the appeal of urban living. This pattern began to reverse in 2016, a development that is expected to continue in 2017 and 2018.

Dodge projects the dollar value of nonresidential building project starts to increase at an 8 percent clip in 2017. FMI forecasts the value put-in-place of nonresidential building construction growth will run at a slightly slower rate of approximately 6 percent in 2017 and 2018, nearly identical to the pace set in 2016. FMI's segment-by-segment breakdown anticipates the lodging, office, commercial, and amusement and recreational categories will decelerate during the forecast period from 2016 rates. The slowdown is expected to particularly sharp for lodging and office, each of which averaged 20 percent-plus gains over the period 2014 to 2016. The health care, religious, public safety, transportation, communication, and manufacturing segments, in contrast, are expected to pick up speed, with some swinging from contraction in 2016 to increases in 2017 and 2018.

A large question mark looms over the outlook for nonbuilding structures, an aggregate that includes infrastructure segments such as conservation and development, water supply, sewage and waste disposal, and highway and street, among others. FMI projects value put-in-place for this category to advance at a 5 percent pace in both 2017 and 2018, following last year's 2 percent increase. This should be considered a baseline scenario reflecting current planning and funding expectations. The prospect of a substantial federal infrastructure spending program remains in play. However, considerable uncertainty regarding the "ifs, whats, whens, and to-what-extents" of such a program render it too speculative to incorporate into forecasts at this point.

Energy

Investment in crude oil and natural gas exploration and production began to show signs of recovery in the second half of 2016 following a steep downturn beginning in 2014. West Texas Intermediate crude oil futures prices climbed to approximately \$55 per barrel by late February, up more than \$20 from the same period last year. Natural gas process, meanwhile, were \$2.60 per million BTU, up approximately \$0.80 from the same period last year even in the face of depressed demand due to an unusually warm winter.

Consistently higher prices have had the predictable effect of stimulating production and investment. After bottoming out in May 2016 at a monthly average of 316, according to Baker Hughes, the number of active oil drilling rigs in the United States has steadily rebounded, climbing to an average of 593 during the first four weeks of February 2017. More broadly, investment in extractive structures (i.e.: mines and oil and gas wells) increased in the fourth quarter of 2016 by 24 percent SAAR. That represented the first quarterly increase in private investment in petroleum and mineral exploration in two years. The sharp percentage increase, though, comes from a deeply depressed level. Investment measured \$47 billion (SAAR) in inflation adjusted 2009 dollars, up from \$44 billion (SAAR) in the third quarter of 2016, but down from a peak of \$135 billion (SAAR) in the fourth quarter of 2014. Moreover, even assuming market conditions remain attractive, downward pressure will remain on investment since producers became much more efficient with each individual drill site and dollar of investment during the downturn.

U.S. crude oil production measured 8.9 million barrels per day in 2016, down 6 percent from 2015. Despite the annual decline, though, production ticked upward in the fourth quarter for the first time in more than a year. The Energy Information Administration (EIA) forecast for 2017 is for a marginal increase to 9 million barrels per day. A 3 percent increase to 9.3 million barrels per day is expected in 2018. U.S. dry natural gas production was 72.4 billion cubic feet

(BCF) per day in 2016. EIA forecasts a 2 percent increase to 73.8 BCF in 2017 and a further 4 percent increase to 76.7 BCF in 2018.

The value of construction put-in-place for power facilities – a broad category that includes electricity generation, transmission and distribution facilities, as well as oil and gas transportation, storage, and distribution networks – grew an estimated 6 percent in 2018, according to FMI, and is expected to expand approximately 8 percent per year in 2017 and 2018. The build out of a number of solar and wind projects started in 2016, construction and upgrades of traditional power generation facilities, and the new administration's plans to expedite pipeline permitting are all expected to contribute to the growth of this segment.