

Chicago Fed Letter

Economic growth to decelerate in 2019 and then ease further in 2020 as auto sales downshift

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According to participants in the Chicago Fed's annual Automotive Outlook Symposium (AOS), the nation's economic growth is forecasted to slow this year and then moderate close to its long-term average in 2020. Inflation is expected to decline in 2019 and to edge higher in 2020. The unemployment rate is anticipated to move down to 3.6% by the end of 2019, but then tick back up next year. Light vehicle sales are predicted to decrease from 17.2 million units in 2018 to 16.8 million units in 2019 and then to 16.6 million units in 2020.

The Federal Reserve Bank of Chicago held its 26th annual Automotive Outlook Symposium on May 31, 2019, at its Detroit Branch. More than 60 economists and analysts from business, academia, and government attended the AOS. This *Chicago Fed Letter* reviews the forecasts from last year's AOS for 2018, and then analyzes the forecasts for 2019 and 2020 (see figure 1) and summarizes the presentations from this year's AOS.

The U.S. economy continued to expand from the longest and deepest drop in economic activity since the Great Depression. During the first 30 quarters following the end of the Great Recession in mid-2009 (through the fourth quarter of 2016), the annualized rate of real gross domestic product (GDP) growth was 2.2%—just slightly above what is considered the long-term rate of growth for the U.S. economy. That said, since the start of 2017, growth has accelerated: From the first quarter of 2017 through the first quarter of 2019, the U.S. economy's annualized rate of growth was a stronger 2.8%. This improvement in growth was partly due to the fiscal stimulus resulting from federal tax reform passed in December 2017 (the Tax Cuts and Jobs Act).

Most materials presented at the latest AOS are available online, <https://www.chicagofed.org/events/2019/automotive-outlook-symposium>.

The growth rate of industrial output was a very strong 4.0% in 2018, partly reflecting the effects of federal tax reform. However, the support from tax reform appears to have waned, as the annualized growth rate of industrial production was -3.5% over the first five months of this year. Real business fixed investment has shown renewed strength over the past couple of years; its annualized growth rate from the start of 2017 through the first quarter of 2019 was 6.1%—which is faster than its annualized growth rate of 4.9% between mid-2009 and the end of 2016 (the first 30 quarters following the Great Recession). After setting a record of 17.5 million units in 2016, light vehicle sales (car and light truck sales) decreased to 17.1 million units in 2017 and then increased slightly to 17.2 million units in 2018. Light vehicle sales softened in early 2019: The annualized selling rate of light vehicles was 16.8 million units over the first five months of this year.

1. Median forecasts of real gross domestic product and related items

	2018	2019	2020
	(Actual)	(Forecast)	(Forecast)
Real gross domestic product ^a	3.0	2.3	1.9
Real personal consumption expenditures ^a	2.6	2.0	1.8
Real business fixed investment ^a	7.0	3.0	2.5
Real residential investment ^a	-3.3	0.5	1.9
Change in private inventories ^b	96.8	76.9	63.7
Net exports of goods and services ^b	-955.7	-907.5	-953.7
Real government consumption expenditures and gross investment ^a	1.5	2.1	1.2
Industrial production ^a	4.0	0.6	0.7
Car and light truck sales (millions of units)	17.2	16.8	16.6
Housing starts (millions of units)	1.25	1.21	1.24
Unemployment rate ^c	3.8	3.6	3.7
Consumer Price Index ^a	2.2	1.6	1.8
One-year Treasury rate (constant maturity) ^c	2.67	2.60	2.55
Ten-year Treasury rate (constant maturity) ^c	3.03	2.75	2.85
J. P. Morgan trade-weighted dollar index ^a	4.2	1.5	2.3
Oil price (dollars per barrel of West Texas Intermediate) ^c	58.97	63.50	60.00

^aPercent change, fourth quarter over fourth quarter.

^bBillions of chained (2012) dollars in the fourth quarter at a seasonally adjusted annual rate.

^cFourth quarter average.

NOTE: These values reflect forecasts made in May 2019.

SOURCES: Actual data from authors' calculations and Haver Analytics; median forecasts from Automotive Outlook Symposium participants.

The housing sector continued to modestly improve in 2018. Housing starts went up from 1.21 million units in 2017 to 1.25 million units in 2018—a gain of 3.3%. Housing starts eased in 2019, to an annualized rate of 1.24 million units over the first five months of the year. This pace falls short of the nearly 1.4 million annual housing starts that the U.S. averaged during the 1990s. Since the end of the Great Recession in mid-2009, residential investment has contributed just 0.2 percentage points toward the overall economy's annualized growth rate of 2.3%.

Against this backdrop, the unemployment rate fell to 3.6% in May 2019—below prominent estimates of the natural rate of unemployment (i.e., the rate that would prevail in an economy making full use of its productive resources). The economy added 19.0 million jobs between February 2010 and May 2018, and strong gains continued—over 2.3 million additional jobs were added over the 12 months ending in May 2019. Some other indicators help illustrate how tight the labor markets have become across the country. For instance, unemployment rates for blacks and Hispanics fell to record or near-record lows this year. Yet, not all labor market indicators have reached or have come close to reaching historic levels. For one, year-over-year growth in nominal employee compensation (both wages and benefits) has been slowly improving since bottoming out at 1.2% in the fourth quarter of 2009; it only reached 2.7% as of the first quarter of 2019.

Inflation, as measured by the Consumer Price Index (CPI), had increased slightly from a reading of 2.1% in 2017 to 2.2% in 2018. But by May 2019, the year-over-year rate of inflation had eased to 1.8%.

So, on the whole, the U.S. economy appeared fairly healthy as of May 2019. Yet, notably, in the final months of 2018, the U.S. economy suffered two major shocks—a hefty decline in the stock market and a collapse in the price of oil—which raised concerns of a possible recession. The Standard and Poor's (S&P) 500 Index—a prominent stock market index—peaked in late September of last year

and proceeded to fall throughout the fourth quarter, hitting bottom in late December, with nearly 20% of its value lost. In addition, the average price of oil fell from around \$70 per barrel in September to about \$49 per barrel in December. The main worry in late 2018 was that slowing economic growth in the U.S. and abroad was lowering demand for oil and driving down its price. Another concern was that falling oil prices would hurt the domestic energy industry. Concerns about the weakening U.S. economy were eased in early 2019 as both of these economic indicators turned around quickly: By the end of the first quarter of 2019, the S&P 500 had recovered over 80% of its losses, and oil prices had risen to \$58 per barrel, on average.

Another headwind to U.S. economic growth has been the implementation of tariffs by the federal government on a number of products and countries beginning in early 2018. Moreover, there has been substantial uncertainty surrounding the duration of existing tariffs and the introduction of new ones. Current and potential tariffs, as well as related negotiations over trade agreements, are leading some businesses to contemplate making changes to their supply chains. U.S. tariffs (and trading partners' countermeasures) pose downside risks to the outlooks for many sectors of the economy, including the automotive industry, as many speakers at the latest AOS shared.

Results versus forecasts

For 2018, the actual growth rate of real GDP was 3.0%—very close to the 2.8% predicted by participants in last year's AOS consensus forecast (defined as the median forecast). The unemployment rate averaged 3.8% in the final quarter of 2018—exactly what was predicted in the 2018 AOS forecast. Inflation, as measured by the CPI, was in fact 2.2% in 2018—much lower than the projected 2.9% increase in prices for last year. Light vehicle sales increased slightly in 2018 to 17.2 million units—somewhat higher than the forecast of 17.0 million units. Housing starts increased to 1.25 million units in 2018—the actual number of starts was below the 1.33 million units expected for last year.

Outlook for 2019 and 2020

According to this year's AOS consensus forecast, the economy is expected to grow at a solid but moderating pace in 2019 and 2020: The growth rate of real GDP is predicted to be 2.3% in 2019 and 1.9% in 2020. The unemployment rate is anticipated to remain below 4% through the end of 2020. Inflation, as measured by the CPI, is projected to decrease from a rate of 2.2% in 2018 to 1.6% in 2019 and then edge up to 1.8% in 2020. The average price of oil is expected to reach \$63.50 per barrel in the final quarter of 2019 and then moderate to \$60 per barrel in the fourth quarter of 2020. Real personal consumption expenditures are forecasted to expand at a solid rate of 2.0% this year and at 1.8% in 2020. Light vehicle sales are expected to decline from 17.2 million units in 2018 to 16.8 million units this year and then ease further to 16.6 million units next year. The pace of real business fixed investment is projected to slow to a still fairly solid pace of 3.0% in 2019 and then moderate to 2.5% in 2020. After growing a robust 4.0% in 2018, industrial production is forecasted to register very modest gains of 0.6% this year and 0.7% next year.

The housing sector is predicted to improve over the forecast horizon. Real residential investment is anticipated to expand by 0.5% in 2019 and then by 1.9% in 2020. Housing starts are expected to decrease to 1.21 million units in 2019, but then increase to 1.24 million units in 2020—still below what is viewed as their long-term trend.

The long-term interest rate (ten-year Treasury rate) is forecasted to decrease 28 basis points in 2019, to 2.75%, and then rise 10 basis points in 2020, to 2.85%. The short-term interest rate (one-year Treasury rate) is projected to be virtually flat this year and next: It is expected to decrease just 7 basis points in 2019, to 2.60%, and then edge down a further 5 basis points in 2020, to 2.55%. The trade-weighted U.S. dollar is predicted to rise 1.5% this year and 2.3% in 2020. The trade deficit (net exports of goods and services) is expected to decrease this year and then increase next year.

Auto sector outlook

Emily Kolinski Morris, chief economist, Ford Motor Co., provided her near-term outlooks for global and U.S. automotive markets (encompassing light-, medium-, and heavy-duty vehicle sales). Global automotive sales in 2018 totaled 95.2 million units, and they are expected to be flat in 2019, she said. Kolinski Morris stated that total new vehicle sales in the U.S. are forecasted to decline from 17.7 million units in 2018 to 17.3 million units in 2019. She also said vehicle sales in Europe are predicted to be flat at 20.1 million units this year. While demand for new vehicles in the U.S. and euro area remain at healthy levels, current economic conditions are providing a smaller tailwind for vehicle sales compared with 2018, she noted. Trade risks are a key source of uncertainty for auto markets around the globe. For instance, total vehicle sales in China declined in 2018 for the first time since 1990; vehicle sales in China are expected to continue moving down in 2019.

Turning to the composition of new vehicle sales in the U.S., Kolinski Morris observed that fleet sales (rather than retail sales) were the source of growth in the past six to 18 months. Fleet sales consist of bulk sales of vehicles to rental car agencies, other commercial firms (including trucking companies), and governmental entities. In the second half of 2018, fleet sales made up 3.3 million units of the annualized total of 17.7 million vehicle sales. Year to date at the time of the 2019 AOS, fleet sales accounted for 4.4 million units of the annualized total of 17.3 million vehicle sales. Fleet sales are expected to continue to climb as structural changes, such as an increase in demand for delivery services, drive up demand for commercial vehicles, she said. According to Kolinski Morris, declining retail sales may be explained in part by heightened consumer sensitivity to price, coupled with the rising average transaction cost for a vehicle.

Light vehicle sales are expected to decline to 16.8 million units in 2019 and 16.6 million units in 2020, per the AOS forecast.

Jonathan Smoke, chief economist, Cox Automotive, discussed some key trends for the automotive industry. Although U.S. light vehicle sales were fairly steady over the past couple of years, Smoke said he expects light vehicle sales to decline from 17.2 million units

in 2018 to 16.8 million units in 2019 and to drop again in 2020 to 16.5 million units (pretty much in line with the AOS consensus forecast). Demand for new light vehicles is expected to soften because of increasing monthly auto loan payments (partly due to higher interest rates) and decreasing growth in incentives offered by auto dealers and manufacturers (e.g., financing deals, often involving lengthy loan terms to keep monthly payments low; cash-back offers; and generous leasing terms). Moreover, because new vehicles are becoming less affordable, there's been a shift among consumers toward purchasing used ones (used light vehicle sales in 2019 are projected to match 2018's level of 39.4 million units). While new light vehicle sales, on the whole, are expected to decline in 2019, Smoke said he forecasts fleet sales to be up 6% and retail sales to be down 4%. In line with Kolinski Morris's forecast, Smoke said fleet sales are likely to make up a greater share of total vehicle sales in the coming years. A long-term shift away from personal vehicle ownership supports this projection, he contended. Alternatives such as ride-sharing and car-sharing services are making owning a car less necessary for many consumers.

Mike Jackson, executive director, strategy and research, Original Equipment Suppliers Association (OESA), presented outlooks on both the global and U.S. light vehicle markets and reported results from a survey of top automotive industry executives (the *OESA Automotive Supplier Barometer*). Jackson began by discussing the global light vehicle market. He said that light vehicle sales are effectively flat across the world: Global sales are projected to increase by only 150,000 units from 2018 to reach 94.8 million units in 2019. In North America, light vehicle sales are predicted to decrease 2% in 2019 after experiencing flat growth in 2018 and a decline of 2% in 2017. Light vehicle sales are projected to grow 1% in both Western Europe and China this year. Although growth in light vehicle sales appears to be constrained in the near term, global sales are projected to reach 109.8 million

units by 2026, with much of the growth coming from sales in China and India over the forecast horizon, said Jackson.

Shifting his focus to the U.S. light vehicle market, Jackson said that according to projections from some of OESA's key affiliate members, sales in the U.S. are expected to experience a steady decline from 17.2 million units in 2018 to 17.0 million units in 2019, 16.6 million units in 2020, and 16.5 million units in 2021. He discussed a number of factors supporting this outlook. As of May 2019, U.S. economic conditions still looked favorable from the consumer's perspective, as reflected in high consumer sentiment readings, he noted. Low unemployment, firm and steady job creation, rising labor force participation, low interest rates, and low gas prices all bode well for continued solid sales of light vehicles over the near term, Jackson observed. The last factor—low gas prices—has contributed to a shift in consumer taste toward larger light vehicles: U.S. consumers are increasingly choosing to purchase more expensive sport utility vehicles (SUVs) over passenger cars, stated Jackson, and this trend is expected to continue in the years ahead. All that said, Jackson did cite rising material costs, labor costs, and interest rates as potential headwinds to growth for the automotive industry. And of course, he pointed out, a key unknown factor remains the end of the current expansion—which at the time of the AOS was just shy of breaking the record for the longest one in U.S. history.

From the auto parts supplier's perspective, business conditions look unfavorable, noted Jackson. According to the *OESA Automotive Supplier Barometer*, roughly 70% of respondents were more pessimistic about the 12-month business outlook in the first quarter of 2019, compared with roughly 50% of respondents in the previous quarter. Their pessimism was driven mainly by changes in the U.S. government's international trade policy, poor sales of vehicles their firms supply parts for, and implementation of new government regulations. In closing, Jackson explained that according to OESA analysis, for suppliers' North American operations to remain profitable in 2019, light vehicle production in the region would need to exceed 14.7 million units. Fortunately, the region's light vehicle production is forecasted to hit nearly 17 million units. However, Jackson said, the gap between the production level needed for suppliers to break even and actual production has narrowed in the past few years. Jackson warned that the current "buffer" of roughly 2 million units would not be large enough to protect some suppliers from severe financial hardship should a recession occur.

Steve Tam, vice president, Americas Commercial Transportation (ACT) Research Co. LLC, discussed his outlook for the commercial vehicle (heavy- and medium-duty trucking) industry. Tam reported that demand for heavy-duty vehicles remains strong at the moment, but there may be some signs pointing to weakening demand over the next few years. Demand for such vehicles is still up for a number of reasons. For instance, since at least April of 2018, the U.S. manufacturing purchasing managers' index from IHS Markit has been pointing to manufacturing activity growing at or above trend. Additionally, consumer and business confidence readings have been on the upswing, and corporate tax cuts have encouraged increased business investment. Given such positive conditions, total U.S. heavy-duty trucking capacity has risen 5% since January 2017, per ACT estimates, said Tam. Moreover, at least 45,000 trucking jobs were added to the U.S. economy in 2018. Despite these gains, Tam cautioned that the trucking industry may soon be facing an overcapacity problem—where too many trucks are chasing too little freight. Signs of overcapacity are emerging: The average carrier profit margin peaked at 7% in the fourth quarter of 2018 (well above its long-run average of 3%), but then fell to just below 5% in the first quarter of 2019. Furthermore, freight volumes appear to be leveling off after a record year in 2018, and the American Trucking Associations' truck loads index is moving up more slowly now than last year. Freight rates have already begun softening, and Tam said this trend is expected to continue into 2020. Apparently, some trucking companies have recognized that they don't need to add any more shipping capacity, as net orders of class 8 trucks in North America fell to an annualized rate of only 190,000 units during the first four months of 2019, after totaling 490,000 units in 2018. Given such trends, according to Tam,

heavy-duty truck production in North America is projected to increase from 325,000 units in 2018 to 342,000 units in 2019, but then drop to 245,000 units in 2020. Heavy-duty truck production in the region is then forecasted to move up to 263,000 units in 2021.

Medium-duty truck production in North America is expected to plateau starting in 2019, after experiencing nine consecutive years of growth, said Tam. The key segments of the economy that support medium-duty truck demand—including consumer services, package delivery, and residential construction—are all performing well in 2019, with just a slight drop-off in activity compared with 2018. Tam stated that medium-duty truck production in North America is expected to decrease from 273,000 units in 2018 to 268,000 units in 2019 and then increase slightly to 271,000 units in 2020, before slipping down to 265,000 units in 2021.

Kristin Dziczek, vice president, Center for Automotive Research (CAR), shared her organization's outlook for U.S. light vehicle sales and then spoke about the impact of shifting trade policies and labor relations on the automotive industry. According to CAR, U.S. light vehicle sales are expected to fall from 17.2 million units in 2018 to 16.8 million units in 2019 and then dip further to 16.5 million in 2020 and 16.4 million units in 2021. U.S. light vehicle sales are anticipated to recover and eventually reach 17.7 million units by 2025, per CAR's forecast. However, these CAR sales projections may not adequately account for certain risks that are very difficult to model, including the effects of various trade agreements and labor contracts, she conceded. Dziczek suggested that the uncertainty posed by possible additional tariffs (e.g., on light vehicles and auto parts), the unratified United States–Mexico–Canada Agreement (USMCA), and the upcoming United Automobile Workers' (UAW) labor negotiations with the Detroit Three (Ford, General Motors, and Fiat Chrysler) have all contributed to slowing activity in the U.S. auto sector. For instance, U.S. auto employment growth has been slowing of late, and U.S. auto labor productivity has fallen after peaking in 2013–14. Additionally, there have been relatively few announcements of automaker investments in the U.S. (such as new plants) since 2015, when the last UAW–Detroit Three labor contract negotiations were completed. In fact, Ford and General Motors have recently announced layoffs and plant closures in North America for 2019–20. The auto manufacturers are likely finding it difficult to determine the optimal investments to produce and deliver their products in today's highly uncertain environment. So, at least until the labor negotiations with the UAW have been completed by this fall (and manufacturers get a better sense of their labor costs), no major investment announcements from the Detroit Three are expected. Dziczek emphasized that the U.S. cannot meet the domestic demand for light vehicles on its own—e.g., 47% of the 17.2 million light vehicles sales in 2018 were imported. Therefore, any further auto-production-related tariffs and treaties will matter a great deal to auto manufacturers, auto workers, and U.S. consumers.

Conclusion

According to the consensus forecast from this year's AOS, the growth rate of the U.S. economy is predicted to be somewhat above its long-term average in 2019 and then near its long-term average in 2020. Light vehicle sales are forecasted to decrease from 17.2 million units in 2018 to 16.8 million units in 2019 and 16.6 million units in 2020. Other sectors of the economy are also projected to moderate their growth rates in 2019 and 2020. Inflation is anticipated to average 1.6% this year and 1.8% next year. And the unemployment rate is expected to remain below 4% through the end of 2020.

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