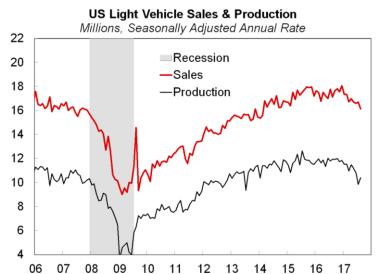
Current Economic Conditions

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HURRICANES HURT ECONOMY IN AUGUST & SEPTEMBER; REBOUND COMING

Hurricane Harvey, which hit Texas on August 26 (and stayed there for days), and Hurricane Irma, which hit Florida on September 10, have already had a significant negative impact on the U.S. economy. They will likely trim 0.5-1.0 percentage points from annualized growth in real Gross Domestic Product in the third quarter. Over the next two quarters, however, growth is likely to be a little stronger than it otherwise would have been as home owners repair or rebuild homes damaged or destroyed by the hurricanes and motorists replace the vehicles irreparably damaged by floodwaters.



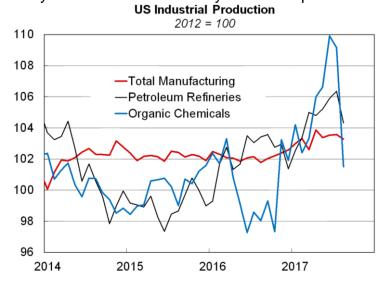
The first economic data point affected by the hurricanes was the report on September motor Light vehicles (cars, SUVs, and vehicle sales. pickup trucks) sold at a 16.03 million seasonally adjusted annual rate in September, down from a 16.70 million rate in August to the lowest selling rate since February 2014. Not only were consumers busy preparing for and suffering through Hurricane Harvey during the last week of August; much of the inventory of cars for sale in the Houston area was either destroyed or moved to higher ground. But vehicle sales are likely to surge in coming months as motorists replace estimated half million vehicles totaled floodwaters in the Houston area.

vehicles are replaced in the fourth quarter, the seasonally adjusted annual rate of light vehicle sales will be boosted by two million units. More likely, the sales surge will be constrained by a lack of inventory, the insurance claims process, and financial constraints on those without adequate insurance and will be spread over a longer period that has already begun. Vehicle production, which has declined significantly in recent months, must rebound to replenish depleted inventories. Since Texans are more likely to drive domestic vehicles than are drivers on the east and west coasts, most of the added vehicle production will be in North America rather than in Japan, Korea, and Germany.

The next data point affected by the hurricanes was initial claims for unemployment insurance, probably the best weekly measure of U.S. economic conditions. Claims jumped from 236,000 in the week ending August 26 to 298,000 in the week ending September 2 as workers filed for unemployment insurance when businesses in Texas were shut down by the hurricanes. The jump in claims suggests that growth in nonfarm payrolls will be lower in September (and unemployment higher) than in recent months. The weakness in labor markets will be reflected in other economic data, including income, spending, and industrial production. But claims had fallen to 259,000 by the week ending September 16, suggesting that Texas and Florida are recovering more quickly than feared.

Industrial production in U.S. manufacturing fell 0.3% in August. In its release, the Federal Reserve reported that "storm-related effects appear to have reduced the rate of change in factory output in August

about 3/4 percentage point," meaning that had it not been for Harvey, production would have been up about 0.5%, a very strong monthly increase. "The manufacturing industries with the largest estimated storm-related effects were petroleum refining, organic chemicals, and plastics materials and resins." Because shutdowns of refineries and chemical and plastics plants in Texas and Louisiana were extended into early September, industrial production might not snap back in September, but the cumulative increase in production from August to October is likely to be substantial. Industrial production in coming months is likely to be further boosted by increased production of building materials (wood products and nonmetallic



mineral products), furniture, appliances, and carpeting as home owners repair or rebuild their homes and furnish them. Looking beyond the next few months, strong growth abroad and the weakening of the U.S. dollar this year will boost U.S. exports and further lift industrial production. Production will also rise as new chemical plants. built to take advantage of cheap and abundant natural gas liquids from shale formations, come online over the next few years. Industrial production in U.S. manufacturing rose 1.8% from August 2016 to July 2017 after declining 1.3% over the prior 21 months. When growth resumes, possibly in September but almost certainly by October, it is likely to be stronger than that.

Even though Hurricane Harvey never reached the Permian Basin of West Texas, where most of the drilling activity takes place, oil and gas drilling may have been indirectly affected. Refinery shutdowns reduced demand for crude oil, pushing the price of West Texas Intermediate crude oil down from \$48.45/barrel on August 23 to \$45.95/barrel on August 30. The lagged impact of this decline might account for a decline in the number of oil and gas drilling rigs in operation in the United States from 944 on September 8 to 936 on September 15. Crude prices have since rebounded, to above \$50/barrel, which is likely to trigger a rebound in the rig count. But while refinery shutdowns pushed crude prices down, they pushed gasoline prices up by more than thirty cents per gallon, more on the East Coast. Since every penny per gallon costs U.S. motorists \$1.4 billion annually, this could reduce consumer spending on other items. Fortunately, most of the increase in gasoline prices is likely to be reversed by October.

Repairing and rebuilding homes damaged or destroyed by the hurricanes could boost investment in residential structures, a component of GDP that includes both new construction and improvements. This would reverse the second-quarter decline that likely extended into the third quarter. Housing starts will be depressed in September (and perhaps into October), but will bounce back by year-end. Since most of the rebuilds will be done on owners' lots by small builders, they won't be constrained by the increased industry concentration that has left national builders in control of many vacant building lots. However, there are limits to how much hurricane recovery can boost residential construction. Labor and materials used to rebuild houses in Texas and Florida cannot be used to build houses elsewhere.

While hurricane recovery will boost growth in coming quarters, one should not expect that boost to exceed the hit to third-quarter GDP. As French economist Frédéric Bastiat pointed out in 1850 in what has become known as the parable of the broken window, money spent recovering from destruction is not a net benefit to society. Money spent rebuilding houses and replacing cars can't be spent on other goods and services. Rebuilding can't boost overall economic activity even during the recovery unless there is some slack in the economy. There is plenty of spare capacity in the U.S. manufacturing sector, which means that manufacturing output could benefit from recovery from the hurricanes, but tight labor markets will constrain the rebound in services and construction. Finally, even if the hurricanes were to raise GDP, that would not mean they had benefitted society. GDP is a measure of economic **output**, not of welfare.