

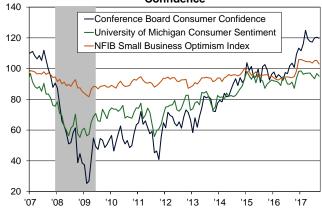
Economic and Strategic Research

Economic Developments – October 2017

Hurricanes Temporarily Distort Economic Activity, But Their Effects May Linger in the Housing Sector

In September, we revised higher our forecast for full-year 2017 gross domestic product (GDP) growth by two-tenths to 2.2 percent. Because Hurricane Irma had just made landfall when we completed the forecast, we didn't incorporate its impact, but noted a downside risk to our third quarter GDP growth projection and an upside risk to our fourth quarter outlook. So far, the recent hurricanes have had varying impacts on incoming economic data, making it difficult to separate the underlying trend from temporary, weather-induced noise. After considering the hurricanes' likely overall impacts, we lowered our third quarter GDP growth projection in the prior forecast by two-tenths to 2.4 percent annualized. The hurricanes appear to have slowed consumer spending growth and dragged modestly on consumer and business confidence. In addition, they disrupted home sales, which were already weighed down by tight inventory.





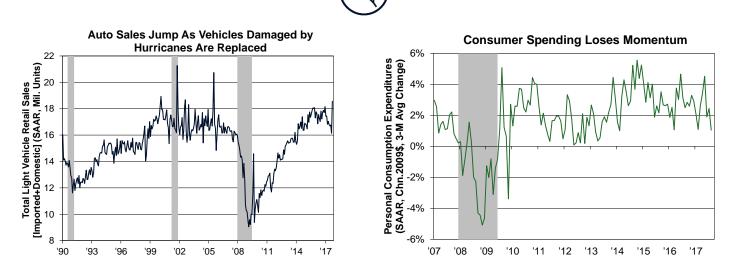
While consumer spending growth and residential investment likely weakened during the third quarter, we expect that business equipment investment, inventory investment, and trade helped to offset those weaknesses. The decline in the dollar and stronger global growth have been tailwinds for manufacturing and exports. Although we lowered our expectations for third quarter GDP growth, we slightly raised our growth forecasts for the fourth quarter of this year and the first quarter of next year to reflect rebounds in activity as hurricane disruptions dissipate and rebuilding efforts begin. As a result, our GDP growth forecast for all of 2017 remains at 2.2 percent, as the hurricanes have not altered our view of full-year economic performance.

For 2018, we expect economic growth to moderate to 1.8 percent, despite the expected hurricane rebuilding boost early in the year. We see a modest upside risk to growth from possible tax cuts, but downside risks from restrictive trade policies and geopolitical concerns. Monetary policy also poses downside risk. Last month's well-telegraphed announcement from the Fed to taper the balance sheet has had little immediate impact on interest rates or mortgage spreads. However, the effect of reducing the balance sheet amid continued increases in the fed funds rate is uncertain in the long term, which could lead to increased rate volatility.

Third Quarter Activity Reflects Disruptions from the Hurricanes

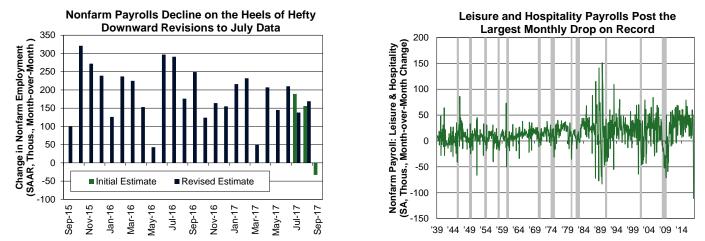
Consumer spending is one important piece of economic data that appears to have been affected by Hurricane Harvey. Real consumer spending fell 0.1 percent in August, the month of landfall, marking the first drop since January. Power outages following the storm likely contributed to the decline in real spending on housing utilities. Furthermore, Harvey appears to have driven a plunge in auto sales in August to a multi-year low of 16.1 million units annualized, which led to a sharp drop in durable goods spending during the month. However, auto sales surged 15.0 percent in September to an expansion high of 18.6 million units annualized as Harvey may have pushed some auto purchases from August into September. In addition, September sales likely received a strong boost as consumers replaced vehicles damaged or destroyed by Harvey and Irma.

While we also expect that Irma disrupted consumer spending in early September, spending likely rebounded later in the month. Over the three months through August, real consumer spending rose just 1.0 percent annualized, a significant loss of momentum from 2.4 percent annualized over the three months ending in July. Thus, even with an expected rebound in September, we anticipate that real consumer spending growth moderated to 1.9 percent annualized for the third quarter, down from the 3.3 percent pace recorded in the second quarter.



The September employment report also clearly showed the impacts of the hurricanes. Nonfarm payrolls dropped 33,000 during the month, which was not surprising given the timing of Hurricane Irma's landfall. In an indication of potential distortions from the storm, the Bureau of Labor Statistics noted that the number of workers who had a job but were not at work due to bad weather jumped during the survey period to the second highest level in the four-decade history of the series. While the hurricanes likely weighed on the September data, the payroll trend had already weakened before the hurricanes, as data in the prior two months were revised lower by a total of 38,000.

Leisure and hospitality payrolls, which are highly sensitive to weather, fell 111,000 between August and September, the largest drop on record. Payrolls in food services and drinking places accounted for 105,000 of this decline. In the establishment survey, individuals are employed if they are paid for any work in the pay period that contains the 12th of the month. About six million people were evacuated in Florida ahead of Irma's September 10th landfall, which may have prevented many from working during the payroll reference week. In lower-paid industries such as leisure and hospitality, workers are more likely to be unpaid when they are absent from work.

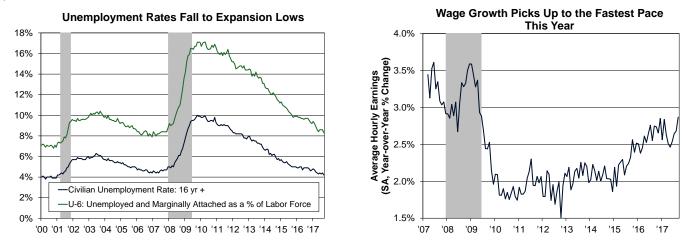


September's establishment survey showed that average hourly earnings, which are not adjusted for the composition of employment, jumped 0.5 percent from August and 2.9 percent from last September, the biggest annual increase this year. Part of the pickup was likely induced by the hurricanes, due to stronger demand for relatively high-paid utilities workers amid the plunge in lower-paid workers in the leisure and hospitality sector. However, upward revisions boosted the year-over-year rate of growth in average hourly earnings in both August and July, pointing to a firmer wage growth trend before the hurricanes.

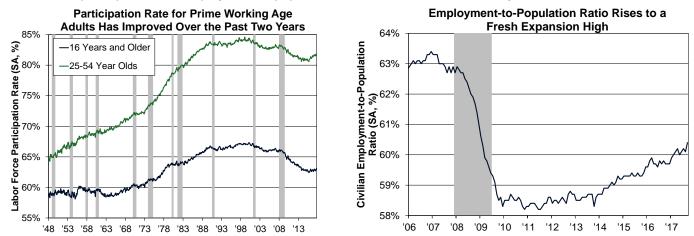
Looking past the weather-related noise, there were many positives in the September household survey, which is less likely to be affected by the hurricanes. (In the household survey, people are still counted as employed even if they temporarily can't get to their jobs due to bad weather). The unemployment rate declined two-tenths to 4.2 percent, a 16-



year low, and the broadest measure of labor force underutilization (the U-6 rate) fell three-tenths to 8.3 percent, an expansion low.



The decline in the unemployment rate was accompanied by a rise in the labor force participation rate, which increased 0.2 percentage points to 63.1 percent, the highest level since March 2014. The labor force participation rate for prime-aged (25-54 year old) workers rose in September to match the highest rate since the end of 2010. With improving employment and labor force participation, the employment-to-population ratio increased to its recovery best.



Hurricane impacts will dissipate over time, as has occurred in the aftermaths of previous major storms. In fact, the decline in payrolls recorded in September's preliminary estimate could ultimately show a gain after revisions, which happened following both Hurricanes Andrew and Katrina. We expect payrolls to get a boost in coming months as those who were kept from work by the hurricanes return to their jobs. However, over time, we expect job gains to moderate as the labor market approaches full employment. Meanwhile, our forecast calls for a decline in the unemployment rate to 4.0 percent during the fourth quarter of 2018, as we anticipate that the economy only needs to create about 80,000 jobs per month by then to keep up with growth in the working-age population.

Despite the expected slowdowns in consumer spending growth and residential investment last quarter, other components of GDP appear to have held up well. The factory goods orders reports showed strengthening core capital goods shipments, a direct input to estimates of business investment in equipment, suggesting that business capital expenditures are poised to be a solid contributor to third quarter GDP growth for the second consecutive quarter. The leading indicator for business capital expenditures—core capital goods orders—has also firmed, which bodes well for business equipment investment for the fourth quarter. On the trade front, the real goods trade deficit narrowed in August, suggesting that net exports likely contributed to third quarter growth for the third straight quarter. Lastly, total factory inventories posted a solid gain in August, suggesting more inventory build this quarter, which will also help to support growth.



The Fed Stays the Course Amid Muddy Waters

We expect the Fed to brush off the temporary distortions in the September payrolls data, and see the pickup in wage growth and the drop in the unemployment rate as supporting evidence for a rate hike in December despite muted inflation. The Fed's favored measure of inflation tied to consumer spending—the Personal Consumption Expenditures (PCE) Deflator—ticked up 0.2 percent in August, keeping the annual increase at 1.4 percent for the third consecutive month, well below the Fed's two-percent target. The core PCE deflator, excluding food and energy prices, rose 0.1 percent, but the year-over-year growth rate decelerated from 1.4 percent to 1.3 percent, the weakest increase this year. In her speech at the National Association of Business Economists conference late last month, Fed Chair Janet Yellen pointed to significant uncertainties surrounding the inflation outlook but reiterated the necessity of continuing to remove policy accommodation, noting that the Fed should be "wary of moving too gradually."

Housing Roundup

While economic data prior to the hurricanes showed increased momentum, housing data were losing steam as lean for-

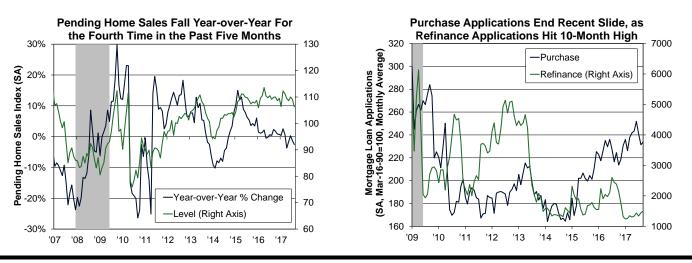
sale inventory and strong home price appreciation, especially in the lower-end of the price range, restrained sales and home purchase affordability. Hurricane Harvey exacerbated the slowdown in sales in August, and Irma will likely lead to additional pullback in September.

Existing home sales fell in August for the third consecutive month to reach a 12-month low, with sales dropping sharply in the South but also in the West. The number of homes for sale posted the 27th consecutive year-over-year drop, falling 6.5 percent. Housing supply appears to be a problem rather than housing demand, as homes are selling fast, with existing homes staying on the market for 30 days or less for the fourth consecutive month. New home sales also dipped to a new 2017 low in August. While Hurricane Harvey likely drove the decline in sales in the South, sales also fell in the Northeast and the West.



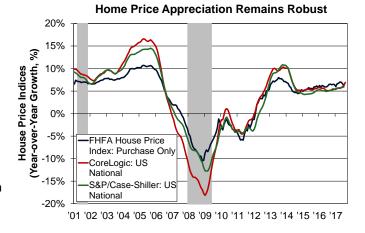
Leading indicators point to further drops in home sales. Pending home sales, which record contract signings of existing homes and usually lead closings by one to two months, fell in August for the fifth time in six months to hit a 20-month low. On a year-over-year basis, pending home sales posted the fourth drop in five months. While pending sales decreased in the South, sales posted the sharpest decline in the Northeast, suggesting that Harvey was not the only factor restraining activity.

Another leading indicator, purchase mortgage applications, fell in August for the second month in a row despite declining mortgage rates. However, purchase demand rebounded slightly in September. Refinance applications have fared better than the purchase segment, rising in September for the second consecutive month and the fourth time in five months.





Harvey did not have a meaningful impact on homebuilding activity in August. Multifamily starts dropped, but single-family starts posted a modest rise, boosted by gains in the West and the South. The hurricanes should have a greater impact on the September construction data, however. The Census Bureau noted that the Federal Emergency Management Agency (FEMA) Individual Assistance counties in Texas and Florida together accounted for about 13 percent of single-family permits in the United States and 26 percent of permits in the South in 2016. It is unusual for homes to be rebuilt from the ground up following a hurricane, and thus the housing starts data are unlikely to see a major boost in coming months from the hurricane recovery efforts. Furthermore, structural repairs in the hurricane disaster areas will likely face significant delays, given ongoing shortages of skilled labor and material such as lumber, whose prices have risen sharply this year. Repairs of



existing structures are not counted as housing starts, but will be included in the home improvement component of residential investment.

Extremely lean inventory continues to fuel home price appreciation, which has been outpacing income growth. Main measures of home prices, including the Case-Shiller, the Federal Housing Finance Agency Purchase-Only, and the CoreLogic indices, showed annual gains of between 5.9 percent and 6.3 percent in July.

Our mortgage rate forecast hasn't changed over the past month, with the yield on 30-year fixed-rate mortgages expected to average 3.9 percent in the fourth quarter. However, largely as a result of the hurricanes, we have downgraded our home sales forecast for the year. We now expect total home sales to be flat in 2017 versus a 3.3 percent rise in the prior forecast. For 2018, we expect total home sales to rebound by about three percent, a slight upgrade from the September forecast.

As in October of each year, we have updated our estimate of single-family (1-4 unit properties) mortgage originations for the prior year based on our annual benchmarking to the newly released Home Mortgage Disclosure Act (HMDA) data. We revised lower our estimated purchase originations by \$9 billion and revised higher our estimate of refinance originations by the same amount, thus keeping our 2016 total mortgage originations estimate unchanged at \$2.05 trillion. As a result of the benchmarking, the 2016 refinance share edged up one percentage point from the prior estimate to 49 percent. We also upgraded our projected mortgage originations for 2017 by \$109 billion, with refinance originations accounting for the majority of the increase, as we adjusted various assumptions in our purchase and refinance mortgage originations models during the annual benchmarking process. For all of 2017, total mortgage originations are expected

2016 HDMA Release Leads to Negligible Revisions to Originations Estimates

to decline approximately 13 percent from 2016 to \$1.79 trillion, with a 12 percentage point drop in the refinance share to 37 percent. Mortgage originations are projected to fall further by about four percent to \$1.72 trillion in 2018, as a decline in refinance originations outweighs an increase in purchase originations, leading to an expected further drop in refinance share to 31 percent.

Economic & Strategic Research (ESR) Group

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For a snapshot of macroeconomic and housing data between the monthly forecasts, please read ESR's <u>Economic and</u> <u>Housing Weekly Notes</u>

Data source for charts: The Conference board, The University of Michigan, National Federal of Independent Business, Autodata, Bureau of Economic Analysis, Bureau of Labor Statistics, Census Bureau, National Association of REALTORS®, Mortgage Bankers Association, S&P Case-Shiller, CoreLogic, Federal Housing Finance Agency, Fannie Mae.



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