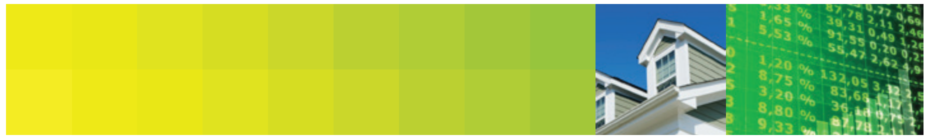
Freddie Mac



Economic & Housing Research **Outlook**

OCTOBER 2017

Hurricane Season Puts Pressure on Housing

As the country recovers from the impact of hurricanes Harvey, Irma and Maria, we expect economic activity to bounce back in the longer term despite the near-term disruption.

The second quarter real gross domestic product (GDP) estimate was strong at 3.1 percent. Inflation remains a sore spot with the Consumer Price Index (CPI) coming in at 1.9 percent year-over-year through August 2017. Despite losing 33,000 jobs in September, the labor market remains strong with the unemployment rate at 4.2 percent. The loss of jobs is largely attributable to a steep month-over-month decline in the leisure and hospitality industry employment, almost certainly an effect of recent storms.

The housing market remains unchanged. Home prices appreciated at a stronger-than-expected rate of 6.3 percent in July. The already tight supply of homes was exacerbated by the hurricanes, with total home sales for August at a weak 5.9 million units (SAAR). Mortgage rates continue to remain favorable. Starts and permits were a bright spot in the housing market with both numbers coming in above expectations.

Forecast Snapshot (October 2017)

Summary (annualized)	2016	2017	2018
30-year PMMS (%)	3.7	4.0	4.4
Total home sales (M)	6.01	6.13	6.30
House price growth (%)	6.4	6.3	4.9
Total originations ($B)	2,125	1,800	1,695

Triple trouble

Over the past few months, hurricanes Harvey, Irma and Maria left a trail of destruction across Texas, Florida, Puerto Rico, and the U.S. Virgin Islands. Per Moody's Analytics' early estimates, the total economic loss in Texas and Florida from Harvey and Irma was nearly $168 billion. Roughly $51 to $56 billion worth of residential real estate was affected by Hurricane Harvey and $30 to $40 billion worth of residential real estate was affected by Hurricane Irma. The preliminary cost of Hurricane Maria to Puerto Rico is estimated to be between $45 billion and $95 billion, and residential real estate is expected to be the biggest driver of losses; between $25 and $55 billion.[1]

With many homes damaged or destroyed in the aftermath of the hurricanes, there will be more pressure on the already-tight housing inventory. Per the U.S. Census Bureau's Building Permits Survey, the counties in Texas and Florida that were included in the FEMA Hurricane Disaster Declaration accounted for about 13 percent of U.S. total housing units authorized by permits in 2016.

In our previous Outlook, we highlighted the tight market for construction labor and high development costs as two main reasons why builders are not building enough houses. Construction workers are in short supply due to a significant gap in skilled construction workers, inability to attract young workers, the opioid crisis and increased immigration enforcement. Similarly, land-use regulations have become more burdensome in the U.S., making developable land costlier. Per the NAHB's Economic and Housing Policy, 25 percent of the price of a built-for-sale single family home is due to government regulations.

It's likely that the housing situation will further deteriorate in Puerto Rico—which was already facing a debt crisis, population losses and infrastructure issues. On the mainland, we expect three things to happen in the housing market in the aftermath of the recent hurricanes.

2016 Home Mortgage Disclosure Act

On Sept. 29, Federal Regulators released the 2016 Home Mortgage Disclosure Act (HMDA) data. Freddie Mac's estimates of conventional origination dollar volume aligned well with the 2016 HMDA data.

Below are some of the findings based on our analysis of 2016 HMDA data:

- The dollar volume of mortgage originations increased 19 percent from 2015 to approximately $2,024 billion. Purchase originations rose 14 percent to $1,002 billion, refinance originations rose 24 percent to about $954 billion, and home improvement volume increased 37 percent to about $68 billion.
- Based on the 2016 HMDA data, the origination volume sold to the GSEs represented about 71 percent of the estimated conventional, conforming, first lien originations, same as in the 2015 HMDA data.
- Non-depository, independent mortgage companies accounted for 53 percent of first-lien owner-occupied purchase loans, continuing the upward trend of recent years, and up from 50 percent in the 2015 HMDA data. Independent mortgage companies also represented 52 percent of first-lien owner-occupant refinance loans, up from 48 percent in 2015.
- Based on the HMDA 2016 single-family originations volume, and adjusting for coverage, we left our total origination volume estimate for 2016 unchanged at $1,125 billion. We adjusted the quarterly origination pattern to match the HMDA quarterly distribution. We adjusted our refinance share slightly down to 47 percent from 48 percent previously estimated.

1 Less detailed data are available on the island's real estate and vehicle stock, so property damage is aggregated into a single category.

1. Inventory will be tighter while house prices will see short-term growth

When Hurricane Katrina hit New Orleans in 2005, a similar amount of residential destruction occurred as in the aftermath of Hurricane Harvey. Per the Freddie Mac House Price Index (FMHPI) the annualized quarterly home price appreciation rate in New Orleans jumped from about 11 percent in the second quarter of 2005 to about 18 percent in the fourth quarter.[2] The price appreciation was a result of tight inventory in the hurricane-affected areas and people looking to buy homes in dry, unaffected neighborhoods. However, in the case of New Orleans, the exodus of long-term residents altogether pushed home prices down in later years.

This time around, an early estimate shows that more than 15,500 homes were destroyed in Houston alone, and over 270,000 homes throughout the hurricane-affected areas have been damaged or destroyed. With many families in a need of relocation, we expect demand for housing to grow in nearby areas not affected by the hurricanes. If a significant number of buyers look to buy a house, then it is unlikely that there will be enough houses to keep prices steady, given that the housing market was already tight prior to the hurricane.

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2. Rebuilding activity will be slow due to tight labor market

In the aftermath of hurricanes, we expect rebuilding activity to jump as homeowners who sustained damage to their properties hire contractors to make immediate fixes. However, the labor market is tight in the U.S., and the hurricane-affected markets are no exception.

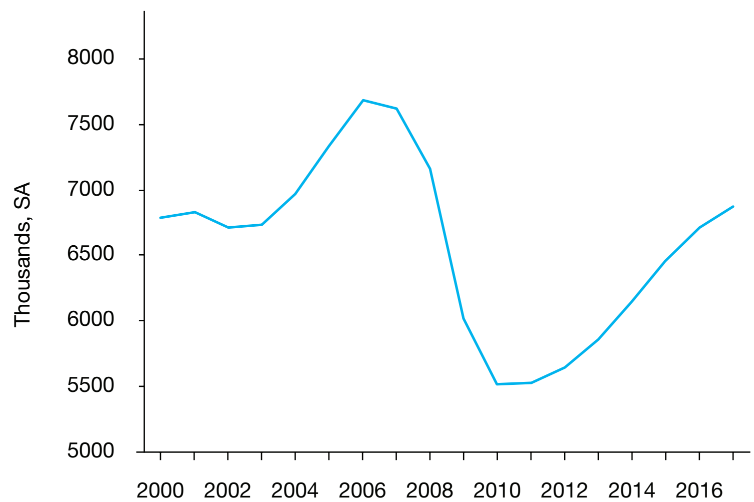
Texas, which is in the middle of a building boom, was already having trouble filling construction positions. Per a survey from the Associated General Contractors of America, 69 percent of the contractors in Texas were having trouble filling positions before the storm hit. The scarcity is due in part to a crackdown on the undocumented workers that make up an estimated 28 percent of Texas' construction workforce. It is estimated that the Houston metro area alone could need as many as 20,000 construction workers to handle the volume of repair and reconstruction work.

2 The FMHPI does not include distressed sales.

New employment data from the Bureau of Labor Statistics showed that 28,000 new construction jobs were added in August, but the total number of U.S. construction jobs remains below the pre-recession peak (Exhibit 1). In Texas, while the construction sector regained all the jobs lost to recession, worker shortages held back growth (Exhibit 2 & Exhibit 3). In Florida, the construction sector is still lagging. As such, we can expect a labor shortage to put serious pressure on building and rebuilding activity in both hurricane-affected areas.

Exhibit 1

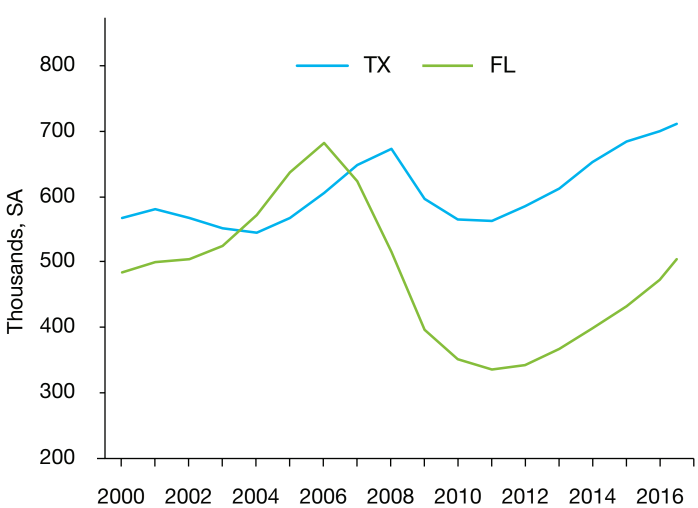
U.S. residential construction employment



Source: U.S. Bureau of Labor Statistics

Exhibit 2

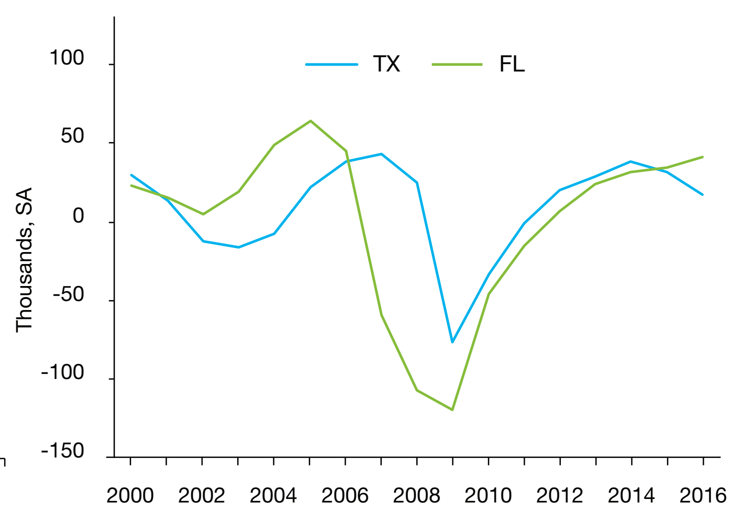
Residential construction employment



Source: U.S. Bureau of Labor Statistics

Exhibit 3

YoY change in residential construction employment



Source: U.S. Bureau of Labor Statistics

3. Delinquencies will increase

According to Black Knight, the total number of mortgaged properties in the FEMA-designated disaster areas were 1.18 million in Texas and 3.1 million in Florida. The number of properties affected in Florida was three times more than in Texas and the Irma-related disaster area included more than 90 percent of all mortgaged properties in Florida. Black Knight estimated that delinquencies could rise 16 percent in the hurricane-affected areas. As many as 300,000 borrowers could become delinquent (30 days past due), and another 160,000 could become seriously delinquent (90 days past due).

The government-sponsored enterprises (GSEs) are doing their part to help the disaster-affected homeowners. For example, Freddie Mac has suspended foreclosures and evictions in the wake of the hurricanes. Some of the other measures undertaken by Freddie Mac are:

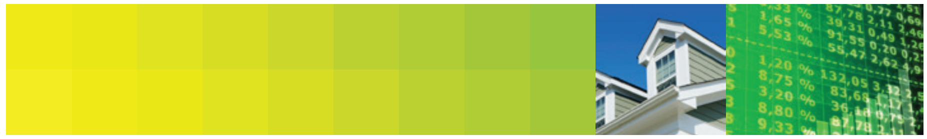
- Suspending foreclosures by providing forbearance for up to 12 months;
- Waiving assessments of penalties or late fees against borrowers with disaster-damaged homes; and
- Not reporting forbearance or delinquencies caused by the disaster to the nation's credit bureaus.

After Hurricane Katrina, 9.5 percent of the homeowners in Mississippi and 13.5 percent of the homeowners in Louisiana were seriously delinquent. However, homeowners in hurricane-affected metropolitan statistical areas (MSAs) in Texas and Florida have significant equity in their homes compared to homeowners in Katrina-impacted areas, so they are unlikely to walk away. Per CoreLogic, homeowners in the Houston-Sugarland-Baytown MSA have almost 50 percent in home equity and homeowners in the Naples-Immokalee-Macro Island MSA have a little over 50 percent in home equity.[3]

Conclusion

Texas and Florida together represent 24 percent of the total housing starts in the U.S.[4] Housing units impacted by the hurricanes are a fraction of the total starts in Texas and Florida, so we do not expect a huge national impact. However, the hurricanes won't help with tight inventories. Building activities in the hurricane-affected areas may slow down as labor and capital gets drawn into rebuilding. Delinquencies in hurricane-affected areas can be expected to rise. However, with some help from the GSEs, the delinquency storm may pass without much damage. Finally, we expect the economies of Texas and Florida to bounce back. For Puerto Rico, however, it seems like recovery will be a long haul.

3 As of July 2017
4 Per U.S. Census Bureau: New Residential Construction; Moody's Analytics Estimated



October 2017 Economic & Housing Market Forecast

Forecasted Figures

Historical Data

As of 10/2/2017

Indicator	2016 Q1	2016 Q2	2016 Q3	2016 Q4	2017 Q1	2017 Q2	2017 Q3	2017 Q4	Annual Totals 2016	Annual Totals 2017	Annual Totals 2018
Real GDP (%)	0.6	2.2	2.8	1.8	1.2	3.1	2.1	2.3	1.8	2.2	2.2
Consumer Prices (%) a.	0.1	2.3	1.8	3.0	3.1	-0.3	2.1	2.2	1.8	1.8	2.4
Unemployment Rate (%) b.	4.9	4.9	4.9	4.7	4.7	4.4	4.4	4.3	4.9	4.5	4.5
30-Year Fixed Mtg. Rate (%) b.	3.7	3.6	3.5	3.8	4.2	4.0	3.9	3.9	3.7	4.0	4.4
5/1 Hybrid Treas. Indexed ARM Rate (%) b.	2.9	2.8	2.8	3.0	3.2	3.1	3.2	3.1	2.9	3.2	3.7
10-Year Const. Mat. Treas. Rate (%) b.	1.9	1.8	1.6	2.1	2.4	2.3	2.2	2.2	1.9	2.3	2.6
1-Year Const. Mat. Treas. Rate (%) b.	0.6	0.6	0.6	0.8	0.9	1.1	1.3	1.4	0.7	1.2	1.7
Housing Starts c.	1.15	1.16	1.15	1.25	1.24	1.17	1.20	1.26	1.17	1.22	1.33
Total Home Sales d.	5.88	6.04	5.97	6.11	6.24	6.17	6.00	6.10	6.01	6.13	6.30
FMHPI House Price Appreciation (%) e.	1.5	1.4	1.6	1.7	1.7	1.7	1.3	1.3	6.4	6.3	4.9
1-4 Family Mortgage Originations f.											
- Conventional	$305	$421	$474	$451	$290	$377	$388	$321	$1,651	$1,376	$1,327
- FHA & VA	$95	$113	$134	$132	$107	$113	$112	$92	$474	$424	$368
- Total	$400	$534	$608	$583	$397	$490	$500	$413	$2,125	$1,800	$1,695
Refinancing Share - Originations (%) g.	48	42	47	51	42	26	32	32	47	33	25
Residential Mortgage Debt (%) h.	1.1	3.3	4.1	3.5	2.5	3.5	4.2	4.3	3.0	3.6	4.7

Note: Quarterly and annual forecasts are shown in shaded areas; totals may not add due to rounding; quarterly data expressed as annual rates.
Annual forecast data are averages of quarterly values; annual historical data are reported as Q4 over Q4.

a. Calculations based on quarterly average of monthly index levels; index levels based on the seasonally-adjusted, all-urban consumer price index.

b. Quarterly average of monthly unemployment rates (seasonally-adjusted); Quarterly average of monthly interest rates (not seasonally-adjusted).

c. Millions of housing units; quarterly averages of monthly, seasonally-adjusted levels (reported at an annual rate).

d. Millions of housing units; total sales are the sum of new and existing single-family homes; quarterly averages of monthly, seasonally-adjusted levels (reported at an annual rate).

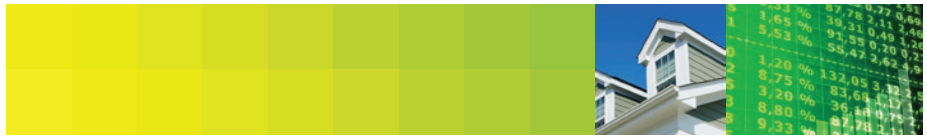
e. Quarterly growth rate of Freddie Mac's House Price Index; seasonally-adjusted; annual rates for yearly data.

f. Billions of dollars (not seasonally-adjusted).

g. Home Mortgage Disclosure Act for all single-family mortgages (not seasonally-adjusted); annual share is dollar-weighted average of quarterly shares (2014 estimated).

h. Federal Reserve Board; growth rate of residential mortgage debt, the sum of single-family and multifamily mortgages (not seasonally-adjusted, annual rate).

Prepared by the Economic & Housing Research group; Send comments and questions to chief_economist@freddiemac.com.



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