

Texas 2015 Housing Market and the Price of Oil

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The Takeaway

The price of Texas oil and the upstream energy sector is a prime cause of concern for Texas' 2015 economy and housing market. History shows that Texas' housing does not depend on high oil prices. In fact, the state's housing market has thrived at prices within a wide range of oil prices lower than those experienced in 2013 and the first half of 2014.

Texas' tie to the energy industry continues to play a highly significant role in the state's overall economic health and outlook. Starting in the early years of the new millennium, unprecedented highs in

oil and natural gas prices fueled an energy boom in exploration and drilling using hydraulic fracturing. As a result, Texas did not feel the global and national recession until 2009, and that impact was somewhat diffused by the energy sector expansion. By 2011, Texas was in full force expansion with jobs, people and capital pouring into the state.

Today, some of the early bloom is off the rose.

Natural gas drilling, production and investment fell precipitously as the price of natural gas plummeted from \$12.69/million metric British thermal units (mmbtu) in June 2008 to \$3.80/mmbtu by June 2009. Gas drilling fell dramatically, and many wells were closed. Today, the price of natural gas varies between \$3 and \$5/mmbtu.

Almost simultaneously, though, the price of West Texas Intermediate (WTI) crude oil experienced a sharp escalation, going from \$33 per barrel (bbl) in December 2008 (after collapsing from \$142/bbl in July) to another high of \$109.53 in April 2011. After that two-year surge, the WTI price fluctuated between roughly \$85 and \$105 per barrel until June 2014. During this five-year run, billions of dollars of capital investment were made or targeted in new, mostly hydraulic, oil wells as well as midstream pipelines and service operations plus downstream refining and petrochemical processing.

The price of WTI crude closed at \$107.95 on June 20, 2014, then tumbled to around \$50, a 55 percent decline, by mid-March 2015. This precipitous downward trend in oil prices casts a shadow over Texas' 2015 economy and housing market (Figure 1).

While the fall in natural gas prices in 2009 caused a severe drop in the number of active gas wells in Texas, the total rig count bounced back within about a year as oil wells replaced the closed gas wells. With the recent fall in oil

**Figure 1. West Texas Intermediate Spot Oil Price
FOB Cushing, Oklahoma**

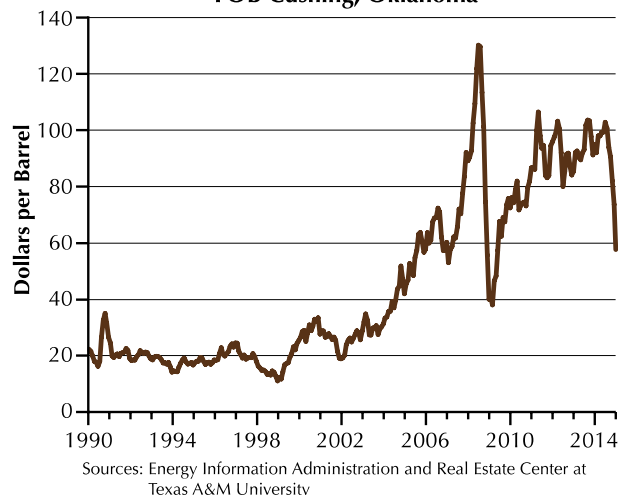
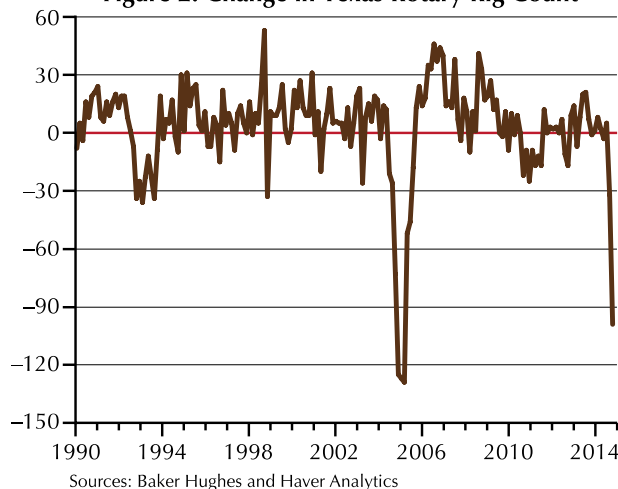


Figure 2. Change in Texas Rotary Rig Count



ffects from the energy sector decline.

Perhaps even more importantly, expectations during the past few years have not led to excessive overbuilding or overspending as was the case in the 1980s. Oil price expectations, this time, were not based on maintaining \$100/barrel (bbl) or more levels, thus reducing the potential negative impact on the economy, especially in housing and commercial real estate. As many people have noted, “we’ve seen this cycle before, so we’re not as carried away with the good times.” Also, the state’s banking sector is not as seriously exposed or vulnerable as it was in the 1980s, when more than 700 banks and savings and loans failed.

Perhaps the best case scenario for Texas in 2015 is a slowdown in the economic growth rate rather than an absolute decline. Employment losses in mining and energy and oil field services should be offset by growth in the many non-energy sectors and enhanced improvement in the national economy. Texas’ total employment expanded by roughly 3.3 percent in 2014, considerably faster than the overall 2.1 percent employment growth for the United States. The Texas growth rate for 2015 may more closely follow or slightly lag the U.S. rate — a much slower expansion than the past several years but still positive job gains. One potentially positive result of lost jobs in drilling and exploration would be the relocation of many workers back into residential and nonresidential construction, where labor shortages have been acute.

Capital investment in exploration and production will not come to an absolute halt. Most oil producers operating today hedged against falling oil prices in the futures market and are better able to withstand short-term price declines

prices and the continued low price for natural gas, the number of active rigs in the state is beginning to slip. There were 29 more operating rigs in Texas in December 2014 than in December 2013 (872 versus 843) but 19 fewer rigs than in June 2014. In the one-month period from November 2014, when the number of operating rigs reached a two-year peak of 904, to December 2014, 32 rigs ceased operating, a 3.5 percent decline (Figure 2).

The number of active rigs in the state is volatile, even when prices are high (Figure 2). If, or as, oil prices decline further, expect oil producers to drastically cut back on capital investment to drill new wells and to close existing marginally producing wells. Cutbacks in exploration and production create related cutbacks in the oil field services and equipment segments.

Outlook for Texas Economy

Lower oil and energy prices, while not all that good for Texas’ economy, positively impact the U.S. economy. Lower gasoline prices, lower fuel oil costs, lower transportation costs to move goods to market and lower energy costs to run industrial facilities create greater economic activity, better profit margins, higher GDP and, generally, more employment. Texas benefits from an active and growing national economy even in the face of a declining energy sector.

Everyone remembers the energy bust of the 1980s in Texas, but there are numerous reasons to believe that the current price downturn is different — at least that is the hope. First, the state’s economic diversification over the past three decades included growing economic segments such as health care, technology, trade and professional services that should help offset some of the negative ef-

without severely impacting operating revenues. Consequently, many of the potentially negative impacts can be planned for and may not occur until the second half of 2015 or even into 2016. A prolonged slump in prices, therefore, may be more impactful in 2016 than in 2015.

The slowdown in job growth would likely lead to a slowdown in domestic population immigration, but that is not likely to be noticeable for a couple of years.

Texas Housing Markets and Oil Prices

Texas' housing markets surged in 2014 along with the state's general economy and employment. Home sales in 2014 reached 285,000 transactions, the second-highest level ever recorded at somewhat less than the 2006 peak of 292,805. The statewide median home price set another record high for the fourth year in a row, reaching \$183,700. Inventory of homes listed for sale fell to new lows relative to the pace of monthly home sales, reflecting the tight residential markets across the state as population and employment gains coupled with low interest rates fueled home purchase demand.

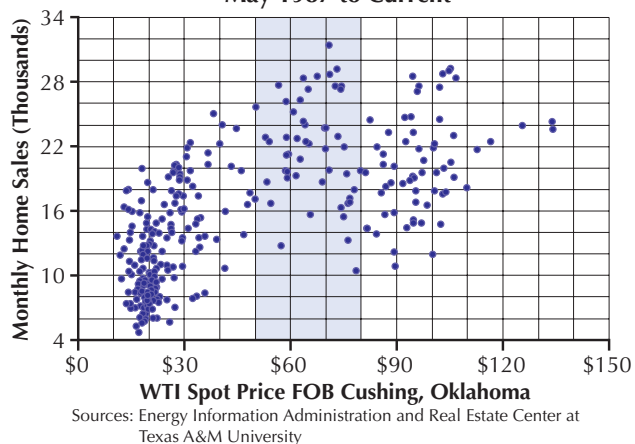
Single-family building permits in 2014 rebounded to 102,000, close to the 105,000 average permits issued between 1995 and 2012. Even at that level, they were still unable to offset the increase in demand. Multifamily building permits for the year reached 65,700, a total not exceeded since 1985, the last year of the last oil boom. The rapid increase in population in the past several years, especially young singles and young married families coming to the state for employment opportunities, fueled a strong rental housing market.

Texas' housing market in 2015 will not be exclusively based on the price of oil. Local metropolitan markets experience different levels of influence from oil prices and energy sector activity over the year, depending on how closely tied they are to that sector. Several other factors will affect home sales, home prices and home construction around the state. The major housing market influences besides oil prices include ease of credit and availability for first-time homebuyers, employment growth in nonenergy economic sectors, population growth and immigration, and continued very low mortgage interest rates.

The negative economic impacts of low oil prices should be at least partially offset by positive impacts from nonenergy economic activity. The uncertainty about how low prices will go and how long they will stay low makes 2015 estimates extremely difficult. No doubt there will be some job losses and a reduction in the job growth rate, which will impact the housing sector. Equally significant, though, may be any negative psychological impact on buyer and seller expectations and behavior if the nonenergy positive impacts are not sufficiently offsetting.

The national economy continues to gain strength and show greater improvement in job growth, income, productivity and GDP. Lower oil prices will stimulate the national economy even further, with lower inflation effects, lower transportation costs and lower gas prices providing greater spendable income. It appears the Federal Reserve will be cautious about letting interest rates increase too soon or by too much, and coupled with a heavy inflow of foreign investment capital, a climate of low interest rates should continue to prevail.

**Figure 3. Texas Monthly Home Sales and WTI Price/BBL
May 1987 to Current**



**Figure 4. Texas Single-Family Permits and WTI Price/BBL
Monthly, January 1995 to Current**

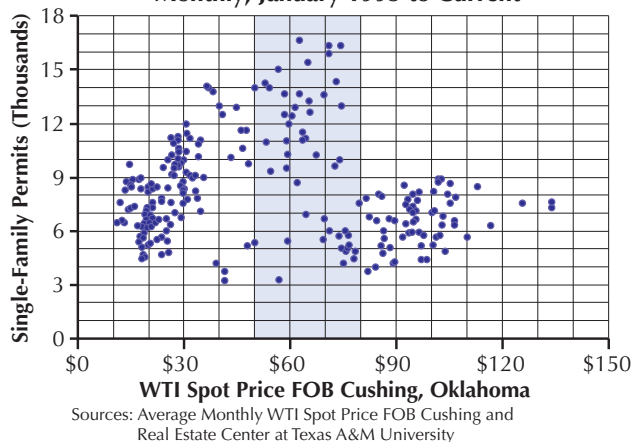


Figure 5. Texas Median Home Price and WTI Price/BBL Monthly, January 1990 to Current

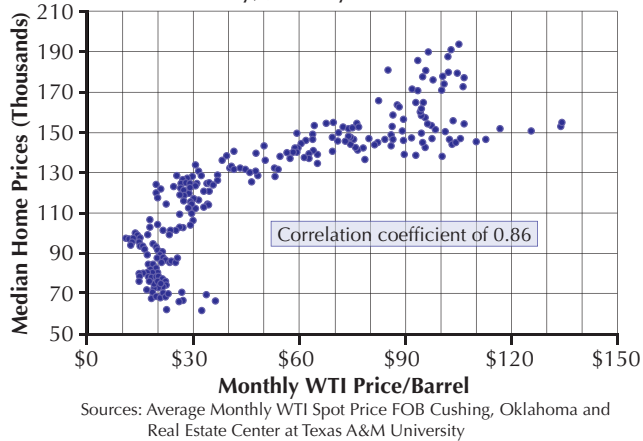


Figure 6. Houston Home Sales and WTI Price/BBL May 1995 to Current

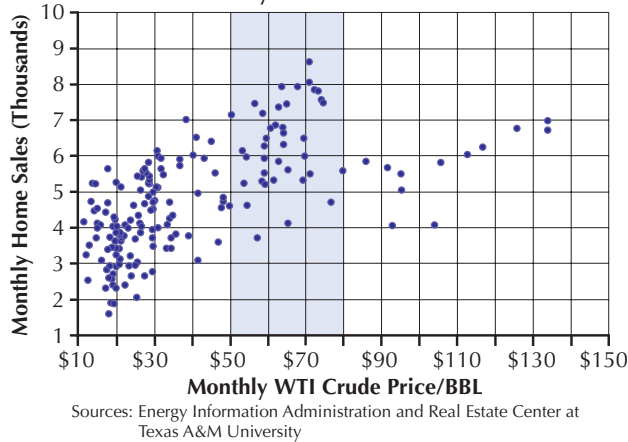
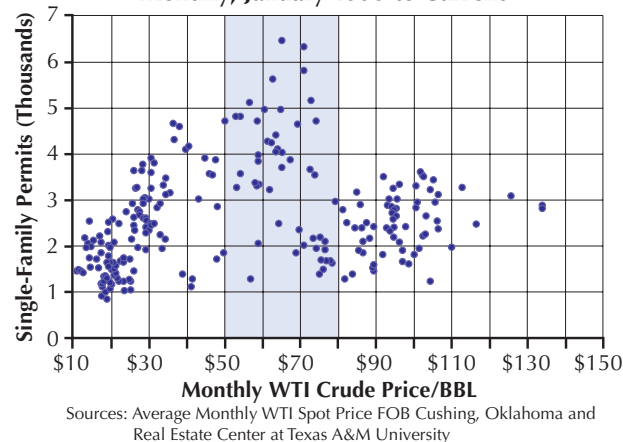


Figure 7. Houston Single-Family Permits and WTI Price/BBL Monthly, January 1995 to Current



The first-time buyer and first-time move-up housing market in Texas declined significantly the past several years because of tight mortgage credit underwriting, which limits buying opportunities, and low-growth household incomes. Statewide, sales of homes priced under \$160,000 fell about 18 percent and even more in the major metropolitan areas. This same decline affected the national housing market, prompting political leaders and the director of the Federal Housing Finance Agency to call for looser credit underwriting for first-time and lower-income buyers to stimulate homeownership. The Federal Housing Administration (FHA), Fannie Mae and Freddie Mac have initiated efforts to lower costs and support lower down payment mortgage financing, but lenders have done little to make such loans available.

Last November, a Metrostudy Inc. blog post reported a “sweet spot” in oil prices between \$55 and \$90/bbl that “produces the highest demand for housing in the Houston market.” The data presented showed quarterly housing starts tended to be higher within that range of oil prices.

State and local home sales and single-family permit data indicate that demand (sales) and supply (permits) tend to maximize within an identifiable “optimum range” of WTI oil price. The sales and permits depict a notable negative correlation to exceptionally low or high prices. Both sales and building permits fall when oil prices are in excess of \$90/bbl and similarly at prices below \$50/bbl. Residential construction, as measured by single-family permits, falls even more distinctly as the price of oil exceeds \$80/bbl (Figures 3 and 4).

Home prices exhibit a distinct positive correlation with oil prices within a broader range (\$30 to \$110) but also show a distinct falloff at much lower oil prices (less than \$30/bbl) and at extremely high oil prices (more than \$110/bbl) (Figure 5).

Houston, Dallas-Fort Worth, San Antonio and Austin home sales and single-family building permits similarly tend to be highest within the same oil price “optimum range,” even though each metropolitan market has different connectivity to oil- and energy-related industries.

The key to estimating the Texas and major metro market areas’ 2015 housing market focuses on how low oil prices go and how long they stay there. The current WTI price of around \$45/bbl falls just below the historical “optimum range” for home sales and building permits, but generally not enough below to indicate a major decline in either. The possibility remains that WTI oil prices could fall further, perhaps stabilizing for some time in the \$35 to \$40/bbl range, or lower. Such a prospect would not necessarily be catastrophic for the Texas housing market but would

definitely cause sales and home construction to constrict from 2014 levels. Assuming the prevailing annual WTI oil price for 2015 stabilizes between \$40/bbl and \$50/bbl, home sales statewide could potentially equal or, more likely, be 5 to 10 percent less than the 2014 level. The state most likely will not set another record sales high, but the decline would not be overwhelming. The overall shortage in the supply of homes available for sale will similarly limit a significant expansion in overall sales.

Home construction should show some improvement as it has not fully recovered from the 2007 recession. However, the lack of finished, developed land, financing for first-time buyers and the shortage of construction labor may keep any marked expansion in check.

Home prices will continue to rise but at a slower rate, probably around 5 to 7 percent. A rate of price increase closer to a long-term norm (around 4.5 percent) would be a desirable outcome to avoid affordability issues, especially within the low- to moderate-priced housing sector, but the lack of supply relative to demand should keep prices higher.

If the WTI price stabilizes at a significantly lower level and the multiplier effect of energy job losses spurs even greater employment decline, the housing market could fare much worse. Sales and construction activity could decline by 10 to 20 percent or more. The level of increase in the median price could be severely restricted or possibly fall. The more intense negative psychological effects of a more significant economic decline on the market would further depress the housing sector.

If, on the other hand, the repercussions of lower oil prices are not as pronounced or prices stabilize at a higher level, the housing market could fare much better. Already, a 30-year fixed mortgage interest rate of less than 4 percent is stimulating demand. Because mortgage industry regulators and politicians have eased entry-level financing by lowering required down payments, making these loans Qualified Mortgages, the volume of sales and starts could be stimulated to even greater levels than last year. ➔

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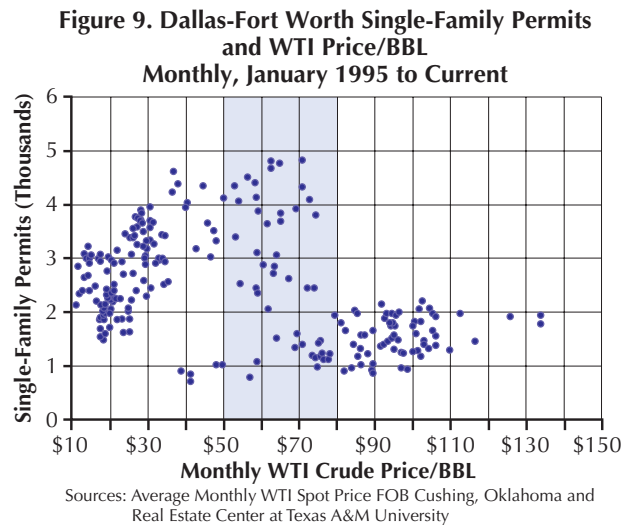
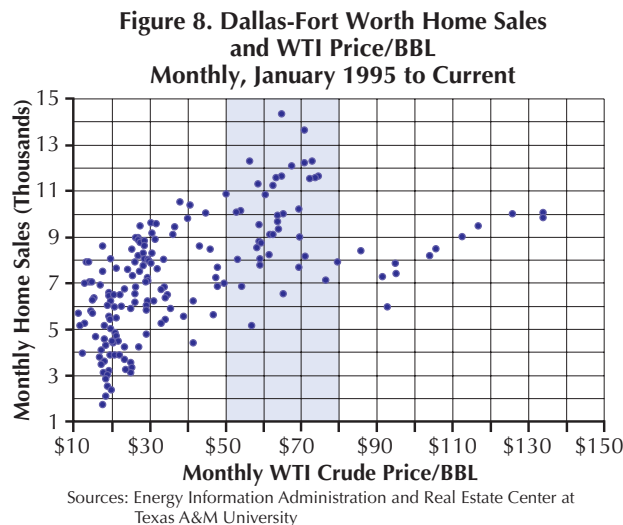
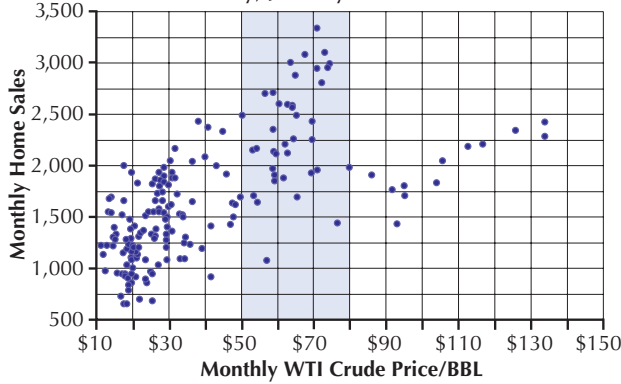
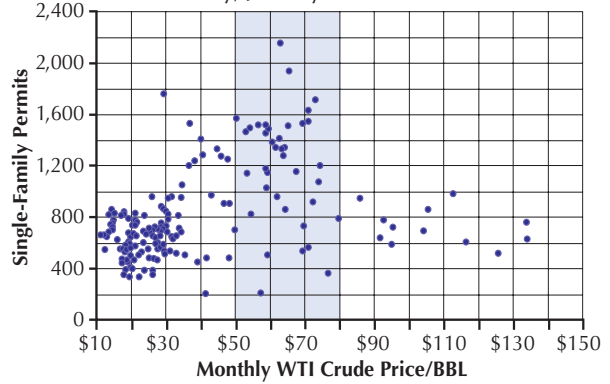


Figure 10. Austin Home Sales and WTI Price/BBL Monthly, January 1995 to Current



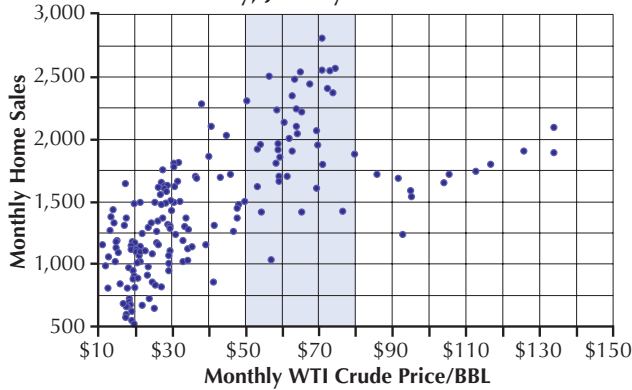
Sources: Energy Information Administration and Real Estate Center at Texas A&M University

Figure 11. Austin Single-Family Permits and WTI Price/BBL Monthly, January 1995 to Current



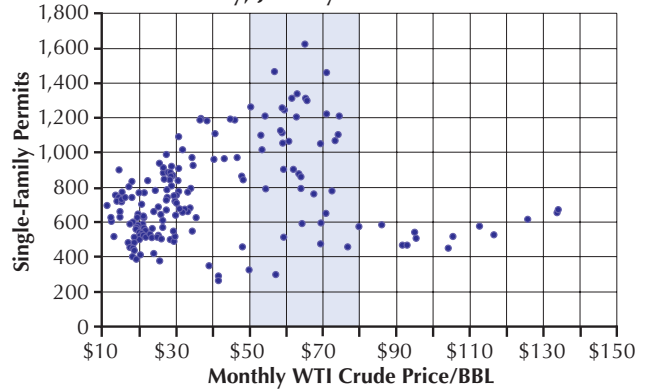
Sources: Energy Information Administration and Real Estate Center at Texas A&M University

Figure 12. San Antonio Home Sales and WTI Price/BBL Monthly, January 1995 to Current



Sources: Energy Information Administration and Real Estate Center at Texas A&M University

Figure 13. San Antonio Single-Family Permits and WTI Price/BBL Monthly, January 1995 to Current



Sources: Energy Information Administration and Real Estate Center at Texas A&M University



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