The Impact of the 2017 Oil Price Recovery on Texas Real Estate

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With Houston recognized as the intellectual center of the oil and gas industry, at McAlister Investment Real Estate we strive to keep our clients informed on energy, Texas housing and real estate markets. This is a follow up to the January 2017 release of “The Impact of The Texas 2016 Oil Price Recovery On Texas Real Estate” by Jim McAlister, Sr.

2017 was interesting as the news cycle was dominated by politics, natural disasters, tense geopolitical challenges while energy markets were challenged by high stocks and sluggish prices. Energy sectors were busy watching OPEC extend and adhere to production cuts as the United States increased crude oil production while keeping costs down and demanding increase enough to give hope, but not yet enough to really move the needle. Following are reflections, observations and predictions for the United States energy industry:

- *United States came into its own as an energy exporter in 2017 while remaining the worlds leading importer*
- *United States shale cost reductions are tighter than expected*
- *United States is by far the top consumer worldwide with China as the second leading consumer due to rapid increases in recent years*
- *OPEC may be running out of cards with the rise of United States tight oil*
- *United States oil production will soar to a record in 2018 extending into 2019 setting the stage to become the worlds largest oil producer*

Crude oil is one of the most present and essential resources in everyday life with the oil industry being one of the most powerful branches in the world economy. Saudi Arabia and the United States produce approximately 26% of the 4 billion metric tons produced annually. The Middle East region accounts for approximately 33% while Russia is the world’s 2nd largest producer.

Oil demand and consumption have risen steadily over the last decades and it is projected global oil demand will increase until at least 2035 from 89 million barrels in 2012 up to 109 million barrels in 2035 when the worlds population is expected to reach 8.7 billion people. The population growth will increase demand for fossil fuel, which will put pressure on available oil and gas supply ensuring a strong energy industry for years.

There is no doubt the market is re-balancing at a quick pace; stability is steadily returning and thus there is far more light at the end of the tunnel than the road we have traveled since 2014. The current oil industry surplus compared to a five-year average in industrialized nations has fallen below 160 million barrels, proving the strategies are working for price stabilization. OPEC and its allies announced cuts would extend through June 2018:

OPEC Meeting December 2017: We'll discuss exit strategy in June.

Saudi oil minister Khalid al-Falih stated December 1, 2017 the group will have a better sense of what they will do next by June. "We think the outlook for when we will hit the balanced market will be clearer in June, and we will start thinking of what do we do in 2019," he said. However, he also said that the expectation was that "we will not alter our course in the second half of the year." When asked about the possibility of tightening the market too much, al-Falih dismissed those claims. "We have close to 2 million barrels (per day, bpd) of spare capacity so our ability to bring back production in case of need for global supply security goes beyond the amount of cuts we have made," Falih said. "There will be plenty of supply to respond to any need in the market."

With Brent crude oil averaging $54/barrel in 2017 an increase of $6/barrel from 2016, OPEC strategy is working to attempt to move prices upward. Brent is forecasted to remain fairly stable with an average of $60/barrel in 2018 (March 2018 futures currently trading at $70.23) and $61/barrel in 2019. West Texas Intermediate averaged $50/barrel in 2017, forecasted average for 2018 is $55/barrel (February 2018 futures trading at $61.02) and $57/barrel in 2019, respectively lower than Brent.

Part of the price formation for global crude oil benchmarks is the Asian demand, for products and supply considerations to transport crude oil to Asian countries. Movement of crude oil from the United States to Asia costs approximately $0.50/barrel more than to ship Brent from the North Sea to Asia for United States exporters must still use smaller, less-economic vessels or more complex shipping arrangements, which add to the cost.

In 2017 the EIA estimated the implied global stock exchange averaged 0.4 billion barrels/day marking the first year of global inventory draws since 2013 while global consumption of petroleum products grew by 1.4 million barrels/day. EIA estimates consumption growth in 2018 will average million barrels/day and 1.6 billion barrels/day in 2019 with supply driven by countries outside of OECD and OPEC due to very little excess oil production capacity from OPEC and OPEC countries nearing their limit to increase oil production.

The United States has made significant gains in reducing costs for drilling and production of oil and gas. Daily crude oil production will soar to record highs in 2018 producing 10.2 million barrels/day and in 2019 producing 10.8 million barrels/day, possibly topping 11 million barrels/day by the end of 2019. This will mark the highest annual average production in United States history. United States supply of oil is substantial and cost efficient with growing reserves. In 1970, the United States was producing in excess of 9.5 million barrels/day, declining in 2005 to 4 million barrels/day, but due to fracking by 2014 the United States was back up 9.5 million barrels/ day. Due to the growing reserves it is anticipated annual production increases going forward will drop into single-digit growth compared to the recent year over year increases of 30% plus.

Rig count is one of the simplest and largest indicators of production change forthcoming. In 2014 rigs peaked at approximately 1800 working daily and in early 2016 dropped to 500. By June 2017 rig count was back up to 915 and as of January 2018 up to 939 with a predicted forecast of 1100+ operating in 2019 according to Baker Hughes.

The Permian Basin region 2018 production forecast is 515,000 barrels/day representing nearly 30% of total United States crude oil production in 2018. This region predominantly covers approximately 53 million acres spanning from southeastern New Mexico to the Permian Basin of West Texas. Smaller sub-basins, including the Delaware and Midland, contain historically prolific non-tight formations along with multiple tight formations such as the Wolfcamp, Sprayberry and Bone Spring. Even when West Texas Intermediate falls below $50 per barrel operators can continue to drill through several tight layers and increase production due to the large geographic area of the Permian and stacked plays.

Permian Basin rig counts are also related to cash flow. Operators have been able to maintain a positive cash flow due to increased hedging activity, higher productivity and lower costs. These available cash flows potentially contribute to growth. Interestingly, production per rig in the Permian is forecasted to decrease for operators are completing fewer wells while number of wells drilled is increasing. There is a not a clear cause for this trend, but may be related to minor transportation constraints and multiple wells drilled from a single pad with completion at a later date.

The $1.6 trillion Texas economy is the second largest in the United States in addition to being home to 100 of the largest public and private Top 1000 companies. According to Dallas Fed Sr. Economist Keith Phillips, the Texas economy is firing on all cylinders going into 2018. It is forecasted to grow 3% and add up to 366,000 jobs compared to 306,000 jobs in 2017 as the region recovers from Hurricane Harvey and oil prices continue to climb. Since 2007 Texas has accounted for 1/5 of the growth realized in the United States according to BBVA Research & Haver Analytics, January 2018. Energy is a key factor in the improving outlook for the state after an evident three-year downturn. As the energy sector continues rebounding Texas will gain momentum with many of the 366,000 additional jobs in 2018 in the energy and manufacturing realms. Texas is home to 2 of the top 4 ranked MSA's in the country, Austin and Houston. Due to its diversity, demographics and workforce Houston will benefit even more as producers increase activity allowing the return of oil field workers and administrative staff to meet the employment demand. Demand for additional office space, housing and retail will contribute to the Houston economy, as well.

BBVA Research, presented at the MIT Enterprise Forum Forecast Luncheon, January 2018 supports a strong economic outlook for Houston with 2018 GDP growth to exceed 5% and averaging a 4.24% growth through 2020, outpacing the estimated United States GDP growth by 1.75%. In 2016 the United States GDP was $18.57 trillion and 3Q 2017 $19.5 trillion. 2016 GDP for Houston was $479 billion, 4.5% down from the $503 billion 2015 GDP. Approximately 1/5 of Houston's GDP is related to exports and 1/3 related directly to oil and gas. When you factor in housing, transportation, entertainment and daily expenditures of energy related employment, the GDP related to oil and gas is significantly higher. Tailwinds from rising energy prices should support positive GDP growth in energy producing areas. Oil prices, policy and strengthening 2018 Harvey bounce back are a key mixture to boost the Texas GDP to the highest level seen since 2013.

The primary challenge for increasing oil production in the United States is mobilizing the work force. Over 50% of the field labor was laid off between 2014 and 2016 and skilled worker staffing takes time. With strong demand and growth and price stabilization, investments in overseas projects will increase requiring more petroleum engineers and other white-collar workers in Houston. The current unemployment rates reflect state and local economies are picking back up. As of November 2017, unemployment rate for Texas dropped to 3.8% and Houston dropped to 4.3%, down nearly a percentage point from November 2016.

It holds true for 2018 what Jim McAlister Sr. stated in his January 2017 report -"The Impact Of The Texas 2016 Oil Price Recovery On Texas Real Estate".

The primary conclusion of the study of oil and gas production and its impact on Texas and Houston's real estate market is the oil and gas industry will continue to be the dominant component in providing worldwide energy supply decades into the future. Houston will continue to be the focal point for the growth of energy and oil related companies and Texas will be a major source for increased production volume in the United States. The long-term view is Houston and Texas will continue to be strong in the worldwide exploration and production of oil and gas.

As Texas and Houston gain momentum to accelerate the economy, real estate values are appreciating at a faster rate than many other United States markets. When taken into account the lower-than-the-national average real estate prices in Houston along with the persistent under supply of lots for new home construction, both the Texas and Houston real estate markets are positioned to increase in value for the foreseeable future providing prime investment opportunities.

We invite you to visit our website at www.mcalisterinv.com for additional information on our company.

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