

Testimony of M. Ray Perryman Before the Texas House Committee on Energy Resources

February 3, 2016

Chair and Distinguished Members:

My name is M. Ray Perryman. I am President of The Perryman Group, an economic research and analysis firm based in Waco. I hold a BS degree in Mathematics from Baylor University and a PhD in Economics from Rice University. I have more than 30 years of professional experience and have built and continue to maintain an extensive set of models for the Texas economy. I am extremely involved in a wide variety of public policy issues, and have worked on numerous economic development initiatives throughout the world. I have frequently testified before the Texas Legislature on a wide range of issues related to the Texas economy.

I appreciate this opportunity to offer a perspective on the economic implications of the current low oil price environment. I apologize that I could not appear in person today due to a long-standing commitment. I have studied the relationship of the Texas economy and the energy industry for about 35 years, and have performed dozens of studies related to the industry. In addition, examining the effects of oil and natural gas prices on Texas economic performance has been a crucial phase of the econometric modeling involved in producing my regular subscription forecast series, which has been released multiple times per year for more than three decades.

The Effect of Low Oil Prices on Projected Texas Economic Performance

For several years, the economies of Texas and its metropolitan areas ranked among the strongest performing in the nation. The oil surge was a key reason for this strength, with companies and communities across the state benefitting from the entire industry spectrum: drilling to headquarters operations to service companies and many more. This situation was

driven by the boom in shale production which persisted for several years in a high-price environment.

The sharp decline in oil prices and resulting scaling back in the industry have had a decidedly negative (though not catastrophic) effect on the Texas economy. On average over the next five years, I'm estimating that the Texas economy will grow at a rate about 10% lower than would be the case with prices in the \$70-\$75 range (with the pattern over the next couple of years being quite different from that found in a higher-price scenario).

My current economic forecast calls for expansion in Texas real gross product at a 4.15% annual rate of growth through 2020, representing total expansion of \$347.1 billion. Almost 1.4 million net new jobs are forecast to be added over the next five years, a 2.12% compound annual rate of growth.

While the rate of expansion represents relatively healthy performance, it is decidedly slower than it would be with higher oil prices. In 2014, for example, the state economy added 400,000 jobs, notably faster than the 280,000 per annum I am projecting through 2020. Expansion in 2015 (December to December) was about 166,000, with a similar pattern expected in 2016. Moreover, the expansion will be concentrated in the later years of the projection period.

Clearly, the fiscal implications of changes in the oil industry are also substantial. In addition to direct taxes paid, the economic activity generated by oil and gas exploration and production is a substantial source of fiscal revenue. Revenues to state and local governments have been significantly affected by the end of the oil surge.

Oil Price Outlook

The market is currently oversupplied with crude oil, even though demand has been generally solid (with some areas of the world, such as China, growing but lagging expectations). Lower production will decrease the oversupply over time (shale wells decline rapidly and domestic production is already falling); however, as long as supply exceeds demand, there will be downward pressure on prices. Another factor that has come into play is a stronger dollar as the US economy has gained relative strength, other parts of the world have weakened, and the Federal Reserve System has begun a slightly less expansionary stance. This phenomenon alone is responsible for about 20% of the price movement.

One difficulty in predicting when oil prices will turn around is that a key determining factor right now is political, not economic. There are signs that OPEC members and other major producing

nations are feeling the economic pinch of lower prices. For some countries, oil is essentially the only resource, with few other sources of business activity to pick up the slack when crude prices fall. Many nations are running high deficits and rapidly burning through accumulated assets as they fund government operations with drastically lower revenues. Currency problems are also escalating. Many nations rely on exports of oil to obtain foreign currency, and several currencies are down sharply. Pressure is mounting, and at some point restricting production to boost prices is the most likely outcome.

Although conditions are not yet right for a sustained increase in prices (due to oversupply, inadequate storage, and the pending increase in Iranian exports), there are some signals of change in the global crude oil market. The most likely timeline appears to be sustained and notable upward movement later this year, although some analysts are expecting a longer retrenchment. In large measure, the timing will be affected by the actions of OPEC and other major producers in the coming months.

A recent development with positive long-term implications for oil prices is the end of the oil export ban. As a major oil-producing region, Texas stands to benefit from the change, though the effect will likely be modest until global supply and demand shifts and worldwide prices begin to rise in earnest. The dynamics of the ban being lifted were illustrated recently as tensions escalated between Iran and Saudi Arabia, yet the market did not react because US supplies were available to fill any potential gaps in availability.

Nevertheless, the spread between oil prices in the US and elsewhere has begun to narrow, and oil produced in Texas has already been sold into world markets. As more normal circumstances resume once global suppliers retrench and demand accelerates, domestic producers can expect prices \$6-\$7 per barrel higher than those that would have occurred with the ban in place. Another positive development is the beginning of exports of liquefied natural gas, thus giving Texas producers access to higher priced markets in other parts of the world.

Concluding Comments

Oil and gas exploration and production is not a major source of direct employment, with only about 300,000 of the 12 million people working in Texas employed directly in the sector. However, jobs in the industry tend to pay well, capital investments are large, productivity levels are high, and multipliers are significant. Reductions in activity in the industry therefore lead to much larger economic fallout than that observed in other sectors. It should be noted, however, that the current downturn has not created the economic devastation observed in the 1980s

and, in fact, modest expansion has been sustained. This fact reflects such factors as (1) the increasing diversity of the state economy over the past 30 years, (2) the lower amount of leverage in the investments (which provides greater flexibility and staying power), (3) the emergence of a new technology, and (4) the nature of shale wells relative to conventional wells.

How rapidly the pace of growth gains momentum depends on how low oil prices go and how long they stay there. Oil prices are below the sustainable long-term equilibrium level, and it is highly unlikely that they will stay in that range for an extended period of time. Once prices recover, drilling activity in Texas will trend upward, with faster economic growth the inevitable result. If prices turn around sooner than expected, my forecast for the Texas economy would certainly be more positive. In fact, given ongoing efficiency gains and cost reductions, a price recovery into mid-\$50s per barrel is enough to engender a resurgence, and this level is easier to achieve with an open global market. Despite capital budget reductions among major producers, the market will respond quickly to price changes. High oil prices certainly gave the state (and, in particular, regions with strong energy ties) a notable economic boost, and will do so again.

As a final statement, I will note that a sustained period of low oil prices such as that in the 1980s and 1990s is unlikely. The current prices are not sufficient to support the level of production that will be required as the emerging nations of the world resume economic expansion in the near future. Energy demand will increase more in the next 25 years than the total consumption in North, Central, and South America today, and that can only occur with prices that incentivize production and investment.

I am grateful for the opportunity to offer this perspective. I sincerely appreciate all that each of you do for Texas and Texans and would be happy to answer any questions that you may have. If I can assist your efforts in any other way, please let me know.

Respectfully submitted,

A handwritten signature in black ink that reads "M. Ray Perryman". The signature is written in a cursive, flowing style.

M. Ray Perryman, PhD, President

The Perryman Group