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Miracle on Ice?
What Low Oil Prices Mean for Texas

The Texas economy has long been a standout among the states and a major source of Lone Star bragging rights. While Texas' economic leadership is most certainly not a new phenomenon, it has gained national attention in recent years as the "Texas Miracle."[1] Over the past eight years alone, Texas' annual job growth has exceeded the nation's growth by a factor of four, with Texas adding jobs at a robust 2.0 percent clip, even in the face of severe recession, while the U.S. grew at an anemic 0.5 percent annually.

But much of Texas' growth has been fueled by oil and gas, and the recent price drop has taken its toll. Texas is no longer the nation's most robust job creator. **Though Texas continues to add jobs, for the first time in 12 years our job engine has been lagging the rest of the nation** (Figure 1).

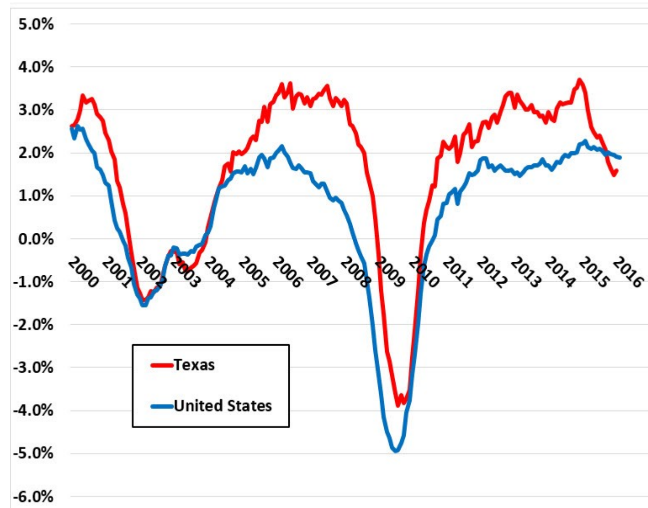
Over the past year, oil and gas companies have cut investment by more than $80 billion and payrolls by 65,000, with the ripple effects meaning Texas payrolls are 250,000 fewer than they would be otherwise.

Yes, oil and gas still matters in Texas. The Texas Miracle, at least for now, appears to be on ice.

That's not to say the Texas economy is not growing—it is a testament to the state's resilience that it is. And some parts of the state are doing quite well—particularly along the I35 corridor from San Antonio to Dallas. But hard times in the oil patch are taking their toll. Houston, the energy capital of the world, and the state's oil and gas producing areas will continue to experience rough waters that will splash onto other parts of the state. By all measures, 2016 will be a more challenging year in Texas, at least unless oil prices stabilize. Texas should still add another 1 percent to its jobs tally—but that is less than the state is used to, and less than the nation overall.

Though the economy is sluggish, the state's fiscal house remains largely in order. Much of the oil downturn has been factored into the budget, but even so, lawmakers left a $4.2 billion cushion of cash sitting in the general revenue fund along with roughly $10 billion in the state's Rainy Day Fund. And if severance taxes ultimately register below official estimates, half of the revenue losses will be to the state's Rainy Day Fund and highway funding, not state general revenues.

Figure 1
Texas and U.S. Job Growth
Percent Change from Same Month in Prior Year



Source: U.S. Bureau of Labor Statistics

Texas More Diversified? It's Complicated.

But this is 2016, and the Texas economy is more diversified, so why are low oil and gas prices still a threat?

In fact, Texas' increasing economic diversity is more a function of a bureaucrat's pen than it is of economic events. In 1992, the federal government adopted a new industry classification system. A portion of what was previously considered a part of oil and gas extraction was reassigned to other

[1] In fact, since 1939, Texas' job growth has exceeded the nation as a whole in more than 78 percent of the monthly job reports.

industrial sectors. Overnight, the oil and gas industry "shrank" in terms of official measurement by more than one-fifth. Outside of definitional change, the industry did decline through the early 2000s, but a funny thing happened on its way to oblivion. New technologies—specifically hydraulic fracturing and new horizontal drilling techniques—made previously unrecoverable reserves recoverable, sparking renewed investment. Adjusting for the 1992 definitional change reveals that the oil and gas industry is *almost* as big a player in the Texas economy as it has ever been—at least before prices started dropping. In 2014, the industry accounted for 13.5 percent of Texas' economic output—not substantially less than 1981's 15.3 percent record.

There's a great deal more to Texas than oil and gas, but when 13.5 percent of the state's economic output has been cut by more than half, it takes a toll on the bottom line.

Oil Prices: A Victim of Technological Success?

The drop in oil prices has been a simple demonstration of elementary economics. Worldwide oil supply has been increasing much faster than demand. The International Energy Agency estimates there has been a surplus of roughly 2 million barrels a day—about 2 percent—since early 2014. When supply exceeds demand, prices will fall, and that is exactly what has happened. In classic economic terms, oil demand is considered to be inelastic relative to price—adjusting very slowly across different price levels. Consequently, a small excess or shortfall of supply can lead to very dramatic price swings. That modest 2 percent excess has caused oil prices to fall precipitously on worldwide markets (Figure 2).

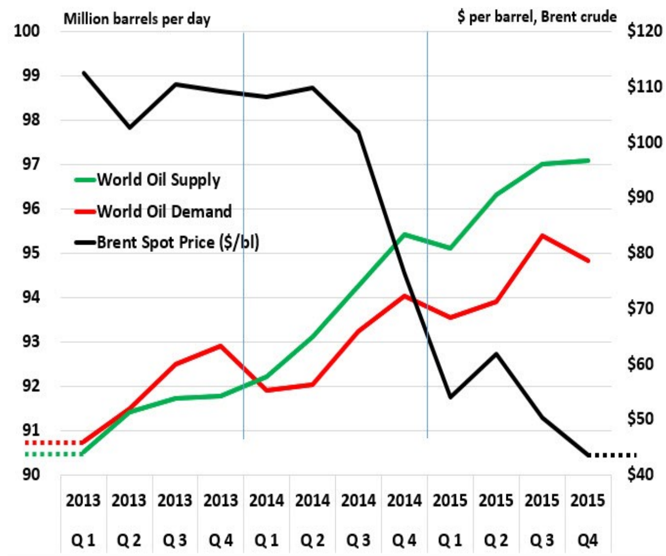
Texas is part of the reason for the oversupply. The state's oil production has tripled since 2010, threatening to eclipse the record of more than 40 years ago. Domestic U.S. production has almost doubled since its 2008 low point. All totaled, increased U.S. production has added 4 million barrels a day to world markets—a huge factor in the world's oversupply and the corresponding drop in the price of oil.

What Does that Mean for Texas?

While the nation as a whole may benefit from lower prices, it is a body blow to Texas, a state which produces over a third of the nation's oil. Oil and gas are five times more important to the Texas economy than they are to the nation as a whole.

Prices have a very direct impact on oil and gas investment, as reflected by the Texas rig count (Figure 3). The number of rigs operating in Texas has fallen from over 900 to the 200s in roughly a year's time. **With each rig reflecting perhaps $75 million in annual operating costs, the loss of over 600 rigs equates to a drop in Texas investment north of $40 billion.** That has sparked dramatic layoffs in the oil and gas industry—with 65,000 jobs lost over the past year.

Figure 2
Oil Supply, Demand, and Prices on the World Markets



Source: International Energy Agency

But the impacts haven't been limited to roughnecks and roustabouts. As drilling has fallen, so too have industry orders for pipe, chemicals and other oil field supplies. As oil and gas field activity has fallen, so too have hotel and restaurant and other trade and services industries. The U.S. Bureau of Economic Analysis estimates that every oil and gas job in Texas supports 2.8 other jobs in the Texas economy. The loss of 65,000 oil and gas jobs has so far cost the overall Texas economy roughly 250,000 jobs, making the Texas economy a laggard rather than a leader, even though many parts of the Texas economy remain healthy.

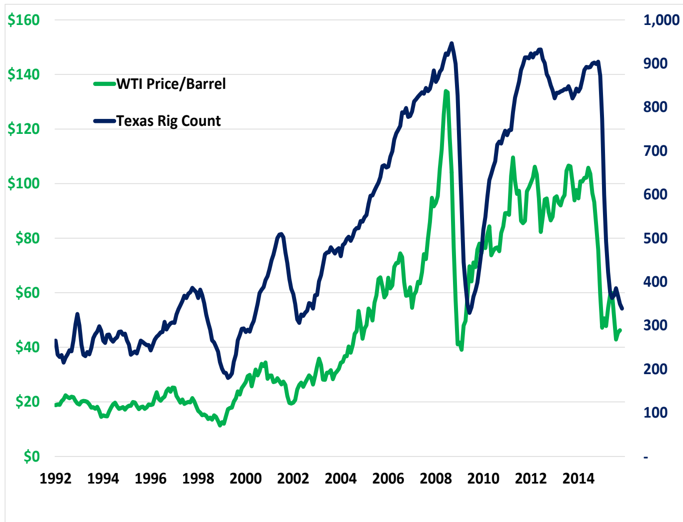
The Missing Fiscal Calamity

Falling oil prices generally mean a tough time for the Texas Treasury. In the 1980s, oil prices dropped from over $100 to less than $15, throwing the state into a deficit and sparking passage of the largest tax package in the state's history. From 2008 to 2009, oil prices fell by two-thirds, and the state faced a shortfall estimated by some at over $20 billion. In 2016, oil prices are down 75 percent and the state faces a multi-billion dollar ... *surplus*?

Unlike many previous oil and gas "busts," Texas state finances remain sound today for several reasons:

- **Cash in Hand.** Texas budgets are usually balanced near the dollar, but in 2015 lawmakers intentionally left over $4 billion sitting unspent in the general revenue fund (in addition to $10 billion in the state's economic stabilization fund). That gives the state a sizeable amount of insulation to weather the oil and gas downturn before the budget would go into a deficit.

Figure 3
Texas Oil Prices and the Rig Count



Source: Baker Hughes International and the U.S. Energy Information Agency

- **A More Diversified Revenue Structure.** While still critical to the economy, oil and gas is a smaller player in the state's revenue structure than it was 30 years ago. The 1980s ended with a vastly different tax structure than it started the decade with. Severance taxes went from 24 percent of state revenues in 1980 to 8 percent by 1990, partly because of falling oil and gas prices and production, but also because the state raised other taxes, making them more important players in the state's revenue structure. Sales, fuels, franchise and other tax hikes inflated the tax base by nearly 50 percent, reducing the state's reliance on oil and gas taxes.

- **Rainy Day Fund Stabilizes Revenue**. In 1987, lawmakers crafted a Constitutional amendment, ultimately approved by voters, creating the Economic Stabilization, or "Rainy Day" Fund—to be largely funded by excess severance taxes on oil and gas. This provided a double-edged sword of diversification. It not only created a cushion of cash that could be accessed in times of fiscal duress, it also took a portion of severance tax revenue off the table during times of oil and gas prosperity, limiting growth in state spending. Most of the state's severance taxes no longer end up in the general revenue fund, but are now dedicated to either the Rainy Day Fund or the State Highway Fund.

- **A Growing U.S. Economy**. Previous oil and gas price collapses were contemporaneous with challenging national economic conditions. While national economic growth today remains substandard, the U.S. economy has been growing throughout the recent oil price decline, providing a rising tide helping to keep Texas' economic boat afloat.

- **The Floor is Higher.** Texas oil production today is about 50 percent higher than it was during the 1986 downturn and almost three times higher than it was in 2008. Texas natural gas production is substantially higher as well. That means the severance tax floor is much, much higher today. For example, in 1987, $30 oil on an annual basis equated to $1 billion in severance tax collections; in 2009, $500 million. Given near record production today, $30 oil would generate $1.7 billion in severance taxes. Today's high production levels lessen the revenue depth of the price crash.

- **(Much of) It is Already Factored Into the Budget.** Finally, though downside risks remain, the Comptroller has already factored much of the downturn into his official forecast of state revenues. Absent a national recession (or absent an adverse court ruling—see *Three Court Cases that Matter to the Budget*), Texas state finances are likely to remain in the black for the near future, even if oil price weakness continues.

2016: Slow and Unsteady Ahead

The U.S. Energy Information Agency (EIA) forecasts that the price of a barrel of Texas oil will fluctuate substantially while averaging under $40 a barrel in 2016[2]—about $10 below 2015's level. Natural gas prices are expected to hover near 2015 levels. Fewer producers will be able to make money at those prices, and they'll drill fewer wells, employ fewer people, and produce less oil than in years past.

Many oil and gas companies have announced further cutbacks in their 2016 capital budgets—suggesting that the Texas rig count may see little move up from current levels. But while the oil and gas contagion has and will continue to hurt oil and gas-related manufacturers, such as metals and machinery manufacturers, Texas also has a large energy-consuming economy that benefits from low energy prices.

In particular, chemical plants and natural gas export facilities will benefit from low oil and gas prices, and these new projects along the Gulf Coast have driven healthy growth in industrial construction jobs, which should continue into 2016, and add new manufacturing jobs as these projects begin operations. Housing construction has rebounded from its woeful recession levels and appears to be at a sustainable level of activity.

Services industries have demonstrated strong growth, though part of that reflects underlying structural trends. Companies continue to compartmentalize and outsource traditional "overhead" activities such as engineering, accounting and legal work—driving very healthy growth in business and

[2]U.S. Energy Information Agency, Short-Term Energy Outlook, February 9, 2016.

What a One Dollar Change in the Price of Oil Means to Texas

Oil and Gas Industry Revenues	$1.2 billion
Rig Count	8 rigs
Wells Drilled	175 wells
Investment	$1.1 billion
Jobs	800 jobs
General Revenues	
Sales Tax	$25 million
Severance Taxes (part)	$14 million
Other State Taxes	$5 million
Total State General Revenues	$43 million
Rainy Day Fund Severance Tax	$21 million
Highway Fund Severance Tax	$21 million
Total Dedicated Severance Taxes	$42 million
Total All Tax Revenue	$85 million

Note: Figures reflect a reasonable historic average on an annual basis, but are subject to wide fluctuations at any given point in time.
Source: Texas Taxpayers and Research Association

professional services. Health care is a continual bright spot, driven not just by Texas' population growth, but also as an international destination for quality treatment.

Other parts of the consumer economy—retail and hospitality—have been robust as growing payrolls have enhanced consumer spending, though the decline in oil and gas and an uncertain U.S. economy have caused growth to taper off most recently.

Putting the various pieces of the economic puzzle together, Texas should continue to add jobs in 2016, but diminishing oil and gas activity will mute the overall rate of growth. Rather than the near 3 percent annual job growth of the past few years, 2016 will likely see overall growth closer to 1 percent. The oil patch will continue to be weak—particularly the Permian Basin and the Eagle Ford. Major metropolitan areas along the I35 corridor, the least oil-dependent parts of the state, should see the strongest job growth, as should certain coastal counties, thanks to major industrial construction projects.

While 2016 may be a challenging year in Texas, it is a testament to the economy's underlying strength that the state has continued to add jobs as oil prices and drilling have slid to a third of what they once were. State finances, though under pressure, remain sound, buoyed by a $4 billion cash balance in general revenue and $10 billion in the state's Economic Stabilization, or "Rainy Day" Fund.

Three Court Cases that Matter to the Budget

Southwest Royalties v. Hegar (previously Combs): This case concerns whether the sales tax exemption for equipment used in processing or manufacturing tangible personal property (Tax Code 151.318) applies to "below-ground" equipment and supplies used in oil and gas production. Travis County District Judge John Dietz initially ruled in 2012 in favor of the taxpayer. He immediately reconsidered his decision upon being advised of the potential revenue loss by the Comptroller's Office. Most recently, Comptroller Glenn Hegar estimates the potential loss of revenues to the state at $4.4 billion in refunds and more than $1 billion a year prospectively. The Texas Supreme Court heard oral arguments on March 8, 2016, and a decision is pending.

American Multi-Cinema v. Hegar: This franchise tax case deals with who may claim a deduction for cost of goods sold. Under the current franchise tax, a taxpayer may claim a deduction for their "cost of goods sold," provided they are selling a good and not a service. The definition of a good in Texas law includes something that can be "seen, weighed, measured, felt, or touched, or that is perceptible to the senses in any other manner." AMC contends that the showing of a movie meets this definition, and qualifies as a good rather than a service, making it eligible to claim a "cost of goods sold" deduction. In April 2015 the Third Court of Appeals agreed with AMC. The Comptroller has advised that the court's ruling could substantially expand the "cost of goods sold" deduction, resulting in up to $6 billion in franchise tax refunds and up to $1.5 billion a year prospectively. The case remains in the appellate courts, as the state has requested a rehearing.

Public School Finance. Approximately 600 Texas school districts, under the consolidated case name "Texas Taxpayer and Student Fairness Coalition," won a favorable decision from Travis County District Judge John Dietz, who ruled that the current system of school finance did not meet constitutional requirements of equity and adequacy, and that local school property taxes had, in effect, become a state property tax, which is specifically prohibited under the Texas Constitution. The state appealed the case directly to the Texas Supreme Court, which heard oral arguments in September 2015 and could announce a decision at any time. While money is always at the heart of school finance cases, only a ruling that current funding levels are inadequate would require additional funds.