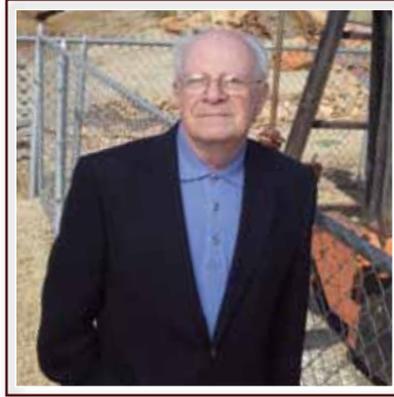


A pivotal industry:

Energy's ups and downs drive economies



From his company's headquarters in Seminole, Okla., Melvin Moran has experienced every oilfield boom during the last six decades. Unfortunately, he's also had an up-close seat to every bust.

Since 1953, when he joined Moran Oil Enterprises—the company his father started in the 1930s—Moran has seen Seminole's fortunes swing up and down, much like the pumpjacks that still dot the surrounding east-central Oklahoma landscape.

Oil was discovered in the region during the 1920s, boosting the city's population from 864 to more than 30,000 in just a few months. At its height in the early 1930s, Seminole was producing about one-third of the world's oil.

"Oil really built Seminole," Moran says. "It was a real boom town—a lot like the gold towns that sprung up in the 1800s. Almost every oil company had a presence in Seminole at some point."

After periods of increasing production and higher oil prices, the market would occasionally fall, sending oil prices lower and jobs elsewhere. For Moran, an especially memorable oil bust took place in the 1980s. In 1985, he recalls,

oil went for about \$28 dollars a barrel. A year later, the price had dropped to \$9. Almost all of Seminole's 200 or so oil firms disappeared, leaving about 20 to pick up whatever business remained.

"The area was decimated," Moran says. "People were losing money with every barrel they produced. It was a tough time for a lot of people."

But in the two decades since that bust, oil and natural gas production rebounded once again in Seminole, where 60 to 70 energy firms are now based in the city of about 6,800.

Similar stories are common in towns across Oklahoma. In good times, the state's economy has reaped the benefits of higher energy prices, driving job growth, tax revenues and income to supporting industries and households.

The strength of the oil and natural gas industry in recent years also provided support when the nation's economy slowed. Mark Snead, assistant vice president and Denver

VOLATILITY IN THE ENERGY INDUSTRY has long affected the economies of towns such as Seminole, Okla. In the 1980s, a boom saw about 200 oil firms searching for office space in the town, and a bust closed the doors of all but 20. Though oil is still prominent in Seminole's economy today, a more diversified mix of industries helps the town better weather energy's boom-bust cycle.

Branch executive at the Federal Reserve Bank of Kansas City, says the industry's growth allowed traditional energy states such as Oklahoma to avoid the start of the latest recession.

"The record-high crude oil and natural gas prices we saw provided a buffer for the major energy-producing states, such as Oklahoma, as the recession began," Snead says. "While other states started losing jobs, the rapid expansion in oil and natural gas production and exploration helped support the economies of energy states in the early stages of the recession."

But, Snead adds, the recession eventually caught up with energy-producing states. By mid-2009, falling demand pushed oil and natural gas prices lower, and the economies of the energy states began underperforming the rest of the country.

"This kind of volatile shift in economic activity tied to energy prices is very similar to what happened in the 1970s and 1980s," Snead says. "It suggests that the energy cycle is still alive and well in the traditional energy states."

The energy states

While many states produce some oil and natural gas, only a few can truly be considered an "energy state." The distinguishing mark of an energy state is whether a change in energy prices leads to a rapid expansion or contraction in the state's overall economy, Snead says.

During times of high energy prices, the oil and gas industries in energy states are a major driver of overall economic growth—providing jobs and boosting incomes, even in the face of a national recession. But, lower energy prices can lead to a significant slowdown in an energy



state's economy, even if the rest of the country is experiencing an expansion.

This distinction means that a state such as California, which is the country's third-largest producer of crude oil, is no longer considered an energy state because of the minor role energy now plays in its overall economy, Snead says.

"For example, in Oklahoma and Texas, the economic health of the state is strongly tied to the health of the oil and gas industries," he adds. "The same is true in North Dakota, where the energy industry is very small in comparison to other states, but it influences the state's overall economy."

Snead has identified a core group of 13 energy states. These include a "top tier" of Oklahoma, Wyoming, Texas, Alaska and Louisiana, and a second tier consisting of New Mexico, Colorado, West Virginia, Kansas, Mississippi, Montana, North Dakota and Utah.

Among these states, North Dakota and West Virginia have the greatest potential to



move into the top tier, if production of oil and gas continues to grow and identified oil and gas sources are developed, Snead says. By the same token, Kansas and Mississippi may start losing their energy state status as the earnings paid to workers by oil and gas firms continue to decline as a percentage of total state earnings. In addition, Snead says, it's debatable whether Utah is still an energy state: It has large natural gas sources in development, but growth in its non-energy industries has outpaced that in oil and gas.

The fact that oil and gas still influence the overall health of the top energy states to such a large degree suggests that few have successfully diversified their economies, Snead says.

"Many of these states still depend on oil and gas for a large share of their total earnings," he says. "The risk is that a prolonged slide in energy prices could pose considerable problems to these states' recoveries. We're seeing a little bit of that now with natural gas prices remaining well below their previous highs."

A slump in Wyoming

In the heart of Kemmerer, Wyo.—not far from the first dry goods store operated by James Cash Penney—John Sawaya continues a century-long tradition of outfitting western Wyoming workers with shoes and clothing at his family's store. As with many areas rich in natural resources, the town has seen its share of energy booms over the last 100 years.

The latest one peaked in 2008 as natural gas companies, spurred by record-high prices, rushed into the state to build pipelines and processing plants. Jobs were plentiful, and hotel rooms, usually reserved for tourists taking in the area's scenery, were filled with workers.

"Because of the natural gas boom, it seemed like all the major companies were expanding," Sawaya says. "We were extremely busy with construction workers coming in from Illinois and Texas. They were working outside in the winter, and it gets to minus 20 here."

But, starting in 2009, the pace of work slowed, and Sawaya says the "two-stoplight town" returned to a more peaceful pace.

"This last year, a lot of projects were completed and others are not really getting off the ground as quickly," he says. "They're either being postponed or using fewer workers. Instead of 1,000 people working day and night, it's fewer people taking longer to complete it. We're going through quite a slump."

Further signs of that slump can be found across the state. City governments are facing stiff cuts due to lower sales tax revenues. At the statehouse, debates over how to spend revenue surpluses are no longer taking place; lawmakers are now preparing for a much more conservative budget.

Perhaps more significantly, the state's unemployment rate rose from 2.7 percent in January 2008—a level well below the national average at the time—to 7.5 percent in December 2009, still below the national average but the highest in Wyoming since 1987. In late November, Wyoming's Department of Employment cited an "unprecedented"

Energy States in the Tenth District

Among the 13 energy states identified by Mark Snead of the Federal Reserve Bank of Kansas City, five are in the Tenth Federal Reserve District: Oklahoma, Wyoming, New Mexico, Colorado and Kansas. Two of these states—Oklahoma and Wyoming—have the highest concentrations of oil and gas earnings in the country and are in the top tier of energy states.

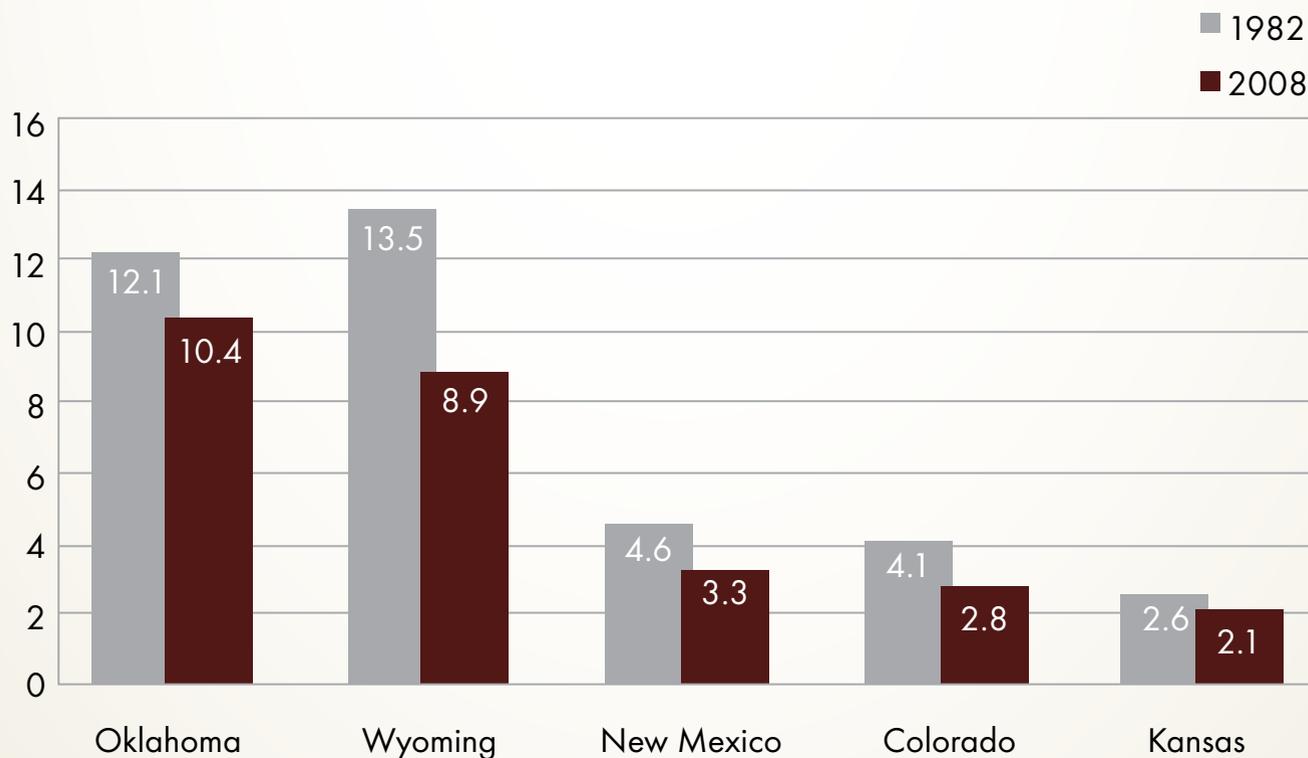
Historically, the District, which is located in the center of the country, has had a high concentration of energy states, and as a result, the District tends to follow the ups and downs of the energy industry more than the national economic cycle, Snead says.

For the latest recession, this has meant that the District fared better than the rest of the country in terms of job losses and overall growth at the beginning of the economic slowdown. And, as was the case in prior recessions, the District began underperforming the rest of the country once energy prices began declining.

However, Snead says, the current downward trend is not likely to match the conditions the region experienced in the 1980s oil bust.

"The down part of the cycle is probably not going to be as severe or prolonged as it was in the 1980s because oil prices have already bottomed and bounced back," Snead says. "The strength in oil prices will partly offset the decline in natural gas, but the sensitivity to natural gas could continue to be a drag for some energy states' economies."

Percentage of total state earnings contributed by oil and gas



number of calls to its Unemployment Insurance Division.

Much of the state's recent economic highs and lows can be tied to movements in the natural gas market. According to Snead's research, natural gas prices surged from \$2 per unit to more than \$10 from 2003 to 2008, setting a record high in the process. But as the recession continued and demand fell, natural gas sunk back down to about \$2 per unit before rebounding to around \$5 in the early part of 2010.

As the price declined, many companies slowed exploration and drilling. According to the Wyoming Oil and Gas Conservation Commission, natural gas production last year fell for the first time since 1997. The number of wells also fell significantly with 2,162 drilling permits issued statewide, compared to 3,681 in 2008. With fewer wells to drill, many jobs disappeared.

For Sawaya, fewer workers are around to buy shoes and clothing from his business. He says the impact is noticeable in other businesses around Kemmerer, such as auto parts and hardware stores.

"It's nice and quiet again," he says. "But I'm not happy to see such a dependence on the energy market."

The recovery

That dependency on energy is the biggest risk faced by the energy states, Snead says.

"The traditional energy states typically enter recessions later and emerge sooner than the rest of the country as energy prices recover," Snead says. "Oil prices are rebounding to more-balanced levels, but the continued downward pressure on natural gas prices could potentially result in a slower recovery than usual in some energy states."

In Oklahoma, Moran says state and local economic development officials are well aware of the risks of relying on energy too heavily. Though the most recent recession was relatively mild for Oklahoma due to the rebound in oil

prices, the experience of the 1980s bust is still fresh in many minds, and worries about natural gas prices are widespread.

"Oklahoma has been trying to diversify," Moran says. "We're providing all kinds of incentives to encourage other kinds of industries, and I think we've had some success."

In Seminole, where oil was the only game in town for many years, the largest employers are now a meat processor and an apparel manufacturer. Moran credits a number of creative-thinking leaders for attracting different kinds of businesses to the town over the years. Still, oil keeps a prominent place in the area's economy.

"The oil price is absolutely perfect right now," Moran says. "It's good for producers and it's not too expensive for consumers. People are still drilling, and the economy is picking up."

While conditions in Wyoming have slowed for Main Street business owners like Sawaya, he's still optimistic about future prospects.

"Since the 1950s, we've seen this kind of cycle," he says. "I expect to see some kind of pickup soon. It's always been like this."



BY BILL MEDLEY, SENIOR WRITER

FURTHER RESOURCES

"ARE THE ENERGY STATES STILL ENERGY STATES?"

By Mark Snead
KansasCityFed.org/TEN

COMMENTS/QUESTIONS are welcome and should be sent to teneditors@kc.frb.org.