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Houston Business
A Perspective on the Houston Economy

High Oil Prices Boost Houston's Job Growth, Improve Local Outlook

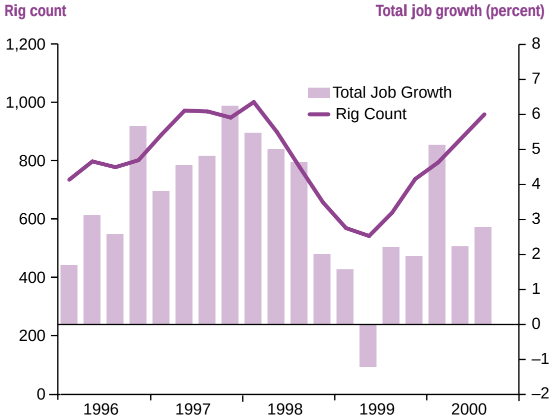
Oil and natural gas prices drive the immediate outlook for Houston. If they remain high—oil above $20 and natural gas at $2.50 or more—the outlook is for strong local job growth.

The 1997 Asian financial crisis and its aftermath pushed crude oil markets into a prolonged period of low prices. To see how this period compares with 1986—the benchmark for hard times in the oil industry—we can use the refiner acquisition price of imported crude oil, adjusted for inflation. We find that the price of oil fell under $15 per barrel for three consecutive quarters in late 1986, averaging $13.66 in today's dollars. In contrast, in early 1998, the price of crude oil fell below $15 for five quarters and averaged $12.71 per barrel. Crude prices in 1998–99 were not only lower than in 1986, but the period of low prices was longer.

In spring 1999, a turnaround in the global economy, including the start of a tremendous growth spurt in the United States, improved the demand for oil, helped OPEC pull together as a group and set the price of crude oil on an upward climb. By the third quarter of 1999, oil reached $19.75 per barrel, and quarterly average prices since that time have been between $23 and $27. The oil industry initially responded slowly to the incentives offered by higher crude and natural gas prices, cleaning up balance sheets damaged by low revenues and reluctantly engaging in risky or expensive projects. But the industry now has pushed the domestic rig count over 1,000 working rigs, back to the highest levels of U.S. drilling activity in a decade.

Houston's economy is still closely linked to conditions in world oil markets. For those who have any reservations about the continued linkage, Figure 1 plots the recent quarterly percentage

Figure 1
Domestic Rig Count and Total Job Growth in Houston (Quarterly job growth at annual rates)



SOURCES: Baker Hughes Inc.; Texas Workforce Commission; Federal Reserve Bank of Dallas early rebenchmarking.

growth rate in total employment in Houston and the number of rigs drilling in the United States. This article discusses Houston's most recent ride on the roller coaster of world oil markets and the current oil-driven outlook for the local economy.

RECENT GROWTH IN HOUSTON

The hard times in the oil industry in 1997–98 saw the seasonally adjusted rig count fall 48 percent from an early 1998 peak to an early 1999 trough, cutting domestic drilling activity nearly in half in a year. Beginning in mid-1998, local oil and gas extraction employment began to fall, and by the end of 1999 Houston had lost 7,600 jobs, or 10.8 percent of local oil jobs. The demand for oil field goods feeds directly into local manufacturing, and 18,000 factory jobs, or 8.1 percent, were lost by the end of 1999.

The good news is that Houston absorbed this blow with minimal damage overall. As Figure 1 shows, after a total employment dip for one quarter in 1999, the metro area quickly turned around and moved back onto a strong growth path. Five quarters later, we find ourselves looking at job growth that has averaged 3.2 percent over the last 12 months. Measured December 1998 to December 1999, total job growth in Houston was only 1 percent. But if we look at important *secondary* sectors during the same period, we see strong continued job growth that offset oil-related declines. The sectors that carried 1999 total job growth into positive ground are construction, 3.2 percent; retail, 4.5 percent; and a large sector of personal and business services, 2 percent.

Houston showed tremendous resilience in the face of a serious downturn in its major business sectors. Certainly, the pattern in Figure 1 contrasts sharply with the loss of 225,000 jobs, or one out of every eight Houston jobs, in the oil bust of 1982–87. To explain Houston's apparent strength, we look first to the ongoing boom in the U.S. economy, which provided essential support to the oil-independent sectors of the local economy by generating jobs at companies such as Compaq Computer Corp., Continental Airlines and American General Corp. Second, the strength of the local turnaround was driven by a global recovery and helped by a decline in the trade-weighted value of the dollar, an important consideration for a port city and leading export center with a large international business community.

But perhaps the most important factor in limiting the extent of the 1999 decline was momentum. During the two previous years, measured from December 1996 to December 1998, the Houston economy had enjoyed job growth of 8.7 percent, representing 162,000 new jobs. This number of new jobs is almost exactly the same as total employment in Houston's neighboring metro area of Beaumont–Port Arthur–Orange (BPA). It was as if we had moved all the residents of BPA to Houston; invited them to find a house, go shopping and pick out new restaurants to patronize; and built the new schools, streets and other necessary infrastructure to accommodate the new residents. This process takes time, and the strong construction, retail and service growth that Houston registered in 1999, well after the oil downturn was under way, was an echo of the growth that took place in earlier years.

Finally, once we acknowledge the role of momentum, we have to recognize the good timing of the rebound in world oil markets. Momentum could carry Houston only so far, and the agreement hammered out by OPEC in March and April of 1999 to remove oil from world markets stopped the bleeding in Houston's oil sector. A prolonged downturn in oil certainly would have meant a longer period of no growth or slow growth for the city.

EXCELLENT OUTLOOK

Houston's economic performance in recent years suggests that the essential ingredients for local growth are a strong U.S. and global economy, a stable dollar and high prices for oil and natural gas. Through the first three quarters of 2000, Houston grew at a 3.2 percent annual rate as these conditions fell back into place. By year-end, after all the revisions are complete, we may find Houston grew at more than a 4 percent annual rate in 2000.

Looking forward, these conditions appear to still be in place as we enter 2001. The U.S. economy is slowing back to its long-term potential growth path but is still expected to perform at a healthy 3.5 percent or higher GDP growth rate. The International Monetary Fund forecasts a 4 percent to 5 percent expansion in worldwide GDP this year and next. Oil and natural gas prices were healthy this time last year, near $21.50 for light sweet crude and $2.75 per thousand cubic feet for natural gas; now, the oil price is 50 percent higher and the natural gas price has doubled.

Oil and natural gas prices drive the immediate outlook for Houston. If they remain high—oil above $20 and natural gas at $2.50 or more—the outlook is for strong local job growth. Of course, high oil prices hurt Houston as well as help it. Like consumers in the rest of the United States, Houston consumers feel the effect of expensive gasoline, higher natural gas prices and rising electricity rates. The petrochemical industry is already struggling with natural gas prices in excess of $5 per thousand cubic feet and excess capacity and rising inventories that are preventing chemical price increases from covering higher energy feedstock costs. The number of new construction projects announced on the Texas and Louisiana Gulf Coast by the petrochemical and refining industry has fallen to the lowest level since the early 1980s. But on net, as our forecast indicates, Houston is still a big winner from high energy prices.

Table 1 summarizes the job growth forecast for Houston in 2000 and 2001, with three-quarters of 2000 already behind us. Mining and manufacturing both accelerate next year, to 5.7 percent and 7.1 percent, respectively. Oil never returns to its 1998 peak of over 70,000 jobs, and manufacturing returns to the prior high only in the second half of 2001. Construction remains strong, with a 6 percent expansion in jobs next year, although the strength comes on a second-half rebound. By late next year, Houston will again have added 160,000 jobs in 24 months, and the need to build homes, businesses and infrastructure becomes the driving factor in local construction. The strength comes despite poor levels of construction in the petrochemical industry, a segment that typically can account for one-third of Gulf Coast construction jobs. Retail trade slows in 2001, as local consumers pull back. Services generally match overall job growth.

Table 1
Forecast of Job Growth by Sector in Houston Metro Area

	2000	2001
Mining	4.0	5.7
Manufacturing	4.0	7.1
Construction	5.8	6.0
TCPU	2.3	2.5
Retail	3.5	2.0
Wholesale	2.1	3.5
FIRE and services	5.3	4.1
Total private	4.3	4.1

NOTE: TCPU is transportation, communications and public utilities; FIRE is finance, insurance and real estate.

SOURCE: Author's calculations.

Are there risks to the forecast? Yes, and with so many indicators pointing in a positive direction, the risks are almost certainly weighted to the downside. The forecast in Table 1 is the most likely outcome in our view, but its strength is based on a confluence of positive events in national and global economic growth as well as in world oil markets. In 1997, the biggest concern thought to be facing the oil industry in coming years was a shortage of rigs and workers—much like now. What unexpectedly plunged the industry into a deep recession in 1998, only months later, was the unforeseen, and perhaps unforeseeable: a major economic setback in Asia, the fastest growing region in the world. The Asian financial crisis put large amounts of oil back on world markets, creating an unmanageable glut and the lowest crude prices in decades. Another big setback to global demand, equally unforeseeable today, remains the quickest way to bring down high oil prices—and the quickest way to end the oil-driven economic boom now under way in Houston.

The No. 1 lesson of the 1980s bust remains as true today as ever: never bet your company's future on an oil-price forecast.

The Houston economy continues to gain steam, with 12-month job growth moving above 3 percent and October's 3.8 percent unemployment rate almost matching the lowest local October rate of the past decade. The monthly survey of Houston area purchasing managers shows the local mining and manufacturing sector continuing to expand strongly, even as the U.S. industrial sector slowed to a standstill in recent months.

RETAIL AND AUTO SALES

Retailers report good traffic through the stores, but customers are keeping their wallets closed. October sales were slow; November sales picked up with cooler weather, then slowed again. Furniture and appliances are selling well, probably because of strong home sales, but clothing sales are off. A good holiday season depends on whether customers are willing to spend.

In contrast, Houston auto dealers blew away the October auto sales record they set last year. October sales were up 21 percent from last year. Year-to-date sales are 16 percent ahead of last year.

OIL AND NATURAL GAS MARKETS

Light sweet crude has traded consistently at over $30 per barrel during the past six weeks, with prices reaching their highest levels in response to violence in the Middle East. Natural gas prices continued to set a string of record highs on the New York Mercantile Exchange trading floor, moving over $6 per thousand cubic feet as early cold weather struck the Midwest and Northeast. The basic story remains one of strong demand and low inventories, with fears of winter shortages and price spikes. Despite four OPEC production increases in 2000, crude oil inventories remain 9 percent to 10 percent below last year's. Natural gas inventories also lag last year's by 9 percent.

Respondents think the domestic rig count will peak at current levels—1,000 to 1,100 working rigs—as available equipment and crews are stretched to the limit. The international rig count made another nice gain, led by Latin America. The complexity of drilling has improved, with more offshore, horizontal and international work. Pricing is improving and is expected to show further gains as competition grows at home and abroad for limited crews and equipment.

PETROCHEMICALS AND REFINING

Refiners saw a nice improvement in already strong profit margins, partly due to seasonal loss of capacity during the fall maintenance season. However, the seasonal decline in capacity utilization was only half that of last year; refineries tried to limit downtime and stay on line to take advantage of good margins. They also were responding to political pressure to rebuild heating oil inventories, which remain 30 percent below those at this time last year. Retail gasoline prices fell slightly but remain near $1.50 nationwide.

Petrochemical producers saw a bad situation turn worse, as natural gas feedstock prices hit $6 per thousand cubic feet and chemical product prices kept falling. Rising chemical production capacity—both at home and in Asia—has raised inventories and resulted in falling prices for such key products as polyethylene, polypropylene and polyvinyl chloride. Profit margins have evaporated.

HOUSING MARKETS

The new home market remains hot in Houston. Last year's shortages and waiting lists have turned into this year's big gains in sales and starts. Available labor and materials have allowed builders to work down the waiting lists for new houses and even to put spec homes on the ground for off-the-shelf sales. New home sales are up 18 percent since last October, and starts are up 35 percent. The existing home market, in contrast, has cooled off. Last year, the shortage of new homes forced buyers into the used home market. Now the pendulum has swung the other way. Existing home sales were flat in October compared with last October's and have remained flat through the first 10 months of this year.

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