HOUSTON BUSINESS BRIEFS

Oil Industry Consolidation: Which Oil Cities Fared Best in the 1980s?

The collapse of oil prices in the 1980s left few winners and many losers in its wake. The U.S. rig count topped 4,500 in late 1981 but fell below 800 working rigs in early 1989. Over the same period, employment in oil and gas extraction fell by nearly half, and total payrolls fell nearly as far. Cities that were home to the oil industry, such as Houston, suffered significant economic setbacks. The blow to the oil and gas industry quickly spread to secondary sectors and precipitated sharp general declines in economic activity in several of these oil centers.

In this article, we look at cities with a large component of oil and gas operations and ask how the industry rearranged itself spatially in the 1980s. While few cities emerged as winners, some were certainly bigger losers than others. As the industry shrank and consolidated its activities, which cities fared the best? And, in particular, how well did Houston fare relative to other oil-center cities?

Our results show that the industry generally pulled back into the nation's metropolitan areas and that a much greater share of the industry's activities are today being carried out in corporate overhead and at headquarters facilities. Indeed, cities demonstrated marked differences in their ability to retain oil and gas employment and earnings. Surprisingly, given the conventional wisdom that Houston has been a beneficiary of oil industry consolidation, the city fared no better than typical major oil centers. Dallas, in contrast, fared significantly better and is a modest winner in the battle for a share of the remaining pieces of the industry.

Oil Centers

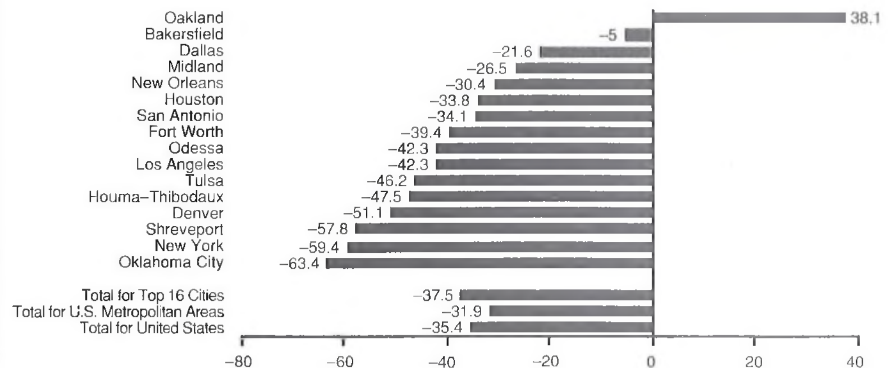
For comparison purposes, we selected 16 metropolitan areas in the United States with earnings of $100 million or more from oil and gas mining in 1988. These earnings comprise wages, salaries and incomes of the self-employed. These cities, listed in Figure 1, include headquarters cities such as New York, Los Angeles and Oakland. The list also includes the California oil service center of Bakersfield and a more familiar group of Southwestern oil patch cities.

Houston, with $3.1 billion in annual earnings, has the largest oil center by far, as measured by earnings in oil and gas extraction. Next are Dallas ($1 billion), New Orleans ($734 million) and Denver ($658 million). Shreveport ($113 million) and San Antonio ($110 million) have the smallest oil centers of the 16 cities.

Figure 1 shows the percentage change in constant dollar earnings from oil and gas extraction in each metropolitan area between 1982 and 1988. Taken together, these 16 cities saw 37 percent of their real earnings from oil and gas disappear between 1982 and 1988. Some headquarters cities, with few direct ties to operations in the field, fared the best. The Texas cities on the list together lost 33 percent of their real earnings.

continued on page two

Figure 1
Metropolitan Earnings: Oil and Gas Extraction
(Percent Change, 1982–88)



Houston and San Antonio were about average, with a loss of 34 percent, while Dallas lost 22 percent. Midland lost only 27 percent of its earnings, while Odessa lost 42 percent. Oklahoma City took the worst blow—a 63-percent loss.

Drilling Centers

An oil center deeply involved in drilling and field activity will have strong backward linkages to durable manufacturing, especially with the machinery industry. Figure 2 shows percentage declines in real non-electrical machinery earnings for the cities listed in Figure 1. (Oklahoma City was excluded because of data-comparability problems.) Once again, the headquarters cities showed the best results. Also, Fort Worth retained most of its earnings share because its large machinery sector is related to defense rather than oil and gas. Denver and Shreveport are the only other oil centers near Texas that lost less than the 28-percent average among these 15 cities. Generally, those oil centers most deeply involved in either building or operating rigs fell to the bottom of the list and suffered the greatest losses. Dallas lost 39 percent, and Houston lost 48 percent. Midland and Odessa lost more than 70 percent of their machinery industry.

Administrative Centers

With a rig-count decline of more than 75 percent, roughnecks and toolpushers faced tough times after 1982. Administrative centers providing overhead support for oil and gas operations were more likely to fare better than oil field workers as operations declined. Perhaps by confining our comparison to consolidation of oil industry administration, a different picture would emerge. Let's remove the blue-collar worker from our analysis and ask, Which of these cities emerged as contenders for the well-paid, white-collar jobs in oil and gas?

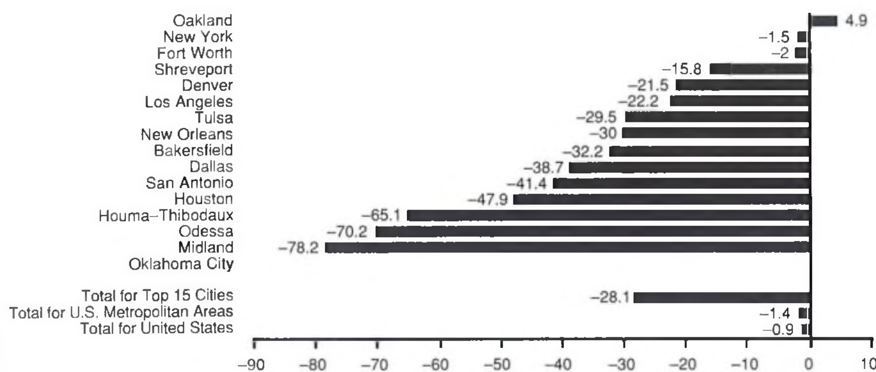
The U.S. Census Bureau counts workers engaged in *corporate administrative and auxiliary employment.* These employees perform central management and administrative duties, or they provide support services for other parts of their own firm, as opposed to the general public or other firms. Texas oil and gas operations in 1981–82 provided 44,000 such jobs; there were 37,000 jobs in 1987. Clearly the industry was shrinking these central administrative establishments much more slowly than field operations, making administrative duties the focus of the consolidation process.

Five central metropolitan counties accounted for 88 percent of oil and gas administrative jobs in Texas in 1981–82: Harris, Dallas, Tarrant, Bexar and Midland. These counties were home to 93 percent of oil and gas administration by 1987. Table 1 shows how the jobs were distributed among these counties and how the distribution changed after the oil bust. Harris County, with 64.2 percent, was by far the largest center for administrative jobs in 1981–82. After Harris County were Dallas, with 15.6 percent, and Midland, with 5.1 percent. The most notable change over the time period is that Harris County lost 7 percentage points of its share of administrative jobs, a loss just matched by the gain in Dallas County. Changes in the other counties had little effect on the overall picture.

Decision-Making Centers

Another way to look at the consolidation process is to turn attention to corporate headquarters. We have been looking at the location of workers, but where is the real power—with the bosses? If we look at corporate headquarters as the decision center and the focus of control, where do we find control of the industry? How has control

Figure 2
Metropolitan Earnings: Nonelectrical Machinery
(Percent Change, 1982–88)



Data for Oklahoma City are not comparable.

Table 1
Oil and Gas Administrative and Auxiliary Employment
(Share of Texas Total)

County	1987	1981–82
Bexar	1.8	0.4
Dallas	22.9	15.6
Ector	0.4	1.0
Harris	57.3	64.2
Midland	6.9	5.1
Tarrant	4.1	2.3
Other	6.6	11.4
Texas	100.0	100.0

shifted spatially with the downsizing of the industry in the 1980s?

To answer these questions, we looked at the 100 largest firms on the *Oil and Gas Journal's* annual listing of the 400 largest firms in the United States. (These top 100 firms have 91 percent of the assets of the entire group of 400.) After some adjustments for comparability between 1982 and 1989 (limited partnerships, for example, were not listed in 1982, and we removed them from the 1989 list), we totaled the worldwide assets of these firms and attributed them to the state or city in which its headquarters were located. For example, Exxon's $83 billion in assets goes to New York because its headquarters is in New York City.

Figure 3 shows that New York was the biggest gainer, adding more than 10 percentage points to the share of oil industry assets controlled by headquarter operations in the state. The losses, however, all come from outside the traditional oil patch states listed in Figure 3. Texas, Louisiana, Oklahoma and California held onto their shares. Houston and Dallas also were essentially unchanged.

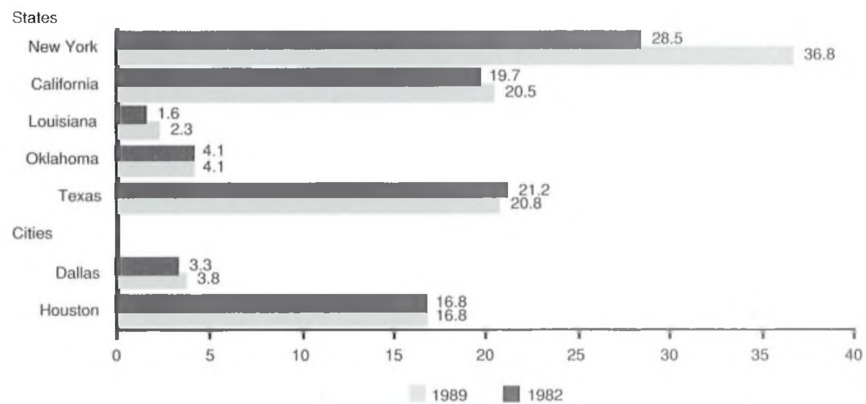
Figures for 1991, however, will reflect a significant shift because Exxon, the largest company on the *Oil and Gas Journal's* list, moved to Dallas. New York will lose close to 20 percentage points of its 1989 share to Texas and Dallas. If we adjusted the 1989 data to reflect Exxon's move, Dallas' share of the assets of the top 100 firms controlled from that city would rise to 24 percent, while Houston would maintain a 17-percent share. Exxon's move would give Texas a commanding lead among the states, with control of more than 40 percent of industry assets; New York would move to third place, behind Texas and California.

Conclusions

Houston remains the largest oil center in the United States, with annual earnings from oil and gas extraction that are three times those of its nearest metropolitan rival. However, as the industry shrank in the 1980s, Houston's ability to retain its share of these operations proved mediocre compared to other large oil centers. Its losses in related industries, such as oil field machinery, were significantly worse than losses in other oil centers. Houston retained its share of general administration, and the share of industry assets controlled by companies headquartered in the city also remained stable. Rival Dallas, however, significantly improved both its share of administration located in the city and the share of assets controlled from there.

The race for administrative and headquartering activity is an important one. All the oil centers on our list rely on declining fields. As the search for oil becomes increasingly global, and as drilling operations follow this search, administrative and headquartering activity will be the part of the industry left behind. Oil centers that fail to compete well for these activities are probably facing decline in the 1990s. ❖

Figure 3
Assets of the 100 Largest U.S. Oil and Gas Firms
(Percent Distribution by Headquarters Location)



Houston Beige Book
November 1990

In the third quarter of 1990, Houston gained 5,900 new jobs, a significant slowdown from the 10,000 jobs added in the third quarter of 1989. Barring a year-end change of course, Houston will add slightly more than 30,000 new jobs in 1990, compared to 47,000 in 1989. Evidence that the local economy's forward momentum has faltered somewhat was apparent in the cautious responses obtained in our Beige Book survey of Houston business conditions conducted in early December. Houston continues to do well, in contrast to the nation and to most of the state, but much recent news on the local economy is disappointing compared to expectations from early summer.

Wholesale and Retail Trade

Retailers do 10 percent to 12 percent of their annual business in November and another 17 percent in December. Sales, while appearing to be about 5 percent ahead of 1989 levels in the early part of the Christmas season, have failed to meet business plans for the season. At the high end of the spectrum, the better specialty stores are doing well; the large discount stores at the other end of the spectrum report better results than mass suppliers in the middle. Inventories are in good shape and are being managed cautiously. There is no sign of distressed discounting that marked the 1989 Christmas season in much of the nation.

Wholesalers report that demand is holding strong, and they see the seasonal peak so far this year moving at levels comparable to 1989. Inventories are reported as just right or too small. Selling prices are up 3 percent to 5 percent over last year's levels, and wages are up 2 percent to 3 percent. Most retailers are planning for comparatively flat sales next year.

In October, auto sales staged a nice recovery from two bad months. Pent-up demand played a strong role, and fleet sales that affected national figures played a smaller role in Houston. Inventories are adequate. Selling prices have been very competitive in a slower market. At the end of October, sales volume was about 4 percent ahead of volume at the same point in 1989.

Real Estate

Two new office buildings have been announced for Houston; both will be outside the central business district and anchored by large oil firms. Generally, however, respondents felt that the national problems in real estate are spilling into the Houston market. Interest in Houston as a recovering market has slackened, with far fewer acquisitions under way and greatly diminished competition for those that do go forward. Financing was described as "almost impossible to find at this time."

In October, housing starts in Houston were about even with October 1989. Housing sales, on the other hand, were up 21 percent over last October; on a year-to-date basis, Houston's new home sales were up 10 percent over last year. Respondents said that walkthroughs and commitments have declined in recent weeks, however. Inventories of houses on the ground are being kept very tight. The labor market remains tight for construction workers.

The only serious cutbacks found in regional manufacturing were linked to problems in *national* housing markets. Shutdowns and layoffs that exceed the normal seasonal cutbacks going into winter are occurring in lumber, ventilation equipment and other housing-related industries.

Paper

Sales are strong, operations are at capacity and backlogs are good, as are inventories. Prices are causing some concern because they are down slightly for coated paper and a lot for pulp. Demand for pulp is very strong, and much of it is headed for the export market.

Chemicals and Refining

Big chemical companies continue to rebuild inventories after the Iraqi invasion of Kuwait caused a panic surge in demand. Margins improved sharply over the past few weeks as companies were able to pass along increases that restored prices to levels only 4 cents to 5 cents lower than those of August 2. Inventories are now returning to normal. It is still too early to know how much demand will soften in wake of previous panic purchases, but respondents expressed concern that the demand pendulum could swing back and hurt sales in the next few weeks.

Refiners saw demand for gasoline soften slightly. Margins remained strong, on average, but slipped some in recent weeks. Operating rates remain near capacity.

Oil and Natural Gas

The workover-rig count was up 20 percent in October and November, suggesting an effort to squeeze production out of existing wells while the price is up. Exploration activity remains unaffected by current high oil prices. The focus of exploration activity continues to move abroad, and respondents cited Latin America as a growing center for much new seismic and other exploration activity.

Oil prices continue to fluctuate with rumors of war. Market fundamentals, apart from war, indicate a heavy overhang of oil stocks. Warm weather, high oil prices and weak economic growth are slowing demand, and 1991 could bring further building of inventories, according to respondents. Natural gas prices did not rise with oil prices and have been further depressed by warm weather and weak demand. ❖

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