



Houston Business

A Perspective on the Houston Economy

Just as Houston was among the last to feel the effects of this recession, it may be among the last to pick back up. Strong U.S. growth will be the first and most important step in getting Houston growing.

Slow Job Growth in Houston in 2002

Last year was a bad one for the U.S. and global economies. After a decade-long run, the United States ended the longest continuous expansion in its history and, in March, fell into recession. Manufacturing led the U.S. downturn early in 2001, and GDP growth turned negative in the second half. As the U.S. economy sputtered and Japan and Europe failed to replace the United States as the main engine for global expansion, worldwide growth slowed to less than half the pace of the year before.

If it was a bad year for the world economy, it was an even worse year for economic forecasters. Occasionally, forecasters find themselves scrambling to keep up with current events, and last year was such a time. Table 1 shows a series of forecasts the International Monetary Fund (IMF) made between October 2000 and December 2001, predicting annual growth rates for the United States, the world's advanced economies and the world economy. The forecasts are representative of most made in the last 18 months. They show a continuous downward revision of growth prospects as it became apparent the United States would not achieve a soft landing, that it would fall into recession and that the recession would be extended by the events of Sept. 11.

Based on the forecast the IMF made in October 2000, the year 2001 should have been a good one for Houston. After U.S. GDP growth exceeded 4 percent annually from 1997 to 2000, the IMF thought growth would slow to 3.2 percent in 2001. The world economy, which is important to Houston's chemical and machinery exports, port activity and international business community in general, was expected to grow at 4.2 percent, down only slightly from 4.7 percent in 2000. And a full-scale drilling

Table 1

2001 a Bad Year for Economic Forecasters

(IMF Forecasts of Annual Percent Growth Compared for Various Regions)

Forecast and date made	U.S.	Advanced economies	World
Forecasts for 2001:			
October 2000	3.2	3.2	4.2
May 2001	1.5	1.9	3.2
October 2001	1.3	1.3	2.6
December 2001	0.7	1.1	2.4
Forecasts for 2002:			
May 2001	2.5	2.7	3.9
October 2001	2.2	2.1	3.5
December 2001	1.0	0.8	2.4

SOURCE: World Economic Outlook, various issues.

boom was under way, with domestic drilling activity rising sharply. Such conditions have historically resulted in strong local job growth: 3.3 percent in 1994, 4.9 percent in 1997 and 4.5 percent in 1998. Another year of 4 percent job growth seemed achievable in 2001.

HOUSTON RUNS OUT OF GAS

As the economic outlook was revised downward, Houston continued to see positive job growth through the first half of the year because of its strong drilling activity. The half of Houston's economy that is dependent on national and global economic conditions slowed down; layoffs at Continental Airlines and the proposed Compaq Computer Corp. merger with Hewlett-Packard mirrored broad negative trends in travel and technology being felt elsewhere in the nation. But the energy-dependent half of Houston's economy continued to expand.

In the first half of 2001, drilling activity reached its highest level since 1986. But the oil field boom ended abruptly during the summer (*Figure 1*). After reaching nearly 1,300 working rigs in July, the rig count plummeted to 887 by year-end. The barrier that had kept Houston from recession gave way, and job growth slowed sharply.

Houston's job growth, which was running at a 2.8 percent annual rate in the second quarter, slipped to 1.6 percent in the third quarter and was slightly negative in October and November. The private sector drove Houston's employment growth in the first half of 2001 but became a drag on growth in the second half. If there is a silver lining, it is that Houston outperformed the United States in 2001. In the 12

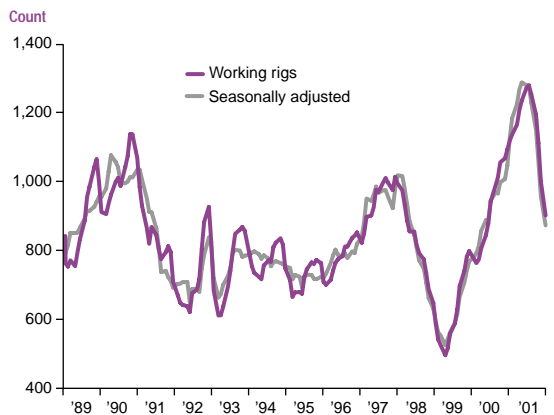
months leading up to November, Houston's job growth was 1.6 percent, compared with a national loss of 0.7 percent.

WHAT HAPPENED TO THE DRILLING BOOM?

Natural gas drives the U.S. rig count. In recent years, 80 percent or more of the rigs searching for hydrocarbons in the United States have been looking for gas, not oil. The end of the U.S. drilling boom resulted from a rapidly rising inventory of natural gas. Natural gas is typically moved by pipeline to the consuming region during the off-season and stored in nearby caverns, depleted gas fields or salt domes for use during the winter heating season. In 2001, storage grew 60 percent faster than in recent years. At the end of November, 3.1 trillion cubic feet of natural gas was in storage—the highest level since data have been kept. Even if a very cold winter materializes through the rest of the heating season, it seems likely that substantial amounts of gas will be left in storage when spring arrives. Large and growing inventories have exerted downward pressure on natural gas prices throughout 2001, and it seems likely they will continue to do so for much of 2002.

Where did all this gas come from? Some came from new production, a result of new supplies found by heightened exploration in 2001. And some was attributable to the slow economy. Production of fewer goods means less natural gas burned under boilers or used in industrial processes, and manufacturing has been the hardest hit part of the U.S. economy

Figure 1
Baker Hughes Rig Count
(Working Rigs, 1989 to Present)



SOURCE: Baker Hughes Inc.

throughout this recession. Unused gas is diverted into storage. While we don't have the data to divide the increase in storage between new supplies and a slow economy, the consensus places most of the blame on the latter.

Gas producers expected a price close to \$4 per thousand cubic feet in 2001. Instead, the price bounced between \$2 and \$2.50 for most of the second half. Producer cash flows were lower than expected, and cuts in drilling activity ensued. Without a brutally cold winter or a quick revival in U.S. industrial production, a collapse in gas prices remains a real threat.

Conditions in the oil fields may not be as bad as the decline in the domestic rig count would indicate, however. Independent producers led the U.S. rig count to the high levels of 2001, and their cuts have been responsible for the recent decline in activity. However, the major and supermajor companies now seem to be spending money after digesting a series of mergers during 2000 and much of 2001. Very large and risky projects—projects that only the majors can undertake—continue to move forward overseas and in the deep waters of the Gulf of Mexico, which saw record activity last year. The international rig count remains strong in areas important for oil service revenues, such as the North Sea, Brazil and west Africa. Day rates for offshore rigs, for example, have collapsed in the shallow regions of the Gulf of Mexico, but they remain at last summer's high levels in the North Sea, Africa, Brazil and the deep Gulf of Mexico. Most estimates of capital spending for oil and gas exploration in 2002 are down only about 20 percent from 2001, less than one might expect from the recent decline in domestic activity.

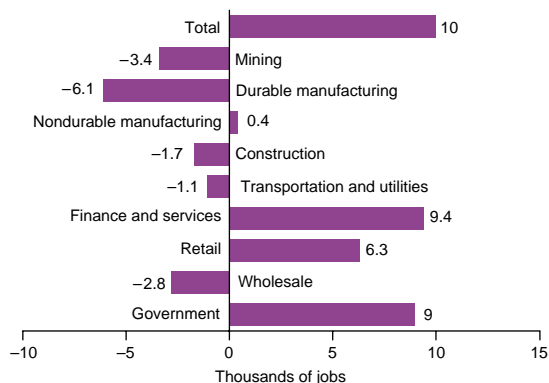
OUTLOOK FOR 2002

Just as the Houston economy was among the last to feel the effects of this recession, it may be among the last to pick back up. Strong U.S. growth will be the first and most important step in getting Houston growing. Strong U.S. growth would ignite world growth, which would lift global energy markets. This may be a lengthy process, and it may be 2003 before we see all the energy and nonenergy components of Houston's economy working together and driving strong job growth.

Even an optimistic outlook for 2002 does not bring much local job growth. Figure 2 shows overall growth in Houston of only about

Figure 2

2002 Houston Job Growth Slow Even with Quick Turnaround



SOURCE: Author's calculations.

10,000 jobs, or 0.5 percent, this year. This scenario makes some fairly optimistic assumptions: a first-quarter turnaround in the U.S. economy and improved job markets by the second quarter; a pickup in worldwide growth by midyear; and stabilization of the domestic rig count at 850–900 working rigs before picking up late in the year. Even these optimistic assumptions make it difficult to overcome the negative momentum of the second half of 2001. Mining, durable manufacturing, construction, transportation and utilities, and wholesale trade drive job losses. The bulk of the gains come from finance and services, retail and government.

What if these assumptions are too optimistic? What if the U.S. recovery is delayed or more sluggish than expected? Or what if domestic natural gas prices or world oil markets collapse? Clearly, such economic conditions would continue to dampen the Houston economy. But it is important to know that Houston has seen these circumstances before. In 1991–92, a national recession and sluggish recovery, combined with a warm winter, briefly pushed natural gas prices below \$1 per thousand cubic feet. The rig count collapsed in 1992 as a result, but the Houston economy did not. Total job growth was near zero for nearly 18 months, waiting for the economy and the rig count to recover, but there was no significant overall local job loss. Strong growth was a hallmark of Houston's economy through the rest of the decade.

Beige Book respondents reported that weak conditions persist in oil and gas exploration, as well as in petrochemicals and refining. Good news was confined to strong auto and home sales. Job growth has weakened steadily all year, and Houston enters 2002 with virtually no forward momentum in the local economy.

RETAIL AND AUTO SALES

Houston retailers reported mixed results over Christmas. Only furniture and food stores hit the level of sales achieved last year, while sporting goods were among the worst performers. Department stores did better than anticipated, but only with the help of expensive promotions that hurt margins.

Auto sales in November were 14 percent above sales last November, thanks largely to manufacturers' incentives. Year-to-date auto sales are running 1 percent ahead of last year's record. Dealers reported that sales remained solid in December.

CRUDE AND OIL PRODUCT MARKETS

The price of crude oil remained in a range of \$18-\$21 in recent weeks, with the bottom of the range marking a 29-month low. The dominant factor moving oil prices was OPEC's efforts to gain crude production cuts from non-OPEC producers such as Mexico, Norway and Russia. Non-OPEC producers finally agreed to cut half a million barrels of production on January 1, and OPEC joined in with another 1.5 million barrels. In response, the price of crude moved back to the top of its recent range. Cuts were driven by weak global oil demand, warm weather in the United States and rising crude inventories.

The second warmest November of the last 100 years pushed heating oil prices down sharply, and weaker than expected gasoline demand over the Thanksgiving holiday hurt gasoline prices. Refiners saw profit margins fall throughout recent weeks, particularly for Gulf Coast and East Coast refineries. Heating oil prices bounced back up at year-

end, as very cold weather returned to the United States.

PETROCHEMICALS

Petrochemical markets remained very weak, suffering from a combination of a lack of demand and overcapacity in the industry. Producers of plastics such as polystyrene, polyethylene and polyvinyl chloride have all reported price declines in recent weeks, citing weak demand as the primary reason. Profit margins remain very low.

NATURAL GAS

Natural gas inventories built to a record 3.1 trillion cubic feet in November, thanks to warm weather. With 40 percent of the heating season behind us, it is highly likely that spring will find substantial amounts of gas still in storage. The price briefly slipped under \$2 per thousand cubic feet in December, but with cold weather in January, it rallied back to \$2.50.

DRILLING AND OIL SERVICES

Warm weather, the buildup in natural gas and heating oil inventories, and OPEC's loosening grip on world oil prices have put downward pressure on drilling activity. The decline in the domestic rig count accelerated over the past eight weeks, falling from more than 1,000 to 887 at year-end. Key international markets and deep-water drilling in the Gulf remain strong, offsetting some weakness at home. Forecasters point to a rig count in the 750-900 range for 2002, with a 20 percent cut in industry capital spending from 2001 levels.

HOME SALES

Lower interest rates, rising apartment rents and the remaining momentum from solid job growth earlier in the year offset other gloomy economic news, and new home sales in Houston set a record for November, 3 percent above November 2000. Existing home sales did even better, up 25 percent from November 2000.

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