

# Houston Business A Perspective on the Houston Economy

# **Gulf Coast Expansion Waits for Upstream, Downstream Energy**

he petrochemical belt encompasses 11 metropolitan areas along the Gulf Coast, from Corpus Christi and Victoria in the west, through Houston, Galveston and Brazoria, to New Orleans in the east.1 These cities form an important part of the American industrial landscape, with highly distinctive features that set them apart from the rest of the country, as well as from inland cities in Texas and Louisiana.2

For example, oil and natural gas extraction is more important to the Gulf Coast region than elsewhere, especially in headquarters cities such as Houston and New Orleans and offshore operations centers such as Houma and Lafayette. Downstream refining and petrochemicals dominate the manufacturing base of all the cities, with Baton Rouge, Beaumont-Port Arthur, Brazoria, Corpus Christi and Lake Charles having little matching upstream activity. All the cities are ports, with strong water, pipeline and rail connections. Construction of petrochemical facilities plays a significant role in the regional business cycle.

The inland cities are different. Their manufacturing bases are typically built on industrial and electrical machinery, they serve as inland distribution points with strong wholesale activity, and they often have better developed banking and financial sectors.

The good news for the Gulf Coast is that over the 12-month period that ended in February, these cities outperformed their inland counterparts, the state of Texas and the United States. The bad news is that collective job growth along the Gulf Coast was only 0.3 percent, far below the 1.9 percent annual average over the past five years. It may be that U.S. job growth (-0.9 percent over 12 months),

The ongoing recovery in the U.S. economy has been an important first step in improving the Gulf Coast's economic performance, but energy has not picked up yet. The area is unlikely to return to strong job growth until energy industries are healthy and expanding again.

Table 1
Key Gulf Coast Economic Events

October 1996 Petrochemicals enter period of rapid expansion on Gulf Coast

December 1996 Dollar appreciates against foreign

currencies as global financial crisis looms

April 1997 Fixed mortgage rates peak at 8.1 percent,

begin decline

January 1998 Domestic drilling peaks at 1,018 working rigs

August 1998 Dollar peaks and begins decline as global

financial crisis eases

January 1999 Petrochemical construction announcements

begin prolonged decline

April 1999 Domestic drilling reaches trough of 526

working rigs

April 1999 Mortgage rates begin to rise from 6.9 percent

January 2000 Dollar again begins to appreciate rapidly

May 2000 Mortgage rates peak at 8.5 percent,

begin decline

March 2001 U.S. economy peaks, enters recession

May 2001 Drilling peaks at 1,288 working rigs

October 2001 Mortgage rates bottom out at 6.6 percent

SOURCES: Baker Hughes, Inc., Federal Reserve Bank of Atlanta, *Hydrocarbon Processing* and Federal Home Loan Bank

as well as Texas (-0.8) and inland city (-0.8) growth, barely stands on one side of the definition of recession and the Gulf Coast barely on the other.

This article examines the reasons for the slowdown on the Gulf Coast and the prospects for a return to faster growth. The national economic recovery that's under way is an important first step. But a revival of drilling and petrochemicals will lag U.S. expansion, and a weak global economy may hinder the region's export-oriented industries.

### RECENT HISTORY

A variety of factors gives the Gulf Coast economy a business cycle all its own. Oil exploration, petrochemical construction, and national and global economic conditions all matter. Table 1 is a time line of important turning points for these factors. Also included are key dates for rates charged for fixed-rate mortgages; lower interest rates were important in keeping housing strong over the past year, making the downturn milder than it might otherwise have been.

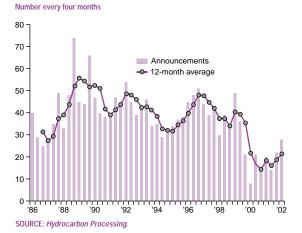
The period shown in Table 1 includes two slowdowns in the U.S. economy, the first being the growth recession that followed the Asian financial crisis of July 1997. The U.S. expansion stumbled only briefly, however, and the national economy resumed strong growth in the second half of 1998. The period was marked by a sharp reduction in interest rates and a collapse in worldwide commodity prices. Drilling activity fell nearly 50 percent from January 1998 to April 1999. Job growth in our 11 Gulf Coast cities (measured December to December) fell from 4.2 percent in 1997 to 2.9 percent in 1998 and 0.8 percent in 1999.

In 2000, the region staged a moderate recovery, with job growth returning to 1.8 percent as drilling activity experienced a major rebound through the last three quarters of 1999 and in 2000. The U.S. economy, however, weakened in the second half of 2000 and fell into recession the following spring. Lower interest rates played a major role in keeping auto, consumer durables and, especially, housing sales on course, despite the downturn. Drilling peaked in May 2001 and remains in decline.

In addition to the national economy, interest rates and drilling, two other factors are of special significance to the Gulf Coast economy: exports and petrochemical construction. Petrochemicals and industrial machinery, especially oil- and gas-related machinery, are the region's most important exports. Both of the recent slowdowns in the U.S. economy put the chief engine of global expansion out of commission, resulting in a slower world economy and a strong dollar as foreign savers and investors used the United States as a safe haven. The strong dollar and weak markets abroad hindered exports.

Petrochemical construction on the Gulf Coast remained strong during the global economic crisis of 1997–98, as healthy profits generated a string of new project announcements. But since early 1999, weak profits and growing overcapacity have sharply limited new construction plans (*Figure 1*). As large multiyear projects have come to an end, there have been no projects to replace them, leaving a big gap in regional construction activity. Shutting down one of these projects, with 1,500 to 2,000 workers at its peak, can immediately impact the construction statistics of a small metropolitan area. At least part of this gap has been filled, however, by construction elsewhere in

Figure 1
Gulf Coast Petrochemical Construction Announcements



the economy, stimulated by lower interest rates. For example, housing starts in our Gulf Coast cities surged 29 percent between February 2001 and February 2002. Total construction employment has been basically flat over the past 12 months, similar to what's occurred in the inland cities.

In April 1999, the Gulf Coast began recovering from the effects of the global financial crisis. The national economic expansion was strong, the dollar was falling against other currencies, the rig count had turned and was climbing from low levels, and the decline in petrochemical construction was just beginning. Yet the Gulf Coast achieved job growth of only 0.8 percent.

In April 2002, the situation was less favorable. The U.S. expansion has just begun, and its strength is undetermined. The dollar remains very strong, the rig count is still falling and petrochemical construction continues at low levels. Although economic conditions are expected to continue improving throughout the year, job growth on the Gulf Coast seems unlikely to outstrip that of 1999 and an acceleration is likely to be delayed until 2003.

# **ENERGY RECOVERY VITAL**

The slump in U.S. drilling activity has been the result of rapidly growing natural gas inventories. More than 80 percent of domestic drilling has been directed to natural gas in recent years, and growing inventories and falling prices throughout 2001 and in early 2002 were seen as a signal to cut back on drilling. An extraordinarily warm winter made the situation even worse. As of March, the Department of Energy estimated that working gas in storage was twice the level of a year earlier.

Over the past month, however, the price of natural gas has risen, going from \$2.20 per thousand cubic feet to \$3.50 in April. Late winter weather and good news about the pace of recovery in manufacturing initially drove these price increases. Many analysts remain skeptical that the fundamentals have improved enough to support prices over \$3, however, and oil service companies are reporting little sense that a turnaround in drilling activity is imminent.

On the surface, things are improving in commodity petrochemicals. Demand has definitely picked up, due to better economic fundamentals and extensive inventory restocking in the plastics supply chain. The question is how much demand remains after inventories have been refilled.

Because of industry overcapacity, profit margins for chemicals probably would have remained weak for most products anyway despite the increased demand. But rising oil and natural gas feedstock prices have eliminated any chance of improved profits in the short run. Continued overcapacity also limits the possibility of a surge in regional chemical construction until well into 2003.

The bottom line is that the ongoing recovery in the U.S. economy has been an important first step in improving the Gulf Coast's economic performance, but energy has not picked up yet. The area is unlikely to return to strong job growth until energy industries are healthy and expanding again.

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# **NOTES**

¹ The 11 metropolitan areas considered here and their 12-month growth rates are Baton Rouge (2.1), Beaumont–Port Arthur (-1.6), Brazoria (2.9), Corpus Christi (-0.7), Galveston (-0.3), Houma (2.7), Houston (0), Lafayette (1.4), Lake Charles (1.8), New Orleans (0.4) and Victoria (-1). ² For the comparisons made here, the inland cities are 15 metro areas in North and East Texas and northern Louisiana: Abilene, Alexandria, Austin–San Marcos, Bryan–College Station, Dallas, Fort Worth–Arlington, Killeen–Temple, Longview–Marshall, Monroe, Sherman–Denison, Shreveport–Bossier City, Texarkana, Tyler, Waco and Wichita Falls. For a comparison of the industrial structure of these cities with those on the Gulf Coast, see the May 1994 and March 1999 issues of *Houston Business*.

ouston job growth, weak since mid-2001, registered a small 12-month decline in February. The Houston Purchasing Managers Index remained below the break-even point of 50 in March for the sixth straight month, indicating continued mild contraction. The Beige Book survey pointed to weakness in many sectors, including retail sales, energy and real estate.

## **RETAIL AND AUTO SALES**

Retail sales remained poor through the spring season. Retailers had low expectations for the holidays, however, and were not caught with excessive inventory. Promotions have been limited. For the first time in a long time, good workers are plentiful in the job market.

Auto sales were off 7.8 percent in the first two months of the year; many of the incentives available last year may have stolen sales from 2002.

#### **OIL AND NATURAL GAS PRICES**

Crude oil prices have moved up from \$20 per barrel to \$26-\$27, partly due to news of the national economic recovery. But turmoil in the Middle East and Venezuela was the dominant factor, adding a temporary premium of \$4 or more per barrel.

Natural gas prices moved up to \$3.50 per thousand cubic feet, with cold weather and news of a stronger industrial sector playing a role, along with worries about a widespread nuclear plant shutdown. Like oil, the current spike in natural gas prices may not accurately reflect underlying fundamentals.

Drillers and oil service companies report no clear signs that a turn in the level of drilling activity is under way. Although higher oil and natural gas prices have generated more customer inquiries, most producers seem content to use the current increase in cash flow to pay down debt.

#### REFINING AND PETROCHEMICALS

Gasoline demand has been extremely strong, running at levels typical of late sum-

mer, while jet fuel demand remains well off last year's levels. Rising crude prices, strong demand and an improving economy have combined to push retail gasoline prices from \$1.15 to \$1.40 per gallon over a two-month period. Refiners' profit margins have improved moderately from the very low levels of this past winter.

Petrochemical demand has strengthened along with the economy, but the dominant factor in commodity petrochemicals remains too much capacity. Price increases are driven by specific outages, rising energy prices and other circumstances that don't reflect improved pricing power. More product is moving, which makes the purchasing manager feel better, but poor profits are not improving the outlook from the corporate suite.

#### **REAL ESTATE**

Single-family housing sales in Houston continue to be strong, with low interest rates providing the momentum. March sales of existing homes matched those of the same month last year, and although new home sales in the first quarter were off 5 percent from a year earlier, it was a very strong performance by historical standards.

The apartment market weakened early in the year, particularly for Class A properties, where occupancy is down 2 percentage points citywide. Layoffs and downsizing have hurt this market, especially in the downtown and midtown areas.

Office occupancy also fell significantly in the first quarter, with all classes contributing. However, overall rents were up slightly, with the Class A properties registering the best increase.

The retail market is described as remaining flat over the past year in terms of absorption, with a slight drop in rents in the first quarter. The opening of 12 new Kohl's stores helped last quarter, while many of the announced closings of Kmart and Albertson's stores will hurt second-quarter numbers.

The views expressed are those of the authors and do not necessarily reflect the positions of the Federal Reserve Bank of Dallas or the Federal Reserve System.