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Houston Business

A Perspective on the Houston Economy

Insights from Several Corners of the Houston Economy

This article offers an update on several key data series on Houston…. Taken together, these data provide insight into the growing stability now apparent in Houston's oil and manufacturing sectors. We are still waiting for a significant turnaround, however.

The June issue of *Houston Business* considered the outlook for employment growth in Houston, focusing on how the dramatic turnaround in oil prices that began last March has altered forecasts. OPEC members' high levels of compliance with last spring's production cuts pushed the price of West Texas Intermediate over $22 per barrel in late August. If this strong oil market holds, if the U.S. economy remains strong and if international markets continue to recover without further crisis, Houston could easily return to 3 percent or better employment growth in 2000.

This article offers an update on several key data series on Houston: the local purchasing managers index, petrochemical construction, consolidation of the oil-extraction industry into Houston and international construction markets. Taken together, these data provide insight into the growing stability now apparent in Houston's oil and manufacturing sectors. We are still waiting for a significant turnaround, however.

HOUSTON PURCHASING MANAGERS INDEX

The December 1998 issue of *Houston Business* took a detailed look at the Houston Purchasing Managers Index (PMI) and compared the Houston index with the U.S. PMI for manufacturing. Both indexes are computed in such a way that an index value over 50 indicates economic expansion and a value less than 50 points to contraction. Such diffusion indexes are typically good leading indicators, and the U.S. PMI is recognized as such.

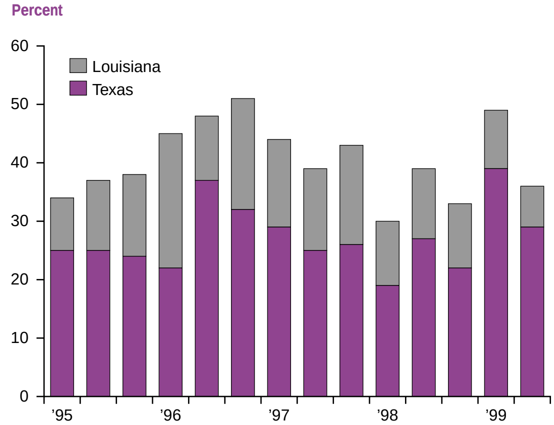
The local index, published by the Houston Purchasing Managers Association, includes eight series based on eight different questions posed to local purchasing managers; the U.S. PMI includes only five series. The U.S. index is seasonally adjusted, while the relatively new Houston index lacks enough data for seasonal adjustments. To compare the two indexes, Figure 1 shows both the Houston and U.S. indexes computed using only the five U.S. series (new orders, production, supplier deliveries, inventories and employment) and with no seasonal adjustment for either series. The figure shows that Houston and the United States both began to lose altitude in the wake of the Asian financial crisis in late 1997, but that Houston flew higher than the nation as a whole before the crisis and fell further afterward. Houston's peak index value was a roaring 73 in November 1997; its trough came in December 1998 and January 1999 at 40.7.

The recent rebound in Houston's PMI was timed precisely with the March revival in world oil markets. From values well under 50, indicating recessionary-type conditions in Houston mining and manufacturing, the March reading jumped to 48.7. Since March, Houston has averaged an index value of 51.8, generally pointing to a slow turnaround from the December/January lows. A very strong July reading of 55 was not sustained by an August value that fell back to 51.8. We are still waiting for oil prices to take hold and push Houston's oil-extraction and manufacturing sector back to strong growth.

Figure 1
Houston and U.S. Purchasing Managers Index, 1997–99

SOURCES: National Association of Purchasing Management, *Report on Business* (various issues); NAPM–Houston, *Business Report* (various issues).

Figure 2
New Petrochemical Construction Announcements in Texas and Louisiana, 1995–99



SOURCE: "HPI Construction Boxscore," *Hydrocarbon Processing Magazine* (various issues).

GULF COAST PETROCHEMICAL CONSTRUCTION

The headline in the May 26, 1999, issue of *Chemical Week* reads, "Chemical Investment Past Its Peak." The article states that "U.S. Gulf Coast chemical producers are weathering a cyclical trough…. In Texas and Louisiana… construction is proceeding [mostly] on projects announced before the industry's recent troubles." The pace of new construction announcements is off sharply in Texas, although there is some offset for the Houston area in that the limited Texas investment that has been announced has focused on Baytown and Bayport.

New petrochemical projects are typically driven by strong cash flow for the chemical producer. Figure 2 shows the number of new projects announced in Texas and Louisiana since 1995. The 1996 peak in announcements was driven by the unexpectedly strong growth of the U.S. economy, which caught fire in 1994 and drove very strong sales of new homes and autos. Many petrochemical producers found themselves short of capacity and with strong profits in hand that justified further expansion.

We regard the peak in late 1999 as a last hurrah, with fewer announcements and less construction on tap as we move into 2000. The July 1997 Asian financial crisis marked the point at which global petrochemical prices began to decline. Offsetting this decline initially—and protecting profit margins for much of 1998—was the fact that oil and natural gas feedstock prices were falling faster than chemical prices. Good profits and extraordinary domestic demand for chemicals—again a product of the strong U.S. economy—led to the 1999 round of investments.

The outlook is relatively bleak, however, as the current round of OPEC-driven increases in oil and natural gas prices has sharply pushed up the cost of doing business downstream. The Ship Channel has seen a string of price increases, but they have been a mostly futile effort to protect profit margins.

CONSOLIDATION OF OIL EXTRACTION INTO HOUSTON

The April 1996 issue of *Houston Business* examined the forces driving consolidation of the oil-extraction industry into Houston. The conclusions were twofold. First, the highly knowledge-intensive and technical segments of the oil industry are the most prone to consolidate. It is more necessary than ever to be plugged into the industry's knowledge loop, with the development of three-dimensional seismic techniques, horizontal drilling and subsea completion.

Second, consolidation is often a cost-driven process. Locating in the oil industry's chief hub gives access to a large and highly skilled labor force. Put an ad in the newspaper to hire an employee in Houston and there are 64,000 potential applicants. In New Orleans, in contrast, there are 13,000. Similarly, the choice of suppliers and contractors is wider and more competitive.

From 1987 to 1999, Houston's share of total oil-related employment in the United States rose steadily from 15.6 percent to 22.3 percent. The data for 1998 and 1999 show a particularly sharp surge in Houston's share—from 19.9 percent to 22.3 percent.

Houston's share increase from 1997 to 1999 (actually the first seven months of 1999) consists of two parts, one cyclical and one permanent. The cyclical part reflects the success and past benefits of consolidation into the Houston area. By becoming a focal point for oil headquarters, producers and technical operations, Houston has insulated itself from the immediate layoffs of drilling crews and other field operations. Both U.S. and Houston oil-extraction employment peaked in December 1997, and the U.S. employment has since shrunk 18.7 percent. In contrast, Houston employment has shrunk 8.7 percent.

Part of the jump to 22.3 percent in 1999 will prove permanent, however, although it is too early to tell how much. No doubt the tough times of 1997 and 1998 have brought a number of new companies to Houston. Moving here becomes a matter of long-term survival in pursuit of the cost savings discussed above.

Table 1
Global Billings for International Engineering and Construction

	1998 (billions of dollars)	1998 (percent change)	1997 (percent change)
Asia	33.8	–2.7	–18.1
Europe	30.7	3.9	–15.9
Middle East	14.3	36.6	–22.7
United States	12.7	–6.7	–6.0
Africa	10.6	19.0	–8.5
Latina America	11.2	9.9	19.0
Canada	3.0	34.7	–21.7

SOURCE: "Top Global Contractors," *Engineering News Record* (various issues).

INTERNATIONAL ENGINEERING AND CONSTRUCTION

The August 16 issue of *Engineering News Record* (ENR) contains a definitive assessment of the 1998 global market for engineering and construction. The international construction market increased by about 5 percent in 1998, following a significant contraction in 1997 in the wake of the Asian financial crisis. Asia continued to decline in 1998, but the Middle East and Africa experienced big gains. So did Latin America, led by a strong Brazilian market that was unfazed by the country's financial crisis. Table 1 contains a summary.

The May 1998 issue of *Houston Business* outlined the importance of the international engineering and construction business to Houston. Not all the contractors important to Houston responded to the ENR survey in 1997 and 1998, but those that did mostly saw revenues improve in 1998. U.S. contractors generally saw their market share jump from 18.8 percent in 1996 to 24.3 percent in 1998; global billings for the petroleum/petrochemical market that is so important to local contractors jumped 22 percent, to $30.2 billion. However, this oil-related work has reportedly begun to dry up in 1999, and Houston-based engineers are now being laid off in large numbers as companies await further projects. International financial stability and higher oil prices are both essential to get this piece of Houston's economy back on track.

Higher oil prices have yet to make a significant impact on the local economy, as producers are still unwilling to undertake risky or expensive drilling projects. The local Purchasing Managers Index does point to a bottoming out in local oil and manufacturing sectors. Job growth remains slow at under a 2 percent annual rate. Expectations for the coming year are rising, however, as Houston has moved back on the list of favored locations for real estate investors across the nation.

RETAIL SALES

The sales tax holiday provided a big boost for Houston retailers, with reported increases of 15 percent to 90 percent compared with the same weekend last year. After a relatively weak second quarter, department and specialty stores are now reporting third-quarter sales running at double-digit rates over last year. The question is whether the sales tax holiday simply borrowed from future sales. Some retailers argue that they had held off on earlier promotions to wait for this tax holiday. This should be a boon for the bottom line to the extent that it was a relatively inexpensive promotion that generated a big response.

ENERGY PRICES

Over the past six weeks, the price of crude oil has continued to move steadily upward, topping $22 per barrel in late August. Estimates are that OPEC made 95 percent of promised cuts in August, and the combination of production cuts and very strong gasoline demand has steadily pulled down crude inventories.

Gasoline inventories fell for nine straight weeks, before demand finally slowed at the end of the summer driving season. Inventories have returned to the “just-in-time” levels refiners tried to maintain before the 1997 Asian financial crisis. Since late June, retail gasoline prices have risen by 12 cents in Southwestern states, helping refiners’ margins significantly. Margins were nearly nonexistent in the second quarter, and even with the third-quarter improvements profits are relatively weak.

Natural gas prices moved up 70 cents in late July and August, mostly due to hot weather and potential threats to Gulf gas production from hurricanes. The spot price of gas at the Henry Hub briefly exceeded $3 per thousand cubic feet in late August.

DRILLING ACTIVITY

Domestic drilling activity continues to rise, moving up by 85 working rigs to 690 by early September. Oil-service companies reported that demand for their products remained fairly disappointing, however, because the new drilling was relatively shallow and located onshore. Also, the lucrative foreign work continued to decline along with the international rig count. Oil-directed drilling and well workovers have not improved at all, despite the oil price increases.

PETROCHEMICALS

The extraordinary series of outages that took more than 10 percent of ethylene capacity off the market earlier this year continues to keep ethylene and polyethylene inventories low. These shortages have spilled over into polypropylene, which sometimes can be substituted for polyethylene, and a string of price increases has been pushed through for all these products. The price increases are not expected to last past the first of the year as inventories rebuild and new capacity comes on line.

Virtually all plastics intermediates have been trying to boost prices to pass through the cost of rising energy feedstocks, but with limited success outside the ethylene chain. The industry is moving through a cyclical low, and profits are generally under growing pressure.

FINANCIAL

Lending remains stable to strong, with local auto lending setting records almost monthly. Rate hikes were cited as only slowing a rising tide of loan demand. Deposit growth remains stable, although existing investment portfolios, not growing deposits, are funding most new lending.

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