HOUSTON BUSINESS BRIEFS

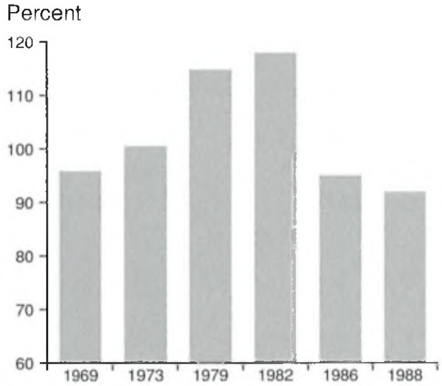
Real Per Capita Income Growth In Houston 1969 to 1988

The best measure of regional economic welfare available to us is real per capita personal income. In this article, we track income growth in Houston from 1969 to 1988, looking with particular care at the city's performance during the oil recession of the 1980s. The basic story is familiar—sustained and rapid growth from the late 1960s to 1982, followed by a precipitous decline and partial recovery. The per capita income data faithfully retell the saga. The data also provide some interesting insights into the boom and bust cycle, as well as Houston's economic recovery since 1986.

Table 1 summarizes trends in Houston's real per capita income and provides income growth data for the average U.S. metropolitan area. The period from 1969 to 1982 was one of virtually uninterrupted expansion in Houston, and the period from 1982 to 1988 marked the oil bust (through 1986) and partial recovery (1986–88). Because of the lag with which metropolitan income figures are released, 1988 is the latest year for which data are available.

In 1969, Houston's per capita income was 96 percent of that found in the typical U.S. metropolitan area. By 1982, per capita income had risen to 118 percent of the U.S. metropolitan average, as shown in Table 1 and Figure 1. Six years later in 1988, per capita income fell back to only 92 percent of the U.S. metropolitan level. The lower half of Table 1,

Figure 1
Per Capita Personal Income for Houston Relative to the U.S. Metropolitan Average



which shows growth rates for total income, population and per capital income, indicates that from 1982 to 1986 the *difference* between the growth rates for per capita income in Houston and in the typical U.S. metropolitan area was a remarkable –5.4 percent per year. The extent of the difference stemmed not just from Houston's decline but also from its timing. Houston's downturn occurred in a period of rapid national expansion after the 1981–82 recession.

Definitions

Personal income consists of earning, property income and transfer payments. *Earnings* are wages, salaries, proprietor's income and other labor income, such as employer contributions to private pension funds. *Property income* consists of dividends, rent and interest. *Transfers* are payments to individuals for which no current services are rendered. Social Security, unemployment compensation, railroad and military retirement and Medicare payments are examples of transfers. Each component can be divided by total current population to place it on a per capita basis. We eliminate general inflationary trends and convert each component to constant 1982 dollars by using the Personal Consumption Expenditure deflator from the National Income and Product Accounts.

Earnings per capita is further broken down by using this simple identity.

$$\frac{\text{Earnings}}{\text{Population}} = \frac{\text{Earnings}}{\text{Employment}} \times \frac{\text{Employment}}{\text{Population}}$$

The first term is the *earnings rate* or, more simply, the average annual wage or salary per employed worker. The second term is the *employment to population ratio.* This measure has increased steadily since 1969 because of long-term trends, such as the increase in the number of working women and the baby boom generation's entry into the labor force. This ratio also rises and falls cyclically with the availability of jobs.

The earnings rate is an average across all industries in the region. In Houston, the annual wage or salary is significantly higher in oil and gas extraction than, for example, in

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retail trade. Other things being equal, the expansion and contraction of high- and low-wage industries will affect the average Houston earnings rate. Thus, changes in the *industry mix* affect the growth of the earnings rate. A shift of employment into high-wage industries will cause income to grow faster; a shift to low-wage industries will slow income growth. Of course, while the mix of industries in a region changes, other factors do not stay equal. All the other changes that affect growth in wages and salaries earned per employee are called the *local effect.* This term encompasses the changes in wage and salary rates that may result from local structural factors, such as the age and education of the work force, or from cyclical events that affect the supply and demand for local labor.

Table 2 neatly summarizes this lengthy list of terms. The top line of the table shows the average annual growth rate for real per capita income in Houston. For example, the first column under 1969–82 shows that real per capital income grew 3.2 percent per year. This amount reflects growth of earnings per capita (3.2 percent), property income per capita (0 percent) and transfers per capita (0.1 percent). Earnings per capita can be further divided into growth in the earnings rate (1.4 percent) and the employment–population ratio (1.8). The expansion of the earnings rate benefited from a favorable industry mix (0.3 percent) and a positive local effect (1.1). Apart from rounding errors, all the percentage-point contributions equal the overall growth rate of real per capita income.

Table 1
Long-Term Trends in Houston's Real Per Capita Income

(Constant 1982 Dollars)

	1969	1982	1986	1988
Personal Income (billions)	17.7	44.4	42.2	42.2
Population (thousands)	1,860	3,082	3,257	3,247
Per Capita Income				
Houston	9,539	14,406	12,942	13,006
U.S. Metropolitan Area	9,954	12,216	13,624	14,154
Per Capita Ratio: Houston to U.S. Metropolitan Area	0.96	1.18	0.95	0.92

Annual Growth Rates

(Percent)

	1969–82	1982–88	1982–86	1986–88
Personal Income	7.1	–0.8	–1.3	0.1
Population	3.9	0.8	1.4	–0.2
Per Capita Income				
Houston	3.2	–1.7	–2.7	0.3
U.S. Metropolitan Area	1.6	2.5	2.7	1.9
Difference: Houston minus U.S. Metropolitan Area	1.6	–4.2	–5.4	–2.2

Income Growth in Houston

The first two columns of Table 2 contain our long-run results for Houston from 1969 to 1982 and from 1982 to 1988. As indicated earlier, the years leading up to 1982 brought strong expansion. Improvement in earnings per capita account for most of the growth during this period, with both earnings per worker and the employment–population ratio making solid positive contributions.

The lower half of Table 2 shows differences between Houston's results and similar calculations for the typical U.S. metropolitan area. The figures represent each component's percentage-point contribution to income growth in Houston minus its contribution in the typical U.S. metropolitan area. From 1969 to 1982, Houston's average annual growth rate for real per capita income was twice that of other U.S. metropolitan areas. Real growth in Houston's earnings rate exceeded that in other cities by 1.6 percent per year. Houston shared national trends that increased the employment–population ratio, but the city's local contribution to income growth was more than double the effect of this ratio in the typical U.S. metropolitan area.

In contrast to the previous 12 years, 1982 to 1988 was a period of rapid decline in Houston, with real per capital income falling at an average rate of 1.7 percent per year. Once more, changes in earnings dominated economic trends. Slack labor markets, as indicated by the employment–population ratio, pushed income down at a rate of 1.4 percent per year. Changes in local earnings rates also had a negative impact (–1.4 percent), but these decreases would have been worse had they not been moderated by a positive industry mix effect (0.8 percent). This positive mix effect is surprising because the loss of highly compensated jobs in the oil and gas industry was a major concern during Houston's downturn. These data indicate that such losses did not skew Houston's job distribution toward a low-wage mix; in fact, just the opposite seems to have occurred. The industry classifications used here are highly aggregated (slightly less aggregated than a one-digit Standard Industrial Classification definition), but the results are quite consistent with Houston's recent and rapid growth in business, medical, engineering and other professional services. All these service industries have brought highly compensated white collar jobs to the city.

From 1982 to 1988, Houston's absolute losses in income look bad enough, but this period appears truly dismal in comparison to other U.S. metropolitan areas. As Houston was losing jobs and real earnings were falling, incomes grew rapidly throughout the nation after the 1981–82 recession. Overall, Houston fell behind other metropolitan areas at a rate of –4.2 percent each year.

Table 2 also shows Houston's decline into recession from 1982 to 1986 and the brief period of recovery for which data are available, 1986 to 1988. The initial stages of Houston's recovery showed little in the way of overall gains in per capita income, with growth only 0.3 percent per year. Instead, it was a period of stabilization as the city managed to pull out of its economic nose dive.

The big factor in the city's turnaround was solid growth in employment. Employment gains, represented in these data through the employment–population ratio, added 1.6 percent per year to per capita income growth. Improvements in the labor market were not strong enough to stop the fall of real earnings rates, but these rates would have declined much more without favorable changes in industry mix that added 1.1 percent to income growth. Property income (0.3 percent) and transfers (0.1 percent) made small contributions.

Conclusions

If real per capita income is the best gauge of regional economic health, between 1969 and 1986 Houston covered the gamut from robust fitness to critical condition. The data make distressingly clear the depths of the recession suffered in Houston and the extent to which the city lost ground to the rest of the nation.

As more data become available on the recovery that continues in Houston, a point of great interest will be seeing if (and when) the real annual earnings rate begins to rise. We know employment growth continued strongly in Houston in 1989 and 1990, and industry mix changes will likely remain a positive force. The city shows some signs of having a tight market for selected skills, such as radio advertisements for engineers, construction workers and professional temporaries. But broad labor shortages of the kind that lead to higher wages and salaries are not apparent. As economic conditions remain slow in much of the rest of Texas and the surrounding Southwestern states, Houston may continue to have little difficulty attracting workers for growing local job opportunities. This situation puts little upward pressure on pay scales. ❖

Table 2
Annual Percentage Change in Components of Real Per Capita Personal Income — Houston, 1969–88, Constant 1982 Dollars

	1969–82	1982–88	1982–86	1986–88
Per Capita Income	3.2	–1.7	–2.7	0.3
Earnings Per Capita	3.2	–2.8	–4.2	–0.1
Earnings Rate	1.4	–1.4	–1.2	–1.8
Industry Mix	0.3	0.8	0.6	1.1
Local Effect	1.1	–2.2	–1.8	–2.8
Employment–Population Ratio	1.8	–1.4	–2.9	1.6
Property Income Per Capita	0	0.7	0.8	0.3
Transfers Per Capita	0.1	0.4	0.6	0.1

Difference Between Houston and U.S. Metropolitan Growth

	1969–82	1982–88	1982–86	1986–88
Per Capita Income	1.6	–4.2	–5.4	–1.7
Earnings Per Capita	2.5	–5.5	–7.2	–1.9
Earnings Rate	1.5	–2.3	–2.3	–2.2
Industry Mix	0.4	–0.1	–0.5	0.6
Local Effect	1.1	–2.2	–1.8	–2.8
Employment–Population Ratio	1.0	–3.2	–4.8	0
Property Income Per Capita	–0.5	0.7	0.9	0.2
Transfers Per Capita	–0.4	0.7	0.8	0.4

NOTE: Percentage points may not add to relevant totals because of rounding errors.

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Unlike other regions that are experiencing an economic downturn, Houston's economy shows few, if any, areas of real weakness. Houston has not suffered setbacks such as New England's high-technology slowdown and banking problems, Fort Worth's defense plant closings or California's real estate problems. Houston is experiencing no significant negative shocks from overbuilding or speculative excesses. Conservative business practices that were imposed by eight years of steep recession and long recovery are paying dividends by limiting reductions necessary during a period of slower national growth.

Employment growth in Houston during 1988 averaged 4.4 percent, and for 1989 the figure was 3.7 percent. Growth slowed sharply in the fourth quarter of 1990, and Houston will finish 1990 with growth of only 2.6 percent. Most analysts who forecast growth for the Houston area in 1991 place employment growth in the 2.2 percent to 2.7 percent range. Although this prediction calls for the slowest growth since Houston's recovery began in 1987, growth in this range would contrast the decline anticipated in much of the rest of the nation.

Retail Sales

Retailers in Houston had a stronger Christmas season than in the nation as a whole. Despite Houston's favorable results, the city's shopping season must be regarded as disappointing in terms of expectations. One large department store chain placed Houston number one in the nation in terms of percentage increase over 1989, and most chains had comfortable increases over the 1989 season. Discounters and specialty stores (the more upscale the better) did better than the mass marketers in the middle range. Retailers heavily discounted merchandise, but most stores kept profits in the black. Promotions also kept inventories under control as retailers entered the spring season.

Auto sales in November were up 18 percent. Very strong figures for October and November helped offset terrible sales in August and September, and 1990 should show a 4-percent annual increase for car and truck sales in Houston. These results are similar to the previous two years.

Oil and Gas Exploration and Development

By the end of 1990, the Texas rig count was up 34 percent for the year, with most of the increase spurred by horizontal drilling in Texas Railroad Commission Districts 1 and 3. Offshore drilling continues to decline, hurt by low natural gas prices. Higher oil prices since August have translated into increases of about 15 percent for 1991 exploration budgets, and at least one respondent to the Houston Beige Book survey expects a similar increase in the U.S. rig count. Some constraints in both personnel and equipment may hinder this expansion. Upward pressure on wages is significant.

Petrochemicals and Refining

After strong production to rebuild inventories following the invasion of Kuwait, the demand for petrochemicals flattened during the fourth quarter. Until recently, the industry passed through cost increases remarkably well, especially given the size of the increases felt by producers using oil feedstocks. Margins are now shrinking. Export sales, strong following Aug. 2, reportedly tapered off some in recent weeks.

Refiners find themselves in a position similar to petrochemical producers, in that they have managed to maintain reasonable margins even as feedstock prices have soared and demand has slowed. Unpredictable gyrations in oil markets in January 1991, driven by rumors of war, remain the primary operating problem.

Wood and Paper Products

Demand for paperboard, linerboard and even pulp exhibit strong demand. Bleachboard is in very tight supply because some producers, who inaccurately anticipated demand conditions, shut down for maintenance in the fourth quarter. Producers' inventories are thin for most paper products, as are customers' inventories.

One respondent described the market for building products as "simply terrible." Proximity to the strong Houston construction market has kept sales up, but pricing (based more on national economic conditions) is way down. Stronger sales have not come close to offsetting the lower prices. Respondents claim there was a brief bulge in inventories in the fourth quarter, but that is now behind them.

Real Estate

Real estate is another area of surprising strength in Houston. Sales of existing housing remain very strong. Apartment occupancy is high, and rents are rising sharply. Demand for starter homes has picked up sharply due in part to a strong apartment market, and many neighborhoods that Houston's recovery bypassed until recently are now feeling double-digit price increases. Both big builders and custom builders describe new home construction as *slower*, but the market remains fundamentally strong.

Speculative investment in Houston real estate diminished, and several respondents still describe financing as a significant barrier. Those lenders still expressing any interest in real estate investments are highly selective. Houston apartment properties are still selling briskly, but sources indicate that most of the current closings are based on financing secured some months ago. ❖

For more information, call Bill Gilmer at (713) 652–1546. For a copy of this publication, write to

Bill Gilmer
Houston Branch
Federal Reserve Bank of Dallas
P.O. Box 2578
Houston, Texas 77252