



THE 1997 TEXAS ECONOMY BEATS EXPECTATIONS

SURPRISING STRENGTH IN the national economy and the energy sector eclipsed any weaknesses in the Texas economy, leading to another year of vigorous growth for the state. Texas gross state product grew at a robust 7.4 percent annual rate in the first half of 1997, despite labor market tightness and slower growth in high-tech manufacturing and exports to Mexico. Energy sector expansion and a pickup in national demand fed strong growth in the construction, financial, business services and distribution sectors.

INSIDE

Regional Roundup

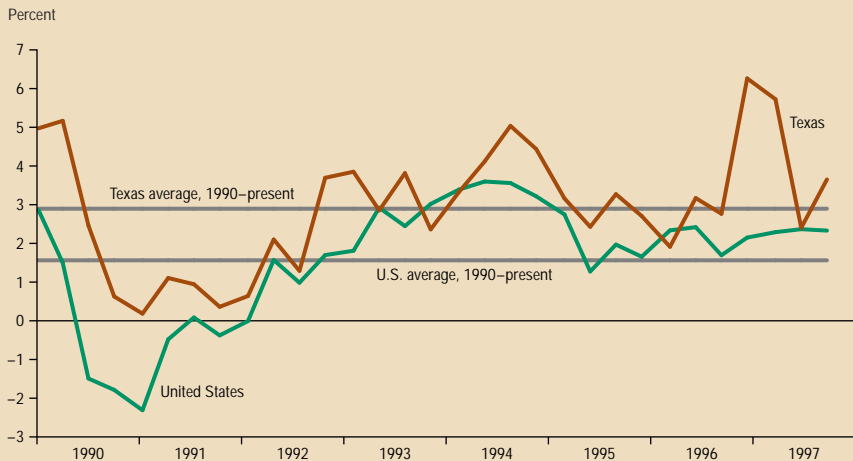
Counting Our Chickens

The Asian Meltdown

National Economic Growth Spurred Texas' Growth

The strength of the U.S. economy was a surprise to many. At the end of 1996, the consensus among analysts was 2.2 percent growth in 1997.¹ In contrast, GDP growth through the third quarter averaged nearly 4 percent, providing a positive boost to the Texas economy.

Chart 1 Employment Growth Was Robust in 1997



Texas employment grew at a 3.6 percent annual rate in 1997, quite a bit better than the nation's 2.4 percent growth over the same period (*Chart 1*).² Texas' employment growth was fairly broad-based. In 1997, all private sectors grew above trend; *Chart 2* shows the difference between 1997 employment growth and the average rate of growth in the 1990s for each sector.

Energy Sector Boosted 1997 Growth

The energy sector, one of the hottest sectors in 1997, helped to push Texas' growth rate ahead of the nation's. Relatively high oil and natural gas prices over the past year led to increased activity in the oil fields. Employment in oil and gas extraction increased at a 5.4 percent annual rate in 1997, the best growth since 1990.

The health of the energy industry has always been closely linked to strong oil prices. Although this still holds, improvements in technology have changed the definition of "strong oil prices" in recent years. New technologies such as three-dimensional seismic imaging have lowered costs of exploration and development while expanding possibilities for new fields once deemed too risky to explore. In fact, oil companies have seen their costs halved in the past 10 years, making it possible for companies to earn profits at much lower oil prices than in the past. With oil prices averag-

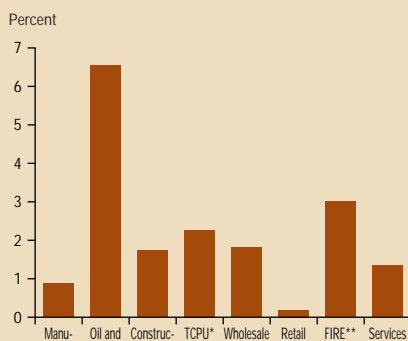
ing near \$21 per barrel, the oil industry did very well in 1997 (see page 7, "Houston Heats Up").

Not Much Upward Risk for Oil Prices

After spending much of the year in the lofty \$20+ range, oil prices fell to near \$18 per barrel in December, the lowest price since the end of 1995. Warm weather, the easing of tensions with Iraq and larger OPEC quotas all exerted downward pressure on oil prices. At their November meeting, OPEC decided to increase production quotas, which had been unchanged since 1993, from 25 million to 27.5 million barrels per

Chart 2 Growth Was Broad-Based in 1997

Difference Between 1997 Employment Growth and Trend

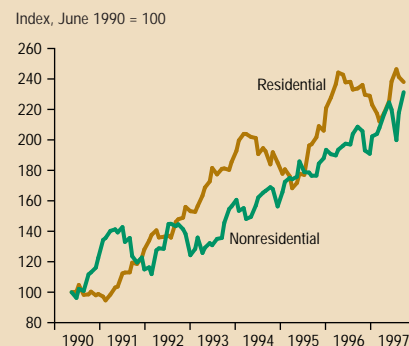


* Transportation, communications and public utilities.
** Finance, insurance and real estate.

day. However, it is doubtful the quota increase will greatly affect oil prices because OPEC members had been over-producing quotas, with OPEC production near 28 million barrels per day in August 1997. In December, the Iraqi government and the United Nations reached an agreement about Iraqi oil sales. Additions of Iraqi oil to the market will put further downward pressure on prices. Another factor that weakened prices was the relatively warm December weather, due to El Niño, which may continue for the whole heating season. All in all, a price of \$18-\$19 per barrel would be a safe bet for West Texas Intermediate crude in 1998. The futures market is currently saying much the same, predicting prices under \$19 per barrel for the next several years.

Chart 3 The Construction Sector Continued Its Strong Rate of Growth in 1997

Construction Contract Values

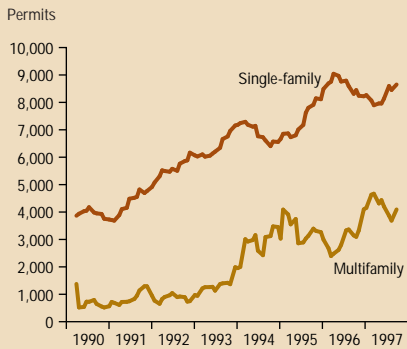


Construction Followed Suit

The construction sector was another bright spot in 1997. Since the banner year of 1994, analysts have been surprised year after year by better-than-expected levels of construction sector activity. 1997 was no exception.

The industrial and office markets continued to be strong, as *Chart 3* illustrates. High levels of absorption in the industrial market quelled analysts' mid-year fears of overbuilding. Office markets across the state showed improvement. The office market was especially robust in the Dallas/Fort Worth metroplex, with higher rents and lower vacancy rates. In

Chart 4
The Residential Sector Continued to Grow



Houston, the office market improved so much that plans were announced for the first new office tower downtown since 1986. Austin and San Antonio office markets also saw increasing occupancy rates in 1997.

The housing market was healthy as well. In 1997, residential contract values neared their 1996 peak. Single-family permits, although still very high, came down from their 1996 highs (*Chart 4*). Annual housing-price movements through the third quarter of 1997 were mixed. Median new home prices fell because of increased sales of lower-priced starter homes. Median existing home prices rose between 6 percent and 9 percent in Austin, Dallas and Houston. For the state as a whole, the House Price Index, an index of same-home repeat sales, shows that Texas existing home prices grew 3.2 percent. Contacts reported hectic demand in the existing home market in the last part of 1997 and expect strong growth in the single-family sector at least until the end of 1999.

Total Exports Surged Despite Slower Growth in Mexican Exports

Mexico is Texas' biggest trading partner, receiving roughly 40 percent of Texas exports. *Chart 5* shows that Texas export growth to Mexico slowed to a 6 percent annual rate in the first half of 1997, quite a bit below the 14 percent average growth seen since 1987. Nonetheless, South Texas saw strong growth in the trade and service sectors as a

result of Mexico's continued recovery (see page 6, "Strong Economic Activity in Austin and San Antonio" and "Steadier Growth Ahead for El Paso"). Vigorous growth in exports to other nations, such as Canada and Singapore, caused total Texas export growth to pick up speed in '97, with an annualized 12 percent increase in the first half of the year, compared with 7 percent growth in '96.

Real Mexican GDP grew 7 percent through the third quarter of 1997. The Dallas Fed's leading index for Mexico suggests continued growth but no fireworks (*Chart 6*). Most economists expect a deceleration of the Mexican economy to about 5 percent growth in 1998.

Distribution Sector Expanded

The distribution sector reflected the strength of the Texas and NAFTA economies in 1997. Transportation sector employment grew at a 5.3 percent annual rate last year, with trucking and warehousing growing by 6.1 percent (see page 6, "D/FW Metroplex Leads the State").

The extraordinary levels of business activity in the state also contributed to Union Pacific rail bottlenecks. Rail shipping delays caused headaches for manufacturers of chemicals, steel, autos, lumber, cement and brick. Chemical firms reported production cuts as a result of the slow return of their railcars, which double as storage containers for some products. In addition, shipping

Chart 5
Export Growth to Mexico Slowed

Real Seasonally Adjusted Texas Exports

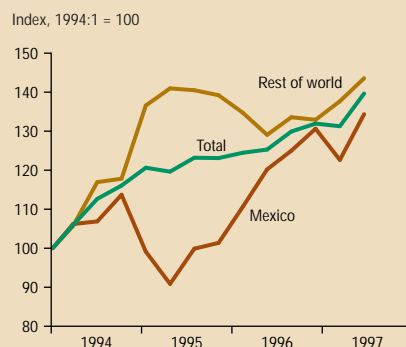
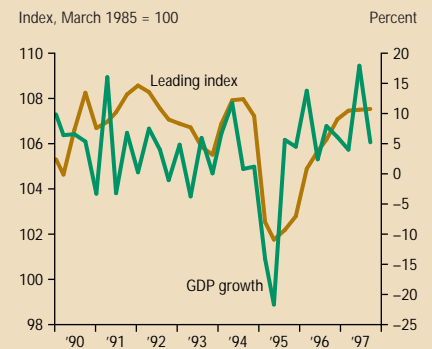


Chart 6
The Mexican Leading Index Suggests Continued Growth



delays caused grain crops to spoil, hurting farmers and agricultural lenders (see page 7, "Slower Growth Outside Major Metropolitan Texas").

Many contacts reported using alternative shipping methods, such as truck and air, but at as much as triple the rail shipment cost. Truck and air cargo shipments going through Laredo jumped by a third, relative to rail shipments, from August to October. However, competition in the product markets prevented companies from passing the higher shipping costs through to selling prices.

Although the distribution sector may see its expansion tempered by slower growth in the U.S. economy, it should continue to be a plus for the Texas economy.

High-Tech Manufacturing Growth Didn't Keep Pace

Chart 7 shows that overall high-tech manufacturing growth slowed in 1997. Nevertheless, the services side of high-tech saw very strong employment growth. Software companies and computer-related services are all part of the business services sector, which surged an annualized 12.5 percent in 1997.

The Dallas Fed's December Beige Book reported that growth in sales of electronic components, telecommunications equipment and semiconductors slowed because concerns about weak Asian demand caused customers to trim inventories. Contacts also reported concerns that weak Asian currencies will

put downward pressure on semiconductor and component prices.

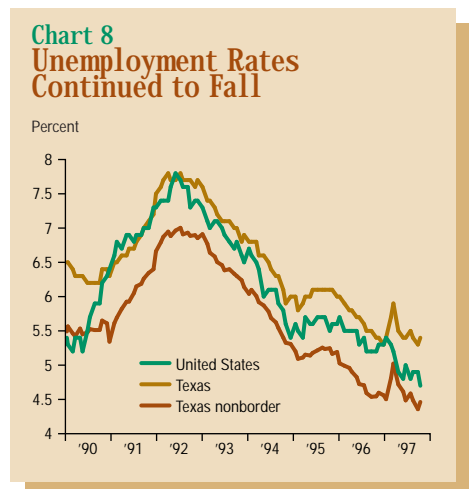
Given the Southeast Asian uncertainty and the weakening in national demand expected in '98, high-tech manufacturing employment growth is expected to be sluggish for another year. High-tech services are less vulnerable to the Southeast Asian problems but may also see slightly slower—though still robust—growth, should national demand slow.

Despite a bout with the "Asian flu," Texas should continue to see fairly robust growth in 1998, albeit somewhat slower than in 1997.

Labor Market Tightness Continued Throughout 1997 and Does Not Show Signs of Easing

The Dallas Fed Beige Book reported labor market tightness throughout 1997, for both low- and high-skilled workers. Despite last year's strong employment growth, it is possible that labor market tightness constrained expansion nonetheless. Chart 8 shows that unemployment rates fell further in 1997, especially in nonborder areas where rates remain below the U.S. average. Furthermore, the state seems to be getting less relief from domestic migration than in the past. Seven percent fewer people migrated to Texas in 1997. Of the 150,000 migrants, two-thirds were international. If the national economy continues to be healthy, no increase in migration is expected.

The labor market was especially tight in the high-tech and energy industries. Many high-tech companies in the region report hundreds of high-tech jobs



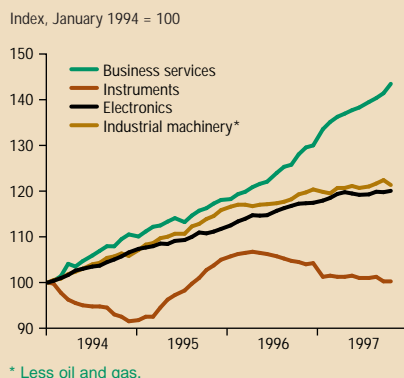
are going vacant for lack of skilled workers. Austin companies recruited nationwide, traveling as far as Boston to recruit software engineers.³ Some companies hired outside the United States, while still others recruited next door, luring away workers from competitors by offering recruiting bonuses to technicians and factory workers. Top software engineer salaries soared by as much as \$20,000 in one year, with the typical increase being \$7,000–\$10,000.⁴ In the energy industry, companies went to England to recruit machinists and to India to hire welders. Geologists and petroleum engineers were in high demand, with reports of \$50,000 three-year retention bonuses.

Labor market tightness did not translate into higher Texas wages. Manufacturing wage growth slowed to 1.7 percent in 1997 from 2.3 percent in 1996. One reason may be that the bonuses and stock options that employees receive are not reflected in the wage data. Personal income data (which would reflect some of these nonwage payments) grew quite a bit faster at 7.6 percent in 1997, while 1996 growth was 6.5 percent.

In response to worker shortages, many companies, besides stepping up recruitment programs, are also taking a more active role in training future workers. To increase the supply of engineers, a number of telecommunications companies such as Motorola, Southwestern Bell Communications Technology Resources Inc., AT&T and Texas Instruments have joined forces with UT Austin, Texas A&M, Texas Tech and UT Dallas to form the Texas Telecommuni-

Chart 7

High-Tech Manufacturing Employment Growth Was Flat



cations Consortium (TxTEC).⁵ TxTEC will support research and educational programs in leading-edge technology. Such training programs may help alleviate some of the hiring problems, as could slower growth in the national economy. However, with a continued slowdown in migration to the state, the labor market tightness is not expected to unwind much next year.

Southeast Asia Is a Downside Risk

The turmoil in Southeast Asia and the extent to which it will affect Texas is a significant cloud on the horizon. Chart 9 shows the growth of real Texas exports. In the second quarter of 1997, Texas sent only 16 percent of its total exports to the PACNIC countries (Korea, Singapore, Taiwan, China and Hong Kong) and Japan. This is somewhat less than the 23 percent share for the nation (*Chart 10*). These countries together accounted for about 7 percent of the growth in Texas exports last year.

From an export perspective, the Texas industries most vulnerable to a downturn in Southeast Asia are chemicals, electronic machinery, industrial machinery and agriculture. In December, contacts reported expectations that weak Asian currencies would put downward pressure on semiconductor and component prices, and sales and profits would be hurt in the first quarter of '98 as demand from Asian countries declines. Companies that manufacture products in the United States to sell in Southeast Asia might be hurt the most in the short run. If the problems result

Chart 9
Real Texas Exports

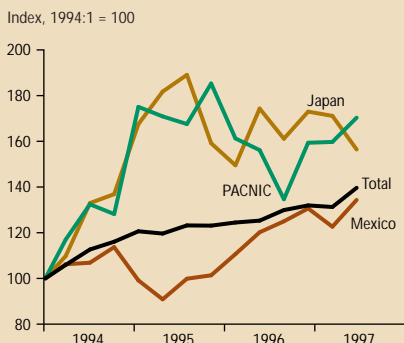
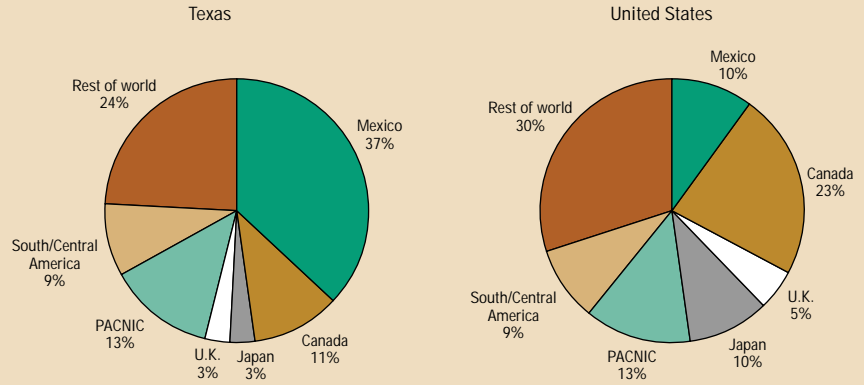


Chart 10
Exports by Country and Region, 1997:2



in a decline in capital expenditures in Asia, capacity growth in that region will slow and U.S. manufacturers may benefit in the long run through increased market share.

Petrochemical producers were also concerned about declining demand in Asian markets and increases in Asian exports to the U.S. market. The austerity measures imposed by the World Bank require the cancellation of several petrochemical projects in Southeast Asia, which has already adversely affected some Texas engineering firms. In the long run though, this could mean greater market share for Texas petrochemical producers.

Texas Economic Growth Should Be Somewhat Slower in 1998

The Texas economy should continue to grow at a relatively strong but somewhat slower rate than in 1997—around 3 percent in 1998. The main factors for slower growth are a slower national economy, a slower Mexican economy, lower oil prices and labor market tightness. The turmoil in Southeast Asia is a downside risk to this forecast.

In contrast to near 4 percent growth in 1997, the U.S. economy is expected to grow 2 percent to 2.5 percent in 1998. This slower growth will give less of a lift to the Texas economy in 1998. Similarly, the Mexican economy is also expected to grow at a slower rate than it did this year. Thus, the growth in Texas'

exports to Mexico should not increase much.

Barring political problems in the Middle East, the risk to oil prices is only on the downside. The growth rate of the oil and gas extraction industry should be somewhat less than 1997's.

Labor market tightness is expected to continue into 1998, especially in the high-tech and energy sectors. If the national economy slows, it will help alleviate some of the labor market problems, but only slightly.

Although it is too early to tell how the Southeast Asian turmoil will play out, the region may be adversely affected in the short run. Despite a bout with the "Asian flu," Texas should continue to see fairly robust growth in 1998, albeit somewhat slower than in 1997.

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Notes

- ¹ Blue Chip consensus forecast at year-end 1996.
- ² All 1997 employment numbers are annualized rates over the first 10 months of the year.
- ³ See Janin Friend, "Guerrilla Recruiting," *Texas Business*, November/December 1997.
- ⁴ For more detailed information on the growth of Texas' high-tech industry, see D'Ann M. Petersen and Michelle Burchfiel, "Silicon Prairie, How High Tech Is Redefining Texas' Economy," Federal Reserve Bank of Dallas *Southwest Economy*, Issue 3, 1997.
- ⁵ For more on this collaboration, see Bridget Metzger, "Technotalent, Higher Education Joins Industry to Collaborate on the Future of the Telecommunications Industry in Texas," *Texas Business*, November/December 1997.