THE TEXAS ECONOMY slowed dramatically in 1998. Total nonfarm employment grew at only a 3.3-percent annual rate in the first 11 months of the year, after very strong 4.6-percent growth in 1997. Furthermore, as Chart 1 illustrates, Texas employment growth slowed throughout the year. Total nonfarm employment grew at a 4.1-percent annual rate in the first half of 1998, at a 2.6-percent annual rate in the third quarter and at only a 2-percent annual rate in the fourth quarter (October and November).

Although all major sectors of the economy slowed from the torrid pace of 1997, weakness in the Texas economy was confined generally to the mining, manufacturing and agricultural sectors. Led by strong growth in business services and transportation, service sector employment grew at a 3.6-percent annual rate in 1998. Meanwhile, rising rents and low vacancy and interest rates fueled a banner year for the Texas construction industry. Office and apartment vacancy rates in Austin, Dallas, Fort Worth and Houston are all lower now than they were during the go-go days of the early 1980s.

Lower energy prices are the primary reason for weakness in the mining sector. Oil prices declined nearly 40 percent during 1998, while natural gas prices declined 25 percent. As Chart 2 illustrates, Texas drilling activity declined with prices. Employment in oil and gas extraction fell by 7,500 workers (5 percent), and the Texas rig count fell by 162 rigs (44 percent).
Much of the weakness in the manufacturing sector can be traced to economic weakness overseas. Texas real exports have declined for three consecutive quarters (Chart 3). In the first half of the year, modest increases in exports to Canada and Mexico partially offset declining exports to Asia and Latin America, but by the third quarter, exports to Texas’ NAFTA partners also had declined. Texas exports are down especially sharply in energy products and agricultural crops.

Low prices and weak export markets both contributed to a bad year for Texas agriculture, but the primary culprit was Mother Nature. Severe drought devastated crop yields across the state and forced ranchers to liquidate their herds.

Low prices and weak export markets both contributed to a bad year for Texas agriculture, but the primary culprit was Mother Nature. Severe drought devastated crop yields across the state and forced ranchers to liquidate their herds.

Strong economic head winds will slow Texas economic activity in 1999. In particular, the state’s economy will continue to face low oil prices, tight labor markets and weakened trading partners.

**Low Oil Prices.** Industry contacts report that energy producers are pulling back hard in preparation for a prolonged period of low prices. The futures market is forecasting a marked increase in oil prices by the end of 1999. However, even if the price of West Texas Intermediate crude returns to the $14 range, the price will still be below the cost of production for some

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**NOTE:** Asian crisis includes Indonesia, Malaysia, Philippines, South Korea and Thailand. Latin America includes Argentina, Brazil, Colombia and Venezuela. Euroland includes Austria, Belgium, Finland, France, Germany, Ireland, Italy, Luxembourg, Netherlands, Portugal and Spain.
Texas firms, and the energy industry should continue to shrink.

The merger mania that has taken hold in the industry could also lead to substantial job cuts. For example, the British Petroleum–Amoco merger is expected to reduce worldwide employment in the two firms by 6,000 jobs, many of which may be in Texas. Similarly, the proposed Exxon–Mobil merger is expected to reduce worldwide employment in the two firms by 9,000 jobs. However, Texas could actually gain jobs if the merged firms consolidate into the region.

Tight Labor Markets. Unemployment rates remain below the national average in many parts of the state (Table 1), and the national average is low enough to be considered full employment by many analysts. In a full employment environment, labor force growth limits employment growth (see box entitled “Labor Market Tightness”), and Texas will be hard pressed to generate labor force growth much in excess of 2 percent in 1999. Because labor markets are much tighter in north and central Texas than they are along the Gulf Coast or the border, difficulties finding workers are more likely to restrain growth in the Dallas/Fort Worth area than in Corpus Christi or El Paso.

Weakened Trading Partners. None of Texas’ major trading partners is in particularly robust health, so export growth is likely to be anemic in 1999. Mexico continues to post solid GDP numbers; however, other economic data suggest weakness (Chart 4). Falling oil prices are a significant drag on the Mexican economy and have forced the Mexican government (which receives more than a quarter of its revenues from oil) to adopt an austere budget for 1999. The real peso has regained some of its recent losses in purchasing power relative to the dollar, primarily because Mexican inflation has risen sharply. The purchasing power of the average Mexican consumer has probably not improved. Texas retailers indicate that sales to Mexican nationals have been disappointing. Canadian purchasing power fell even more than Mexican purchasing power in 1998 (Chart 5). Exports to Canada (Texas’ No. 2 trading partner) fell 6.6 percent in third quarter 1998 and are

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**Table 1**

<table>
<thead>
<tr>
<th>City</th>
<th>Unemployment Rate</th>
<th>City</th>
<th>Unemployment Rate</th>
</tr>
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<tbody>
<tr>
<td>Bryan</td>
<td>1.7</td>
<td>Tyler</td>
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</tr>
<tr>
<td>Austin</td>
<td>2.5</td>
<td>Wichita Falls</td>
<td>4.8</td>
</tr>
<tr>
<td>Lubbock</td>
<td>2.8</td>
<td>San Angelo</td>
<td>5.2</td>
</tr>
<tr>
<td>Dallas</td>
<td>3.0</td>
<td>Sherman</td>
<td>5.5</td>
</tr>
<tr>
<td>Fort Worth</td>
<td>3.0</td>
<td>Brazoria</td>
<td>5.8</td>
</tr>
<tr>
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<td>3.0</td>
<td>Galveston</td>
<td>6.1</td>
</tr>
<tr>
<td>Amarillo</td>
<td>3.3</td>
<td>Texarkana</td>
<td>6.2</td>
</tr>
<tr>
<td>San Antonio</td>
<td>3.3</td>
<td>Midland–Odessa</td>
<td>6.4</td>
</tr>
<tr>
<td>Abilene</td>
<td>3.6</td>
<td>Corpus Christi</td>
<td>6.5</td>
</tr>
<tr>
<td>Waco</td>
<td>3.6</td>
<td>Beaumont</td>
<td>7.3</td>
</tr>
<tr>
<td>Killeen</td>
<td>3.8</td>
<td>Longview</td>
<td>7.5</td>
</tr>
<tr>
<td>Houston</td>
<td>3.9</td>
<td>Laredo</td>
<td>9.3</td>
</tr>
<tr>
<td>Victoria</td>
<td>4.4</td>
<td>El Paso</td>
<td>9.9</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Brownsville</td>
<td>11.6</td>
</tr>
<tr>
<td>U.S. Average</td>
<td>4.4</td>
<td>McAllen</td>
<td>17.0</td>
</tr>
</tbody>
</table>

---

**Chart 4**

*Mexican Economic Indicators*

- **Real stock price index**: 4.89
- **Real oil price**: Fourth quarter 1998
- **Purchasing power of the peso**: 5.81
- **Mexico GDP (annualized)**: 6.72
- **Employment cost index (reversed sign)**: 1.52
- **Net insufficient inventories**: 4.49
- **Imports of capital goods**: –25.96
- **Weekly man-hours manufacturing**: –30
- **Weekly man-hours manufacturing**: –20
- **Weekly man-hours manufacturing**: –15
- **Weekly man-hours manufacturing**: –10
- **Weekly man-hours manufacturing**: –5
- **Weekly man-hours manufacturing**: 0
- **Weekly man-hours manufacturing**: 5
- **Weekly man-hours manufacturing**: 10
- **Weekly man-hours manufacturing**: 15

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Even if the price of West Texas Intermediate crude returns to the $14 range, the price will still be below the cost of production for some Texas firms, and the energy industry should continue to shrink.
Labor Market Tightness

For several years, Texas has been in the grips of a tightening labor market. Firms across the state (but especially in major metropolitan areas away from the Mexican border) have reported increasing difficulty finding all types of workers—from secretaries to statistical programmers. Industry contacts report they are turning away business because they don’t have enough staff to do the work.

Labor market tightness has simple causes. For employment to grow, one of three things has to happen—the population has to grow, labor force participation has to rise or the unemployment rate has to fall.

Slow population growth is not the source of Texas’ tight labor markets. Texas population has grown at twice the national rate, or nearly 2 percent per year, throughout the 1990s. Two important factors explain the faster growth—a faster rate of natural increase (meaning that Texas’ young population produces substantially more births than deaths each year) and strong net domestic migration (meaning that more people from other states move in than Texans move out).

Texas population growth may be strong, but at more than 3 percent per year, the state’s typical job growth is even stronger. Sustaining job growth greater than population growth requires either that an increasing fraction of the population enter the labor force each year or that the unemployment rate fall.

Because the labor force participation rate has held steady at roughly the national rate throughout the 1990s, the unemployment rate has been taking up the slack. Texas’ unemployment rate has dropped to its lowest level in over 18 years (see chart). Take out the border, and the rest of the state’s unemployment rate is below 4 percent. Four percent unemployment is well below the rate that most economists use to define full employment.

In a full employment environment, labor force growth limits employment growth and, barring a major change in the labor force participation rate, population growth limits labor force growth. Because there is no reason to believe that the rate of population growth has increased recently or is going to increase much in the near future, tight labor markets are likely to restrain Texas employment growth for some time.

unlikely to rebound much in the near term. The sharpest declines in exports came in oil and gas, furniture and primary metals.

Elsewhere, Japan continues to be mired in recession, the Asian crisis countries (Indonesia, Malaysia, Philippines, South Korea and Thailand) are at best bouncing along the bottom, the European economies are expected to slow and recent political events in Brazil and Venezuela have increased concern about Latin America.

Outlook for 1999:
Slower Growth but No Recession

The construction industry should continue to register solid growth in 1999. The industry weathered a financing scare in fall 1998 that industry contacts view as the pause that refreshes. Concerns about overbuilding have eased somewhat, and builders who were cut off by the pullback of real estate investment trusts (REITs) and insurance companies are finding other, more conventional sources of finance. Housing markets are generally tight, although Houston contacts report that some buyers are backing out of contracts. Residential rents are increasing at twice the rate of inflation and have been rising faster in Texas than in the nation as a whole—two factors that should fuel continued building activity in 1999. There should also be a substantial increase in highway construction in 1999.

High-tech manufacturing should contribute more to the economy in 1999 than it did in 1998. The Semiconductor Industry Association predicts that sales will grow 9 percent in 1999, after shrinking nearly 11 percent in 1998.1 Computer industry contacts report that PC sales have increased. Continued concerns about the Year 2000 problem may also foster some increase in sales of computers and computer equipment in 1999 (although a 1999 sales binge could mean a hangover for the computer industry in 2000).

Exports, agriculture and energy will be a drag on the Texas economy, but are unlikely to completely upset the economic apple cart. Texas is much less sensitive to energy prices now than it was during the early 1980s (see box entitled “The New Texas Economy”). Resources that are freed up from these industries are likely to be snapped up by other industries looking to expand, thereby easing some of the problems created by tight labor markets.

Bottom Line. As long as the U.S. economy continues to grow, the Texas economy should do likewise. We expect that Texas employment will grow approximately 2 percent in 1999, thereby registering the 11th consecutive year in which Texas employment growth exceeds the national average.

—Lori L. Taylor
Stephen P. A. Brown
Fiona Sigalla
Mine K. Yücel

Note

The New Texas Economy

The last time nominal oil prices hit $11 per barrel—in 1986—the Texas economy fell off a cliff. This time the economy is likely to do little more than stumble.

Chart A illustrates the strong correlation between oil prices and the Texas economy during the 1980s. The figure plots inflation-adjusted oil prices and deviations from trend employment. Deviations from trend employment indicate the extent to which the actual level of employment differs from the level of employment one would have expected if the economy were growing at its long-term trend rate of growth (3.3 percent per year). When the deviations are rising (as was the case during the boom), employment is growing faster than trend. When the deviations are falling (as was the case during the bust), employment is growing more slowly than trend. A horizontal line indicates that employment is growing at trend.

If we assume that the influence of oil prices has remained unchanged and remove it from the picture, we can see a fairly strong, historical correlation between Texas and U.S. employment (Chart B). However, the relationship seems to have broken down recently. Controlling for the negative influence of falling oil prices, Texas was well above its long-term trend in 1998, while the United States was not. In other words, the Texas economy is doing much better than would be predicted on the basis of its historical relationships with oil prices and the U.S. economy. This evidence implies that either Texas’s economic relationship with the United States has changed or the economic influence of oil prices has changed.

Work by Dallas Fed economists Stephen Brown and Mine Yücel suggests that the economic influence of oil prices has changed. Although Texas is still hurt by falling oil prices, Brown and Yücel estimate that the state is 75 percent less sensitive to oil price fluctuations today than it was in 1982. In 1982, a 10-percent reduction in oil prices would have reduced total Texas employment by an estimated 1.37 percent when multiplier effects are included. In 1998, the same 10-percent reduction would lower total Texas employment by an estimated 0.36 percent (about 32,000 jobs) including multiplier effects. Even with the slower growth the state experienced in 1998, Texas still added nearly 24,000 jobs per month.

One reason for the declining influence of oil prices is the rising importance of energy consumers to the Texas economy. For example, the airline industry had a very good year in 1998 and would benefit substantially from continued low fuel costs. Three of the nation’s top seven airlines are based in Texas (American, Continental and Southwest).

Although falling energy prices are becoming less influential for Texas as a whole, they are likely to have a substantial influence on the distribution of economic activity in the state. As Chart C illustrates, Mother Nature serves Texas Tea in only some parts of the state; in other parts, energy consumers dominate the economic landscape. For example, in Dallas/Fort Worth, which represents one quarter of economic activity in the state, the transportation industry is much more important than the energy industry. The total employment of Dallas/Fort Worth mining firms approximately equals the local employment at American Airlines alone. Total transportation employment is more than seven times mining employment in Dallas/Fort Worth. Therefore, Dallas/Fort Worth may benefit from lower oil prices, while other parts of the state—such as Houston—will undoubtedly lose.