

# Regional Update

INDICATORS SUCH AS employment and unemployment are useful measures of regional economic activity, but output figures often give a more complete picture of a region's economy. The Bureau of Economic Analysis (BEA) estimates the output measure, real gross state product (GSP)—the state equivalent of national real gross domestic product (GDP). Unfortunately, because these estimates are yearly and come out with a significant lag (the latest year available is 1994), they are of little use to researchers trying to gauge current economic conditions at the state level.

Frank Berger and Keith Phillips of the Dallas Fed have devised a method to estimate Texas output that is both more frequent and more timely. Using standard statistical techniques, they examined the relationship between the yearly BEA output numbers and other, more frequent indicators that might move in step with GSP. Berger and Phillips found that in most

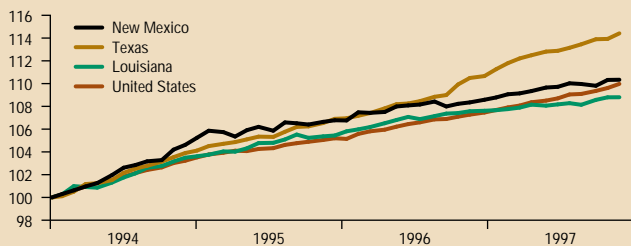
industries, changes in nominal personal income and industry price measures can account for most of the change in the real output figures. Using this relationship, they were able to accurately interpolate quarterly GSP figures within the yearly data and then extrapolate more recent quarters.

According to these estimates, real output growth in Texas accelerated during the first half of 1997, increasing at an annualized 7.6 percent and 6.9 percent rate in the first and second quarters, respectively. This outpaced the United States as a whole, as real GDP rose 4 percent and 3.4 percent over the same time periods. The healthy U.S. economy and the continued recovery in the Mexican economy have helped spur the rapid output growth in Texas. Strong activity in the energy and construction sectors also contributed to the first-half expansion.

—Justin Marion

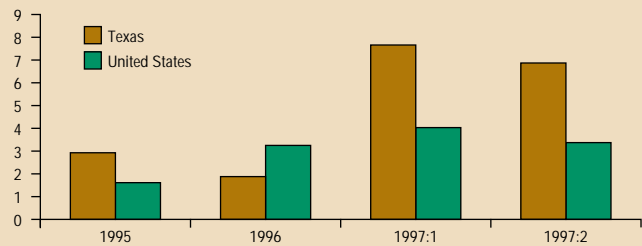
## Total Nonfarm Employment

Index, January 1994 = 100



## Texas GSP\* Growth vs. U.S. GDP Growth

Percent

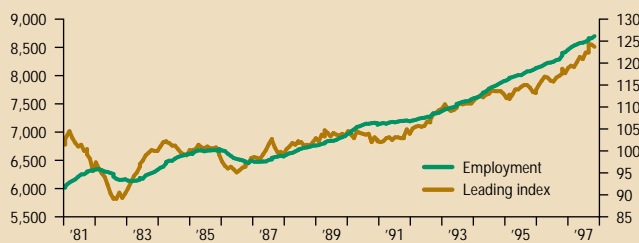


\* estimate

## Texas Leading Index and Nonfarm Employment

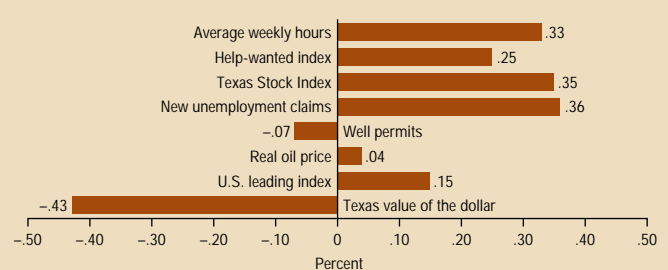
Thousands of persons

Index, 1987 = 100



## Net Contributions of Components to Change in Leading Index

August–October 1997



## Regional Economic Indicators

	Texas Leading Index	TIPI** total	Texas employment*				Private service-producing	Total nonfarm employment*		
			Mining	Construction	Manufacturing	Government		Texas	Louisiana	New Mexico
11/97	123.7	127.9	166.2	469.3	1,088.0	1,472.7	5,503.0	8,699.2	1,839.5	709.8
10/97	124.2	127.7	166.2	466.8	1,084.4	1,469.9	5,474.8	8,662.1	1,839.4	709.7
9/97	124.3	127.6	165.8	467.3	1,083.8	1,483.5	5,459.5	8,659.9	1,835.6	706.4
8/97	122.4	127.2	165.4	465.9	1,082.4	1,473.7	5,438.7	8,626.1	1,828.3	707.4
7/97	122.4	127.6	165.7	463.9	1,078.7	1,468.2	5,426.2	8,602.7	1,830.7	707.8
6/97	120.9	127.0	164.7	464.9	1,078.2	1,467.8	5,407.0	8,582.6	1,828.9	705.8
5/97	121.4	125.5	163.8	463.2	1,077.6	1,471.6	5,401.2	8,577.4	1,827.0	705.4
4/97	120.2	124.7	163.6	458.1	1,076.4	1,470.0	5,384.8	8,552.9	1,828.5	703.4
3/97	119.1	124.6	163.0	455.1	1,073.5	1,468.8	5,371.4	8,531.8	1,824.1	702.1
2/97	119.4	124.1	162.6	455.8	1,070.1	1,467.2	5,344.6	8,500.3	1,821.9	701.6
1/97	118.9	124.3	161.5	446.9	1,067.4	1,466.7	5,317.5	8,460.0	1,820.3	699.8
12/96	117.7	124.0	159.3	444.2	1,066.1	1,464.8	5,279.5	8,413.9	1,819.4	698.5

\* in thousands

\*\* Texas Industrial Production Index

## Further Information on the Data

For more information on employment data, see "Reassessing Texas Employment Growth" (*Southwest Economy*, July/August 1993). For TIPI, see "The Texas Industrial Production Index" (Dallas Fed *Economic Review*, November 1989). For the Texas Leading Index and its components, see "The Texas Index of Leading Indicators: A Revision and Further Evaluation" (Dallas Fed *Economic Review*, July 1990).

Online economic data and articles are available on the Dallas Fed's Internet Web site, [www.dallasfed.org](http://www.dallasfed.org).