A Reprint from *Tierra Grande*

Historically, almost all economic recessions and depressions have ended in periods of recovery and prosperity. This is expected to be the case for the current recession.

Since the U.S. financial system stabilized in mid-2009, several economic indicators, notably the growth rate of U.S. gross domestic product (GDP) and several stock market price indexes, have apparently recovered from their troughs in 2008. It seems that the worst is over. Now the difficult question is whether the recovery will be L-shaped (a long period of stagnant growth), U-shaped (a gradual increase in economic activities), or V-shaped (a strong recovery).

Looking at Economic Indicators

The Real Estate Center's business cycle research program monitors a number of economic indicators to analyze the Texas economy and its relationship to the U.S. economy. The most widely monitored and analyzed economic indicators are employment levels and employment growth rates, unemployment rate, GDP, aggregate personal income, per capita personal income, housing starts, stock market indexes, consumer price indexes and industrial production indexes. Macroeconomists look at these indicators to offer more informed opinions about the direction of the aggregate economy.

The indicators are classified into three groups: leading, coincident and lagging. A leading indicator is an economic time series that changes before the aggregate GDP changes. Examples of leading indicators include stock market indexes, building permits, inventory changes, overtime production hours, unemployment insurance claims and money supply.

Leading indicators are useful for short-term economic forecasting but their macroeconomic forecasting records, especially stock market indexes, have not been any better than weather forecasts. The late Paul Samuelson, the first American Nobel Laureate in economics, once quipped, "The stock market has forecast nine of the last five recessions."

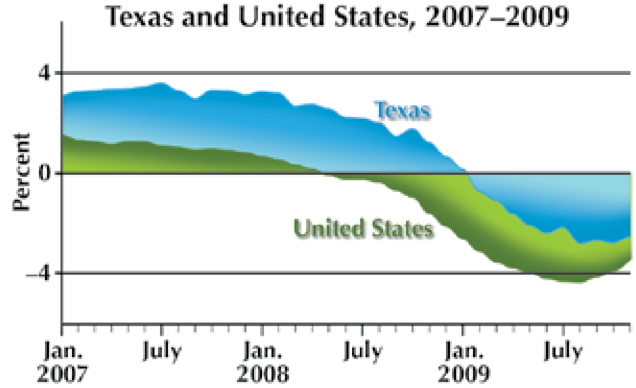
A coincident indicator is an economic variable that changes approximately at the same time as the aggregate GDP. Examples include personal income, retail sales and industrial production indexes. Coincident indicators provide useful information about the current state of the economy and help identify the dates of peaks and troughs.

Lagging indicators are time series variables that change typically a few quarters after a change in the aggregate economy. Examples of major lagging indicators include employment growth rates, outstanding consumer and business loans, and unemployment rates.

Past patterns of economic recovery show that in a recession, private sector firms first attempt to increase productivity and profitability by producing the same amount of goods and services using the same or lower amounts of labor, leading to lower unit labor costs and product prices. The decrease in product prices leads to increases in demand for goods and services, which in turn lead to recovery of sales and output.

In the Center's *Monthly Review of the Texas Economy*, the monthly time series of employment growth rates in Texas industries is studied to analyze Texas labor market cycles. Recovery in the labor market normally occurs after sales and output recover, when firms employ more people to produce more goods and services.

Nonfarm Employment Growth Rates for Texas and United States, 2007–2009



Sources: Texas Workforce Commission and Real Estate Center at Texas A&M University

The Texas and U.S. labor markets seem to have bottomed out in fourth quarter 2009 (see figure). This suggests that the state's GDP and aggregate personal income may have already recovered or at least have bottomed out. Because employment growth rate is a lagging variable, looking at Texas total personal income gives a clearer picture of the current state of Texas' economy.

Texas Personal Income

Texas' total personal income fell from $924,319 million in second quarter 2008 to $902,892 million in second quarter 2009, an annual decline rate of 2.3 percent. It increased to $904,713 million in third quarter 2009, for a quarterly growth rate of 0.2 percent compared with 0.3 percent for the United States (Table 1).

Net earnings accounted for most of third quarter 2009 income growth rates for both Texas and the United States

Table 1. Personal Income for Texas and United States 2008Q2 to 2009Q3

	Seasonally Adjusted at Annual Rates (in millions)		Percent Change from Previous Quarter	
Year:Quarter	Texas	United States	Texas	United States
2008Q2	$924,319	$12,275,276		
2008Q3	921,383	12,273,734	–0.3	0.0
2008Q4	921,317	12,218,427	0.0	–0.5
2009Q1	903,139	11,944,145	–2.0	–2.2
2009Q2	902,892	12,039,430	0.0	0.8
2009Q3	904,713	12,077,636	0.2	0.3

Sources: U.S. Bureau of Economic Analysis and Real Estate Center at Texas A&M University

(Table 2). Net earnings growth rate in the third quarter was 0.4 percent for both Texas and the United States (Table 2, Panel A). Income received on assets (dividends, interest and rent) fell by 0.5 percent in Texas compared with a 0.1 percent increase for the United States.

Transfer receipts, which are income payments to persons for which no current services are performed and of net insurance settlements or the sum of government social benefits and current transfer receipts from business, remained unchanged for Texas and rose 0.4 percent for the United States in third quarter 2009 (Table 2, Panel A).

The net earnings growth rate in Texas contributed 0.26 percent to the state's personal income growth rate in third quarter 2009 (Table 2, Panel B). The combined contributions of net earnings (0.26 percent) and transfer receipts (0.01 percent) reduced by the negative contribution of receipts for dividends, interest and rent (–0.06) resulted in an income growth rate of 0.2 percent in third quarter 2009 (Table 2, Panel B).

Table 2. Growth Rates of Personal Income Components for Texas and United States 2009Q2 to 2009Q3

A.	Percent Change	
	Texas	United States
Personal income	0.2	0.3
Net earnings	0.4	0.4
Dividends, interest and rent	–0.5	0.1
Transfer receipts	0.0	0.4
B.	**Contribution to Percent Change**	
	Texas	**United States**
Personal income	0.20	0.30
Net earnings	0.26	0.24
Dividends, interest and rent	–0.06	0.01
Transfer receipts	0.01	0.07

Sources: U.S. Bureau of Economic Analysis and Real Estate Center at Texas A&M University

Industries Generating Income

Twelve Texas industries generated more income in third quarter 2009 than in the second quarter of the year. Six Texas industries experienced negative income growth rates (Table 3).

Texas' finance and insurance industry ranked first in income growth rate, contributing 0.14 percent to Texas income growth compared with 0.09 percent for the United States.

The health care and social assistance industry ranked second in contribution to income growth rate in Texas, accounting for 0.13 percent compared with 0.12 percent for the nation.

The professional and technical services industry and other services industry (repair and maintenance, personal and laundry services, religious, civic and professional organizations) contributed 0.07 percent to the Texas income growth rate compared with 0.03 percent for the United States.

The contributions of the state's real estate and rental and leasing industry, transportation and warehousing industry, and administrative and waste services industry were twice the national averages for these industries (Table 3).

Table 3. Texas Industries Ranked by Contributions of Earnings to Percent Change in Personal Income by Industry, Seasonally Adjusted, 2009Q2 to 2009Q3

Rank	Industry	Percentage Points Texas	Percentage Points United States
1	Finance and insurance	0.14	0.09
2	Health care and social assistance	0.13	0.12
3	Professional and technical services	0.07	0.03
3	Other services, except public administration	0.07	0.03
5	Real estate and rental and leasing	0.04	0.02
6	Transportation and warehousing	0.02	0.01
6	Administrative and waste services	0.02	0.01
8	Educational services	0.01	0.01
8	Management of companies and enterprises	0.01	0.01
8	Accommodation and food services	0.01	0.02
8	Utilities	0.01	0.00
8	Retail trade	0.01	0.02
13	Farm	0.00	–0.02
13	Forestry, fishing and related activities	0.00	0.00
13	Arts, entertainment and recreation	0.00	0.01
16	Information	–0.02	0.00
17	Manufacturing, nondurable goods	–0.03	0.00
18	Wholesale trade	–0.04	–0.01
19	Manufacturing, durable goods	–0.06	–0.01
20	Mining	–0.10	–0.02
21	Construction	–0.12	–0.06

Sources: U.S. Bureau of Economic Analysis and Real Estate Center at Texas A&M University

Contributions of Texas' educational services industry and management of companies and enterprises industry were 0.01 percent, equal to the national figure. The accommodation and food services industry and retail trade industry contributed 0.01 percent to the growth rate of net earnings, less than the 0.02 percent for the United States. The state's utilities industry contributed 0.01 percent to net earnings growth rate compared with zero percent for the United States.

Total incomes in three Texas industries (farm, retail trade, and arts, entertainment and recreation) remained unchanged from second to third quarter 2009. Four Texas goods-producing industries (construction, mining, and durable and nondurable manufacturing) and two service-providing industries (information and wholesale trade) had negative contributions in third quarter 2009. The construction industry suffered most in terms of reduced income growth and had a negative contribution of 0.12 percentage points.

Suffering heavily from falling crude oil prices, which went from more than $140 per barrel in 2008 to less than $70 in 2009, the state's mining sector, mainly oil and natural gas extraction, reduced the growth rate of net earnings by Texas industries by 0.1 percent.

As reported in the Center's *Monthly Review of the Texas Economy*, heavy job losses in the state's manufacturing industry caused the state's durable and nondurable manufacturing industries to contribute negative 0.06 percent and negative 0.03 percent to the growth rate of net earnings by industry in Texas. In the service-providing sector, the information industry and wholesale trade industry reduced the sum of the contributions by 0.02 and 0.04 percentage points, respectively.

Texas personal income trends point to an early stage of a weak recovery in output and income. These trends, together with decreasing job loss rates (see figure) suggest that the worst of the economic downturn may be over.

Dr. Anari (m-anari@tamu.edu) is a research economist with the Real Estate Center at Texas A&M University.

THE TAKEAWAY

While Texas personal income is growing at a slower rate than that for the nation, income from earnings is growing at the same rate as the U.S. average. Personal income trends combined with decreasing job loss rates suggest that the worst of the economic downturn may be over.

PERSONAL INCOME

Personal income is defined as "income received by all persons from all sources." It is "the sum of net earnings by place of residence, rental income of persons, personal dividend income, personal interest income, and personal current transfer receipts. Net earnings comprise earnings by place of work (the sum of wage and salary disbursements, supplements to wages and salaries, and proprietors' income) less contributions for government social insurance, plus an adjustment to convert earnings by place of work to a place-of-residence basis" (U.S. Bureau of Economic Analysis).

Personal income is measured before the deduction of personal income taxes and other personal taxes and is reported in current dollars — that is, no adjustment is made for inflation. Personal income data are compiled on a quarterly basis.

REAL ESTATE CENTER

MAYS BUSINESS SCHOOL

Texas A&M University
2115 TAMU
College Station, TX 77843-2115

http://recenter.tamu.edu
979-845-2031

Tierra Grande (ISSN 1070-0234) is published quarterly by the Real Estate Center at Texas A&M University, College Station, Texas 77843-2115. Subscriptions are free to Texas real estate licensees. Other subscribers, $20 per year. Views expressed are those of the authors and do not imply endorsement by the Real Estate Center, Mays Business School or Texas A&M University. The Texas A&M University System serves people of all ages, regardless of socioeconomic level, race, color, sex, religion, disability or national origin. Photography/Illustrations: Real Estate Center files, pp. 1, 4.