

# Texas Economy Moves from Recovery to Expansion

By Keith R. Phillips and Jesus Cañas

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The Texas economy, which moved from recovery to expansion in 2011, appears poised for another year of moderate growth. Employment in December edged 0.1 percent above its prerecession peak, reached in August 2008. The nation, meanwhile, remains 4.4 percent below its high point.

If the U.S. follows its average annualized employment growth rate since 1980 (1.2 percent), the country will need about 46 months—or close to four years—to match the state’s accomplishment.

Last year, the Texas economy grew at about the same pace as in 2010. Employment increased by about 2 percent—212,000 jobs—compared with 1.3 percent nationally. Led by a boom in the energy sector and strong growth in exports, particularly in petrochemicals and high tech, Texas private sector employment growth accelerated to 3.3 percent in 2011

from 2.5 percent the year before. A sharp 3.3 percent decline (53,700 jobs) in state and local government jobs offset private sector expansion.

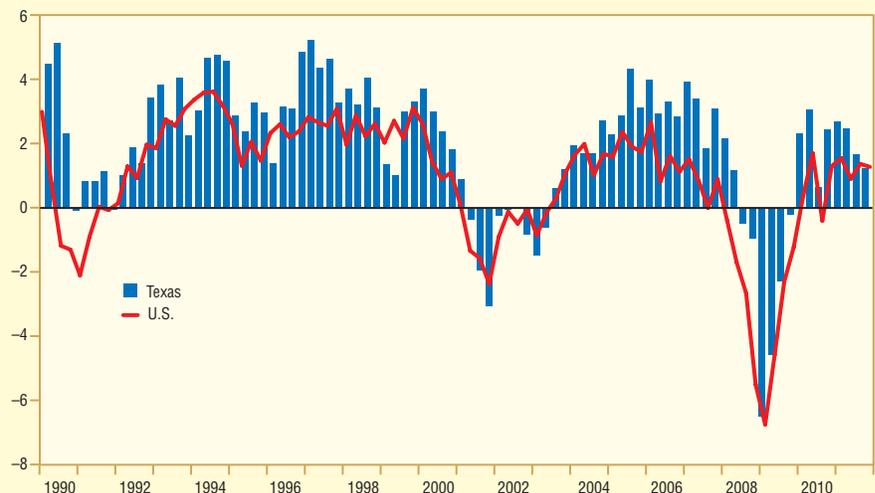
Leading economic indicators have increased in recent months, suggesting growing momentum going into 2012. Housing continues to mend and construction activity may improve slightly. Additionally, steep cuts to state and local government spending over the past 12 months probably won’t be repeated. Conversely, weaker growth in exports and a slowdown in the rapid expansion of oil and gas extraction curb 2012 expectations, leading to anticipated overall job growth of close to 2 percent again this year.

## 2011 Ends Sluggishly

Employment expansion started 2011 strongly and slowed as the year progressed (Chart 1). Texas outperformed the U.S.

**Chart 1**  
**Texas Job Growth Slows in Second Half of 2011**

Percent quarter over quarter\*



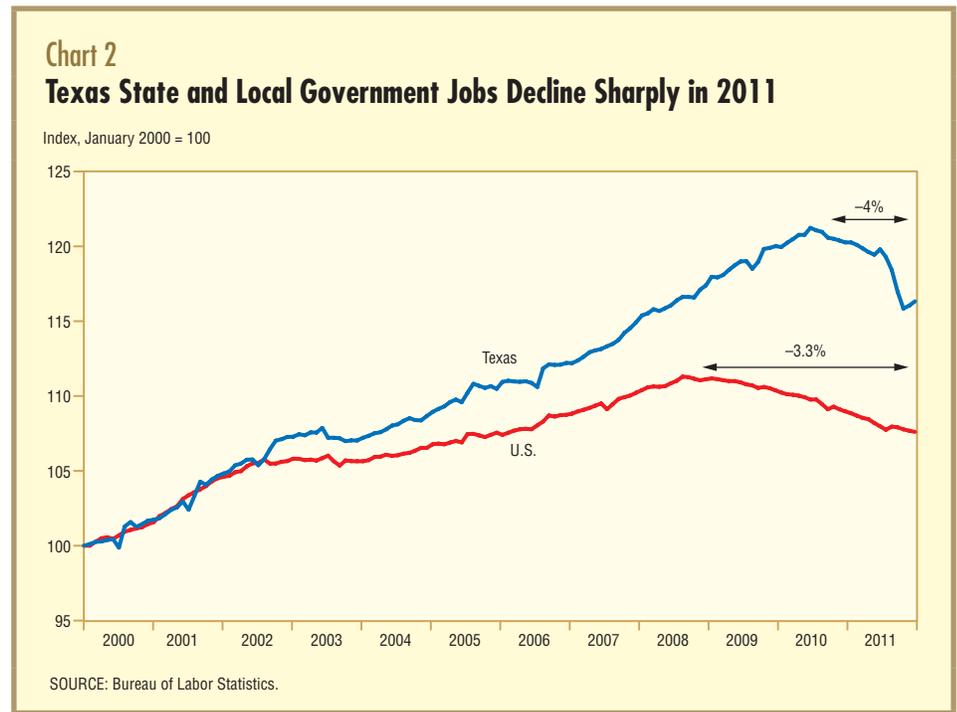
\* Seasonally adjusted, annualized rate.

SOURCES: Bureau of Labor Statistics; Texas Workforce Commission; Federal Reserve Bank of Dallas.

during the first three quarters but fell to the national rate during the fourth quarter. Growth sectors in order of strength were oil and gas, professional and business services, leisure and hospitality, manufacturing, educational and health services, trade and transportation, and financial activities. Government, information and construction closed 2011 with employment losses, with the largest declines in state and local government jobs (*Chart 2*). Since peaking in June 2010, Texas state and local government employment has dropped 4 percent, most of it occurring near the start of the 2011–12 school year. Nationally, state and local government jobs fell 3.3 percent from a peak in August 2008.

### Oil Prices and Technology

A source of Texas economic strength, oil and gas extraction recorded a 25 percent increase in the number of drilling rigs in 2011, almost reaching its mid-2008 peak (*Chart 3*). Strong oil prices and new technology—the use of hydraulic fracturing to reach deep pockets of energy resources not previously attainable—propelled the gain, which produced a 15 percent rise in mining employment last year. The Eagle Ford shale region, a 24-county area in South Texas extending eastward from Webb County (county seat: Laredo) on the Texas–Mexico border to Brazos County (county seat: Bryan), is one area benefitting from hydraulic



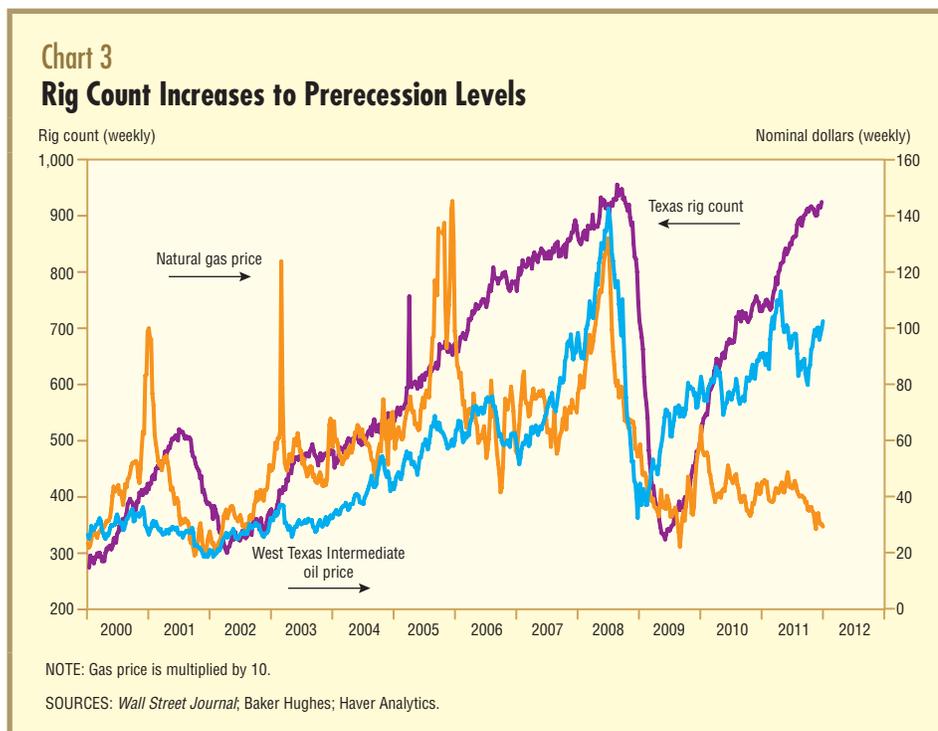
fracturing. Area oil production increased to 21.8 million barrels in 2011 (through November) from 4.4 million barrels in 2010, and gas production rose to 221 billion cubic feet in 2011 from 108 billion cubic feet in 2010, according to the Texas Railroad Commission. Employment and wages in the mostly rural Eagle Ford counties have grown sharply in the past few years.

Exports are an important driver of the economy. Texas ranked ninth among the

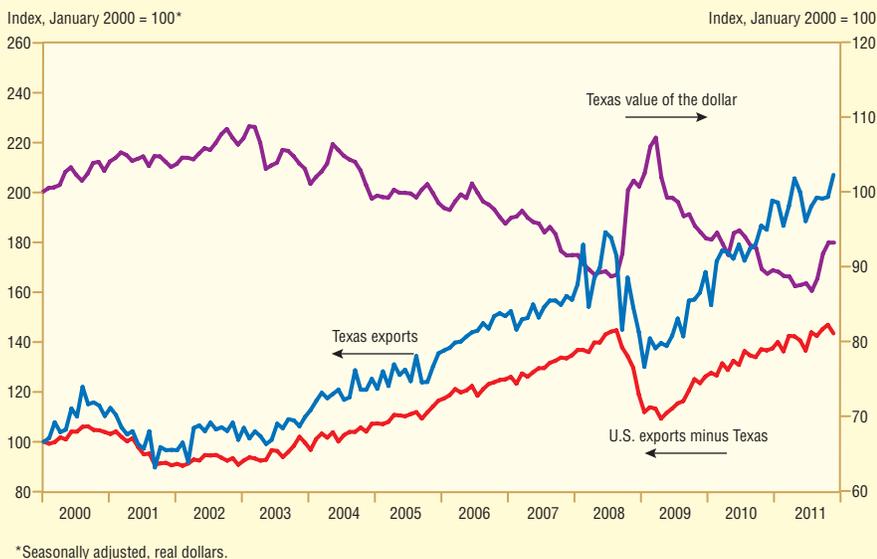
states in the percentage of civilian jobs tied to exports (8.2 percent) in 2008, according to the Census Bureau. Since hitting a trough in early 2009, Texas exports have grown at a faster pace than in the rest of the U.S.—surpassing the previous monthly, inflation-adjusted peak of \$16.2 billion by about 11 percent last year (*Chart 4*). State exports increased at a 12.3 percent annual rate from December 2010 through April 2011, declining through July and bouncing back in the following three months. The value of exports in October nearly equaled April's total.

Texas felt the impact of distant world events. Economic growth began the year strongly in the U.S. and internationally, but the earthquake and tsunami in Japan in March slowed global manufacturing as industries struggled with parts shortages. Although the shortages eased in the second half, the euro-zone debt crisis and resulting slowing economic expansion suppressed Texas' export recovery. Additionally, the euro-zone crisis increased the value of the U.S. dollar—the result of a financial flight to quality that sought the dollar's relative safety. U.S. goods sold abroad became more expensive because of the stronger currency. The increase in the Texas value of the dollar, an aggregate exchange-rate measure that weights real exchange rates based on the shares of Texas exports, is depicted in *Chart 4*.<sup>1</sup>

The summer export slowdown likely damped manufacturing activity in the sec-



**Chart 4**  
**Texas Exports Outpace Rest of U.S.**



SOURCES: Census Bureau; Bureau of Labor Statistics; Federal Reserve Bank of Dallas; authors' calculations.

ond half of 2011, as reflected in the Dallas Fed's Texas Manufacturing Outlook Survey. The survey's index of new orders posted negative readings in November and December 2011 before rebounding in January. Slowing total nonfarm and private sector job growth in fourth quarter 2011 reflected the year's second-half export lull and the sharp decline in government jobs.

**2012: Momentum Picking Up**

Despite the July-to-December slowdown, leading economic indicators increased as the year closed. The gains suggested that the economy should improve in the first half of 2012. Changes in many of the key economic indicators that led movements in the broader economy are aggregated into the Texas Leading Index (TLI) (Chart 5). It is composed of indicators that tend to turn up prior to recoveries and down before recessions. In the three months ended in December 2011, six of the eight components of the TLI increased, resulting in an index increase.

Gains in the Texas stock index and in the U.S. leading index paced the advance. The increase in stock prices of Texas-based companies is a reflection of earnings growth and a positive outlook for businesses. The increase in the U.S. leading index suggests that the recovery in the national economy will continue in the short run, a positive sign for Texas growth. Real oil price, average weekly hours (of production

workers in manufacturing), help-wanted advertising and initial claims for unemployment insurance also contributed to the index's rise.

Generally, hours worked pick up before job gains because employers respond to increased demand by using current employees for more hours, waiting to add new personnel until they are sure demand

will be sustained. Increasing online and print advertising for job openings reflects employers' desire to hire in coming months. And finally, declining initial claims for unemployment insurance are a sign that fewer workers are being laid off.

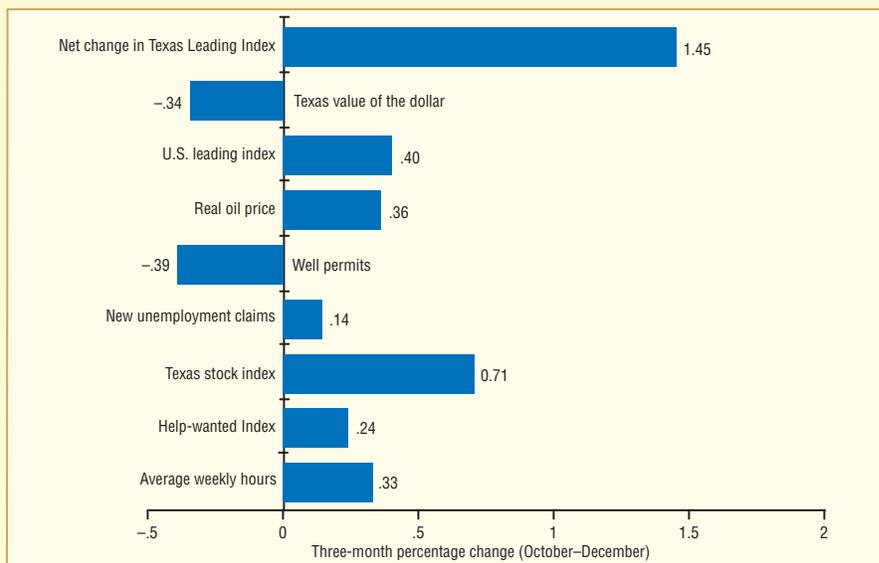
The only negative TLI indicators were well permits and the Texas value of the dollar, which increased toward the end of the year, reflecting more expensive state exports, which tend to suppress manufacturing sector growth. The well permits decline indicates a slowing of the rapid expansion of oil and gas extraction at the end of 2011.

A forecasting model based on the recent momentum in job growth and the TLI suggests that employment expansion will gradually pick up from the weak pace in the fourth quarter to reach the 2 percent projection, the third consecutive year of that rate.

**Housing and Government Improving**

While job growth will be little changed this year, underlying economic strengths and weaknesses will likely differ. The World Bank forecast in January that real global GDP growth would slow slightly to 2.5 percent this year from 2.7 percent in 2011. Weaker expansion, particularly in Europe, could soften Texas exports. And Texas' largest export customer, Mexico, anticipates growth slowing to 3.2 percent from 3.9 percent in 2011, according to Mexico's Central

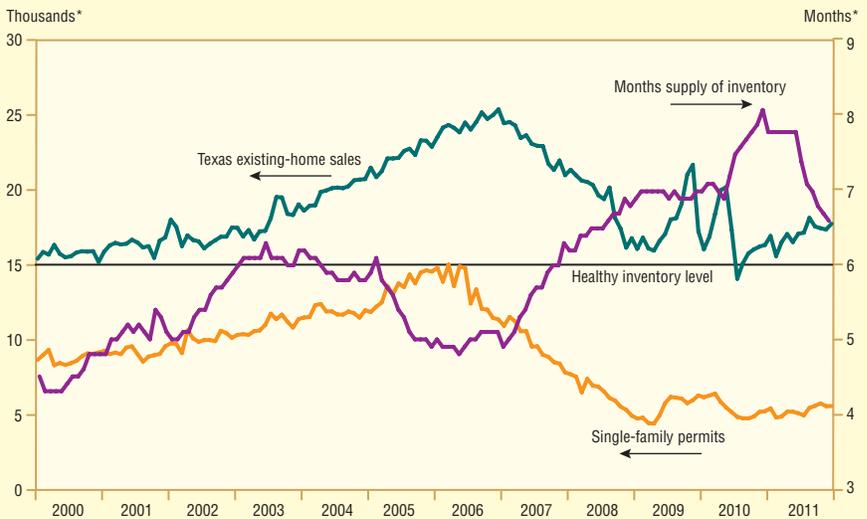
**Chart 5**  
**Most Texas Leading Index Components Are Increasing**



SOURCE: Federal Reserve Bank of Dallas.

*Taken together, the data on construction seem to suggest that Texas will experience gradual improvement in residential and nonresidential building activity in 2012.*

**Chart 6**  
**Texas Existing-Home Sales Tick Up as Inventories Fall**



\* Seasonally adjusted.

SOURCES: Census Bureau; Multiple Listing Service; Federal Reserve Bank of Dallas.

Bank Survey of Economic Forecasters.<sup>2</sup>

The energy sector is expected to continue expanding, but its growth is unlikely to match 2011 levels. Oil prices were high at year-end, while natural gas dropped to relatively low levels (*see Chart 3*). A decline in natural gas drilling is anticipated because of depressed gas prices. Energy prices are difficult to predict, but if they remain stable near current values, the relatively high price for oil and the continued interest in hydraulic fracturing may result in a flat to slightly increased rig count that's unlikely to match the 25 percent rise in oil and gas drilling and the 15 percent employment gain recorded during 2011.

Meanwhile, the homebuilding and government jobs sectors are showing strength. Existing-home sales rose in November and are up 9.4 percent from a year ago in Texas. Anecdotal reports confirm stabilization of new-home sales, with modest growth in December. Prices remain down 3 percent from their peak in first quarter 2009, though existing-home inventories were at 6.6 months of supply in December, down from a peak of 8.1 months in December 2010 (*Chart 6*). Historically, six months of supply is seen as healthy, although with elevated rates of mortgage foreclosures and delinquencies of 90 days or more, current inventories may not represent as much market tightness as in previous periods because continued foreclosures could add to inventory levels.

The construction sector and single-

family building in particular typically grow briskly in the early stages of recovery. But after two years of the economic rebound, single-family housing has yet to strongly bounce back. Although contract values and the number of single-family permits (which precede construction of new houses) have risen slightly in recent months, only multi-family permits (for apartment complex construction) have increased significantly.

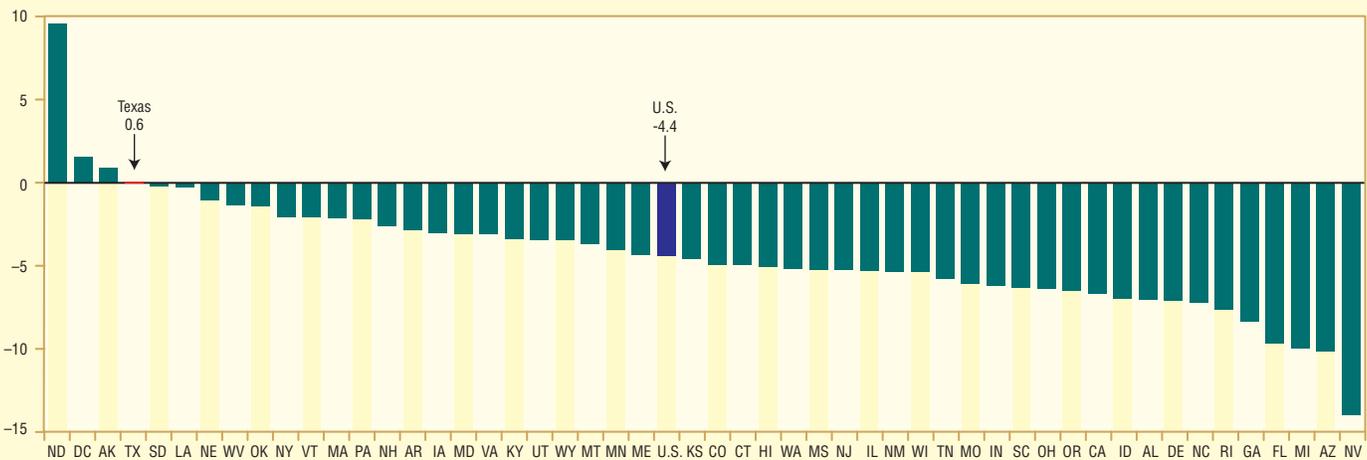
There are many reasons why people may favor renting over buying. Elevated foreclosure rates have reduced the credit scores of many individuals and, at the same time, resulted in increased credit standards among lenders. The sharp declines in home prices over the past several years may make many individuals question if prices have hit bottom. While only about 10 percent of mortgages in Texas are underwater—with more owed than the value of the property—as of third quarter 2011, many potential homebuyers may fear getting trapped in their homes without the flexibility to move if their economic situation changes. The Texas figures compare with 22 percent of mortgages underwater nationally and a high of 58 percent in Nevada.

However, in recent months there have been signs that most real estate markets are recovering. Vacancy rates in industrial, office and apartment markets all fell in the third quarter, and Texas existing-home sales generally have risen in recent months. Signs of bottoming out in the single-family housing

## Chart 7

### Texas Is One of Few States Moving from Recovery to Expansion

December 2011 jobs as percentage change from previous peak in jobs



SOURCE: Bureau of Labor Statistics; authors' calculations.

sector, along with decreases in the mortgage delinquency and foreclosure rates in the third quarter, indicate less bad news ahead. Taken together, the data on construction seem to suggest that Texas will experience gradual improvement in residential and non-residential building activity in 2012.<sup>3</sup>

State and local government is a major employment sector, accounting for about 15 percent of all jobs in the state. Thus, what happens in this sector will affect overall job growth this year. Texas state government bases much of its budget on retail tax collections, representing about 60 percent of revenue. Sales and use tax revenue grew strongly in 2011, resulting in a state comptroller's announcement that Texas' finances are in better shape than previously anticipated, with \$1.6 billion more in tax revenue than projected early last year. This increase, along with an expected slight rise in home values and continued strong levels of energy exploration in 2012, suggests that additional state and local government job cuts may not occur in 2012. Even if a reduction is undertaken, it would probably be much smaller than in 2011. In December 2011, government employment grew for a second consecutive month, a possible sign that state and local government employment has bottomed.

### Texas: A National Leader

Even with a moderate rate of growth in 2011, Texas has moved into expansion

mode. Texas ranks fourth nationally in terms of jobs recovered relative to those lost during the recession (*Chart 7*). Only North Dakota, Alaska and Washington, D.C., have done better, according to data comparing the change from peak employment levels.

The Texas economy should continue growing at about the same rate as last year, although the factors affecting the expansion may change. Slower growth in exports and energy likely will be offset by a gradual improvement in construction and fewer cuts in state and local government jobs. Many factors could speed or slow activity. For example, as of early 2012, most analysts expected a mild euro-zone downturn. If it becomes more pronounced, Texas growth will be slower than anticipated; conversely, better-than-expected activity abroad would aid the state's prospects. Oil prices are another variable—a sharp decline could narrow Texas growth to less than the 2 percent forecast, while a rise would increase that projection only slightly.

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### Notes

The authors thank Linda Bi for her research assistance and Mine Yücel and Pia Orrenius for helpful comments and suggestions.

<sup>1</sup> For more information on the Texas real trade-weighted value of

the dollar and other similar measures for other states, see "New Tool Gauges Impact of Exchange Rates on States," by Keith R. Phillips, Steve Brzezinski and Barbara Davalos, Federal Reserve Bank of Dallas *Southwest Economy*, Fourth Quarter, 2010, [www.dallasfed.org/research/swe/2010/swe1004b.pdf](http://www.dallasfed.org/research/swe/2010/swe1004b.pdf).

<sup>2</sup> For more information on Mexico's Central Bank Survey of Economic Forecasters, see [www.banxico.org.mx/informacion-para-la-prensa/comunicados/resultados-de-encuestas/expectativas-de-los-especialistas/index.html](http://www.banxico.org.mx/informacion-para-la-prensa/comunicados/resultados-de-encuestas/expectativas-de-los-especialistas/index.html).

<sup>3</sup> For a more-detailed look at the Texas and U.S. housing markets, see "Texas Housing on Bumpy Road After Stimulus Effects Fade," by D'Ann Petersen and Adam Swadley, Federal Reserve Bank of Dallas *Southwest Economy*, Second Quarter, 2011, [www.dallasfed.org/research/swe/2011/swe1102b.pdf](http://www.dallasfed.org/research/swe/2011/swe1102b.pdf), and "When Will the U.S. Housing Market Stabilize?" by John V. Duca, David Luttrell and Anthony Murphy, Federal Reserve Bank of Dallas *Economic Letter*, vol. 6, no. 8, 2011, [www.dallasfed.org/research/ecllett/2011/el1108.pdf](http://www.dallasfed.org/research/ecllett/2011/el1108.pdf).