THE TEXAS ECONOMY

O'NEIL CENTER FOR GLOBAL MARKETS AND FREEDOM ★ SMU COX SCHOOL OF BUSINESS ★ MAY 2016

Digging a Little Deeper into Texas' Economic Success

By W. Michael Cox and Richard Alm

Texas' annual GDP of $1.6 trillion sums up the collective efforts of millions of workers and thousands of companies sprawled across a dozen or so major economic sectors. Most of the time, we discuss all this activity in broad terms, focusing on state-level GDP growth, job creation, unemployment rates and the like.

While these general measures give a sense of the economy's overall health, they sometimes obscure what's going on beneath the surface. At any given time, some parts of the economy may be prospering while others struggle—often for a variety of reasons, some obvious and others hidden.

State economies can be studied a number of ways—by total employment, by output, by industry, by region, by metropolitan area. In this issue of *The Texas Economy*, we slice up state-wide real GDP by sector to examine the patterns of Texas' growth and how they compare with a few other big states.

The Texas economy's overall success is well-known. From 1997 to 2015, its output of goods and services rose faster than any other state, increasing by nearly 81 percent. Among the six biggest states, California and Florida had been leading the pack until 2008-09, but Texas zoomed ahead in the past six years (*see chart right*). New York, Pennsylvania and Illinois grew at the slowest pace over this 18-year period.

Using Bureau of Economic Analysis data, we decompose aggregate state economic growth into 15 sectors. Over the past two decades, the top category for Texas has been wholesale and retail trade, with a cumulative growth rate of 13.4 percent (*see chart, next page*).

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The state's population increased by 8.5 million since 1997, and retailers have been opening stores to serve the new Texans, particularly in fast-growing places like Collin and Denton counties in the Dallas-Fort Worth (DFW) area. The state's central location and transportation infrastructure give it an edge in key aspects of wholesale trade, including warehousing and distribution.

Manufacturing ranks second to trade, expanding by 12.5 percent since 1997. The state's factories churn out cars and trucks, petrochemicals, oilfield equipment, electronics and many other products for domestic and global markets. In 2015, Texas stood out as the nation's No. 1 state in factory output.

Texas' growing manufacturing might seem surprising in light of persistent reports of a decline in America's traditional industrial economy. Keep in mind, however, that we're looking at output and not employment. The real story of U.S. manufacturing over the past few decades has been rapid productivity gains—getting more output with fewer workers.

In fact, U.S. factories' total value added has never been higher—$2.2 trillion in 2015, up from $1.8 trillion in 1997. A large share of those gains have come to Texas, a state that offers reasonable wages, right-to-work laws that check union power, easy transport and abundant inputs, such as the oil and natural gas needed by the petrochemical industry.

Texas' next two sectors are professional and business services at 11.6 percent and finance, insurance and

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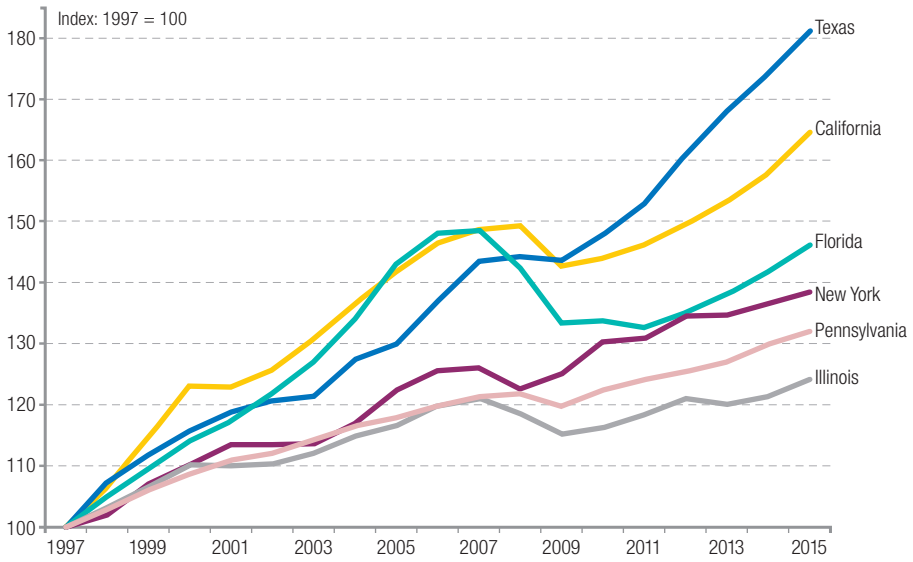
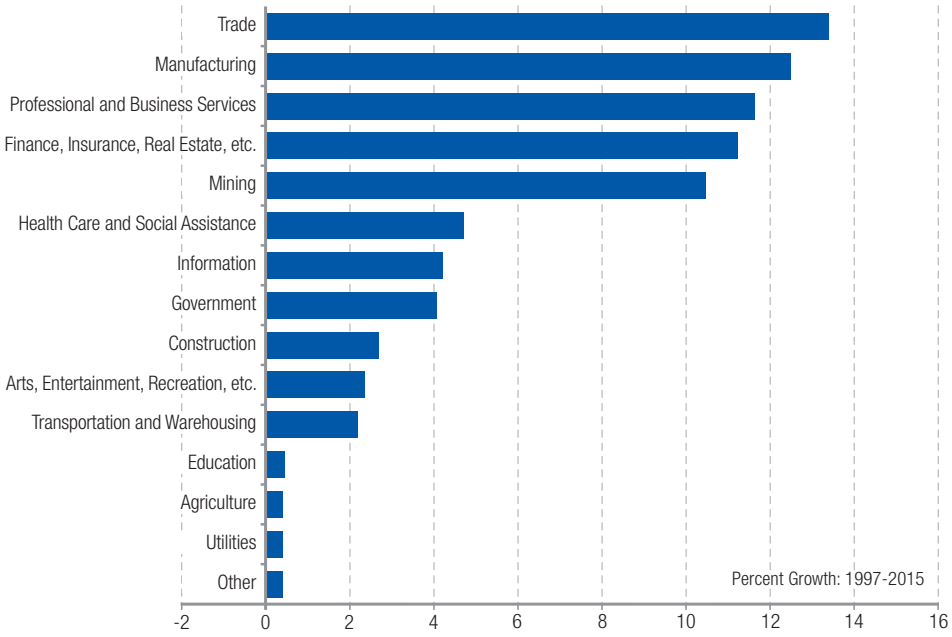
TEXAS LEAPS AHEAD OF OTHER BIG STATES IN GROWTH



FIVE KEY SECTORS FUELED TEXAS' GROWTH SINCE 1997



real estate (FIRE) at 11.2 percent. Taken together, these categories reflect the rise of Texas—in particular, the DFW area—as a center for corporate headquarters and other white-collar businesses. The state's population growth, of course, buoys the real estate industry, both residential and commercial.

Next comes the sector that has historically been a key driver of the state economy—the oil and gas industry. It dominates the mining sector, which grew by 10.5 percent between 1997 and 2015. The strong performance owes to a decade-long oil and gas boom that began in 2005 as hydraulic fracturing ("fracking") technology gave companies a new ability to tap deposits in the Barnett Shale, Permian Basin, Eagle Ford Shale and other formations.

The industry thrived until 2014, when global oil prices fell and forced oil and gas companies to retrench. However, the oil-price bust didn't bring a repeat of the deep recession of the early 1980s; Texas' economy diversified over the next three decades, giving it sufficient strength in other sectors to continue growing despite the lower oil prices (see *The Texas Economy*, March 2016).

The five fastest-growing sectors accounted for nearly three-quarters of Texas' growth since 1997. Health care, information, government, construction and other sectors each grew by less than 5 percent—but all made positive contributions to Texas economic growth since 1997.

Five other big states

How does Texas compare with the rest of the country? To make the assessment manageable and meaningful, we looked at growth patterns in the five other states with the largest economies—California, New York, Florida, Illinois and Pennsylvania. Like Texas, they all had leading and lagging sectors since 1997 (*see charts, Page 3*).

FIRE was the fastest-growing sector in each of the big states outside Texas. Wall Street's financial firms helped New York post the largest gains (15.2 percent), although California and Florida weren't far behind. Professional and business services were strong in California and Florida—but neither matched the pace set by Texas. The state also had the most vibrant trade sector.

It's no coincidence that FIRE, professional and business services and trade are among the five fastest-growing sectors in each of the big states. These sectors have been benefiting from broad trends reshaping the U.S. economy as a whole. As old industrial sectors have faded, services and knowledge-based industries have expanded rapidly, making up an ever-larger chunk of U.S. GDP in a globalizing economy.

Texas lagged other big states in information, a knowledge-based sector that includes software and computer technology. In testament to Silicon Valley's vitality, California saw a 10.8 percent growth in its information sector, best among the big states. New York followed at 7.5 percent from 1997 to 2015. In Texas, the sector managed to grow just 4.2 percent, suggesting that the technological wizardry of Austin and DFW may be oversold.

Health care contributed to growth in all the big states. It was among the Top 5 sectors in New York, Florida, Illinois and Pennsylvania; it ranked sixth in Texas and California.

Manufacturing showed mixed results. Like Texas, California showed strong growth (10.4 percent), probably owing to the output of high-tech products. Illinois held on to its manufacturing, but the sector languished in Florida and New York. It contracted by more than 1.1 percent in Pennsylvania, reflecting the continued decline of old-line industries.

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Unlike Texas, where all parts of the economy grew, each of the other big states had shrinking sectors. Pennsylvania and Illinois both had four of them, although the magnitudes were in some cases small. Utilities were negative in New York and Illinois, states with declining population. Construction faltered in Illinois and, somewhat surprisingly, in Florida, a state with a growing population. Mining dragged down growth in California and Florida. The "other" category—a hodge-podge of small but unrelated industries—contracted in California, New York, Illinois and Pennsylvania.

Texas' edge in economic performance has come from a diversified economy with strength across these leading sectors, plus the bonus of growth in

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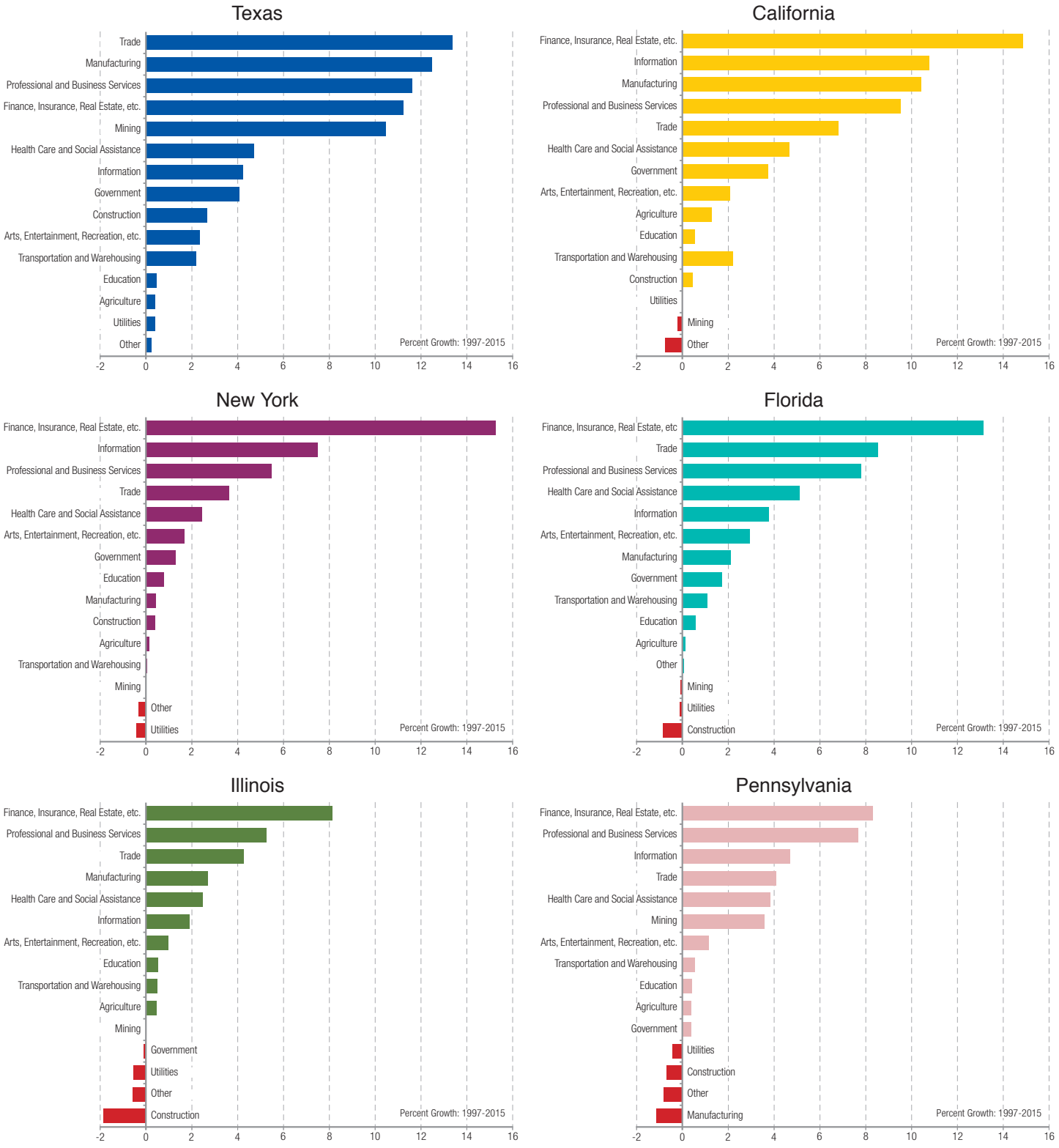
SOURCES OF GDP GROWTH BY SECTOR IN TEXAS, 5 OTHER LARGE STATES



manufacturing and mining (oil and gas). A growing population, fed by migration from other states, no doubt added fuel to the Texas economy in this period.

All the big state economies benefitted from the nation's growing sectors. Texas fared better than the rest of them because its model of economic freedom—low taxes, small government, less meddling in labor markets—gave the private sector more room to adapt and seize opportunities arising at home and abroad (see *The Texas Economy*, January 2016). Operating in a more flexible economy, the state's businesses and workers consistently delivered a growth rate that topped all other states in the past seven years.

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GDP data: U.S. Department of Commerce, Bureau of Economic Analysis. Available at bea.gov. Note: We use 1997 as our starting point because it was the first year of consistent data collected under the North American Industry Classification Codes.

Next issue: *The Texas Economy* will continue its inquiry into the origins of the Texas model, exploring how revolution, independence and statehood made Texas part of an economic system of freedom and prosperity.

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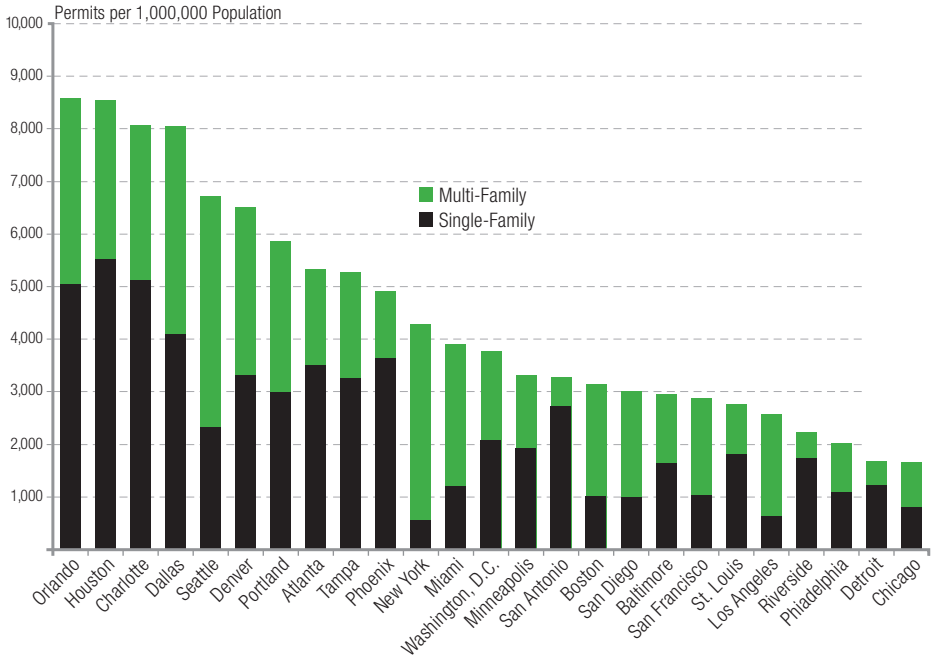
CHARTING THE TEXAS ECONOMY

Building Boom: Houston, DFW Rank Near Top in Housing Permits

Texas claims two of the nation's most vibrant big-city housing markets, according to Census Bureau data. Among the nation's 25 largest metropolitan areas (MSAs), New York led in building permits in 2015 with 86,424, followed by the Dallas-Fort Worth (DFW) area at 57,146 and Houston at 56,901.

In terms of building permits per 1 million people, Houston finished second to Orlando (*see chart*). DFW wasn't far behind, coming in fourth in a virtual tie with Charlotte.

The Top 25 MSAs differ in the composition of building activity as well as its pace. San Antonio, with less than half the permits of Texas' two other big cities, has the highest share of single-family houses at 82.8 percent. Houston leans toward single-family construction (64.6 percent). DFW is evenly split between apartments (49.2 percent) and stand-alone homes (50.8 percent).



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The Texas Economy is an electronic publication of the William J. O'Neil Center for Global Markets and Freedom, a research institute in the SMU Cox School of Business.

The center was founded in 2008 with an initial grant from William J. O'Neil, a 1955 SMU business school graduate, and his wife Fay C. O'Neil. Its broad mission is the study of why some economies prosper and others do poorly, focusing on two critical issues for the 21st Century economic environment—globalization and economic freedom.

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