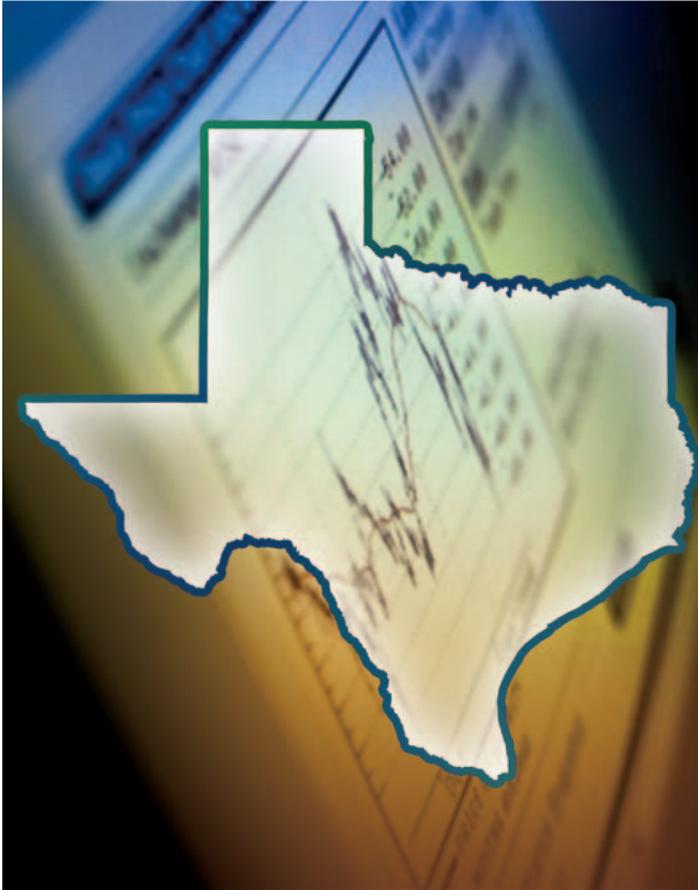


Southwest Economy



Dallas Fed Introduces Business-Cycle Indexes for Texas Metros

The frequency and severity of cyclical swings in a local economy are important to businesses and consumers because such cycles impact production and inventory decisions, employment and unemployment. Analyzing the overall direction of a local economy, however, can be difficult and confusing. Often the handful of local economic indicators gives mixed signals. For example, if the unemployment rate and job growth both increase, is the local economy picking up or weakening? Often it is not clear.

To more clearly define regional business cycles, the Dallas Fed has developed composite indexes that aggregate the movements of key economic indicators for nine Texas metropolitan areas. The Metro Business-Cycle Indexes use statistically optimal weights so that movements in the indexes best represent the underlying co-movements in the indicators and thus the underlying

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*INSIDE:
Texas Finding
Growth in Seeming
Disadvantage*

*Mexico Emerges from
10-Year Credit Slump*

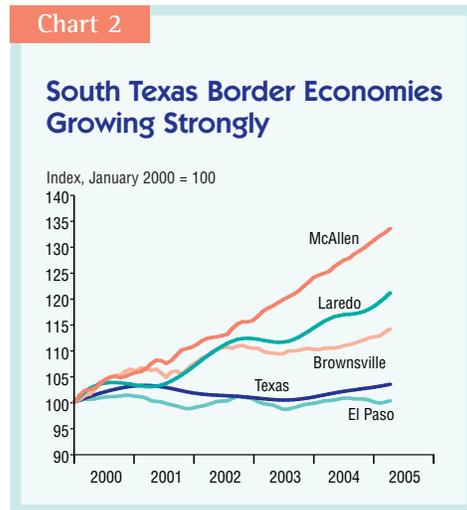
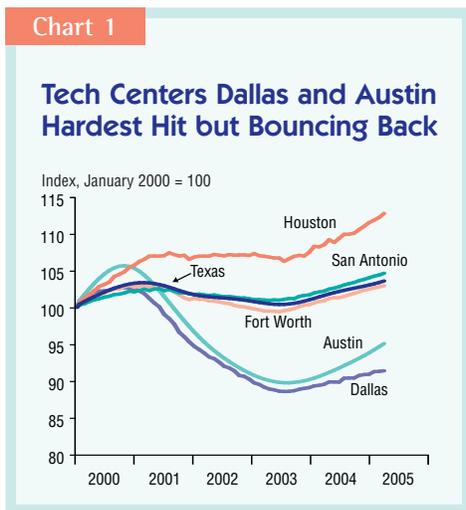
A Fitter, Trimmer Core Inflation Measure

Speaking of the challenge in interpreting monthly inflation numbers during his tenure on the Federal Reserve Board, former Vice Chairman Alan Blinder said, “The name of the game then was distinguishing the signal from the noise, which was often difficult. The key question on my mind was typically: What part of each monthly observation on inflation is durable and what part is fleeting?”¹

Blinder’s conception of a component of monthly inflation that is durable as opposed to fleeting—that represents signal rather than noise—corresponds to what most economists call *core inflation*. Core inflation, understood in this way, represents the underlying trend in inflation once temporary swings have

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state of the economy. The long-run growth in the indexes is set equal to growth in real personal income. The indexes are constructed using the same statistical techniques as the Texas Leading Index.¹

In May the Dallas Fed introduced business-cycle indexes for the metropolitan areas of Austin–Round Rock, Brownsville–Harlingen, Dallas–Plano–Irving, Fort Worth–Arlington, El Paso, Houston–Sugar Land–Baytown, Laredo, McAllen–Edinburg–Mission and San Antonio. Movements in the indexes summarize the movements in locally measured nonagricultural employment, the unemployment rate, inflation-adjusted wages and inflation-adjusted retail sales. Because the indexes are designed to measure the economy’s overall direction but not the magnitude of local activity for each metro area, links are included to the component series.

The indexes will be published monthly on the Dallas Fed web site, www.dallasfed.org, a couple of days after the employment and unemployment rate data for the state and metro areas become available from the Texas Workforce Commission. Usually these data are released on about the 22nd day after the end of the reporting month.

The indexes show clear patterns of recessions and expansions. While Texas recessions have impacted local economies, many of the state’s metro areas have business cycles that deviate from those of the state, the nation and other Texas regions. For example, the high-

tech cities of Austin and Dallas were hit hard by the downturn that began in early 2001 (*Chart 1*), but the South Texas border cities continued to grow (*Chart 2*). The Metro Business-Cycle Indexes illustrate economic conditions in other Texas metropolitan areas as well.

Economic Conditions in Nine Major Metros

Austin–Round Rock. After leading Texas’ major metros in economic expansion during the 1990s, Austin was hit hard by the high-tech bust that occurred in 2001, as the metro’s business-cycle index illustrates. Since mid-2003, however, Austin’s index suggests its economy has turned the corner and is once again one of the fastest-growing in the state.

Brownsville–Harlingen. The business-cycle index shows this metro area outperforming the state and nation since 2000. Brownsville’s economy has been boosted by a strong peso and favorable agricultural conditions due to adequate rainfall and good citrus prices. Nevertheless, Brownsville–Harlingen’s economy has not performed as well as those of some other South Texas border areas, which is consistent with its index. The likely cause is a sharp decline in apparel manufacturing, which historically has been an important industry for this metro.

Dallas–Plano–Irving. Dallas’ business-cycle index illustrates the devastating blows to the metro’s economy in

2001—both the high-tech bust and 9/11's negative impact on the airline industry. Dallas' business cycle this decade has followed a pattern similar to Austin's, except that its heavier concentration of airlines and telecommunications firms likely contributed to the larger downturn and weaker recovery.

Fort Worth–Arlington. This trade, transportation and manufacturing center has mimicked the business cycle of the state overall. The area's relatively large manufacturing sector is not as high-tech intensive as Dallas' or Austin's and thus did not suffer as much during the sectors' decline in 2001 and 2002.

El Paso. Since 2000 the El Paso business cycle has mimicked the Texas business cycle. While the El Paso metro area is generally small and might be expected to correlate less with the state and national economies, its economic performance is closely linked to that of Texas and the United States because of the border city's link to the maquiladora industry. Many El Paso service and manufacturing firms provide inputs to the maquiladoras. The El Paso economy has been growing since mid-2003 but at a weaker pace than Texas' economy overall. Recent improvement in the maquiladora industry and growth in military-related employment should boost the El Paso metro index in coming months.

Houston–Sugar Land–Baytown. Houston's business-cycle index stagnated from mid-2001 through mid-2003. A large health care presence and a relatively low share of high-tech industries helped Houston avoid the downturn that hit Dallas and Austin. Since mid-2003, Houston's index has risen at a moderate pace. Expanding industries such as oil and gas, petrochemicals and health care are likely driving the improvement.

Laredo. According to its business-cycle index, the Laredo economy has expanded strongly over the past four years. This is consistent with the metro's solid growth in transportation, warehousing and retail sales, which have benefited from increased international trade and the strong peso.

McAllen–Edinburg–Pharr. McAllen's business-cycle index has risen robustly over the past four years. Strength in the metro's economic indicators is closely tied to the stronger peso and a relatively

healthy maquiladora sector in the border city of Reynosa.

San Antonio. San Antonio's economy has expanded slightly faster than the Texas economy over the past four years, according to its business-cycle index. San Antonio has a smaller share of high-tech industries and a larger share of health care—a rapidly growing sector. Historically, the presence of stable industries such as government has allowed San Antonio's business cycle to swing less than those of other metro areas. A reduced federal government presence, particularly military-related jobs, will likely lead to greater business-cycle fluctuations in the future.

—Keith R. Phillips

Phillips is a senior economist at the San Antonio Branch of the Federal Reserve Bank of Dallas.

Note

The author thanks Kristen Hamden for her skillful programming and automation of the indexes and James Hoard and Kay Champagne for helpful suggestions and comments.

¹ The procedure is described in more detail in "A New Monthly Index of the Texas Business Cycle," by Keith R. Phillips, Dallas Fed Working Paper No. 0401, January 2004. For more detail on the local business cycle using the new indexes, see the following Dallas Fed publications: "Composite Index: A New Measure of El Paso's Economy," by Jesus Cañas, Robert W. Gilmer and Keith Phillips, *Business Frontier*, Issue 1, 2003; "A New Index of Coincident Economic Activity for Houston," *Houston Business*, by Jesus Cañas, Robert W. Gilmer and Keith Phillips, April 2003; and "Steady-as-She-Goes? An Analysis of the San Antonio Business Cycle," by Keith R. Phillips and Kristen Hamden, *Vista*, Winter 2004. All publications are available on the Dallas Fed web site, www.dallasfed.org.

The Texas Metro Business-Cycle Indexes will be published monthly on the Dallas Fed web site, www.dallasfed.org, under "Economic Data."