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Southwest Economy

Texas Economy Stalled by Recession

Texas followed the nation into recovery at the beginning of the year, but the state's job losses resumed in May, even as the nation continued its anemic recovery. The current Texas recession is shallower than previous ones but will probably last longer. The extent to which Texas remains in recession depends greatly on the strength of the national and global economies.

If we define recession as two consecutive quarters of negative employment growth coincident with gross state product (GSP) declines in at least one quarter, Texas went into recession in April 2001. Employment declined in the last three quarters of 2001, picked up in first quarter 2002, then declined again in the second and third quarters (*Chart 1*). The September employment numbers (the latest data available) show a slight decline of 0.4 percent (annualized) for total employment and a greater drop of 1.1 percent for private employment. Employment is down 1.7 percent (annualized) for the quarter and 0.2 percent (annualized) year-to-date.

Looking at output, the Dallas Fed's estimate of Texas GSP growth looks similar to U.S. GDP

(Continued on page 2)

The National Economy: Heading for a Dip?

The recession began in March 2001 and despite the events of September 11, appears to have ended the following November. How far have we come since November 2001? And where are we headed?

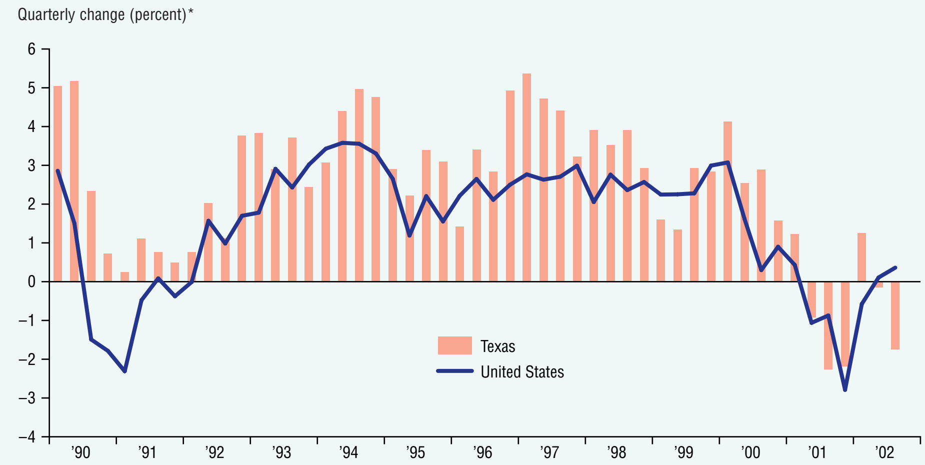
The key features of the apparent expansion have been slow growth in output and almost nonexistent growth in employment. The former is unsurprising, given the mildness of the 2001 recession. The latter, however, contrasts sharply with the usual pattern of post–World War II expansions. In terms of employment growth, the recovery from the 2001 recession is shaping up to be a repeat of the jobless recovery that followed the 1990–91 recession.

Troubling as the lack of job growth has been, more worrisome still is evidence that the pace of the expansion has cooled, beginning around July.

(Continued on page 9)

Chart 1

Employment Falls in Third Quarter



* Seasonally adjusted, annualized rate.
SOURCES: Bureau of Labor Statistics; Federal Reserve Bank of Dallas.

Texas has not yet emerged from recession.

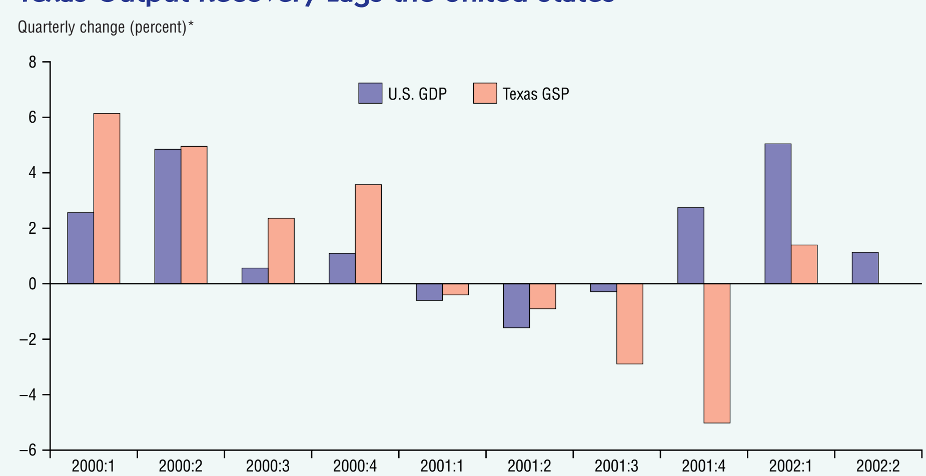
growth (*Chart 2*). Texas slipped into recession with the nation, registering negative GSP growth in the first quarter of 2001. However, in contrast to the United States as a whole, Texas continued with negative growth in the fourth quarter. Like the nation, Texas GSP grew in the first quarter of 2002.

The Dallas Fed's coincident index is a more general indicator than either employment or GSP growth. It tracks current economic activity by combining changes in employment, output and the unemployment rate. Chart 3 shows the index, along with the current and two previous Texas recessions.[1] When the index turns negative, it signals recession. As can be seen, the index is still in negative territory, implying that Texas has not yet emerged from recession.

Anecdotally, the most recent Beige Book—the Fed's survey of business conditions—suggests that economic growth declined in September and early October

Chart 2

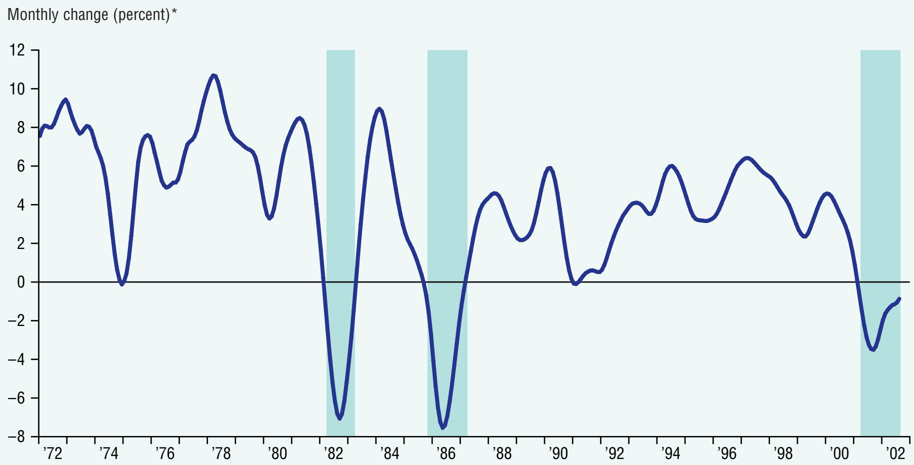
Texas Output Recovery Lags the United States



* Seasonally adjusted, annualized rate.
SOURCES: Bureau of Economic Analysis; Federal Reserve Bank of Dallas.

Chart 3

Texas Coincident Index Signals Continuing Recession



* Seasonally adjusted, annualized rate.

NOTE: Shaded areas indicate recession.

SOURCE: Federal Reserve Bank of Dallas.

The Texas economy is bouncing along the bottom with slightly negative employment growth.

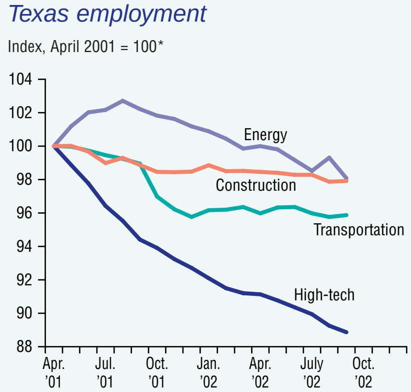
and that Texas' economy is slightly weaker than the nation's. Texas seems to be lagging the nation in recovery because we have a larger concentration of industries that suffered during this recession: transportation (effects of September 11), high tech (the telecom bust and beyond) and energy (weak oil and gas prices in fourth quarter 2001).

At the national level, the question is whether the U.S. economy will double-dip. However, in Texas a more relevant query is whether the state has even come out of recession. Given the unimproved employment situation, weak state output and negative index of coincident indicators, Texas is still in recession. The extent and pace of the national recovery will largely determine the rate of rebound in Texas economic activity.

Chart 4

Hardest Hit Sectors

Texas employment



* Seasonally adjusted, annualized rate.

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

What Are the Current Conditions?

The Texas economy is bouncing along the bottom with slightly negative employment growth. Since April 2001, total Texas employment is down 1 percent and private employment down 1.7 percent. The downturn is broad-based across sectors. Manufacturing and mining have been hardest hit, with TCPU (transportation, communication and public utilities) following suit. Looking at more detailed data, the high-tech, transportation and construction industries declined most (*Chart 4*).

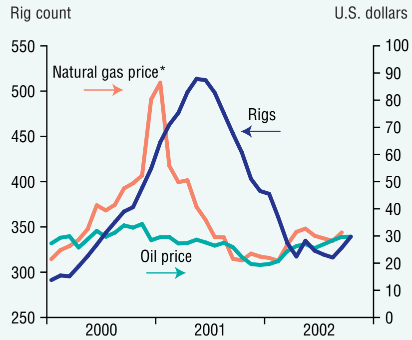
Transportation. The transportation sector was already in bad shape before September 11 and went into a tailspin after. Since April 2001, this sector has lost about 4 percent of its employment (15,300 jobs). Although the sector stabilized in 2002 as the national economy gathered strength, it is still weak and a long way away from prerecession levels.

Energy. The Texas oil and gas extraction sector has lost 4,900 jobs (3.2 percent of employment), and the Texas rig count has declined 28 percent—by

Overall conditions in high tech remain bleak.

Chart 5

Drilling Follows Natural Gas Prices



* Natural gas price is multiplied by 10.

SOURCES: Hughes Tool Co.; *Wall Street Journal.*

136 rigs—since April 2001 (*Chart 5*). This may seem surprising, given the current strength of oil prices. After hovering around $27 per barrel in the first eight months of 2001, oil prices fell nearly 30 percent at year-end. Prices climbed back after the first quarter of 2002 and reached $30 in August, largely because of rumblings of war with Iraq.

Drilling activity is following the natural gas market rather than the oil market these days; 86 percent of domestic drilling is for natural gas. The high levels of natural gas in storage (7 percent more than the five-year average for this time of year) have put downward pressure on drilling. After rising in September, the rig count declined again in October. Although natural gas prices have firmed up, the industry is afraid prices will collapse if we have a mild winter. The Beige Book has been reporting that weak balance sheets are keeping some producers from drilling aggressively. Overall, the price and investment picture remains murky in the energy sector.

High Tech. Overall conditions in high tech remain bleak, and employment continues to drop. Texas' high-tech sector has lost 45,300 jobs since April 2001, about 11 percent of total high-tech employment. High-tech manufacturing jobs have declined 4.4 percent year-to-date (*Chart 6*). The outlook seems to be softer rather than firmer, according to industry contacts. Activity is not expected to improve in the next six months, and recovery in telecom won't come until after 2003. Prospects for earnings growth are poor, keeping sales activity and equity prices in the cellar.

Going forward, several factors present downside risks for recovery. First, overcapacity continues to discourage investment in new equipment. Relatively new hardware available through bankruptcies and shutdowns is being sold at fire-sale prices, competing with sales of new equipment. Second, purchasing managers are still cautious about invest-

Chart 6

Texas High-Tech Bust in Manufacturing Employment

* Seasonally adjusted, annualized rate.

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

ment, and spending budgets for new technology are constrained. This phenomenon has given rise to longer sales cycles and purchases in smaller increments. Finally, venture capital is still declining; venture capital funding to Texas firms in the second quarter of 2002 was down 73 percent from year-earlier levels.

Telecom employment, so vital to North Texas, has continued to drop. Jobs in telecom equipment manufacturing and telephone communications are down 6.6 percent and 5.4 percent, respectively, for the year. The Dallas/Fort Worth Metroplex Technology Business Council estimates that companies in the Richardson Telecom Corridor, which at the peak of the high-tech boom employed 80,000 tech workers, have shed 10,000 to 15,000 jobs in the downturn. Firms that recently laid off workers are reluctant to take on overhead but still have work outstanding, providing short-term (three to six months) contract work for displaced workers. Other laid-off workers have been absorbed by small and midsized companies that previously couldn't compete with exorbitant compensation packages.

The AeA Texas Council reports that while reductions in Texas high-tech manufacturing have been severe during the high-tech bust, software and computer services have not been as hard hit.[2] On the other hand, there are also reports that conditions among software companies in Austin have turned very weak in recent weeks.

Although global chip sales rose in August, they fell in the Americas, mainly because of weak computer and telecommunication equipment sales. New orders for computers and communications equipment were down in the Census Bureau's latest advance durable goods report, which does not bode well for the industry. The semiconductor equipment book-to-bill ratio fell below unity for the first time since February, signaling that new orders are not as strong as shipments.

Construction and Real Estate. Overall construction and real estate conditions have deteriorated in the past few months. The commercial situation remains weak, and previously strong sales in low-priced homes are softening. Strength in single-family housing held up the construction sector fairly well in 2002; the large employment losses came mainly in 2001. Construction employment is down 0.6 percent (annualized) for the year and down 1.3 percent since April 2001. About 10,000 jobs have been lost.

Nonresidential construction and real estate markets continue to decline. Office vacancy rates stand at 25 percent in Austin (up from 8 percent in first quarter 2001) and 26 percent in Dallas (up from 18 percent). Landlords are scrambling to land solid tenants in Houston, where the vacancy rate, currently around 16 percent, is expected to rise to the mid-20s within a year. Construction contract values for office, industrial and commercial properties have been falling since the end of 2001 (*Chart 7*). Rent concessions in commercial properties have persisted, and real estate contacts don't expect a turnaround anytime soon.

In reaction to the events of September 11, insurance premiums on some commercial real estate assets have risen 50 percent in the past year, exacerbating the negative environment in nonresidential real estate. In addition, hoteliers are still feeling the crunch of decreased business travel. Texas has the second-most delinquent hotel loans in the country—about $85 million. Three North Texas hotels have already closed in the past year, and industry observers expect more to follow. With new capacity brought on by recent hotel development, recovery in the sector won't be easy.

Despite weakness in the fundamentals, secondary real estate markets are abuzz with activity, and capital abounds for buying opportunities in commercial and multifamily space. After repeated pummeling in equity markets, investors seeking stability now welcome the predictable rental payments of strong tenants.

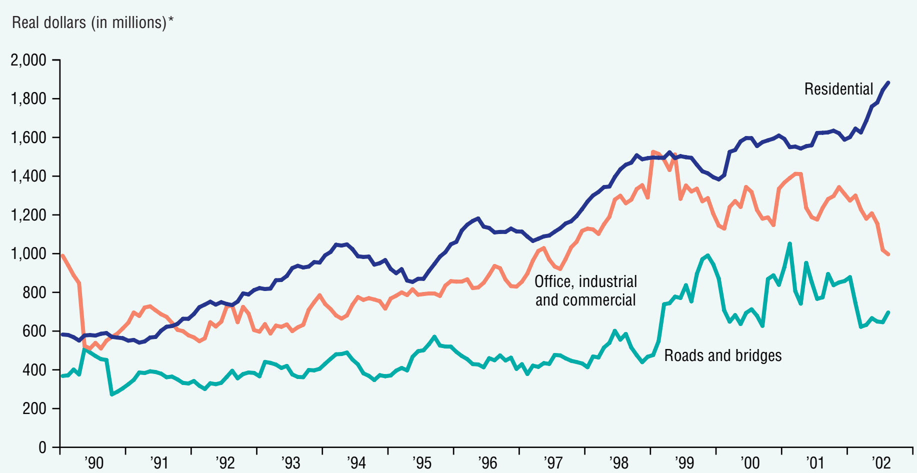
Texas single-family construction was held up by strength in the lower priced segment throughout the year. Construction contract values for residential properties shot upward in 2002 (*Chart 7*), and single-family permits trended up throughout the year because of very strong sales of homes priced below $150,000. However, some weakness has appeared in the past month. The lower-end market has attenuated in recent weeks, despite low mortgage rates. Some contacts have noticed a significant change in momentum in the Dallas/Fort Worth metroplex, and cancellations have increased in Houston.

Exports. Exports picked up in the first quarter of this year for the first time since mid-2000. Total exports were flat in the first quarter but rose 10 percent in the second. Exports were up for all trading partners except Latin America (excluding Mexico). Exports to Asia were

Chart 7

Residential Construction Strong, Office Segment Still Weak

Texas construction contract values



* Seasonally adjusted, five-month moving average.

SOURCE: McGraw Hill Construction/F.W. Dodge.

The current Texas recession is shallower than previous ones.

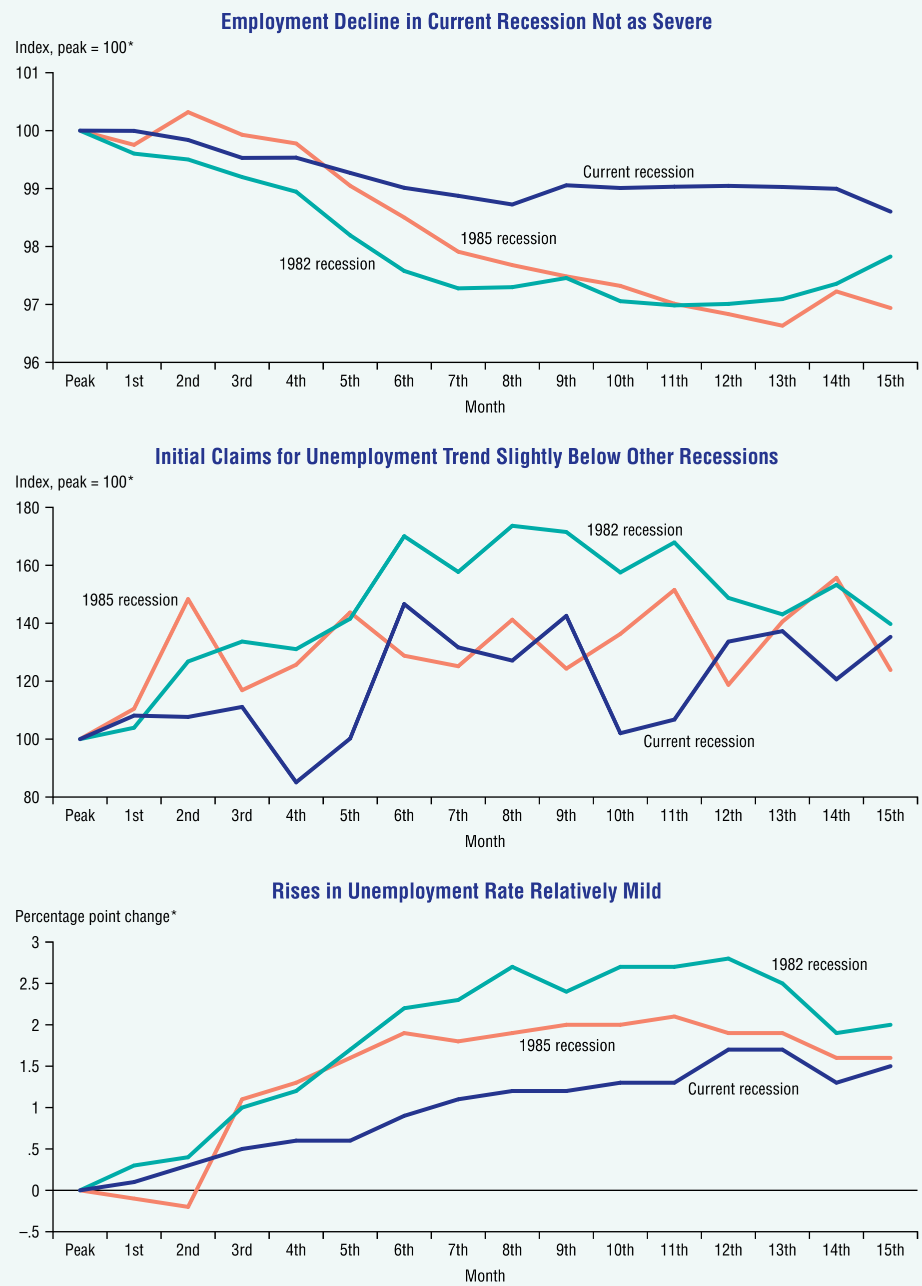
Table 1

Three Texas Recessions

	1982 Recession	1985 Recession	2001–02 Recession
Duration	12 months	17 months	18 months and going
Change in employment	–3 percent	–3.1 percent	–1 percent (September)
Change in gross state product	–1.1 percent	–5.9 percent	–2.3 percent
Change in unemployment rate	2.8 percentage points	2.1 percentage points	1.7 percentage points

Chart 8

Labor Markets



* Seasonally adjusted.

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

particularly strong, increasing 17 percent. Exports to Canada and Mexico increased 7 percent. (See "Beyond the Border" on page 19 for details.)

How Does This Recession Compare with Previous Ones?

Using changes in employment and GSP to date recessions, we compare the current recession with those of 1982 (lasting from April 1982 to March 1983) and 1985 (November 1985 to March 1987). The current Texas recession started in April 2001 and is not over yet. Table 1 compares key characteristics of these three recessions. Other differences between the current and previous recessions are seen in various economic indicators.

Employment. The current recession has been shallower than the previous two in terms of employment (*Chart 8*). Initial unemployment insurance claims are also at a relatively lower level in the current recession, and the unemployment rate has not climbed as much.

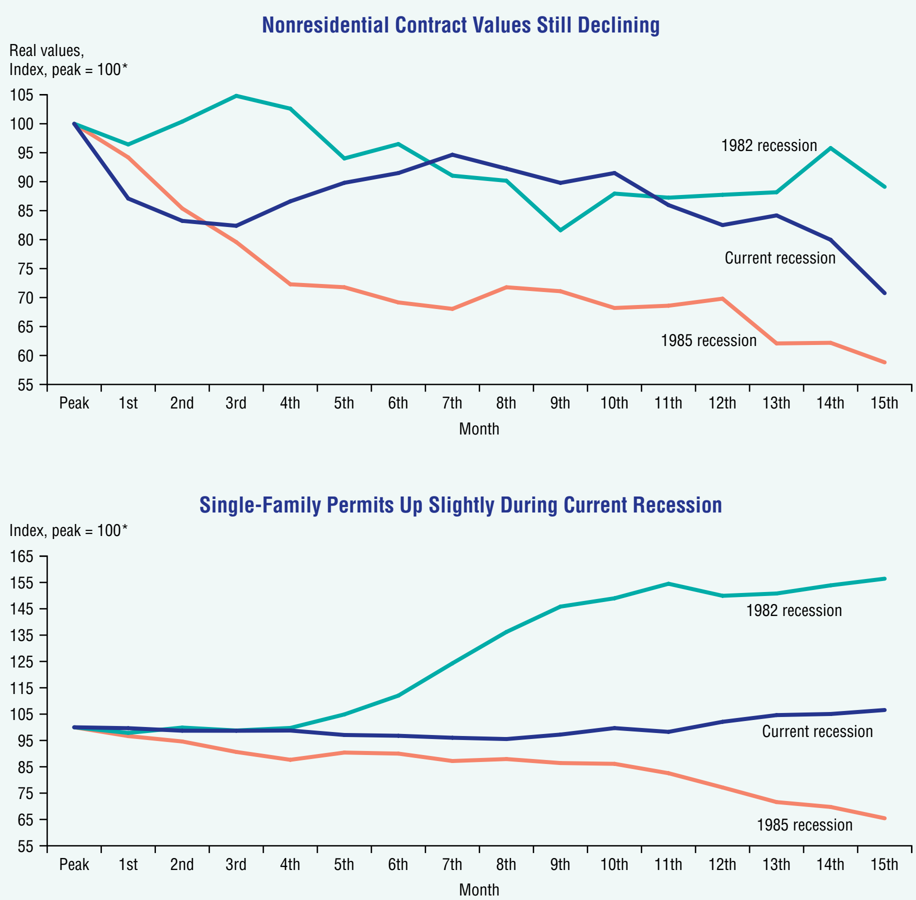
Gross State Product. GSP growth became positive after three negative quarters in this recession; it took longer to turn during previous recessions. GSP has dipped 2.3 percent in the current recession but fell almost 6 percent in 1985. Although the 1982 recession was more severe in all other aspects, GSP growth did not suffer as much.

Construction. Chart 9 shows that the office and industrial construction sector has declined substantially in the current recession, although not as severely as in the real estate bust of the mid-1980s. The nonresidential sector held up pretty well

The current Texas recession started in April 2001 and is not over yet.

Chart 9

Real Estate Conditions



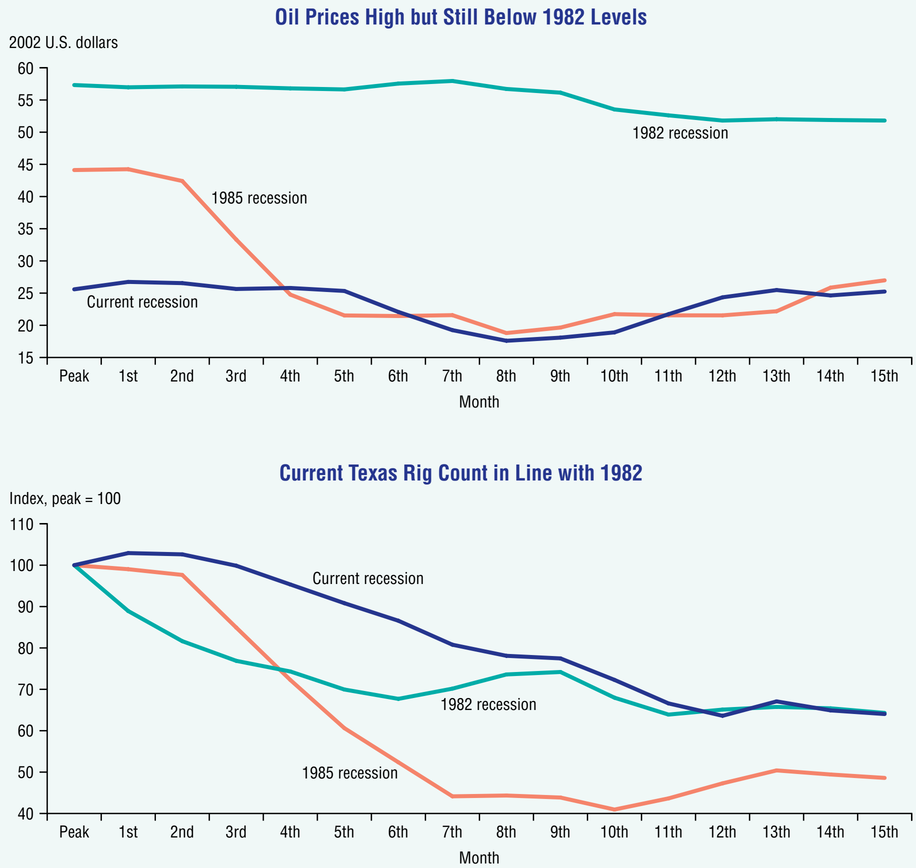
* Seasonally adjusted, five-month moving average.

NOTE: Normalized by Texas population.

SOURCES: McGraw Hill Construction/F.W. Dodge; Census Bureau.

Chart 10

Energy



SOURCES: *Wall Street Journal*; Hughes Tool Co.

during the 1982 recession because of the Economic Recovery Tax Act of 1981, which gave favorable tax treatment to commercial property.

Single-family housing has kept the construction sector going in this recession. Housing also continued strong during the 1982 recession. This was part of what some academics called "the lending frenzy," spurred by several events that gave financial institutions a large pool of available funds to lend to real estate investors.[3]

Energy. Although prices dipped to \$19 per barrel at the end of 2001, they have been relatively stable near \$26 per barrel since April (*Chart 10*). In real terms, current prices are near the 1985 oil-bust levels. Oil prices were relatively stable during the 1982 recession after falling from highs of \$37 per barrel to around \$30 per barrel. Prices remain about half what they were during the 1982 recession (about \$55 per barrel in today's dollars).

The rig count fell 53 percent with the collapse of oil prices in 1985. It fell 36 percent in the 1982 recession. Although oil prices have been relatively strong in this recession, the rig count has declined about 32 percent from its peak.

In sum, this Texas recession is shallower but will probably last longer than previous ones. Even though the energy sector has fared poorly, it has still bested its performance in earlier recessions. It didn't help Texas, but it didn't hurt the state either.

Where Do We Go from Here?

The general consensus is that the nation came out of recession at the end of 2001. It is hard to reach such a consensus for Texas. Employment growth has been negative since May, but the rate of decline has been very close to zero. The Fed's most recent survey of business conditions notes that economic growth declined in the region in September and early October. The leading index, which forecasts economic activity in Texas three to six months ahead, has been on a downward trend since April 2002, implying weakening economic activity. Texas fared somewhat worse than the nation in employment losses because the state has a larger share than the national average of the industries hit in this recession, such as high tech and transportation.

The outlook for Texas depends very much on the health of the national economy. If the U.S. economy double-dips, the Texas economy will be stalled in recession for some time. If the U.S. economy picks up, however, we could see Texas also turning the corner early next year.

—Mine K. Yücel
John Thompson

Yücel is a senior economist and assistant vice president and Thompson is an assistant economist in the Research Department of the Federal Reserve Bank of Dallas.

Notes

1. The Texas Coincident Index was developed and is maintained by Keith R. Phillips of the San Antonio Branch of the Federal Reserve Bank of Dallas.
2. Texas Council AeA, News Release, Dallas, June 26, 2002.
3. One such event was passage of the Depository Institutions Deregulation and Monetary Control Act of 1980, which phased out interest rate ceilings on time and savings deposits. The second was the Garn–St. Germain Depository Institutions Act of 1982, which created the money market deposit account.

The National Economy: Heading for a Dip?

(Continued from front page)

This evidence, which has come primarily from measures of production, has raised fears of a double-dip recession.

Over the same period, though, barometers of the state of demand have remained generally positive. Obviously, production and demand cannot go in opposite directions for long—particularly since inventories have been pared down at all stages of the economy's supply chain. At some point, either production will have to pick up or demand growth will have to slow. Which side will win this tug-of-war is unclear. At the time this article was written, the available data were not signaling an imminent second dip.

Another notable feature of the ongoing expansion has been the falling rate of inflation the economy has experienced over the past year. Since mid-2001, what had been a marked acceleration in inflation has turned, suddenly, into a marked deceleration, to the point where concerns about *de*flation are surfacing.

This article presents a status report on the health of the apparent recovery and discusses some of the factors influencing the economy's near-term direction. It also looks at the economy's recent inflation performance and the deflation concerns it has engendered.

A Weak Expansion

While the National Bureau of Economic Research is the final arbiter of the dates of U.S. recessions and expansions—and a determination from them is still probably months away—every indication is that the 2001 recession ended last November.

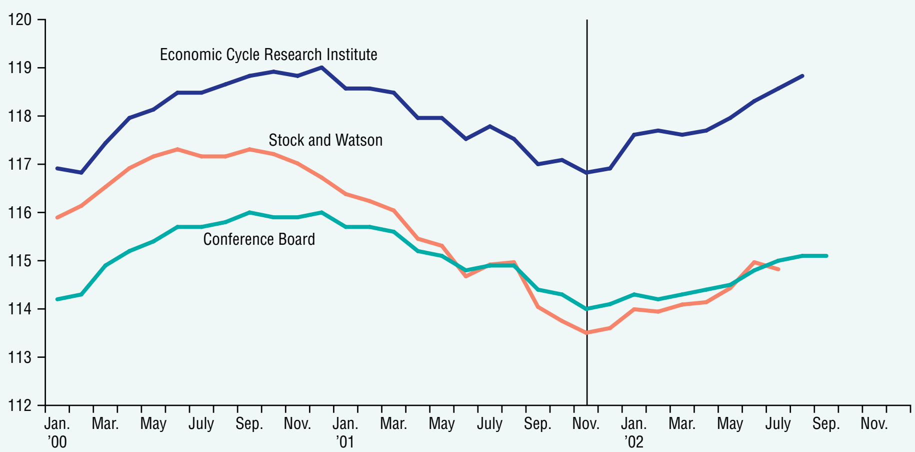
Chart 1 shows three coincident indexes of economic activity—from the Conference Board, the Economic Cycle Research Institute and economists James Stock and Mark Watson of Harvard and Princeton universities, respectively. Coincident indexes amalgamate a large number of economic variables in an attempt to measure the overall level of economic activity. All three indexes hit bottom in November 2001—shown by the vertical line in the chart—after which they begin to rise.

The pace of output growth in this expansion, though, has been slow. GDP grew 3 percent in the year after its third quarter 2001 trough. By comparison, output growth over the first year of the average post–World War II expansion is closer to 6 percent. The slow output growth in the current expansion is, however, consistent with the mildness of the 2001 downturn.

Chart 1

Coincident Indexes Point to Trough in November 2001

Indexes, 1996 = 100

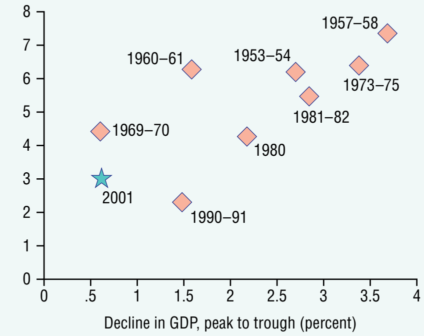


SOURCES: The Conference Board; Economic Cycle Research Institute; James Stock and Mark Watson.

Chart 2

The Milder the Recession, the Weaker the Recovery

Growth in GDP, first year after GDP trough (percent)



SOURCES: Bureau of Economic Analysis; author's calculations.

The Guitar String Theory of Business Cycles

As a rule, mild recessions make for weak recoveries and, conversely, deep recessions make for strong recoveries. Milton Friedman dubbed this the guitar string theory of business cycles: The smaller the pluck downward, the weaker the snap back. By most measures, the 2001 recession was a very small pluck; hence, we shouldn't expect a sharp snap back. Measuring a recession's severity by the percentage decline in GDP from its peak to its trough ranks the 2001 recession as nearly the mildest of the postwar period.

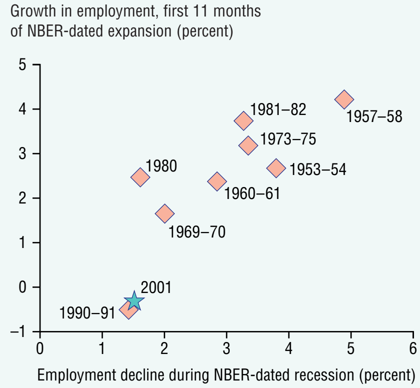
The scatter plot in Chart 2 illustrates the guitar string theory. Each point corresponds to a recession/expansion episode. Points further to the right correspond to deeper recessions, and those higher up correspond to stronger recoveries. The star represents the most recent episode. While the guitar string relationship is looser for milder recessions, output growth following the 2001 recession has not deviated greatly from the historical pattern.

Another Jobless Recovery?

What has been surprising has been the sluggish employment growth. Private payrolls continued to fall for several months after the overall economy began to recover and are still below their November 2001 level. Since April—the point when employment appears to have turned the corner—the economy has gained a mere 83,000 jobs.

Chart 3

Jobless Recovery Redux?



SOURCES: Bureau of Labor Statistics; author's calculations.

Financial market indicators are sending mixed signals about the future pace of economic growth.

Could this simply be the guitar string theory again? The answer is no; employment growth has been slow, even after accounting for the mildness of the downturn. The scatter plot in Chart 3 is similar to the one in Chart 2 except that it measures severity of recession and strength of rebound in terms of employment's percentage decline during the recession and percentage growth over the first 11 months of expansion. Clearly, the two most recent episodes are not like the others, and our current experience is nearly a repeat of the 1990–91 recession and the jobless recovery that followed.

Cooling Production Since July

While the slow pace of output growth so far is probably not cause for concern, evidence of a recent cooling in the pace of the expansion certainly is. This evidence, which began to accumulate in late summer, has come primarily from the economy's production side.

For example, surveys of firms' purchasing managers conducted by the Institute for Supply Management (formerly the National Association of Purchasing Management) indicate a significant deceleration in both the manufacturing and service sectors since July. Industrial production, measured by the Federal Reserve Board, fell in August and September after having registered seven consecutive monthly increases. Aggregate weekly hours worked, measured by the Bureau of Labor Statistics, also dipped in late summer.

Are We Headed for a Second Dip?

Is the economy tipping back into recession? While concern is definitely warranted, the data do not—so far—point to a double-dip scenario. First, while most indexes of leading indicators show declines over the past few months, those declines have been small. Meanwhile, financial market indicators are sending mixed signals about the future pace of economic growth.

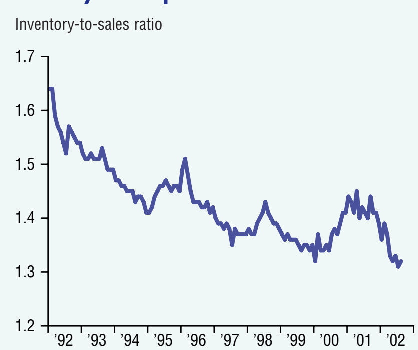
On the plus side, the yield spread—the difference between interest rates of long-maturity and short-maturity bonds—remains high. Economic theory tells us that when interest rates on long bonds exceed interest rates on short bonds, markets are expecting short rates to rise, something generally associated with more rapid economic growth. Thus, a high yield spread generally signals a faster pace of economic activity down the road.

On the other hand, the junk-bond spread—the difference between interest rates paid by issuers of junk bonds and issuers of high-quality corporate debt—has widened since spring. A bigger junk-bond spread indicates tighter credit conditions for below-investment-grade firms, and, while this indicator has a short track record, increases in it have generally portended slower economic growth.

A final factor to consider when weighing the possibility of a second dip is the position of inventories. The great inventory reduction that began in early 2001 seems to have run its course, with

Chart 4

Inventory Reduction in Manufacturing Seems Nearly Complete



SOURCE: Census Bureau.

inventories bottoming out at all stages of the economy's supply chain. At the manufacturing stage, the ratio of inventories to sales—currently around $1.30 in inventories for every $1 in sales—is back to its prerecession level (*Chart 4*).

With inventories stripped down, production will have to increase if demand growth continues.

The Health of Demand

Hence, we turn to demand. It is from here that most of the good news has been coming lately. Firms' investment in capital has recently shown some spark of life, while consumer spending continues to grow at a moderate pace.

The 2001 downturn was, if not an investment-led recession, certainly an investment-fed recession. The declines in just fixed investment—let alone inventories—more than accounted for all the GDP decline in the three quarters in which output fell.

Investment has begun to rebound—at least somewhat. Business fixed investment fell in the second quarter of 2002, though by a much smaller amount than in prior quarters. Within fixed investment—which includes equipment, software and structures—investment in equipment and software grew in the second quarter for the first time since mid-2000. Within equipment and software, the information-processing, or high-tech, portion registered growth in both the first and second quarters. These components are not growing at nearly their prerecession rates, but they are growing nonetheless.

Can investment growth be maintained? The outlook here is unclear. On the plus side, corporate net cash flow over the past few quarters has been up a bit relative to its level of the past few years. On the other hand, Census Bureau data on shipments of capital goods and orders for new capital show little evidence of forward momentum. In particular, the value of new orders has generally been below the value of shipments throughout 2002—that is, manufacturers of capital goods have been getting slightly less than a dollar in new machinery orders for every dollar's worth of machinery they ship. This would seem to portend slower future growth in capital goods shipments.

What about consumers? Thus far in the expansion they are a bit bowed, but unbroken. After slowing late last year, growth has rebounded in both consumption spending and income. Retail sales have been characterized by large boom-to-bust swings owing to the on-again, off-again incentive programs of auto manufacturers. However, monthly sales measures that exclude motor vehicles have shown a much steadier, moderate rate of growth since late last year, though with some evidence of slowing in August and September.

Will consumers continue to spend? The picture here is probably brighter than it is for firms. First, disposable income has been growing faster than consumer spending for most of 2002. As a result, households' savings rates have risen considerably. Consumers, like firms, have been repairing their balance sheets. Also, while consumer indebtedness remains high, so, too, does household net worth—historically so, despite the stock market's recent woes. Finally, while the unemployment rate has not yet begun to fall, its recession peak was at a level below most of the nonrecession rates experienced since the mid-1970s. To the extent that joblessness affects consumer spending, this could be a source of strength going forward.

The Inflation Picture

Finally, we turn to inflation. Since the middle of last year, what had been a significant acceleration in the rate of consumer price inflation has turned into a sharp deceleration. The September Consumer Price Index (CPI) registered a 12-month inflation rate of 1.5 percent; most core, or trend, measures of CPI inflation are hovering near 2 percent (*Chart 5*). Very low rates of measured inflation, together with falling prices in some CPI components, such as commodities and durable goods, have led to concerns that overall deflation may now be a real danger.

While falling commodity and durable goods prices are not, in themselves, evidence of deflation—and may, in fact, have reasonable explanations in terms of productivity growth—very low overall inflation rates may still warrant concern.

Why should we worry about the possibility of deflation? Economic theory is divided in its view of the consequences of deflation. Many economic models suggest that deflation should be actively pursued, while others suggest that it should be strenuously avoided. Real-world experience seems to favor the latter view. The Japanese experience since the early 1990s, for example, vividly demonstrates the difficulties that can arise in a deflationary environment. As nominal interest rates reach zero, the traditional stimulative tools used by central banks—interest rate cuts—become unavailable, and expansionary policy can only be conducted through extraordinary measures. An economy may find itself mired in a deflationary trap that monetary policy is power-

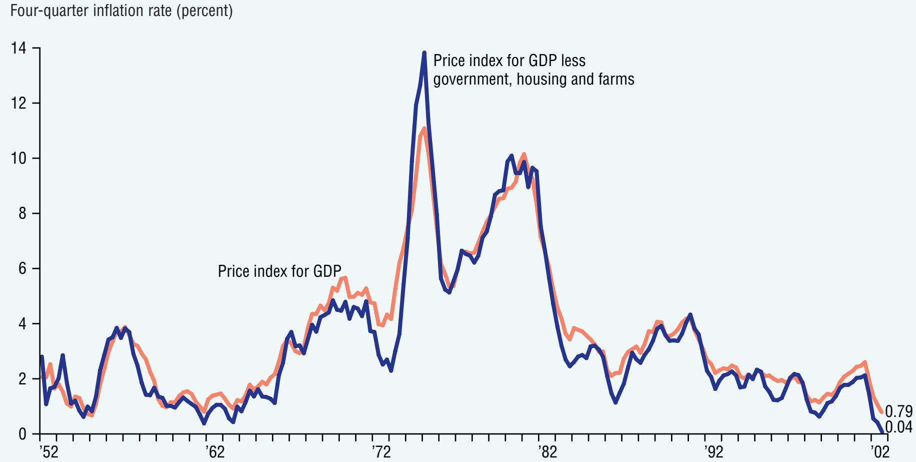
Chart 5

Consumer Price Inflation Shifts into Low Gear

SOURCE: Bureau of Labor Statistics.

Chart 6

GDP Inflation Near 50-Year Lows



SOURCE: Bureau of Economic Analysis.

The U.S. economy is, by some measures, as close to price stability as it has been at any time in five decades.

less to break. Some caution would thus appear warranted.

But how close are we? With core CPI inflation around 2 percent, it may seem that we're not really that close. However, there may be good reason to view that 2 percent figure as an overestimate of the economy's actual rate of inflation. First, in spite of the many technical improvements made to the CPI over the past several years, it's likely that the index is still biased upward—that is, that it overstates the rate of consumer price inflation. Also, the CPI focuses solely on goods and services purchased by consumers. If one looks at broader inflation gauges—for example, the price indexes for all of GDP or some of its major components—one finds inflation rates near 50-year lows. Those inflation rates are also quite a bit closer to zero, though still positive.

As seen in Chart 6, the current annual inflation rate for GDP less government, housing and farms—at a little over 0.04 percent—is below all but one observation in the past 50 years. The U.S. economy is, by these measures, as close to price stability as it has been at any time in five decades.

What's the bottom line on inflation? By most measures, the economy's overall inflation rate is quite low, but still positive. Given the possible consequences of deflation, though, further declines in inflation may be undesirable. For the past 50 years, price stability—understood as a low, stable rate of inflation—has been pursued by restraining inflation from above. In the current environment, maintaining price stability may entail supporting inflation from below.

Conclusions

Clearly, the presumptive expansion is at a delicate stage. Some of the weakness observed so far is to be expected given the mildness of the 2001 recession, but evidence of recent cooling is a cause for concern. Nevertheless, the data suggest that it is premature to conclude the economy is facing a double-dip recession. Demand has held up thus far and—given the stripped-down state of inventories—may yet carry the day. Finally, the reversal of fortune on the inflation front has put us in a position where maintaining price stability may—for the first time in decades—mean boosting inflation rather than containing it.

—James F. Dolmas

Dolmas is a senior economist in the Research Department of the Federal Reserve Bank of Dallas.

Have REITs Helped Tame Texas Real Estate?

Texas is known for its turbulent real estate cycles. More than once, a run-up in the sector has suddenly reversed course, stranding investors with massive amounts of overvalued but underoccupied real estate. Newfound wealth has often vanished nearly as fast as it appeared. However, despite Texas' propensity for cyclical extremes, evidence suggests its real estate markets may now be less volatile than in the past.

The Texas real estate landscape has changed considerably in the last two decades. Some changes have been unmistakable. For example, gone are the days of misguided tax policy, which granted investors large tax breaks for developing real estate. Gone also are the days when unbridled savings and loans could throw money at virtually any project. Such notable changes have added stability to Texas real estate markets.

Other changes have been more subtle but not without effect. Of particular interest has been the shift of ownership from private hands to publicly held real estate investment trusts (REITs). REITs are real estate companies that own and manage properties and whose shares are traded on a public stock exchange. In general, REITs can enhance market discipline by improving efficiency, increasing liquidity and discouraging unjustified lending. They do this, in part, by facilitating improved information gathering and sharing. While the proportion of total real estate owned by REITs is still modest, economic intuition suggests that the increased number of REITs might help moderate market volatility.

This article discusses REIT activity and trends at the national level. It then explores the growth of REITs in Texas and analyzes Texas REIT performance against the overall equity market. Finally, it enumerates some of the differences between the current Texas real estate environment and that of the 1980s and examines REITs' effect on the state's real estate markets.

REITs in the United States

A REIT engages in some combination of buying, selling, operating or financing income-producing properties. Such properties can include apartments, retail establishments, office buildings, hotels and warehouses.

REITs differ from traditional real estate companies—which are often private partnerships—because their shares are publicly traded. Additionally, REITs are required by law to pay at least 90 percent of taxable income to shareholders in the form of dividends.[1] In return, REITs can deduct dividends from their corporate tax bill. As a result, most REITs distribute all of their taxable income as dividends, avoiding corporate income taxation. (They are still required to pay property tax.)

Congress established REITs in 1960 to enable a wider segment of the investing public to own income-producing real estate. In effect, REITs make real estate ownership more accessible by breaking large fixed assets into bite-size shares and lowering other barriers to investment. With the advent of REITs, shareholders are able to extract the benefits of owning professionally managed real estate without being subject to the risks of just a single property. REITs also provide liquidity to their investors. In contrast to private partnerships, REIT investors can quickly dump real estate holdings by selling their shares in the market.

REITs fall into three functional categories. Equity REITs acquire and operate income-producing properties. Mortgage REITs lend money to real estate operators. And hybrid REITs do some of both. In theory, a management team carries out the REIT's daily operations, and a board of directors makes investment decisions.[2] However, in practice, directors often just sign off on investment decisions already made by management.

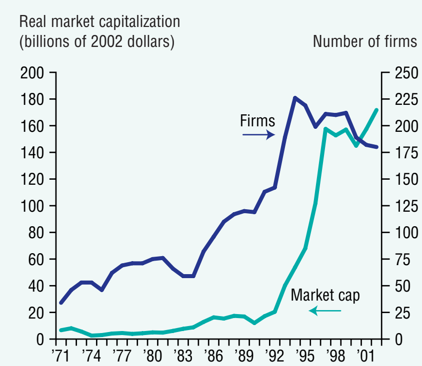
Even though REITs emerged over 40 years ago, it was some time before the industry picked up steam. Early growth was limited because REITs were only allowed to own real estate, not manage it. This arrangement curtailed growth because investors were reluctant to entrust property operations to a third party with possibly misaligned incentives. Also, interest in REITs stumbled initially because private real estate investors could exploit a tax shelter not available to REITs; consequently, REITs were less able to compete for capital.

With passage of the Tax Reform Act of 1986, the picture changed. The legislation boasted a two-pronged adjustment to real estate investment, opening up the sector to brisk growth. First, it curtailed opportunities for tax shelters in private real estate investment. Second, it expanded REITs' autonomy by permitting them to manage and operate properties, not just own them. When the fallout from the 1980s real estate depression and the savings and loan crisis finally began to clear, REITs were poised for rapid growth.[3]

Starting in the mid-1980s, the number of REITs trading on the New York, American and Nasdaq exchanges began a steady upward trend, peaking at 226 in 1994, then scaling back to 180 by 2002.[4] The increase in REITs was followed by a dramatic upsurge in the sector's overall market capitalization. Between 1992 and 2002, total REIT market capitalization increased more than eightfold (*Chart 1*).[5] Growth was so dramatic that by 2001, REITs controlled roughly 15 percent of the $2 trillion worth of investment-grade

Chart 1

REIT Growth over Three Decades



SOURCE: National Association of Real Estate Investment Trusts.

Table 1

U.S. Real Estate, Then and Now

	1981–90	1991–2000
Inventory added (million square feet)	1,319.7	406.7
Increase in inventory	98%	15%
Absorption (million square feet)	887.3	647.9
Inventory added/absorbed	149%	63%
Rental rate increase in nominal dollars	7%	51%
Occupancy change	–13%	11%

SOURCES: Torto Wheaton Research; Crescent Real Estate Co.

Historically, real estate supply and demand have often marched to their own drummer.

commercial properties in the United States.[6] In fact, by 2001 REITs controlled 40 percent of the equity portion (as opposed to debt) of institutional real estate, up from around 1 percent in 1993.[7]

The REIT Modernization Act of 1999 gave REITs new opportunities to increase earnings. The act enabled REITs to offer more sophisticated services, thus helping them maintain a competitive stance in the marketplace. The progression of legislation since REITs' inception in 1960 has helped the industry flourish.

Coincident with REIT growth was a more controlled real estate environment throughout the 1990s. New inventory relative to absorption was more measured in the 1990s than the 1980s, and rent growth was more robust (*Table 1*).

Some observers have argued that during the 2001–02 downturn, REITs helped prevent a return to the overcapacity problems that plagued the 1980s.[8] As the industry matured, improved information flow and transparency helped discourage inordinate construction. Despite stratospheric stock market hype during the 1990s, new office construction never reached the excesses of the '80s. In fact, during the recent weakness in national real estate markets, new completions dropped off before vacancy rates even started edging upward. During the '80s, vacancy rates shot up over 20 percent before completions ever began to decline (*Chart 2*).

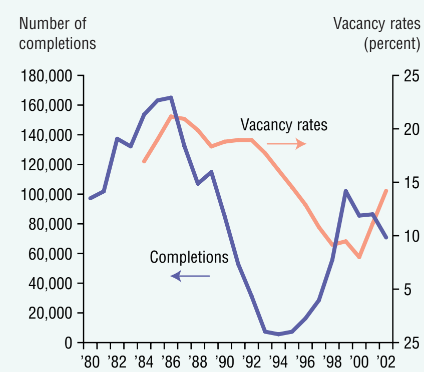
Sharp corrections are still possible, however. Real spending on U.S. nonresidential building has already declined 26.8 percent since peaking in 2001 (and will likely decline more before bottoming out), just below the total decline of 33.3 percent during the 1990–91 recession.[9] While this reversal has damaged the real estate sector, it is also a sign of increased market nimbleness and improved ability to react to changing conditions. Much of the run-up in spending in the late '90s was driven by stock market hype. That the industry has been able to retrench so quickly helped avert a more severe overbuilding problem.

Historically, real estate supply and demand have often marched to their own drummer. However, as REITs own and manage more real estate, there is likely to be a tighter alignment between supply and demand. REITs raise much of their capital through equity markets, making it more difficult for them to pursue irrational investment plans. In addition, REITs must always act to preserve stock value and eschew activities that might undermine it. Analyst and investor

Chart 2

Office Vacancy Rates and Completions

Sum of U.S. metropolitan markets



SOURCE: Torto Wheaton Research.

Table 2

Top 10 REIT Markets

		Total market cap (millions of dollars)	Number of REITs	Total employment	Average annual dividend per share (dollars)	Average dividend yield (percent)
1	Illinois	27,676	11	15,083	1.65	6.5
2	California	24,197	29	9,375	1.51	6.6
3	New York	24,158	25	5,975	1.29	7.1
4	Maryland	9,831	13	7,913	.87	4.2
5	Texas	8,413	10	3,067	1.86	8.4
6	Massachusetts	7,939	5	925	1.46	6.3
7	Pennsylvania	5,559	10	1,881	1.46	7.7
8	Tennessee	4,178	7	15,834	1.60	7.5
9	Georgia	4,077	7	3,123	1.38	7.4
10	Florida	3,843	8	1,129	1.09	6.0

NOTE: Tennessee's unusually high REIT employment is attributable to a single company, National Health Reality, which owns 23 health care facilities.

SOURCE: Bloomberg.

scrutiny of REITs has given the market the ability to quickly punish firms with investment agendas that aren't justified by the fundamentals. While REITs won't erase the sector's cyclical makeup, their presence may be contributing to increased market solidity.

REITs in Texas

REITs are playing an increasingly important role in Texas real estate as well. The state is ranked fifth in the nation in total number of operating REITs, fifth in combined REIT market capitalization and seventh in total REIT employment. The biggest REIT markets are Illinois, California and New York (*Table 2*).

Texas-based REITs are all headquartered in either the Dallas/Fort Worth or Houston metropolitan areas, though their real estate holdings may be located anywhere in the country. Some REITs with operations and headquarters in Texas are actually incorporated in Maryland because of its more favorable tax and regulatory environment for REITs. Most Texas REITs own and operate various types of real estate, including office, retail, multifamily, restaurant and hotel properties. One Texas REIT, Capstead Mortgage Corp., is a mortgage REIT that loans money to real estate owners and operators. (See the box titled "Some Large Texas REITs.")

The effect of growing REIT numbers in Texas has not been trivial. For one, the sector has made efficiency gains. Because shares are traded on public exchanges, investors receive real-time feedback on the sector's relative well-being. Any negative information, such as oversupply risks, gets factored into equity prices, helping safeguard against unrealistic zeal and lessening the chance of the kind of market blindsiding that has afflicted Texas real estate in the past.

The growing incidence and size of REITs have also helped the Texas real estate sector capture economies of scale. Such economies occur when the average cost of a firm's product declines as the firm expands the size of its operations.

Some Large Texas REITs

The following list provides a snapshot of some prominent REITs based in Texas. Size and core business strategy were the basis for selection to the list.

Name	Location	Employees	Investment strategy	Market cap (October 2002)
Camden Property Trust	Houston	1,750	Mid- to upper-market multifamily properties in nine Sunbelt and Midwestern states.	$1.26 billion
Capstead Mortgage Corp.	Dallas	16	Real estate-related assets such as single-family residential mortgage-backed securities issued by government-sponsored entities. Does not have a core geographic focus.	$290 million
Crescent Real Estate Equities Co.	Fort Worth	794	Office, resort/hotel, residential development and temperature-controlled warehouses. Holdings concentrated in Dallas/Fort Worth and Houston.	$1.62 billion
FelCor Lodging Trust	Irving	61	Hotel properties in the United States, mainly Texas, California, Florida and Georgia, and in Canada.	$582 million
Prentiss Properties Trust	Dallas	650	Office and industrial properties in the Midwest, Southwest, Northern Virginia, Northern and Southern California.	$1.04 billion
U.S. Restaurant Properties	Dallas	181	Operates 811 restaurant and service station properties in 48 states.	$257 million
Weingarten Realty Investors	Houston	265	Retail properties and, secondarily, industrial holdings in the southern half of the United States.	$1.95 billion

NOTES: Technically, La Quinta Corp. of Irving and Wyndham International of Dallas are REITs because their primary Standardized Industrial Code is 6798-01, or "real estate investment trust." However, these two companies were excluded because their operations differ substantially from the REITs mentioned. The REITs above have holdings in one or more of the office, industrial, retail, multifamily or hotel market segments. In contrast, La Quinta and Wyndham focus exclusively on hotel ownership and management, effectively operating as large national and international hotel chains. As such, they fall outside the scope of this article. Relatively small REITs were also excluded, including Transcontinental Realty Investors, Dallas; PMC Commercial Trust, Dallas; Income Opportunity Realty Investors, Dallas; FFP Real Estate Trust, Fort Worth; Liberté Investors, Dallas; Texas Pacific Land Trust, Dallas; and AMRESCO Capital Trust, Dallas.

SOURCES: Bloomberg; Yahoo! Finance; Multex.com, Inc. Market Guide.

Chart 3

Market Capitalization of Texas REITs

SOURCE: Bloomberg.

REITs capture economies of scale through brand imaging, access to lower-cost capital, management productivity and increased bargaining power with customers and suppliers.[10] For example, Texas REITs can spread out insurance costs by purchasing umbrella insurance for multiple properties. Such risk mitigation isn't generally feasible for firms with relatively small numbers of properties.[11]

Another effect of higher REIT numbers in Texas has been added discipline through improved monitoring of capital flows to real estate. Historically, lending institutions such as savings and loans, insurance companies and banks committed a pool of money to real estate at the beginning of each year, regardless of any changes that might take place in overall real estate conditions. Such dedicated lending was unresponsive to swings in the marketplace and often led to overinvestment. Real estate companies still get loan commitments that can be insensitive to changing real estate conditions; however, this kind of lending is less prevalent than it used to be.[12]

With REITs, when real estate indicators signal weakness in the fundamentals, equity markets adjust and capital shifts away from the industry. Thus, money is free to flow to the most promising opportunity, not some predetermined investment. This phenomenon has helped fill the long-standing demand for liquidity in what has otherwise been an illiquid industry. Texas REITs have helped improve market sensitivity to changing conditions, as shown by capital flight from REIT stocks in 1998 when real estate markets weakened (*Chart 3*).

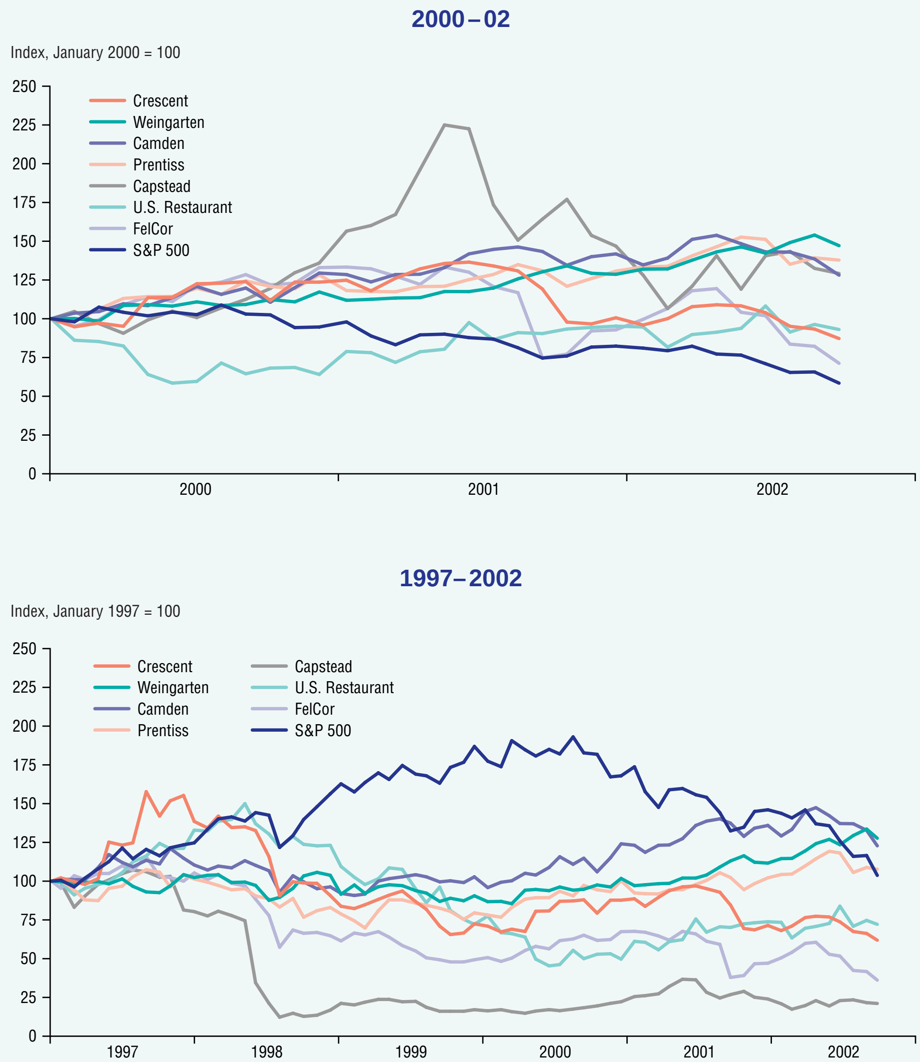
Finally, the requirement that REITs distribute 90 percent of income through dividends builds in an added measure of discipline because they can only accumulate a limited amount of income to fund future growth. The result is that REITs must appeal to capital markets whenever they want to raise more debt or equity funding. They can't fund their future investments with internal sources.[13]

Over the last few years, stock prices of Texas REITs have fared relatively well compared with the overall market (*Chart 4*). From January 2000 to June 2002, stock price appreciation of the largest Texas REITs easily outperformed the Standard & Poor's 500. However, extending the horizon back to January 1997, only Camden Property Trust, Weingarten Realty and Prentiss Properties Trust outperformed the S&P index. Texas REITs outperformed the market during the tech bust but underperformed it in the boom years.

Total returns to REIT shareholders are a combination of stock price appreciation or depreciation and dividends paid out. Table 3 shows a variety of variables used to measure REIT performance. Dividend yields for the largest Texas REITs have been strong in the past year. Total returns for Texas REITs have been mixed but trending downward.

Chart 4

Texas REITs and the Standard & Poor's 500



SOURCE: Bloomberg.

Table 3

Texas REIT Performance

Name	Ticker	Stock price*	Total return (year-to-date, percent)	Dividend yield (percent)	Funds from operations (2002E) ($/share)	Multiple (stock price/FFO)	Net asset value 2002:2 ($/share)	Prem/(Disc) to NAV (percent)
Camden Property Trust	CPT	31.3	–9.5	8.0	3.4	9.2	33.3	–5.9
Capstead Mortgage Corp.	CMO	20.5	—	25.3	5.3	4.0	—	—
Crescent Real Estate Equities Co.	CEI	15.6	–7.8	9.6	2.0	7.8	20.8	–25.1
FelCor Lodging Trust	FCH	11.1	–31.1	5.4	2.1	5.2	18.4	–40.0
Prentiss Properties Trust	PP	26.6	2.8	8.4	3.4	7.9	32.4	–17.9
U.S. Restaurant Properties	USV	12.9	–4.7	10.2	1.4	9.2	13.3	–2.9
Weingarten Realty Investors	WRI	37.2	21.5	6.0	3.2	11.5	30.9	20.4

* As of October 25, 2002.

NOTES: Total return includes stock price appreciation and reinvested dividends. Dividend yield is annualized, year-to-date dividends divided by stock price; this variable effectively gives an interest rate yield on a stock purchase. Funds from operations (FFO) is analogous to corporate earnings but excludes gains or losses from sales of property or debt restructuring and adds back depreciation of real estate. Multiple is analogous to corporate price/earnings ratio, or what the market is paying for $1 of earnings. Net asset value (NAV) is a per share measure of the market value of a REIT's net assets. Prem/(Disc) to NAV [(stock price/NAV–1) × 100] is the premium or discount of the current share price associated with the net asset value of the company.

SOURCES: Salomon Smith Barney; Yahoo! Finance.

During an economic downturn, high-dividend stocks are generally favorable for a portfolio. However, the current data point to a rather weak REIT market going forward. Fundamental real estate conditions in Texas have grown increasingly tenuous in recent quarters. Vacancy rates are up everywhere in Texas since last year, and rental rates have fallen. Until job growth returns, signaling an increase in demand for space, excess capacity will continue to exert downward pressure on Texas REIT returns.

This Time It Really Is Different

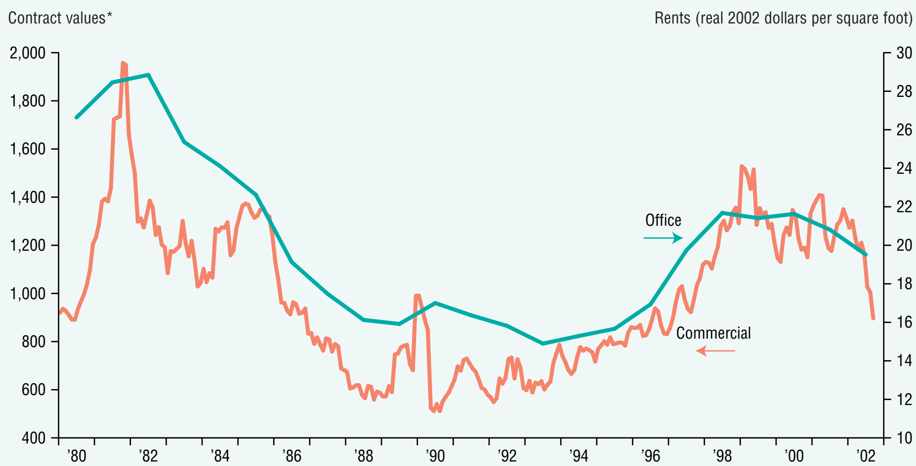
Still, the current weakness in Texas real estate is relatively benign by historical measures. Even though commercial and residential markets have both taken hits in the past 18 months, the situation is less extreme than the 1980s increase and subsequent derailment (*Chart 5*). During those years, investors watched in dismay as bloated commercial contract values collapsed, office rents gave back half their peak value and residential markets took on a burdensome two-year inventory of homes.[14]

The environment is less severe now. Present weakness, while keenly felt in some sectors, isn't nearly as encompassing as the pall that settled on Texas two decades ago. Much of this is due to the fact that Texas real estate markets haven't had as far to fall this time. In the 1970s, a run-up in oil prices cast a rosy hue on the energy-dependent state economy, and many assumed—unrealistically—that robust energy markets were here to stay. The optimism spilled over to real estate markets, and construction crews kicked into gear.

Later, in the 1980s, federal policy gave tax advantages to investors willing to finance real estate projects, feeding the building frenzy. At the same time, deregulation freed savings and loans to invest in service corporations, disregard geographical considerations in loan decisions and lend up to 40 percent of assets in commercial real estate. But the new legislation failed to implement higher deposit insurance premiums for savings and loans with precarious loan portfolios.[15] Exacerbating the problem was the failure of federal and state regulators to shut down insolvent thrifts, which were financing real estate projects that would have otherwise gone unfunded.

Chart 5

Real Texas Construction Contract Values and Real Rents



* Seasonally adjusted, real five-month moving average.

SOURCES: McGraw Hill Construction/F.W. Dodge; Torto Wheaton Research.

The combination of these forces rocketed Texas real estate markets to dizzying heights. But the fundamentals were never in place to support the rapid growth. Eventually the party ended (helped by the Tax Reform Act of 1986), leaving in its place a huge disequilibrium between supply and demand. The consequent imbalance sent property values and rents to damaging lows and dealt massive losses to real estate institutions.[16]

In contrast to the overhyped '80s, a speculative building free-for-all didn't occur in the late '90s, and the current downturn has been far less pronounced. Recent jumps in subleasing and vacancy rates, along with liberal rent concessions, have been somewhat isolated, materializing in tech-laden areas—such as Austin, the Dallas suburb of Richardson and Irving's Los Colinas business center—and not as much in the overall marketplace.

Even though excessive growth expectations seduced equity markets in the late 1990s and an office glut resulted, the memory of the '80s real estate meltdown helped curb Texas builders. What's more, significant changes in the way real estate gets funded helped control the recent buildup. During the 1980s, Texas lending institutions loaned money to practically anyone with a hammer and saw. This time, regulatory fixes prompted tighter scrutiny of capital flows, increased discipline and more transparency. Also, in reaction to 1980s abuses, banks now require a higher equity stake from potential loan recipients. Such hurdles have curbed frivolous lending.

In addition to these changes, the increased prominence of REITs in Texas may have helped contribute to a less frenetic buildup. Markets can punish REITs for ill-advised investment strategies by shunning REIT stocks. This dynamic was not available in the 1980s because REITs had not yet become a material part of the real estate market; they didn't really take off until the early 1990s. The gradual shift of real estate assets from private partnerships to public REITs has increased the sector's transparency, discipline and sensitivity to market conditions.

Still, the extent to which REITs foster increased discipline is contingent on whether markets function correctly in the first place. Accurate information (not corporate book cooking), rule of law (not executive malfeasance) and transparency (not covert and obscure business dealings) are essential to well-functioning markets. Without these, any positive effects from REITs would be negligible.

REITs' Continuing Influence

That the recent boom and bust in technology markets has not yielded a 1980s-like crash in real estate markets suggests some things have changed in Texas in the last two decades. The '90s boom never matched the skyscraping '80s, and it is unlikely the current downturn will be as protracted as the one that gripped the state from 1985 through the early 1990s. Rolling back perverse tax incentives and fixing the savings and loan problem were largely responsible for the improvement. Additionally, the increased incidence of REITs owning and managing real estate in Texas and the subsequent availability of more timely information may be having a positive effect.

REITs are not a fail-safe mechanism to avert irrational run-ups in real estate markets. If nothing else, the 1990s tech boom illustrated that investors still get caught up in bubble markets. It's too early to tell what ultimate effect REITs will have on the marketplace. Evidence in their favor is insufficient, and more research is needed; plus, they still make up a relatively small part of the overall market. But REITs have the potential to enhance the role of market discipline in real estate finance. They can also help improve funding and investment controls and add efficiencies and liquidity to the market.

Historical examples of misalignment between fundamental real estate conditions and investor decision-making abound. Significant improvements in real estate markets over the past 20 years have contributed discipline to the real estate sector, however. As part of these changes, restraint imposed on REITs through the threat of punishment in the equity market has likely contributed to increased discipline in the industry.

—John Thompson

Thompson is an associate economist in the Research Department of the Federal Reserve Bank of Dallas.

Notes

The author thanks Harvey Rosenblum, Ira Silver and Tom Siems for insightful feedback and Kay Champagne for invaluable editorial help.

1 Shareholders still have to pay taxes on dividends at the individual level.

2 National Association of Real Estate Investment Trusts (2002), "Frequently Asked Questions about REITs," www.nareit.org.

3 National Association of Real Estate Investment Trusts (2002), "The REIT Story," www.nareit.org.

4 Only two-thirds of REITs trade on major exchanges, according to NAREIT; others trade on smaller exchanges. The drop-off in REIT numbers starting in 1994 is partially attributable to merger activity.

5 Despite strong growth among REITs, the sector's $172 billion market capitalization amounts to only 2.1 percent of the S&P 500's $8.2 trillion.

6 Elizabeth Stanton (2001), "REITs Rewarding Investors," *Chicago Sun-Times*, Aug. 5.

7 Rosen Consulting Group, Lend Lease Real Estate Investments.

8 Christine Perez (2001), "September 11 Effect on Insurance to Benefit REITs," *Dallas Business Journal*, Dec. 14, and Samuel Zell (2001), "Focus on the Economy: This Time It's Different," *Real Estate Issues*, July 1.

9 U.S. Census Bureau.

10 Shiawee X. Yang (2001), "Is Bigger Better? A Re-examination of the Scale Economies of REITs," *Journal of Real Estate Portfolio Management*, Vol. 7, no. 1, pp. 67–77.

11 Perez (2001). The ability of REITs to continue to capture economies of scale will likely get better. Average REIT size has trended up in recent years, and there has been growing pressure for consolidation. National mergers and acquisitions in 2001 were almost as numerous as in the previous three years combined. Some analysts predict that a third of REITs will disappear or be acquired before the sector reaches equilibrium. See Robert Burgess (2001), "Size Lends Weight," *Chicago Sun-Times*, May 20.

12 Zell (2001).

13 Mike Grupe, National Association of Real Estate Investment Trusts, personal communication.

14 Steve Brown (2002), "Report: Area Home Prices May Fall," *Dallas Morning News*, April 23.

15 An upward adjustment in such premiums would have likely curbed unjustified lending.

16 See Robert A. Eisenbeis, Paul M. Horvitz and Rebel A. Cole (2002), "Commercial Banks and Real Estate Lending: The Texas Experience," *Journal of Regulatory Economics* (forthcoming). See also Bert Ely, "Savings and Loan Crisis," *The Concise Encyclopedia of Economics*, www.econlib.org/library/Enc/SavingsandLoanCrisis.html.

Texas Exports Finally Pick Up but Have Far to Go

Texas exports bottomed out at the end of last year. Since then, they have been growing steadily. But the news still isn't very positive.

Texas exports (adjusted for seasonal variation and inflation) peaked in the third quarter of 2000 and fell almost 22 percent over the next five quarters. After bottoming out in the fourth quarter of 2001, exports rose strongly during the first half of 2002 but are still 14 percent below their peak (*Chart 1*). Although the turnaround has only just begun and the state's export upturn has varied greatly across geographic markets, performance has been positive for most country groupings.

Texas exports to Mexico have started to rebound, but they have farther to go for complete recovery than exports generally. Mexico is easily Texas' principal export market. A slow turnaround in Mexican trade means a slow turnaround overall. Many of Texas' exports to Mexico are re-exported to the United States after processing. Many of these re-exports are in cyclical durable goods categories.

While Texas exports overall fell for five straight quarters, the state's exports to Mexico fell for six. The decline was slightly greater, at 24 percent, than the 22 percent overall drop. Even though Texas exports to Mexico finally turned up in second quarter 2002, they remain 19 percent below the 2000 peak. Second quarter 2002 Mexican GDP was up over its year-earlier figure for the first time since early 2001. Mexico's non-oil exports to the United States have already begun to show signs of a turnaround with the U.S. recovery; hence, the increased Texas exports.

In contrast, exports to the rest of Latin America have not recovered at all. Unlike other geographic categories, exports to other Latin American countries show no evidence of slowing their drop-off. These exports have plummeted 35 percent from their peak, which occurred in second quarter 2001. With Argentina in depression, Uruguay in profound recession and Brazil in soft economic circumstances, weak Texas exports to these countries ought not be surprising, especially since all three have endured strong devaluations this year. Meanwhile, industrial production in Chile and oil output in Venezuela are both down from a year earlier. Texas exports to Latin America are typically only about 4 percent of total state exports, so if some market has to falter, this one is not the worst.

Texas exports to Asia also plunged 35 percent before hitting bottom. After a turnaround, however, this year's exports have climbed back to 15 percent below peak. How this pattern plays out in Asia is a subject of much interest. It will reflect not only continued recovery in Asian demand—and in U.S. demand for products exported to Asia for further assembly and re-import—but also global cost factors. For example, over the last year and a half, a number of Mexican maquiladora plants have moved to China, only to return to Mexico when they discovered that other costs of doing business more than offset China's lower wages. Meanwhile, as China makes the adjustments that its accession to the World Trade Organization requires, exports for final consumption will increase.

No major geographic category of Texas exports has fully recovered. Exports to Europe remain 23 percent below their peak, though they have turned up a little. Exports to Canada are 14 percent below peak, despite a turnaround. For now, there is little evidence a sudden burst of growth will quickly return Texas sales abroad to previous levels.

However, if the U.S. economy continues to recover—and to purchase more from foreign countries such as Mexico that buy inputs from Texas—an important component of Texas exports will continue to expand. The same applies to Texas' important Asian exports. Nevertheless, Texas is a high-tech state in a world in which high technology led the slowdown. A full recovery in many of the state's export sectors will take time.

—William C. Gruben

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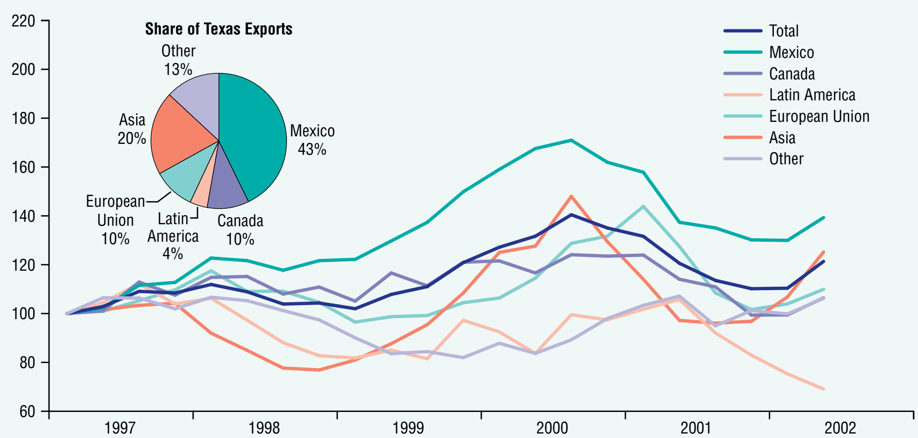
Chart 1

Texas Exports

Real index, 1997:1 = 100*



*Seasonally adjusted.

SOURCES: Massachusetts Institute for Social and Economic Research; Federal Reserve Bank of Dallas.

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