FEDERAL RESERVE BANK OF DALLAS

Issue 1 January/February 2002

Southwest Economy

The Unsinkable Texas Economy Takes on Water

After a decade of strong employment growth, the Texas economy weakened significantly in 2001. Texas' economic growth, which began decelerating in early 2000, continued to slow throughout 2001. A sharp downturn in high-technology industries led to a decline in manufacturing activity and weak growth in the service sector. Demand for Texas products dropped on the national and world markets. Mexico, an important Texas trading partner, entered recession, which sharply reduced activity along the border.

By the end of the summer the Texas economy was vulnerable to an external shock. That shock came on Sept. 11. The U.S. economic slump and subsequent energy price decline worsened the outlook for Texas' economic growth. The energy industry quickly cut back activity, and the airline and travel industries laid off thousands of workers. The Texas economy has decelerated rapidly, and it is possible that it has been dragged into recession along with the nation.

What Has Made Texas' Economy Unsinkable?

Texas has a history of strong employment growth, which often continued even when the

(Continued on page 2)

The Federal Budget: What a Difference a Year Makes

At the beginning of 2001, federal spending was lower and revenues were higher, relative to GDP, than in recent experience. The resulting surplus was paying down the federal debt. Projections indicated that the entire debt would eventually be retired if tax and spending laws remained unchanged.

Three major events during 2001 altered these budgetary patterns. In June, a new tax law brought sweeping income tax reductions. A recession, induced or deepened by the Sept. 11 terrorist attacks, further reduced revenue and pushed up spending. The budgetary response to the attacks also increased spending on defense, homeland security and recovery. As the policy emphasis shifted from preparing for long-term needs to meeting current challenges, the budget moved back into (or close to) deficit.

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Is Telecom Disconnected or Just on Hold?

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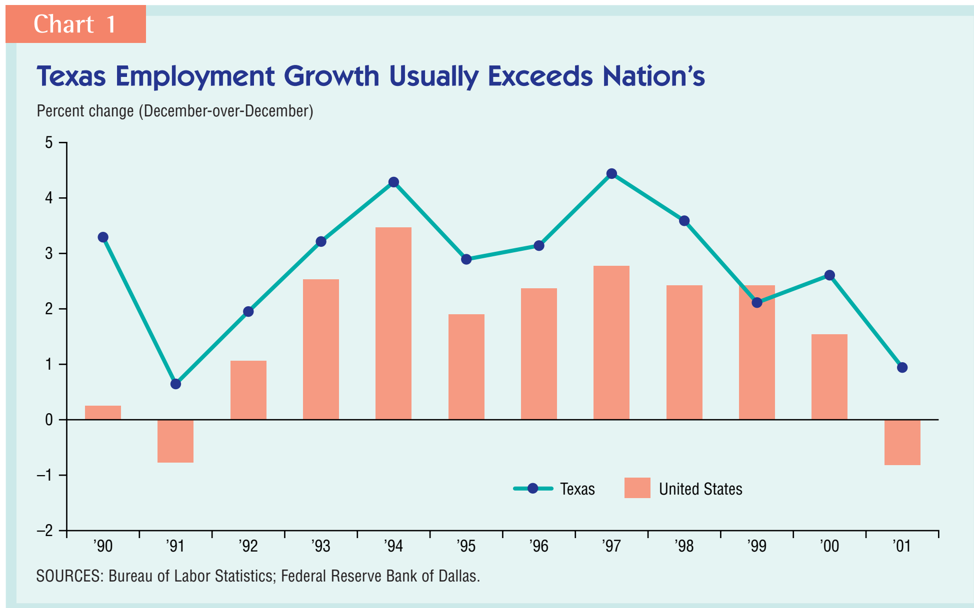
Financial Globalization: Manna or Menace?



Texas has a strong portfolio of diversified industries selling to global markets.

U.S. economy was in recession. Employment growth in Texas has increased each year since the energy bust of 1986.

Many factors have led to the resilience of Texas' economic expansion over the past 15 years. Texas has a strong portfolio of diversified industries selling to global markets. While the state is no longer dependent on the energy industry for economic growth, the energy industry makes Texas' portfolio of industries special. Some of the state's industries benefit from high oil prices, and others benefit from low oil prices. High technology, petrochemicals, plastics and other industries have diversified the economy, buoying economic growth when oil prices weaken.

Other factors stimulate the state's strong economic growth as well. Favorable government policies, such as relatively few regulations, make it easier for companies to start and grow. As a right-to-work state, Texas has a smaller share of unionized workers than much of the country. Texas also has a relatively low cost of living, including low land and construction costs.

Texas' employment growth typically outperforms the nation's by roughly 1 percentage point (*Chart 1*).[1] The unsinkable nature of the state's economy means that economic growth had a long way to slow before entering recession.

Deceleration Accelerates in 2001

Texas job growth has been decelerating since early 2000. After increasing 2.6 percent in 2000, employment growth in 2001 rose just 0.9 percent. Texas private employment fell each of the last four months of the year. The first four-month consecutive drop since 1986.

Manufacturing employment has been falling since December 2000, primarily because of cutbacks at high-technology firms. Manufacturing employment accelerated its decline in fall 2001 and was joined by broad-based decreases in the service sector.

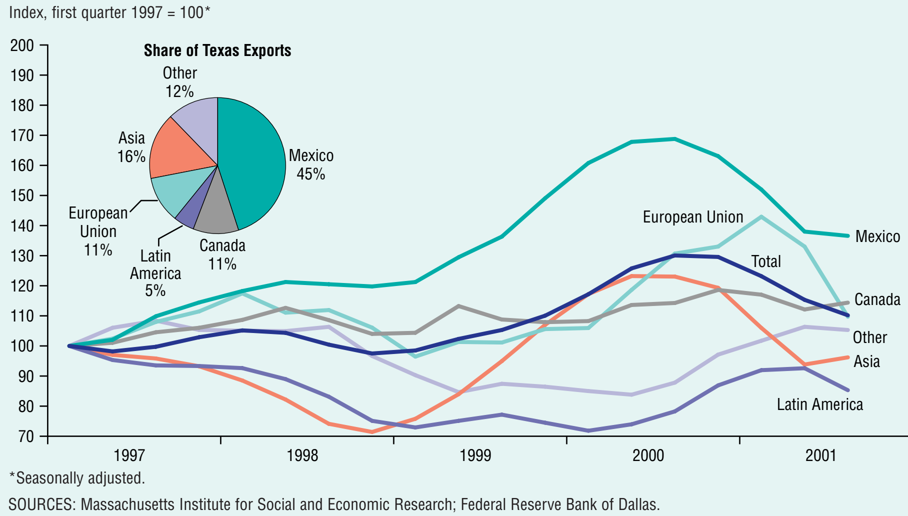
While much of the recent downturn has been related to job cuts at transportation and tourism-related businesses such as hotels, declines have been across the board in nearly all service-related industries. Employment at firms that supply temporary workers has been particularly weak, decreasing 4.8 percent in 2001.

There are several indications that economic conditions are likely to worsen before they improve. The U.S. economy, Mexican economy, construction activity, and the high-technology and energy industries have all been pillars of strength for the region but are now languishing. One or more of these sectors will need to recover before Texas economic activity picks up.

Global Markets Are Weak. Texas producers sell to the world, and weakening world economies have reduced demand for Texas products. Texas exports have fallen 25 percent since August 2000; exports to most major markets have declined (*Chart 2*).

Chart 2

Weak International Economic Conditions Are Hurting Texas Exports



*Seasonally adjusted.

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

Economic growth in Mexico remains very important to the Texas economy. The Mexican economy has weakened along with the U.S. economy and is expected to remain that way until the U.S. economy rebounds. Maquiladora activity—manufacturing plants along the Texas–Mexico border—has dipped sharply (*Chart 3*). This decline in maquiladora employment, along with a drop in cross-border traffic, has dampened activity in Texas' border cities. Difficulty crossing the border is discouraging day crossing and reducing sales at border-area retailers.

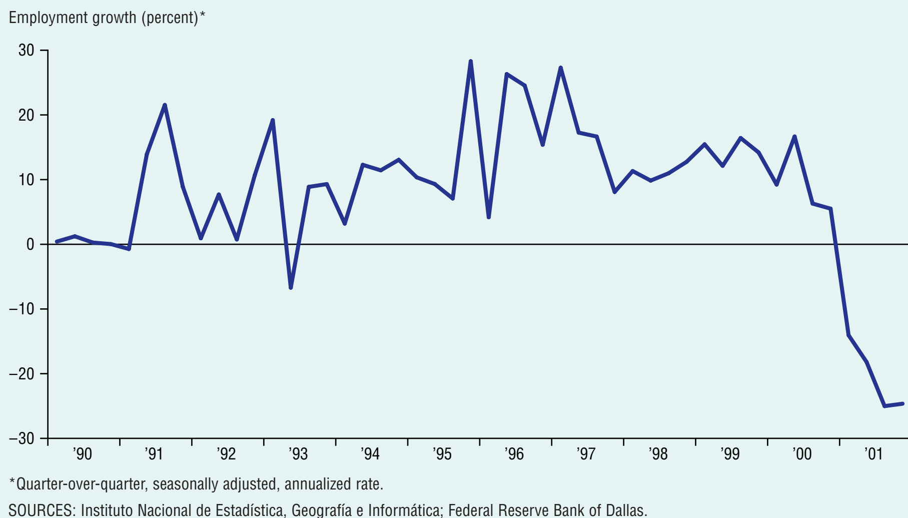
Weak economic conditions in Texas have reduced the number of Mexican migrants coming to the state and encouraged Mexicans in Texas to return to Mexico. While this labor pool reduction has helped the Texas labor market adjust to weakening economic conditions, on net the economic woes of Mexico and other Texas trading partners are a negative for the state.

Energy Industry Deteriorates. Energy activity weakened significantly in 2001 in response to lower energy prices. Natural gas prices started 2001 at very high

The U.S. economy, Mexican economy, construction activity, and the high-technology and energy industries have all been pillars of strength…but are now languishing.

Chart 3

Maquiladora Employment Dives



*Quarter-over-quarter, seasonally adjusted, annualized rate.

SOURCES: Instituto Nacional de Estadística, Geografía e Informática; Federal Reserve Bank of Dallas.

levels but fell by nearly two-thirds—to a more normal range—as the U.S. economy cooled. A drop in demand from weakened world economies also resulted in oil prices falling by roughly one-third.

While energy activity dropped precipitously, it has not declined as much as would be expected with a one-third cut in the domestic rig count.[2] Recent oil industry mergers have left companies flush with cash and ready to invest. Deep drilling continues in the Gulf of Mexico, propping up demand for oil services. Further, the oil industry may be reluctant to lay off workers because cuts that occurred when prices fell in 1998–99 are now considered to have been too deep.

Recent Texas recessions have been accompanied by either a drop in oil prices or a U.S. recession.

Construction Activity Drops. After growing strongly in the late 1990s, construction activity has been retrenching since early 2001. Contract values have weakened, and construction employment began to slide in late summer. Office vacancy and industrial availability rates have been rising, and reports of overbuilding in some office and high-priced home markets suggest construction investment will continue to slow.

Further, heavy construction along the Gulf Coast is unusually weak. Petrochemical activity would normally accelerate with falling energy prices, but weak demand and serious overcapacity are discouraging investment.[3]

What Triggers Texas Recessions?

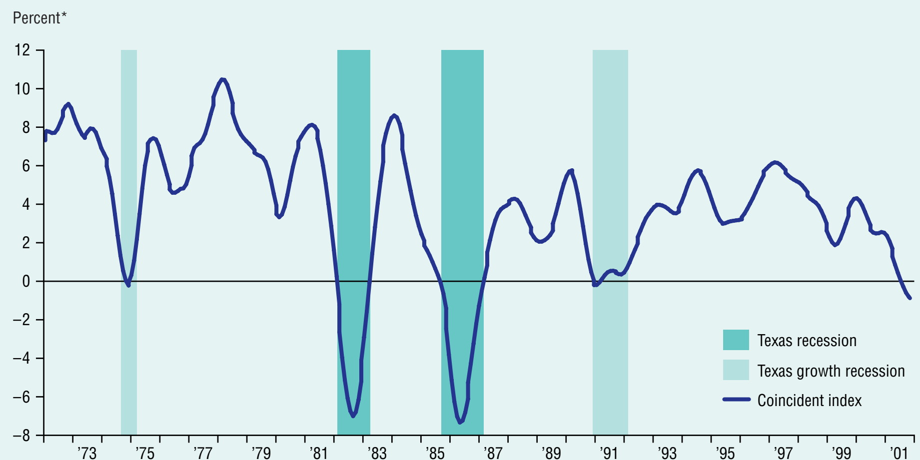
Recent Texas recessions have been accompanied by either a drop in oil prices or a U.S. recession, although neither of these events alone is sufficient to trigger a recession in the state. The coincident index, which measures the Texas business cycle, shows that Texas has had two recessions—at least two quarters of negative growth—over the past 30 years (*Chart 4*).[4] During this same time Texas experienced two growth recessions—periods of growth very close to zero. The characteristics of these four periods are described below.

September 1974 to March 1975. During the growth recession of the mid-1970s, a U.S. recession dragged down Texas employment growth. The 1973 OPEC oil embargo spurred a tripling of oil prices. Texas typically benefits from high oil prices, and the Texas rig count increased moderately during this period. However, wage and price controls limited the benefit to the Texas economy of the higher oil prices.

March 1982 to April 1983. The early ’80s recession was sparked by a decline in energy prices and a sharp U.S. recession. This recession started the bursting

Chart 4

Coincident Index Shows Texas Economic Activity Declining Since July 2001



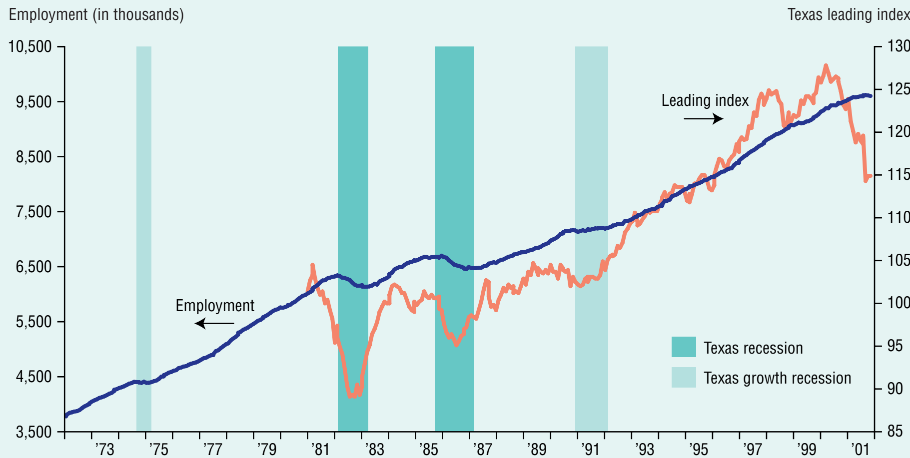
*Month-over-month, seasonally adjusted, annualized rate.

NOTE: Index is composed of employment, the unemployment rate and the gross state product.

SOURCE: Federal Reserve Bank of Dallas.

Chart 5

Leading Index Suggests Continued Downturn in Texas Economic Activity



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

of the Texas energy bubble. The early '80s recession led to a loss of 208,000 jobs in Texas, or roughly 3.3 percent of employment.

September 1985 to February 1987. The mid-'80s recession, commonly referred to as "the bust," was the result of sharply lower oil prices. Oil prices plunged by two-thirds, falling from $37 to about $12 per barrel. This recession was complicated by the elimination of tax incentives that had stimulated overinvestment in real estate. The bust resulted in the loss of another 207,000 jobs, or 3.1 percent of employment.

December 1990 to February 1992. Texas economic growth was again dragged down by a U.S. recession in the early 1990s; however, high energy prices helped keep Texas economic activity afloat.

Is Texas in Recession Now?

Several economic indicators, including Beige Book reports and the Texas Leading Index, suggest that Texas may have entered a mild recession. A forecasting model based on the leading index and past employment growth estimates the recession started in the third quarter of 2001 and will result in a loss of roughly 90,000 jobs, or just under 1 percent of employment.

The Texas Leading Index, which has been falling since March 2000, dropped sharply in September 2001 (*Chart 5*). While the index showed improvement toward the end of the year, most components remain below the August level (*Chart 6*). The recent strength in the index suggests economic growth will pick up, perhaps as early as the second quarter of 2002.

Summary and Outlook

Texas' economic growth began to decelerate in early 2000 and its decline accelerated in 2001. The state typically grows faster than the nation—by roughly 1 percentage point—so economic activity had a long way to slow before reaching negative territory. A U.S. recession and low energy prices may have dragged Texas into recession. But despite a sharp drop in the Texas Leading Index, at worst a recession is likely to be less than half as bad as the recessions of the 1980s.

—Fiona Sigalla

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Notes

The author thanks Keith Phillips, Bill Gilmer, Mine Yücel, Steve Brown, Pia Orrenius, Erwan Quintin, Jason Saving, Lori Taylor and Frank Berger for contributing to this economic assessment and outlook. Anna Berman and Charis Bosell provided excellent research assistance.

[1] Fiona Sigalla and Mine K. Yücel (2001), "Another Great Texas Boom," Federal Reserve Bank of Dallas *Southwest Economy*, Issue 1, January/February, pp. 1–5.

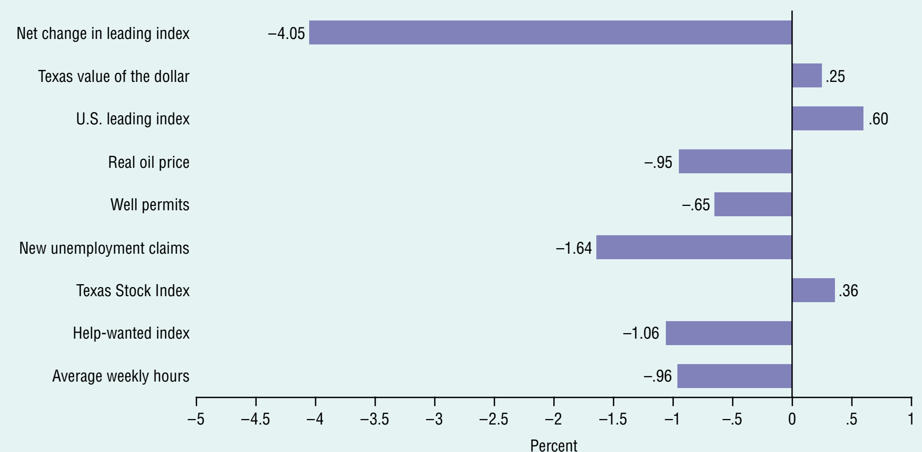
[2] Robert W. Gilmer (2002), "Slow Job Growth in Houston in 2002," Federal Reserve Bank of Dallas *Houston Business* (January).

[3] Mark Eramo, Robert W. Gilmer and Arved Teleki (2001), "Petrochemical Outlook Still Bleak for 2002," Federal Reserve Bank of Dallas *Houston Business* (November).

[4] The coincident index is based on movements in employment, the unemployment rate and real gross state product. The methodology behind the construction of the index is described in Alan Clayton-Matthews and James H. Stock (1998–99), "An Application of the Stock/Watson Index Methodology to the Massachusetts Economy," *Journal of Economic and Social Measurement*, vol. 25, issue 3/4, pp. 183–233.

Chart 6

Net Contributions of Components to Change in Leading Index
(September–December 2001)



NOTE: Help-wanted index not available for November and December 2001.
SOURCE: Federal Reserve Bank of Dallas.

The Federal Budget: What a Difference a Year Makes

(Continued from front page)

Budget Policy at the Beginning of 2001

Federal budget results for the fiscal year ended Sept. 30, 2000, were striking in several respects. Federal spending came in at 18.4 percent of GDP, its lowest level since 1966. In recent years, slower medical cost inflation and defense cutbacks kept spending growth from matching the rapid pace of GDP growth. In contrast, revenues reached 20.8 percent of GDP, higher than in any year in U.S. history except 1944.

Most notably, individual income taxes were 10.3 percent of GDP, up from 7.6 percent in 1992. Strong economic growth caused incomes to rise faster than inflation, pushing taxpayers into higher tax brackets (brackets are adjusted each year for inflation but not for real growth). High stock prices helped bring in $118 billion in capital gains taxes, almost triple the $40 billion in 1995.[1]

The combination of restrained spending and high revenues yielded a $236 billion surplus, the third consecutive surplus and the largest in history. During the three surplus years, the government paid down 10 percent of its outstanding debt. Fiscal 2000 was the eighth consecutive year in which budget balance improved (in 1992, the budget deficit was $290 billion). For the first time in recent history, the non-Social Security portion of the budget was in surplus, by $84 billion.

In January 2001, the Congressional Budget Office (CBO) foresaw growing surpluses throughout the next decade if tax and spending laws remained unchanged (*Chart 1*). This projection marked a dramatic change from the January 1997 outlook of steadily growing deficits. The 2001 projection showed the entire federal debt being retired in fiscal 2009.[2]

The 2001 Tax Cut

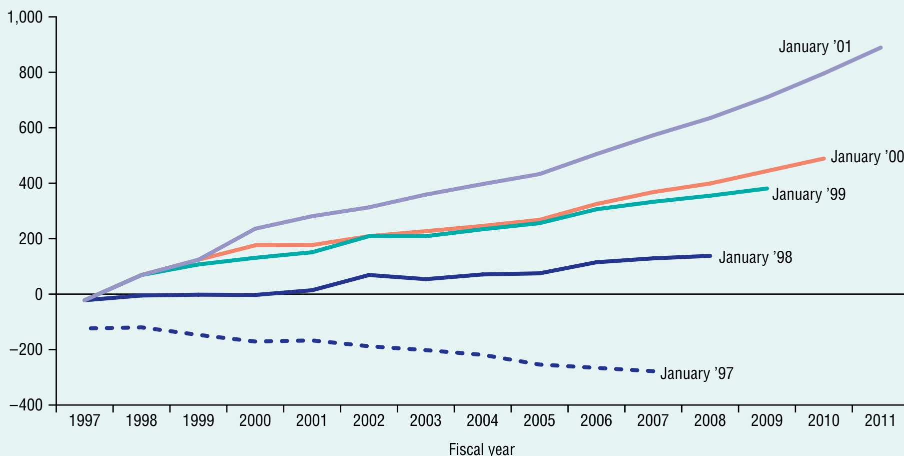
The first major budgetary event of 2001 occurred on June 7. Congress and President Bush adopted the Economic Growth and Tax Relief Reconciliation Act (EGTRRA), which provides broad-based individual income tax relief.[3]

EGTRRA's most striking feature is its sunset provision, under which the entire law expires at midnight on Dec. 31, 2010. Unless Congress extends EGTRRA before then, prior law springs back into force in 2011. A few provisions expire even earlier, while other provisions phase in slowly, taking full effect in 2006, 2008 or 2010.

Chart 1

CBO Projected Mounting Surpluses in January 2001

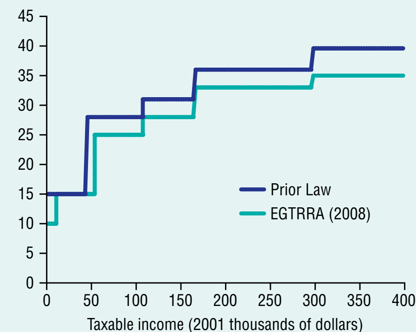
Budget balance (billions of dollars)



SOURCE: Congressional Budget Office.

Chart 2

EGTRRA Reduces Marginal Tax Rates



Provisions. The law's centerpiece is a reduction in individual income tax rates (*Chart 2*). Starting in 2001, a 10 percent bracket replaces part of the 15 percent bracket. The 15 percent bracket is lengthened (only for married couples), a change that phases in from 2005 to 2008. The 28, 31 and 36 percent brackets are each reduced by 3 percentage points, and the top bracket is lowered from 39.6 percent to 35 percent. Each of these brackets was reduced a half point in 2001 and is cut another half point for 2002–2003; an additional full point reduction is set for 2004–2005. The final reduction will take place at the beginning of 2006. All brackets return to their initial levels in 2011.

EGTRRA also repeals the estate tax. It gradually lowers the tax on a $10 million estate from $4.9 million for people dying in 2001 to $2.9 million for those dying in 2009. It then eliminates the tax entirely for those dying in 2010. However, the tax is fully reinstated for people dying in 2011, after the sunset provision takes effect. From a tax-avoidance perspective, then, any day in 2010 is a good day to die.

EGTRRA has many other provisions.[4] It doubles the child credit from $500 to $1,000 by 2010 and allows some low-income workers who do not owe income tax to receive part of their credits in cash. The law also expands a variety of saving

and education incentives. For married couples, EGTRRA provides a larger standard deduction, an expanded earned income tax credit and higher income phaseout ranges for some tax breaks. (Confining these provisions and the longer 15 percent bracket to married couples reduces the marriage penalties that many two-earner couples face and increases the marriage bonuses that many single-earner couples enjoy.) EGTRRA eventually repeals the personal exemption phaseout and the itemized deduction limitation, two provisions that raise effective marginal rates by 1 to 2 percentage points for high-income taxpayers.

Some things are not in EGTRRA. It does not reduce the corporate income tax or payroll and self-employment taxes. It does not change the special 20 percent tax rate for long-term capital gains. It trims, but retains, the gift tax, even when it repeals the estate tax. Unlike many recent tax laws, it does not include industry-specific or highly targeted tax breaks. It offers little relief from the individual alternative minimum tax, thereby increasing the number of people subject to that tax (see box titled "EGTRRA Doubles Reach of Alternative Minimum Tax").

Distribution. Although EGTRRA provides tax savings at all income levels, the largest savings (in dollar terms) go to high-income taxpayers. Critics of EGTRRA complain that a large fraction of its tax savings goes to a small group of high-income taxpayers. Supporters contend that this group is entitled to a large share of the tax savings because they make a large share of tax payments.

Chart 3 shows the allocation, across five income groups, of the number of tax returns, tax payments before EGTRRA and tax savings from EGTRRA. Although the three lower-income groups file most of the tax returns, the higher-income groups pay much of the taxes and receive much of the tax cut. For example, those with incomes above $200,000 file 2.7 percent of tax returns, pay 32 percent of taxes and receive 32 percent of the tax cut. (This group earns 25 percent of all income.) Those with incomes below $20,000 file 30 percent of all tax returns, bear 1.6 percent of the tax burden and receive 2.8 percent of the tax cut. (This group earns 4.3 percent of all income.)

These estimates do not include corporate income taxes, estate and gift taxes, and self-employment taxes. Including the estate tax changes would assign a larger share of the EGTRRA tax savings to high-income groups.

Economic Effects. As EGTRRA moved toward passage in the spring of 2001, an economic slowdown was evident. Supporters of EGTRRA argued that it would promote economic recovery by boosting disposable income, thereby stimulating consumption. As a fiscal stimulus, EGTRRA achieved a rare distinction by taking effect before the economy recovered on its own.

To speed up the stimulus, Congress directed the Internal Revenue Service to

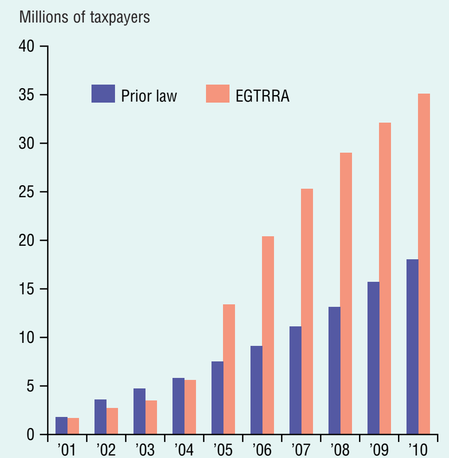
EGTRRA Doubles Reach of Alternative Minimum Tax

The individual alternative minimum tax (AMT) has lower rates than the regular income tax but allows fewer deductions and credits. Taxpayers must pay the AMT if it is higher than their regular income tax. Congress adopted the AMT in 1978 to ensure that taxpayers, particularly those with high incomes, could not use "excessive" deductions and credits to avoid paying income tax.

In 2000, the AMT affected only 1 million taxpayers, causing them to pay about $9 billion in additional taxes. But because the AMT (unlike the regular income tax) is not adjusted for inflation, another 16 million taxpayers, including some middle-income people, were expected to move onto it by 2010 under prior law (see chart). The tax liability was expected to reach $45 billion. Because the AMT disallows deductions for dependents and state and local taxes, people with large families living in high-tax states are most likely to be subject to the AMT.

Because EGTRRA offers little AMT relief, taxpayers already slated to be on the AMT receive little benefit from the law. Also, for many of those who would otherwise have been on the regular income tax, EGTRRA will reduce their regular tax liability below their AMT liability and move them onto the AMT. By 2010 the AMT rolls will swell to 35 million (one-third of all taxpayers), including many middle-income families; the amount of AMT liability will soar to $133 billion. Of course, Congress may take measures to forestall the spread of the AMT.

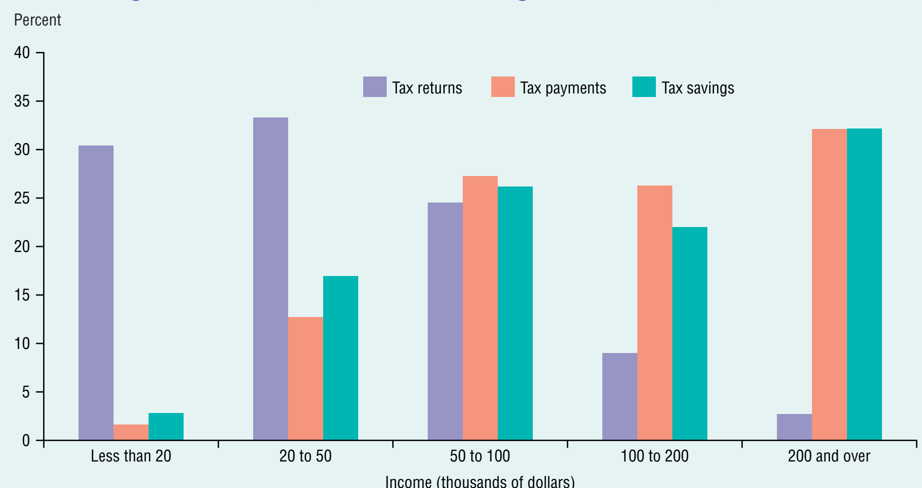
Taxpayers Subject to AMT, 2001–10



SOURCE: Jerry Tempalski, "The Impact of the 2001 Tax Bill on the Individual AMT," unpublished manuscript, U.S. Treasury Department, November 2001.

Chart 3

Tax Savings, Like Tax Payments, Are Largest for Wealthy



SOURCE: Joint Committee on Taxation.

To speed up the stimulus, Congress directed the Internal Revenue Service to distribute the 2001 savings from the 10 percent bracket (about $38 billion) in rebate checks during July through September. However, consumer spending did not immediately respond to the rebates.

distribute the 2001 savings from the 10 percent bracket (about $38 billion) in rebate checks during July through September. Chart 4 shows the upward spike in disposable personal income in those three months. (Starting in July, tax withholding was also reduced to reflect the other 2001 rate cuts.) Congress hoped the rebates would quickly boost consumer spending. Some economists suggested, however, that consumers base their spending decisions on their long-run incomes and therefore would save a one-time income increase like the rebate.

The chart indicates that consumer spending did not immediately respond to the rebates. In July and August (as in May and June), spending remained close to a trend line fitted to its April 2000–April 2001 growth rate. Consumer spending plunged in September due to the terrorist attacks, recovered in October and then slipped again in November.

From a longer-term perspective, EGTRRA also affects economic incentives. Economists view marginal rate cuts as an appealing form of tax relief because they encourage work, entrepreneurship and private saving. The EGTRRA rate cut benefits the many small businesses that operate as proprietorships, partnerships, limited liability companies and S corporations because these firms are subject to the individual, rather than the corporate, income tax.[5]

High tax rates also encourage other forms of tax avoidance, such as tax shelters, fringe benefits, home ownership and charitable giving. For good or ill, the rate cut tends to reduce these activities.

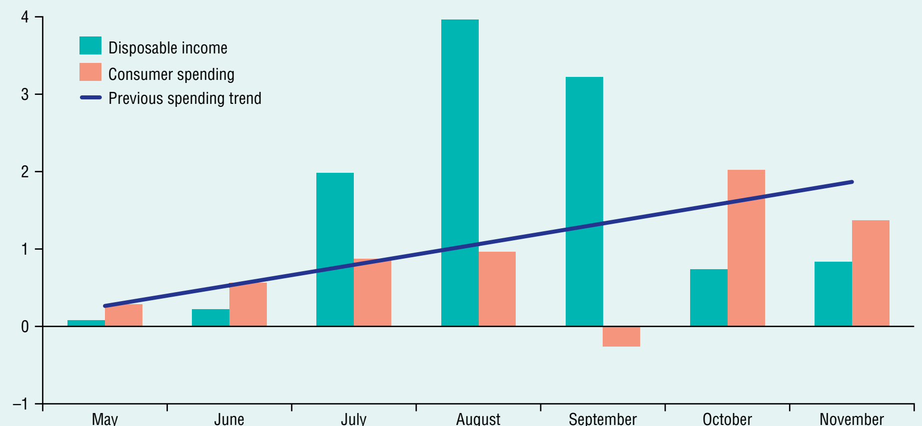
Because the effects of tax-rate changes are difficult to isolate, their size is still disputed. But the EGTRRA rate cuts are likely to have less impact than the 1964, 1981 and 1986 rate cuts because they are smaller, slower and made from lower levels. For example, the 1981 law slashed the top rate from 70 percent to 50 percent five months after its adoption, while EGTRRA reduces the top rate from 39.6 percent to 35 percent over five years. EGTRRA reverses only about half of the increase adopted in 1993, when the top rate rose from 31 percent to 39.6 percent.

Budgetary Impact. According to official Joint Tax Committee estimates, EGTRRA reduces revenue by a cumulative total of $1.35 trillion (*Chart 5*). The estimates do not reflect changes in work, saving and investment but do reflect other behavioral responses. The revenue loss grows as more provisions phase in but tapers off in fiscal 2011 because EGTRRA sunsets three months after the fiscal year begins. If the law is extended, however, the revenue loss continues to grow. Interest on the lost revenues (not shown) adds another $385 billion to the 10-year budget impact.

CBO released new budget projections in late August 2001. For fiscal 2010, CBO projected a surplus of $507 billion, down

Chart 4

Rebates Boost Disposable Income but Not Consumer Spending in 2001

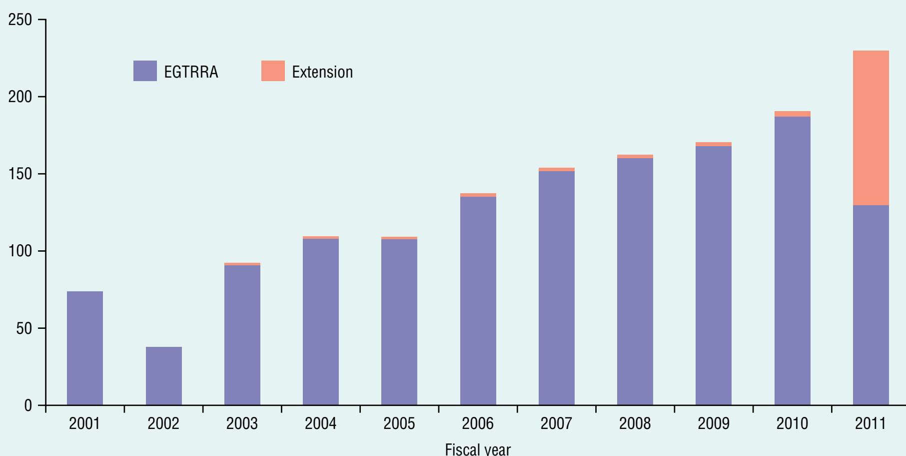


* 1996 dollars, seasonally adjusted.

SOURCE: Bureau of Economic Analysis

Chart 5

EGTRRA Revenue Loss Grows Over Time



SOURCE: Joint Committee on Taxation.

from $796 billion forecast in January 2001. Of the $289 billion revision, $262 billion was due to EGTRRA ($187 billion revenue loss plus $75 billion interest).

The new projection showed the non-Social Security portion of the budget temporarily slipping back into small deficits. For 2010, though, CBO foresaw a $184 billion surplus outside of Social Security (down from the $484 billion projected in January). Moreover, the government was still on track to retire its net debt in fiscal 2012 (three years later than expected in January).

Two weeks after they were issued, however, the CBO projections, like so much else, became obsolete. On Sept. 11, 19 hijackers carried out terrorist attacks that killed 3,100 people.

Terrorist Attacks and Recession

The attacks further weakened the economy, ensuring that the slowdown would qualify as a full-fledged recession, as later confirmed by the National Bureau of Economic Research.[6] As in any recession, revenues have fallen and spending on social programs has risen. Along with the federal government, state governments face revenue shortfalls and extra spending for unemployment benefits and Medicaid.

Fiscal 2001 ended on Sept. 30 with a surplus of $127 billion, $26 billion less than CBO had projected in August. Part of this shortfall reflected extensions firms received on tax payments and deposits after the attacks. The non-Social Security part of the budget posted a $36 billion deficit. Revenues fell to 19.6 percent of GDP from the previous year's 20.8 percent, while spending held steady at 18.4 percent.

Of course, the attacks had budgetary implications beyond their damage to the economy. Congress quickly adopted spending measures to respond to the attacks. Laws adopted Sept. 18 and Jan. 10, 2002, provide $40 billion of new spending—$17 billion for national defense and foreign aid, $10 billion for homeland security and $13 billion for domestic recovery. A Sept. 22 law gives airlines $5 billion in grants and authorizes $10 billion in loan guarantees. It also offers federal compensation to victims of the attacks, at a cost of $5 billion or more.

After the attacks, Congress began working on a stimulus package to boost consumption and investment. Congress considered temporary investment incentives, a supplemental rebate for households with little or no income tax liability (these households did not receive the first rebate), tax relief for firms with losses and those subject to the corporate alternative minimum tax, a capital gains rate cut, a suspension of payroll taxes, tax incentives for workers and firms near Ground Zero, and acceleration of part of the EGTRRA rate cut. On the spending side, Congress considered extended unemployment benefits, health insurance

The terrorist attacks further weakened the economy, ensuring that the slowdown would qualify as a full-fledged recession. The attacks also had budgetary implications beyond their damage to the economy.

assistance for the unemployed and grants to state Medicaid programs. Most of these measures would have been temporary.

Due to congressional deadlock, however, no package was adopted in 2001. While this inaction prompted some economists to forecast a slower recovery, others argued that interest-rate cuts by the Federal Reserve were providing sufficient stimulus and that recovery would soon begin anyway. These economists noted that a stimulus package might even be counterproductive if it drove up long-term interest rates.[7]

Congress may consider a stimulus package again in early 2002. It also may consider partial federal reimbursement of insurance costs from future terrorist attacks, another proposal that fell by the wayside during 2001.

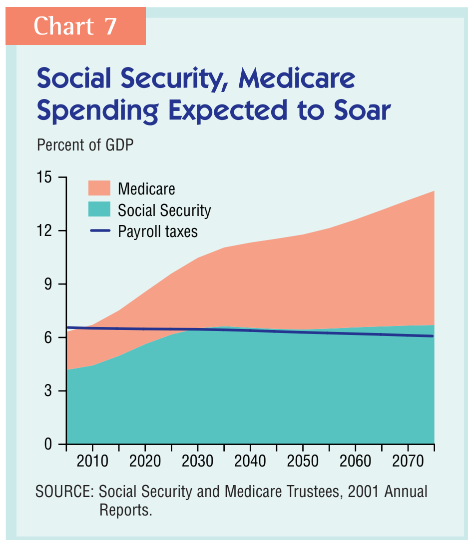
CBO released new budget projections in late January. CBO estimates a $21 billion deficit for fiscal 2002, with a $181 billion deficit in the non-Social Security portion of the budget. While this $21 billion overall deficit is a stark contrast to the $313 billion surplus CBO projected in January 2001, it is also much different from the $188 billion deficit projected in 1997. Despite recent events, the budget is in stronger shape than had been expected five years ago (*Chart 6*).

CBO foresees the budget returning to surplus in fiscal 2004. For 2010, it projects a $294 billion surplus, including a $4 billion non-Social Security surplus. The surplus becomes larger after EGTRRA expires, allowing the net federal debt to be retired around 2014. Of course, new tax and spending measures or economic and foreign policy developments may affect the budget outlook.

Halting or slowing debt repayment imposes a higher debt service burden in the future, which will require tax increases or spending cuts beyond those already required to address the steep expected increase in Social Security and Medicare spending (*Chart 7*). The move away from debt repayment reflects a shift from preparing for these long-term needs to meeting the current challenges facing the nation.

Chart 7

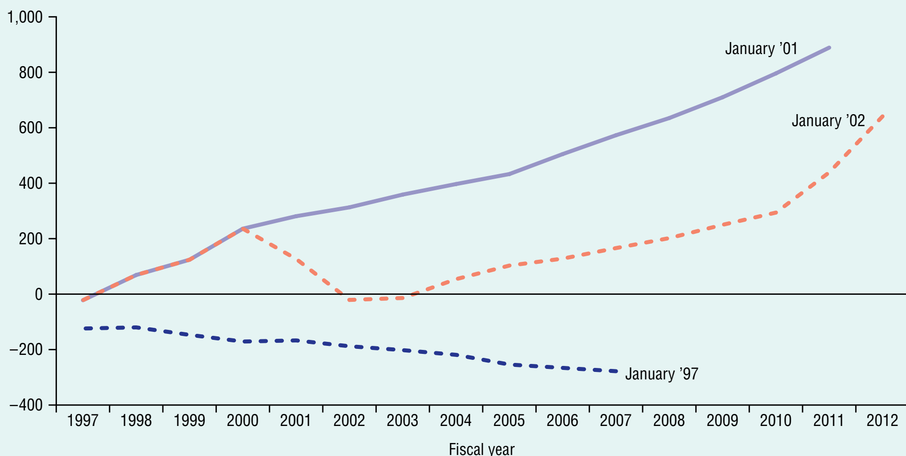
Social Security, Medicare Spending Expected to Soar



SOURCE: Social Security and Medicare Trustees, 2001 Annual Reports.

Chart 6

CBO Revises Budget Forecast



SOURCE: Congressional Budget Office.

Conclusion

A major tax cut, a recession and the response to the terrorist attacks transformed the federal budget outlook in 2001. Resources were shifted away from paying down debt and preparing for long-term needs and toward meeting current needs, particularly tax relief, economic recovery and the battle against terrorism.

—Alan D. Viard

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Notes

1 A 1993 tax law also raised income tax revenue, although a 1997 tax law reduced it.

2 CBO actually projected that the government would run out of debt to retire in fiscal 2006 because holders of the remaining $1.2 trillion would be unwilling to sell before maturity. It would then begin accumulating excess funds. By 2009, the excess funds would equal the remaining outstanding debt.

3 For a simple description of EGTRRA, see Congressional Budget Office, *The Budget and Economic Outlook: An Update*, August 2001, pp. 5–10. For a more complete description, see Joint Committee on Taxation, *Summary of Provisions Contained in the Conference Agreement for H.R. 1836, The Economic Growth and Tax Relief Reconciliation Act of 2001*, JCX-50-01, May 26, 2001.

4 The text of EGTRRA runs 113 pages in the *United States Code Congressional and Administrative News*. This is much shorter, though, than the 316-page text of the 1997 tax reduction law.

5 For new evidence that small business growth is sensitive to individual income tax rates, see Robert Carroll, Douglas Holtz-Eakin, Mark Rider and Harvey S. Rosen, "Personal Income Taxes and the Growth of Small Firms," in *Tax Policy and the Economy*, vol. 15 (Cambridge, Mass.: MIT Press, 2001), pp. 121–147.

6 The economic effects of the attacks are discussed by Evan Koenig, "Down but Not Out: The U.S. Economy after Sept. 11," Federal Reserve Bank of Dallas *Southwest Economy*, Issue 6, November/December 2001.

7 Economists' reaction is described in Steve Liesman and Jon E. Hilsenrath, "Many Economists See No Major Loss in No Stimulus Bill," *Wall Street Journal*, December 21, 2001, p. A2.

Is Telecom Disconnected or Just on Hold?

If there were industries that avoided the widespread unraveling of the U.S. economy before the Sept. 11 terrorist attacks, telecommunications was not among them. September 2001 found much of the industry already in a bad way. The attacks merely landed another blow by shrouding the outlook in uncertainty and paralyzing decision-making.

Telecom has taken a wild ride in recent years. Deep deregulation—starting with the breakup of Ma Bell in 1984 and followed by the Telecommunications Act of 1996—made the industry ripe for growth. Forecasts of boundless demand and quixotic hopes of high margins in the late '90s spawned a deluge of new service providers, unprecedented debt issuance and capacity expansion.

Sales didn't come in as expected, though, and the bubble burst, forcing firms to revise earnings forecasts downward and adjust investment plans. When telecom purchases stalled, manufacturers slashed jobs, sold divisions and liquidated assets. Additionally, deregulation didn't go far enough to open local networks, which hurt new entrants' ability to turn a profit. Now the industry suffers from glutted capacity and burdensome debt loads, which have spurred widespread corporate credit rating downgrades and bankruptcies.

Given Texas' high concentration of telecom firms, the industry downturn has negatively affected business conditions in the state. Telecom is a global market, and activity in Texas is tied closely to worldwide demand. Although some believe telecom may have bottomed out during the second half of 2001, the industry seems likely to languish for some quarters before improving markedly. Recovery will probably lag an upturn in the overall U.S. economy due to the industry's oversupply and investor reticence.

Telecom Down Well Before September

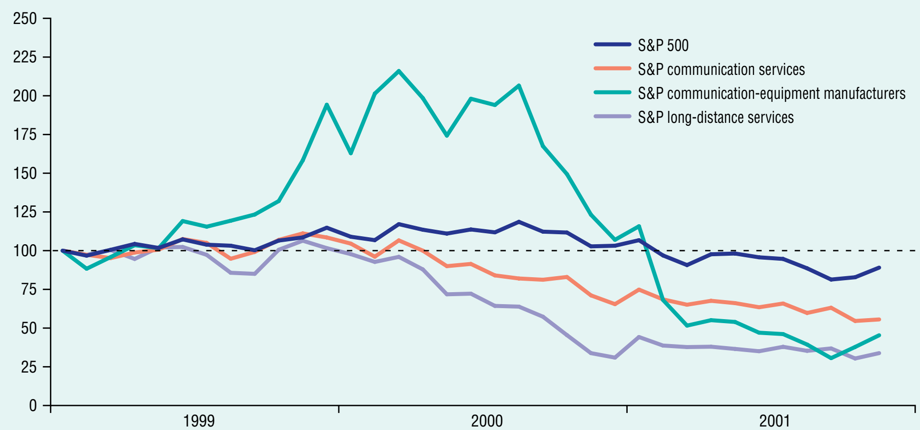
Few sectors have been as hard-hit as telecommunications. From its high in March 2000 to September 2001, the Standard & Poor's (S&P) communication-equipment manufacturers index fell 86 percent, wiping out $793 billion in shareholder equity. The S&P long-distance services index fell 65 percent and the S&P communication services index fell 43 percent over roughly the same period, erasing $113 billion and $150 billion, respectively, in equity (*Chart 1*). Among service providers, the Baby Bells were the least scathed.

Before the terrorist attacks, the industry had been spiraling downward for more than a year, due to an unprecedented supply–demand mismatch. Fed by the dot.com frenzy, investors anticipated robust growth in demand for telecom services for years to come. But a frenetic rush to meet the expected demand by expanding long-haul infrastructure was overkill and neglected improvements needed at the local level.

Chart 1

Telecom Stock Indexes Down From Highs…

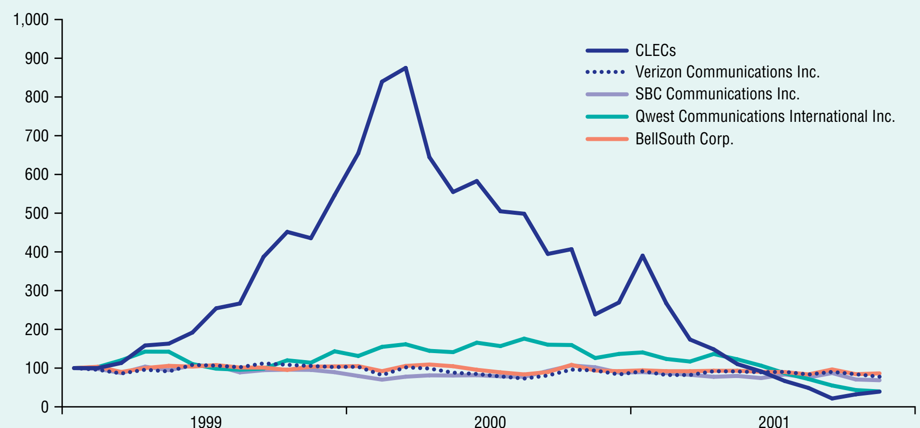
S&P indexes, January 1999 = 100



SOURCE: Bloomberg LP.

…But Baby Bells Relatively Stable

Index, January 1999 = 100

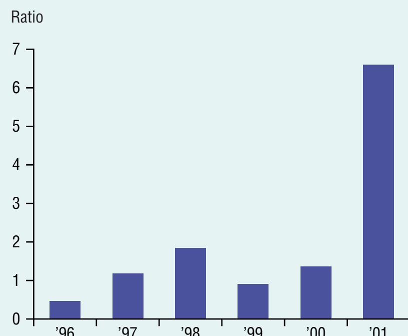


NOTES: Competitive local exchange carrier (CLEC) index includes the following firms: Allegiance Telecom Inc., US LEC Corp., Focal Communications Corp., McLeodUSA Inc., Network Plus Corp., NTELOS Inc., Time Warner Telecom Inc., Williams Communications LLC and XO Communications Inc.

SOURCE: Bloomberg LP.

Chart 2

Ratio of Credit Downgrades to Upgrades Among Global Telecom Firms



NOTES: Ratios are based on Moody's credit ratings on long-term debt of telecommunications companies worldwide.

SOURCE: Bloomberg LP.

Market expectations soared in the '90s, fueled by visions of insatiable demand for bandwidth-guzzling "killer apps," such as TV over the Internet, music downloads and live videostreaming.

Market expectations soared in the '90s, fueled by visions of insatiable demand for bandwidth-guzzling "killer apps," such as TV over the Internet, music downloads and live videostreaming. Telecom firms raced to respond by laying $90 billion worth of fiber-optic cable between 1997 and 2001. Long-haul space became a free-for-all, and oversupply resulted. In all, about 39 million miles of fiber-optic cable was laid—enough to go from Los Angeles to New York and back more than 7,000 times.[1] Telecom companies focused on the simple part of building the network, and once the digs were in motion, it was difficult to cut back. New technologies like dense wavelength division multiplexers also emerged and exacerbated the glut by enabling more data to run over the same fiber.

While billions were spent to expand the nation's intermetro networks, little was done to upgrade the "last mile" infrastructure running into homes and businesses. Regulatory obstacles prevented such improvements, and would-be competitors could not get access to the coveted "hole in the wall." Since the bottleneck was at the local level, little of the long-haul capital investment went to meet demand for broadband services. Furthermore, demand never came in at forecasted levels, which intensified the imbalance. The copious fiber supply combined with this underrealized demand to drive usage of the long-distance backbone below 3 percent in April 2001, down from 15 percent in 1988.[2]

The downturn left telecom firms with massive debt loads and few means of paying creditors. Sources that once furnished easy money for anything with "telecom" in the name dried up. Given the industry's capital-intensive structure, this left many firms in a precarious position. Revenue streams weakened, hampering firms' ability to make debt payments and damaging credit ratings (*Chart 2*). By one estimate, the telephone industry registered an S&P-equivalent CCC+ rating in September, suggesting the strong possibility of industrywide loan defaults.[3]

Debt service problems coincided with a dramatic increase in telecom bankruptcies. In recent years, the telecom pie did not grow nearly as fast as the number of firms trying to claim a piece of it. No matter the packaging, telecom services are a relatively nondifferentiable commodity and have limited ability to produce profits. In the absence of profits and with cash burn rates outstripping funding availability, many telecom firms had to fold or restructure (*Chart 3*).

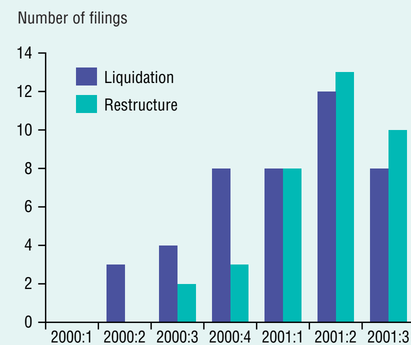
As companies scrambled to cut costs, human capital was one of the first things out the door. Corporations shrank payrolls as they became alerted to decreased business activity. Telecom layoffs were already widespread before September and continued throughout 2001 (*Table 1*).

Sept. 11 a Short-Term Negative

The terrorist attacks dealt the telecom sector an undeniable short-term blow, but much of the fallout was simply an

Chart 3

Telecom Bankruptcies



SOURCES: PricewaterhouseCoopers analysis and calculations; Bloomberg LP.

expunging of excesses still in the system. The attacks gave firms a window to make additional cutbacks while the competition was doing it.

The events of Sept. 11 focused attention on several facets of the telecom industry. First, the situation gave new life to the claim that centralized networks are bad, reminding markets of vulnerabilities customers face when given limited choice for local phone service. The sentiment against centralized networks gives alternative carriers a better case for increased access to local customers.

Second, the attacks did not negatively affect wireless telecom activity and probably boosted it. Wireless sales were strong in the third quarter, while other telecom activity languished. There is still room for growth in the industry because domestic cellular subscription rates are relatively low.[4] When landlines in parts of New York remained a tangle of frayed wires after the attacks, many of the city's firms turned exclusively to mobile communications to conduct business. Satellite telecommunications and other systems not as susceptible to terrestrial disruptions may attract more interest in the future.

In addition, the attacks showed the advantages of Internet-based telecommunications. The Internet—originally conceived to withstand nuclear assault—exploits a data packaging technology that breaks voice communication into small data packets, ships them off over the Internet by the most efficient path and then rearranges them in a recognizable form upon arrival. Such catastrophe-averting technology could make gains in local-access markets since switches are not needed to route traffic.

Finally, telecommuting and videoconferencing have gained more attention since the attacks. There are already 23.6 million teleworkers in the United States, and that number is expected to continue growing at 10 percent a year.[5] If telecommuting growth continues, it could boost demand for residential broadband access and Internet telephony.

Deregulation Benefits Slow in Coming

Unfortunately, the telecom downturn has only delayed the consumer benefits promised with deregulation. While deregulation generally increases market efficiency and consumer welfare, the resulting forces can produce drastic short-term economic fallout among competing firms. Alternative carriers were hardest hit, and many have failed in trying to penetrate retail markets. This trend has not boded well for consumer choice. Although in 2000 at least one competitive local exchange carrier (CLEC) was serving customers in 56 percent of the nation's ZIP codes (home to 88 percent of U.S. households), only 4.6 per-

The terrorist attacks dealt the telecom sector an undeniable short-term blow, but much of the fallout was simply an expunging of excesses still in the system.

Table 1

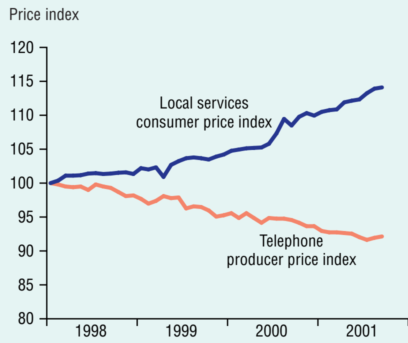
Announced Layoffs for Selected Telecom Firms with U.S. Operations

	Worldwide employment January 2001	Worldwide layoffs announced in 2001	Layoffs as a percentage of year-beginning level
Nortel Networks	94,500	49,000	51.9
Lucent Technologies	113,400	44,910	39.6
Solectron	54,000	20,700	38.3
Corning	40,300	12,000	29.8
Motorola	147,500	39,000	26.4
Alcatel	131,598	33,000	25.1
Ericsson	92,949	22,000	23.7
Cisco Systems	38,000	8,500	22.4
Qwest Communications International	67,000	11,000	16.4
Marconi	56,000	7,000	12.5
Siemens	448,000	17,000	3.8
Verizon Communications	260,000	7,500	2.9
Nokia	60,173	1,250	2.1

NOTE: Layoffs are those announced between Jan. 1 and Nov. 22, 2001.
SOURCES: *Financial Times*; Yahoo! Finance.

Chart 4

Telephone Service Prices



NOTES: CPI data are for local telephone service charges. PPI data are for telephone communications, except radiotelephone.

SOURCE: Bureau of Labor Statistics.

cent of residential and small business customers used CLEC services.[6]

Though CLECs are gaining ground, they still account for a relatively small share of total market revenue. At the same time, prices consumers pay for telecom services have not decreased; they have risen 14 percent since 1998 (*Chart 4*).

Additionally, superior technology and high-bandwidth services are still slow coming to the marketplace. The expansion in long-haul networks did little to relieve demand pressures for broadband services like DSL, as the technology is still unavailable in some areas. When DSL does arrive, it is often plagued by glitches and poor customer service.

Market and regulatory mishaps have beset the telecom industry. Growth prospects for some subsectors will not sustain the number of companies now trying to make market inroads, leaving the least competitive firms to seek protection from creditors or fail altogether. Such trends strengthen incumbents' position and reduce consumer leverage.

Telecom in Texas

Texas is a national leader in telecommunications. Communications firms have more than 13,000 establishments in the state.[7] These include equipment makers and service providers as well as the myriad retailers, wholesalers, consultants and construction firms that serve the industry. Only 36 percent (4,686) are primarily engaged in telecommunications activity, however. The telecommunications sector comprises equipment makers—firms that produce telephone, mobile phone, satellite, fiber-optic, microwave and switching equipment—and service providers—firms that provide local, long-distance, and cable and satellite telecom services.[8]

Service providers employ the vast majority of telecom workers in Texas. In 2000, 80 percent of the state's 168,688 telecom employees fell into this category, whereas equipment makers employed only 20 percent.[9] When it comes to telecom operations, the split between service and manufacturing is even more pronounced. Ninety-six percent of telecom establishments in Texas are service providers; the remaining 4 percent have equipment making as their core focus (*Chart 5*). (See the box titled "Decoding the Jargon" for a description of the various types of service providers.)

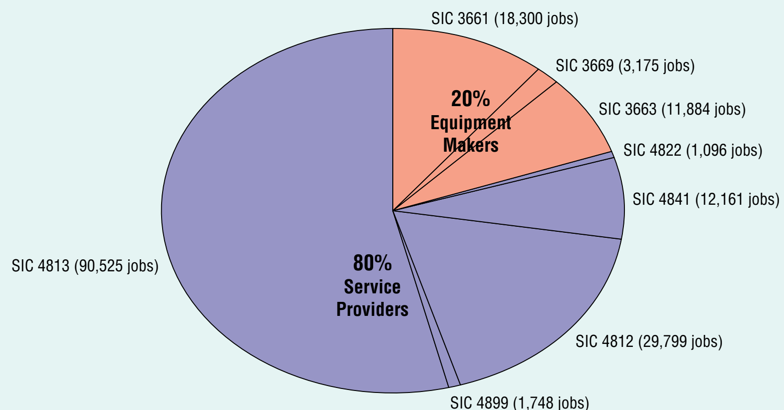
In 2000, Texas was second only to California in service-provider jobs and third after the Golden State and Illinois in equipment-making jobs (*Table 2*). Texas telecom employment accounts for 10 percent of the U.S. total, and the state's telecom employment as a percentage of total private employment is larger than in either California or Illinois.

North Texas is the uncontested state leader in telecom business activity. What began with Texas Instruments and Collins Radio more than 50 years ago steadily

Chart 5

Telecom Employment in Texas by Standard Industry Classification

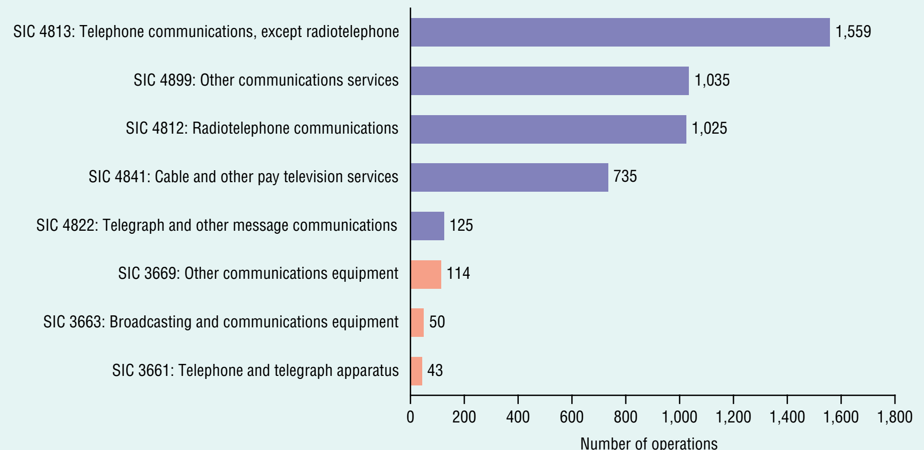
(Total: 168,688 jobs)



SOURCE: Bureau of Labor Statistics, 2000 annual averages.

Telecom Operations in Texas by Standard Industry Classification

(Total: 4,686 operations)



SOURCE: Reference USA, October 2001.

Table 2

Nationwide Telecom Employment

Area	Total private employment	Telecom services	Telecom equipment	Total telecom	Telecom as percentage of employment	Telecom as percentage of U.S. telecom
United States	110,064,902	1,404,702	274,941	1,679,643	1.53	100.00
California	12,652,956	158,842	42,572	201,414	1.59	11.99
Texas	7,744,693	135,329	33,359	168,688	2.18	10.04
Florida	6,086,414	84,554	20,296	104,850	1.72	6.24
New York	7,077,434	93,510	10,666	104,176	1.47	6.20
Illinois	5,138,884	51,462	34,131	85,593	1.67	5.10
Georgia	3,305,221	72,858	5,432	78,290	2.37	4.66
New Jersey	3,321,543	65,805	5,425	71,230	2.14	4.24
Colorado	1,867,568	55,948	5,261	61,209	3.28	3.64

SOURCE: Bureau of Labor Statistics, 2000 data.

evolved until telecom-related employment in the Dallas/Fort Worth metroplex exceeded 90,000 jobs in 2000—the majority of them in Richardson's Telecom Corridor. The Dallas primary metropolitan statistical area (PMSA) leads the state with 75,875 jobs, followed by the Houston PMSA, Fort Worth PMSA, San Antonio metropolitan statistical area (MSA) and Austin MSA (*Chart 6*).[10] Telecom contributes more to the economy of the Dallas PMSA than to any other Texas metro area. It accounts for 4.3 percent of total private employment in Dallas, almost double the state rate of nearly 2.2 percent.

While telecom layoffs have been pronounced throughout the nation, telecom downsizing has been slow to show up in Texas employment data. The pace of growth moderated in 2001, but telecom manufacturing jobs in Texas still rose an annualized 0.3 percent through October. Telecom manufacturing employment at the national level, on the other hand, dropped an annualized 17.8 percent between January and October (*Chart 7*). Texas service-provider employment increased an annualized 1.2 percent between January and November, while the comparable national figure fell 0.3 percent through October.[11] Clearly, Texas employment fared better than the nation's during the downturn in telecom over the past year. Corporate consolidation to Texas' amenable business environment in the wake of the downturn may be part of the reason state employment outperformed the nation's.

Telecom real estate markets in Texas took a big hit, however. Subleasing ran rampant in 2001 as lessors competed against even their own tenants to fill vacated office space. Most of Texas' major metro areas gave up space in 2001. Richardson/Plano was the hardest hit of telecom areas, with a vacancy rate that rose 9.4 percentage points from the third quarter of 2000 to the third quarter of 2001. The oversupply of office space is exerting downward pressure on rents and discouraging investment in real estate.

Texas employment fared better than the nation's during the downturn in telecom over the past year.

Decoding the Jargon

CLEC (Competitive local exchange carrier): Telephone service company authorized by the Telecom Act of 1996. CLECs can deliver dial tone and other services using an incumbent carrier's equipment but generally provide their own networking and switching. They account for 8.5 percent of local telephone lines in service. Some well-known CLECs are Allegiance Telecom Inc., McLeodUSA Inc. and Time Warner Telecom Inc.

ILEC (Incumbent local exchange carrier): Telephone company that was already providing local service when the Telecom Act of 1996 went into effect.

ISP (Internet service provider): A service provider that connects users to the Internet.

Long-Distance Carrier: Telecom company that primarily provides domestic and international long-distance service. Large players include AT&T Corp., WorldCom Inc., Sprint Corp. and Level 3 Communications Inc. ILECs can also provide long-distance service but must first meet FCC standards of opening their networks to competition.

RBOC (Regional Bell operating company) or Baby Bell: Telephone company that resulted from the breakup of the Bell System in 1984. RBOCs are the highest-visibility ILECs and the dominant providers of local service because they control most last-mile connections of the nation's telecommunications networks. The seven original RBOCs have since consolidated into four: Verizon Communications Inc., SBC Communications Inc., BellSouth Corp. and Qwest Communications International Inc.

RLEC (Rural local exchange carrier): ILEC that is not an RBOC. RLECs are smaller ILECs that provide local service for small to medium-sized towns and other areas of low population density. Some RLECs are AllTel Corp., Citizen Communications Co. and CenturyTel Inc.

Wireless Service Provider: Company that provides wireless communication products and services, including cellular, paging, wireless data and messaging services, and other mobile and wireless telecom services. Most RBOCs, ILECs, CLECs and RLECs provide wireless services.

SOURCES: Federal Communications Commission; searchNetworking.com; clecplanet.com; whatis?com; Hoover's Online.

Outlook

Slumping economic conditions continue to dampen prospects for a quick rebound in demand. Through November, telecom firms were still reporting 20 to 30 percent declines in month-over-month demand. Retirement incentives, executive pay cuts and canceled bonuses were still common in December. Despite the declines, long-term prospects for the telecommunications industry remain good. Worldwide telecommunications revenue in 2001 increased roughly 8 percent over 2000 and is projected to grow 7 percent in 2002.[12]

The late '90s were filled with claims about how killer apps would transform the telecommunications industry. A stumbling economy and consumer practicality have kept such changes at bay so far, however. Pedestrian applications like always-on connectivity, small-business telecom services, improvements in wireless service and multimedia transmission are likely to drive telecom demand going forward. Consumers and businesses will continue to buy into technologies that provide real and long-term improvements in utility.

Telecommunications will still have an essential role in the economy, if not in the way investors once thought. Demand for voice and data communication, while substantially lower than projected, has not completely evaporated. Rebuilding from Sept. 11 spurred short-term demand for equipment and services and renewed calls for decentralized networks. Even though many firms will be churned out of the market as the downturn runs its course, this dynamic will help whittle down the burden of too much network supply.

Texas is still poised to remain a world leader in telecommunications. The state's favorable business environment, supply of talented workers and infrastructure will help sustain the Texas telecom industry through the flux. Consumers stand to gain if regulators open closely held local markets to competition and allow market forces to flush out firms with weak business plans. The situation is still tenuous, but Texas is well positioned to recover when national telecom activity returns.

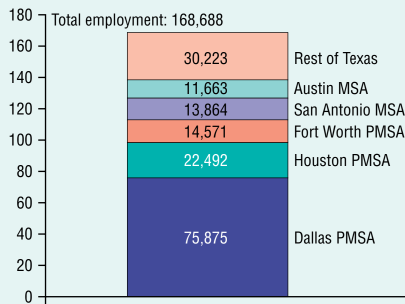
—John Thompson

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

Chart 6

Texas Telecom Employment by Area

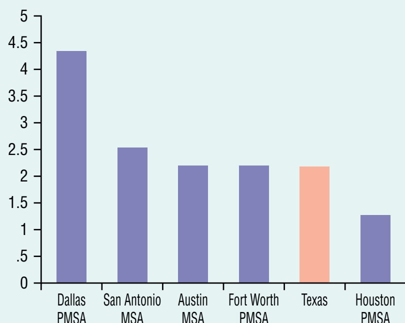
Thousands of jobs



SOURCE: Bureau of Labor Statistics, 2000 data.

Telecom Employment as a Percentage of Total Private Employment

Percent

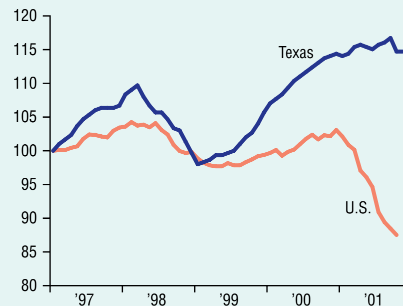


SOURCE: Bureau of Labor Statistics, 2000 annual averages.

Chart 7

Telecom Manufacturing Employment Faring Better in Texas Than in the Nation

Employment index, 1997 = 100



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

Notes

The author thanks Donald Hicks and Stan Kroder for their time and insights, Ken Robinson for his assistance and Monica Reeves for valuable editorial help. Due to the nature of the telecom industry and its rapid pace of change, some content in this article may be outdated by the time this publication reaches readers. For example, certain telecom companies mentioned were restructuring or on the verge of bankruptcy at press time.

1. *Wall Street Journal*, June 18, 2001.
2. "Optical Dead Zone Part 2," Merrill Lynch & Co. industry update, April 5, 2001. The figure does not account for peak-load usage and geographic considerations.
3. "Already High Credit Risk Spikes in Wake of Terrorist Attack—Steps You Must Take Now to Protect Your Company," *Credit Today*, Oct. 1, 2001, www.credittoday.net. The article reported an expected default frequency of 7.69 (produced by KMV LLC) for the telephone group for the six-month period ending in September 2001. This figure is comparable to the S&P CCC+ rating.
4. The domestic cellular subscription rate was 31.2 subscribers per 100 inhabitants in 1999 (latest data available), up from 2.1 subscribers per 100 in 1990. *Year Book of Statistics, Telecommunication Services, 1990–1999*, International Telecommunications Union, Geneva, Switzerland, 2001.
5. International Telework Association and Council.
6. Federal Communications Commission, press release, May 21, 2001.
7. Data were collected in September using the Reference USA database.
8. For the purposes of this article, the telecommunications industry consists of the following Standard Industry Classifications: 3661, telephone and telegraph apparatus; 3663, radio and TV broadcasting and communications equipment; 3669, other communications equipment; 4812, radiotelephone communications; 4813, telephone communications, except radiotelephone; 4822, telegraph and other message communications; 4841, cable and other pay television services; 4899, communications services not elsewhere classified.
9. The most recent employment data at this level of industry detail are for 2000.
10. Metro telecom employment is understated due to Bureau of Labor Statistics disclosure standards. Some data are not disclosable—that is, the data do not meet BLS or state agency disclosure standards. As such, metro level data are understated and "rest of Texas" data are overstated.
11. Employment data are from the Bureau of Labor Statistics and are the most recent available.
12. Gartner Inc., press release, Dec. 27, 2001.

Financial Globalization: Manna or Menace? The Case of Mexican Banking

While international capital markets have been developing for some time, direct foreign entry into the domestic banking sector of many countries has occurred only recently. Similarly, while consolidation of the financial services industry is not new, it is now beginning to transcend national borders in a more substantial way. These changes have occurred as a growing number of countries have considerably loosened long-standing restrictions on the foreign ownership of banks, thereby allowing financial globalization to advance on an unprecedented scale.

Most significant policy changes have their advocates and opponents, and the recent liberalization allowing global banking services is no exception. Advocates say global banking promotes improved practices and financial stability. But opponents claim foreign banks may lack commitment to the host country or be inordinately competitive with domestic banks, resulting in risk too great for domestic bank supervisors to control.[1] As global banking grows, the debate continues.

The situation in Mexico may shed light on this debate. The globalization of Mexican banking began in early 1994 with the North American Free Trade Agreement (NAFTA), which represented a significant step away from the country's history of a closed banking system. The peso devaluation of December 1994 subsequently put Mexico's banks on the brink of failure. Since then, however, Mexico has made numerous moves to stabilize both its economy and financial system, including further liberalization of foreign banking restrictions.

This process of deregulation, coupled with technological and economic factors propelling a general trend toward globalization, recently culminated in the foreign acquisition of the three largest Mexican banks, all within less than 18 months. As a result, Mexico is the largest economy in the world where such an overwhelming majority of commercial bank assets—almost 80 percent—are controlled by foreign financial institutions. As such, Mexico provides a fertile testing ground for assessing the merits of the arguments for and against financial globalization. While this new chapter in Mexico's modern history is only just beginning, the early evidence strongly favors an open policy toward global banking.

A Little History

Prior to NAFTA, individual foreign banks could hold no more than a 5 percent stake in a Mexican bank, and total foreign ownership in any single bank was limited to 30 percent. The only exception was granted to a U.S. institution, Citigroup, whose presence dates back to 1929, when it opened a branch bank in Mexico. This branch was allowed to continue operating, albeit under substantial regulatory restrictions.

NAFTA opened the Mexican banking system to foreign banks by permitting entry through the establishment of newly chartered subsidiaries. In 1994, Citigroup converted its branch into a separate legal subsidiary, and Banco Santander Central Hispano (BSCH) of Spain established a presence in Mexico. In 1995, 13 other U.S., European and Japanese banks entered the Mexican market through the establishment of new charters. Most of these banks formed a holding company, or *grupo financiero*, which held their banking interests in addition to other financial subsidiaries, such as leasing companies and broker–dealers.

Near the end of 1994, the Mexican peso was devalued, highlighting the growing strain in the banking system, which was damaged severely in the economic crisis that ensued. To attract much-needed capital, the Mexican Congress passed financial reform permitting foreign investors to acquire all or part of most existing banks. Still, foreign acquisition of the three largest banks was effectively prohibited. These reforms led to the acquisition of medium-sized commercial banks (between $5 billion and $10 billion) by Banco Bilbao Vizcaya Argentaria (BBVA) of Spain in 1996 and BSCH in 1997.[2] In addition, Citigroup expanded through the acquisition of Banca Confia, a medium-sized bank, in 1998. Each acquisition involved some form of financial assistance from the Mexican government. The government, meanwhile, took management control of 14 additional troubled banks.

By year-end 1998, Mexico already had more foreign than domestic banks. However, foreign banks controlled only 20 percent of banking system assets.[3] BBVA, BSCH and Citigroup controlled 7, 6 and 5 percent of total commercial bank assets, respectively. None of the other foreign banks had a market share greater than 1 percent.

Legislation removed all remaining market-share limitations on foreign ownership in December 1998 and created a deposit insurance and asset-resolution agency, Instituto para la Protección al Ahorro Bancario (IPAB), with stronger and well-defined powers, unlike its predecessor.[4] Subject to overview by the Mexican Congress, IPAB immediately began resolving government-intervened banks through the auction of bank assets and, in some cases, entire banks, to domestic and foreign buyers.

Catalysts for Globalization

In addition to deregulation, other forces in Mexico and around the world have propelled the country toward greater integration with the international community.

The economic fundamentals Mexico currently enjoys, especially in comparison with those of many other developing markets, have further increased the bank-

ing system's attractiveness to foreign suitors. In addition to comprehensive financial system reform and modernization, Mexico has implemented and maintained strict monetary and fiscal discipline. Mexico has successfully hit inflation targets in recent years and anticipates an inflation rate of about 3 percent by 2003, compared with 52 percent in 1995. The president and Congress have exhibited a commitment to reining in public spending, as evidenced by a shrinking budget deficit, and the political system itself has proven to be stable.

Common currencies, economic communities and trading blocs are eliminating obstacles to global expansion, a primary example being the European Community and the euro, which have facilitated merger activity among European banks. In this regard, while Mexico has a local currency, almost one-third of its bank assets and liabilities are denominated in U.S. dollars, and the Mexican peso has been relatively stable in recent years. Moreover, trade with the United States has flourished under NAFTA.

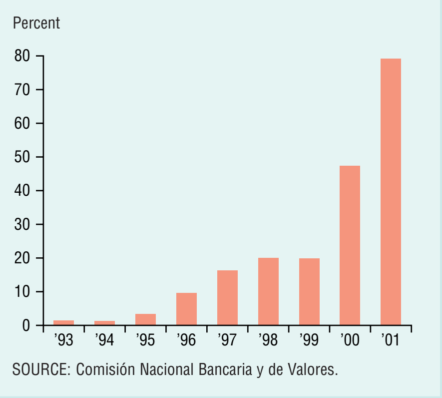
Additionally, technological innovations have changed bank products and revolutionized delivery systems. Advances in telecommunications and the Internet have especially benefited global expansion by enabling financial transactions and managerial control to easily traverse geographic boundaries. Such developments have reduced the information barrier traditionally associated with the distance between an organization's head office and its subsidiaries.

Large-Scale Foreign Entry

Spurred by these developments, a rapid-fire sequence occurred in which foreign banks acquired Mexico's three largest banks in less than a year and a half.[5] In May 1999 IPAB took control of Grupo Financiero Serfin, and in May 2000 this financial group was auctioned to BSCH. Immediately following this transaction, BBVA acquired a controlling interest in Mexico's second-largest financial group, Grupo Financiero Bancomer. The transaction was consummated in August 2000, dramatically increasing BBVA's stake in Mexico and making the newly formed Grupo Financiero BBVA Bancomer the country's largest banking group. This acquisition was the first significant foreign acquisition completed without financial assistance from the Mexican government. In the second quarter of 2001, Citigroup announced it would buy Grupo Financiero Banacci Accival (Banacci), which owns Banco Nacional de México (Banamex). The transaction was completed in September 2001.

Chart 1

Market Share of Foreign-Owned Banks in Mexico



SOURCE: Comisión Nacional Bancaria y de Valores.

Reflecting these acquisitions, the Mexican commercial banking system currently consists of 11 domestic and 19 foreign organizations.[6] The foreign banks include nine U.S. institutions, two Spanish banks, six other European banks, one Canadian bank and one Japanese bank. Foreign banks now hold nearly 79 percent of total commercial bank assets (*Chart 1*). Together, BBVA, Citigroup and BSCH hold 66 percent of these assets.

Mexico is not alone in these developments. Latin American banks in general have often been targets for foreign acquisition in recent years. As shown in Table 1, foreign banks now maintain a substantial presence in most Latin American countries. However, Mexico stands out in terms of the extent of foreign banking, especially given the large size of its economy.

Benefits for Mexico

Insufficient time has elapsed to comprehensively assess any differences in overall banking system performance resulting from foreign institutions' prominence in the Mexican banking system. Nevertheless, the trends have been positive. Each of the acquired banks has reported success in cutting costs, resulting in improved earnings and increased pressure on domestic banks to rationalize their own operations in order to remain competitive. As the cost synergies associated with recent acquisitions are fully realized, further operating-expense reductions are expected. More important, the capital adequacy of the three largest banks has improved, in some cases through capital injections provided by the new foreign parent companies.

In broader terms, the institutional changes since Mexico opened its bank-

Table 1

Foreign Bank Presence in Latin America

	2000 GDP (billions of U.S. dollars)	Foreign Bank Market Share (percent)
Brazil	1,194	24.0
Mexico	875	78.8
Argentina	403	54.7
Colombia	291	24.1
Chile	219	47.0
Venezuela	205	49.7
Peru	133	67.9
Ecuador	59	8.7
Dominican Republic	53	7.0
Uruguay	33	39.2
Bolivia	27	7.1
Panama	23	54.7
El Salvador	20	13.0
Jamaica	10	59.0

NOTES: The Mexican market share is as of June 30, 2001, and reflects the pro forma Citigroup–Banamex combination. All other market shares are as of year-end 2000, but the Jamaican market share reflects the pro forma foreign acquisition of the country's third-largest commercial bank in 2001.

SOURCES: GDP data are from the International Monetary Fund; market share data were compiled by various Federal Reserve Banks, through public information available from central banks and other supervisory agencies in individual countries.

ing sector to direct foreign entry correspond to the benefits claimed by the proponents of global banking in terms of improved practices and financial stability. A full analysis of the benefits of financial globalization must consider this process as a whole, rather than narrowly focus on the behavior of the foreign banks. In conjunction with the opening of its banking sector, the Mexican government has concentrated on stabilization, modernization, transparency and a drive toward internationally comparable standards and objectives.

A look at some related industry developments clearly shows that Mexico's financial system has been much improved and strengthened. The supervisory authorities have implemented a new bank monitoring and rating system, and accounting principles have continued to evolve closer to international standards. Furthermore, supervisors have moved quickly to promulgate new risk-management policies and processes for credit administration. For example, asset–liability management policies have been improved to better assess value at risk and mitigate liquidity and interest rate mismatches. While markets have generally stabilized over the past few years, the effects of these improvements in asset–liability management are reflected in less volatile market-related gains and losses. Moreover, the corporate community and governing authorities have enhanced the disclosure of financial information and established new corporate governance laws that strengthen the accountability of bank directors and increase the rights of minority shareholders.

These are the types of advances globalization advocates have contended would result from international banks' direct entry into a domestic market. A strong foreign presence brings world-class banking practices, heightened competitiveness, and the need for institutional and policy arrangements fully supportive of modern financial services. This process of change in Mexico undoubtedly began even before the onset of direct foreign ownership, as international players had already been competing with domestic institutions to serve Mexico's largest and most sought-after corporate borrowers.

Globalization Concerns Misguided

The path of progress has admittedly been a rough one for Mexico, as evidenced by the 1994 peso devaluation. But from a longer term perspective, even the peso crisis and its associated banking problems proved to be positive in that they helped spur the improvements and modernization subsequently undertaken by governing authorities and Mexican banks.

Opponents often emphasize the perceived weaknesses of an open financial system by referring to examples, such as Mexico's, of financial liberalization followed by financial crisis. But this ignores the underlying institutional and policy problems that typically have accompanied financial crises. A more thorough assessment would consider the possibility that adverse financial developments in the context of a deregulated environment might reflect deeper problems, rather than being the direct result of financial liberalization itself.

In Mexico's case, the 1994 peso crisis highlighted, among other things, the need to pursue the types of improvements to the financial infrastructure that Mexico has since successfully undertaken. Only through these efforts have domestic banking practices, the supervisory process, information quality and corporate governance been made commensurate with the demands of the global marketplace.

A Positive Direction

Mexico has established a strong foundation for economic growth and prosperity. Accompanying the banking sector's openness to foreign ownership and competition has been a large-scale modernization of regulatory practices and accounting standards, together with significantly increased disclosure and corporate governance requirements. In addition to opening its banking sector, Mexico has signed 10 free trade agreements in recent years, encompassing 35 countries that account for more than half of the world's GDP.

More time must elapse before the full effect of these changes on financial and economic performance can be assessed. Nevertheless, developments point firmly in a positive direction, especially in terms of the banking system's capital adequacy. Reflecting Mexico's financial success, the peso has remained fairly stable over the past three years, whereas the currencies of many other major Latin American countries have depreciated.

Within less than 18 months, Mexico's three largest banks were bought by foreign institutions. Cause for concern? We think not. Rather, Mexico's policy of openness is likely to result in continuing economic benefits far greater than what was widely expected only a few years ago.

— Robert V. Bubel
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Notes

1 An excellent discussion of these opposing views and related points can be found in the remarks by Robert W. Ferguson, Jr., before the International Banking Conference, Federal Financial Institutions Examination Council, Arlington, Va., July 20, 1998. See www.federalreserve.gov, under the section titled "Testimony and Speeches."

2 At the time, BBVA was known as Banco Vizcaya Bilbao and BSCH was known as Banco Santander.

3 The government does not report the assets of intervened banks, and therefore these assets are not included in the total. If the assets of intervened banks were counted, the market share calculated for foreign banks would be somewhat lower.

4 Entry is still permitted only through a separate, Mexican-chartered subsidiary. No branches or agencies of foreign banks can be established in Mexico.

5 In addition, during 2000, a Canadian bank acquired a medium-sized Mexican bank it had managed for the government since 1995.

6 The government currently controls 11 intervened banks, including one small bank that was intervened in 2001. Resolution of the largest intervened banks has been arranged through agreements with local banks. The remaining intervened banks are essentially shells, as the most valuable assets and deposits have already been sold. Recently, IPAB announced that the licenses for seven of these banks will be formally revoked and the banks fully liquidated.

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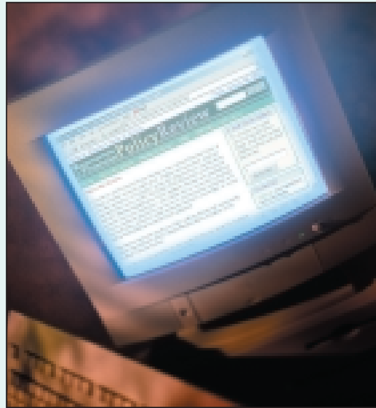

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