

Southwest Economy



A Texas Revival

After years of growth that was the envy of most states, the Texas economy has fallen into the pack. Hit hard by the 2001 recession, Texas was thrown off its usual course by a severe downturn in high-technology industries that led to widespread job losses, many in high-paid positions.

Texas emerged from recession in mid-2003, nearly a year and a half after the U.S. economy did. While Texas job growth has begun to accelerate, it remains relatively weak, and a fast-growing industry to propel growth faster than the nation's has yet to step forward.

The Texas economy has been evolving from resource-based industries toward more knowledge-based industries for several decades. If the shrinking influence of the state's energy sector was ever in doubt, those thoughts should be put to rest by the industry's muted response to the recent spike in oil and natural gas prices.

High-tech firms became the important driver of growth in the 1990s, absorbing the state's low-cost real estate and plentiful labor pool. Texas was attractive to firms that wanted to grow quickly, and a new boom was born.¹ But for some reason, many of the industries that grew faster than the

(Continued on page 2)

*INSIDE:
Five Years of the Euro:
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*Revising Texas
Economic History*

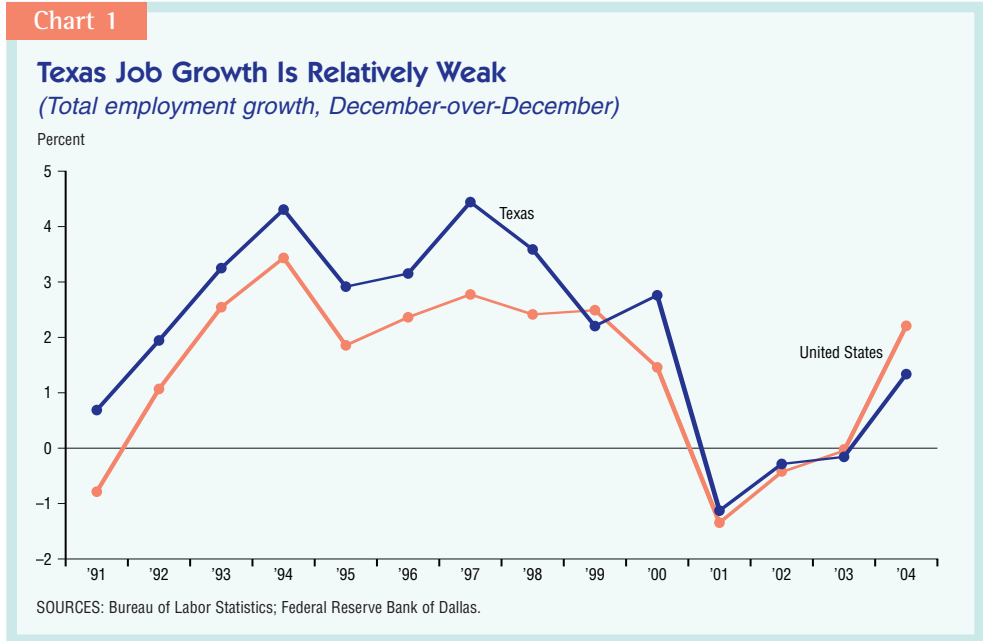
The Federal Budget: Developments and Outlook

In recent years, concern about the federal budget deficit has become more pronounced and widespread. A combination of economic and policy changes has shifted the budget from surplus to deficit. This shift has probably reduced national saving, which will impose substantial economic costs—a reduction in Americans' future income.

Despite these costs, the budget outlook cannot be described as a crisis. The deficit is still within its historical range. And it is projected to shrink over the next decade, although economic developments and policy changes could slow or reverse the projected decline.

(Continued on page 8)

Texas employment and output growth was consistently stronger than the nation's throughout the 1990s.



national average during the boom years have contracted faster as well. Not only have many firms failed to fully recover, but a similar Texas resurgence is unlikely in industries such as semiconductors and telecommunications.

An economic rebound is under way, but growth remains below the state's long-term trend and is likely to continue sluggish, by Texas standards, in the short run. The Texas economy is likely to grow faster than the nation's eventually, but it is hard to see the driver of that growth at

this time. Once again, the state has found itself looking for industries in search of a good place to grow.

A Timid Texas Recovery

Texas employment and output growth was consistently stronger than the nation's throughout the 1990s. But over the past year and a half, state job growth has been roughly the same as or slightly less than that of the United States (*Chart 1*). Employment in Texas grew at a tepid 1.3 percent annualized rate in the

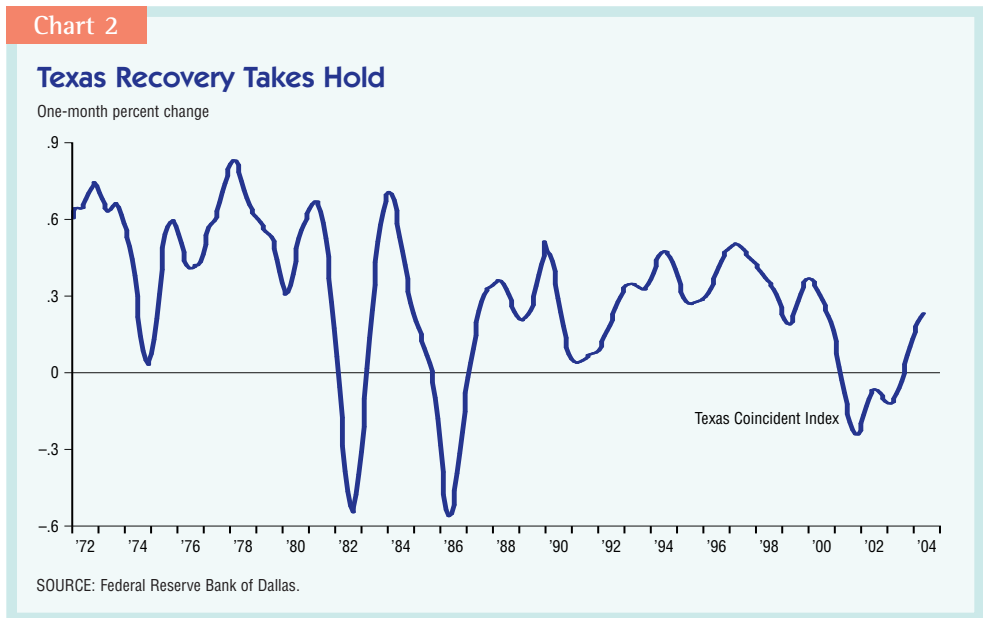
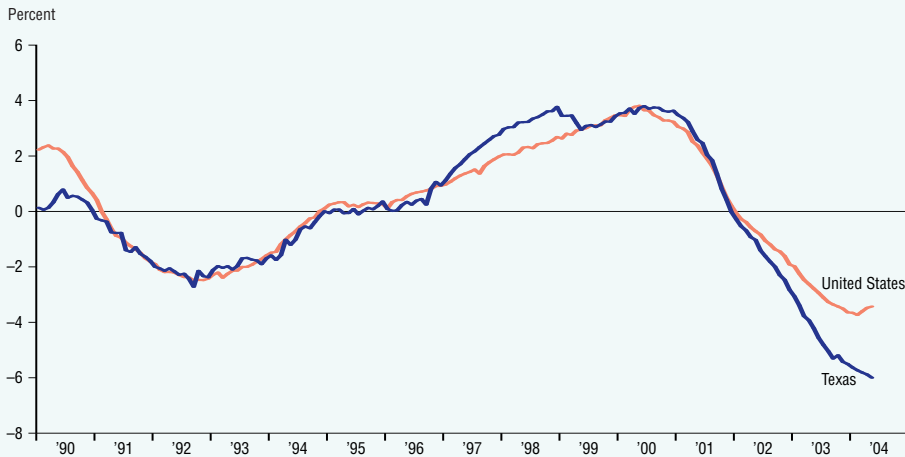


Chart 3

Texas Employment Is Further Below Its Trend than the Nation



NOTE: Deviations from employment if it grew at the 13-year average rate over time.
 SOURCES: Bureau of Labor Statistics; Federal Reserve Bank of Dallas.

first five months of 2004. During the same period, U.S. employment increased at a 2.2 percent pace.²

The U.S. recovery began in early 2002. The Federal Reserve Bank of Dallas' Texas Coincident Index suggests that the Texas economy resumed expansion in the third quarter of 2003 (*Chart 2*). But because Texas' annual job growth rate was roughly 1 percent faster than

the U.S. rate during the 1990s, recent job growth—about the same pace or slightly slower than the nation's—puts Texas further below its trend than the nation (*Chart 3*).

Why Has Recent Growth Been So Weak?

While the 1990s boom was stimulated by strong growth in high-technol-

ogy industries, all sectors of the economy joined the party, adding jobs at a faster pace than the rest of the country. The high-tech sector stimulated demand for business services and spurred rapid construction of offices, manufacturing facilities and homes.

Chart 4 shows the pattern of Texas employment as a percentage of U.S. employment for major industries over the past few years. When the ratio is rising, Texas is adding jobs at a faster pace than the nation. When the ratio is falling, job growth in Texas is slower than in the rest of the country.

During the 1990s, all sectors of Texas' economy added jobs faster than the nation. Between 1991 and 2000, Texas employment grew nearly 1 percent per year faster than the nation. During that period, Texas had a slightly smaller share of fast-growing industries. Most of the state's stronger growth was attributable to Texas firms' growing faster than their national counterparts.

The downturn has been as broad based as the boom. Since 2001, many sectors of the Texas economy, including services, transportation and non-high-tech manufacturing, have been declining or growing at about the same pace as their national counterparts. Chart 5 takes a closer look at the past few years. The educational and health services sector has been increasing relative to the nation. Government (federal, state and local) is also adding jobs at a faster rate in Texas than in the rest of the country. But the bulk of the economy continues to lose ground slightly compared with the nation.

Shrinking Energy Industry. One factor contributing to Texas' relative weakness compared with past recessions is the shrinking importance of the energy industry. In the 1970s and 1980s, Texas' business cycle was dominated by the energy industry, entering recession only when oil prices dropped. Most U.S. recessions have been preceded by a spike in energy prices. High oil and natural gas prices restrain Texas output for some industries as well, but the Lone Star State's energy industry has typically surged, contributing to relative strength in the state.³

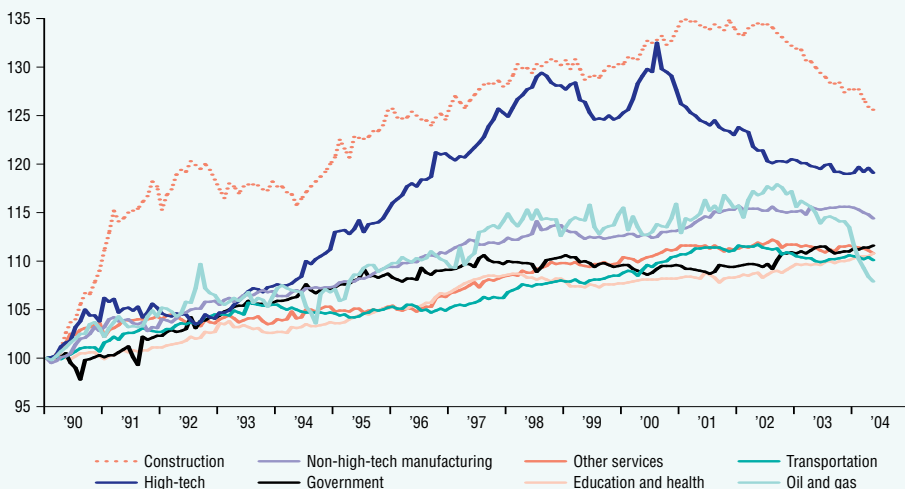
Energy employment and drilling activity have increased only modestly

Chart 4

In the 1990s, Industries Added Jobs More Quickly in Texas than in the Nation

(Texas employment as a percentage of U.S.)

Index, January 1990 = 100



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

despite oil prices reaching \$42 per barrel and natural gas prices topping \$7 per million Btu. The energy industry's relatively weak response has been caused by two factors. First, while these prices appear high, they are not high by historical standards after adjusting for inflation. The market does not expect current and futures prices to be sustainable. Second, the energy industry has contracted both in Texas and in the United States. There is not much oil or natural gas that can be drilled affordably onshore in the lower 48 states. As a consequence, the industry looks to less expensive and more productive places elsewhere in the world to drill.

Excess Supply of Real Estate. The Texas construction sector responded to the high-tech boom by building more rapidly than the rest of the country in the 1990s, particularly in high-tech-intensive areas such as Austin and Dallas. Real estate demand contracted sharply during the high-tech bust, leaving an excess supply of nonresidential real estate, particularly in the high-tech areas.

Construction employment fell in 2002 and 2003. Continued homebuilding, stimulated by low mortgage rates, has led to a slight expansion in construction employment in 2004—up an annualized 0.8 percent so far this year. Despite the slight pickup, Texas construction job growth considerably lags national construction employment, which is up at a nearly 5 percent annual rate this year.

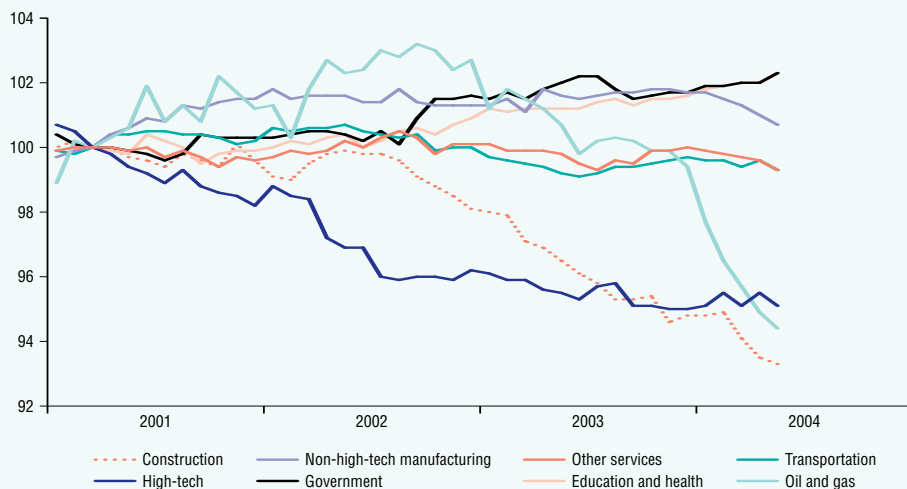
Texas land remains plentiful, while regulation and construction costs are low compared with other parts of the country. These traits are part of what makes the state attractive to business, because it makes it easier for firms to expand rapidly. The ability to build quickly also increases the likelihood that excess supply will follow an economic downturn.

Market conditions are not nearly as overbuilt as they were following the tax-incentive-spurred boom of the early 1980s, but the excess supply of real estate, particularly apartments, offices and industrial space, signals slower growth in the near term. Dallas, once again, has the highest office-vacancy rate in the country. It will take time for the excess capacity to be absorbed and for building to resume.

Chart 5

But Texas Job Growth Has Been Slower Since the Recession
(Texas employment growth as a percentage of U.S.)

Index, March 2001 = 100



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

The housing market is showing early signs of softening, with slower sales growth and rising inventories of new construction. This slowing is expected to continue if mortgage rates or construction costs rise. The state's favorable demographics contribute to a healthy housing market because the relatively young population creates new households faster

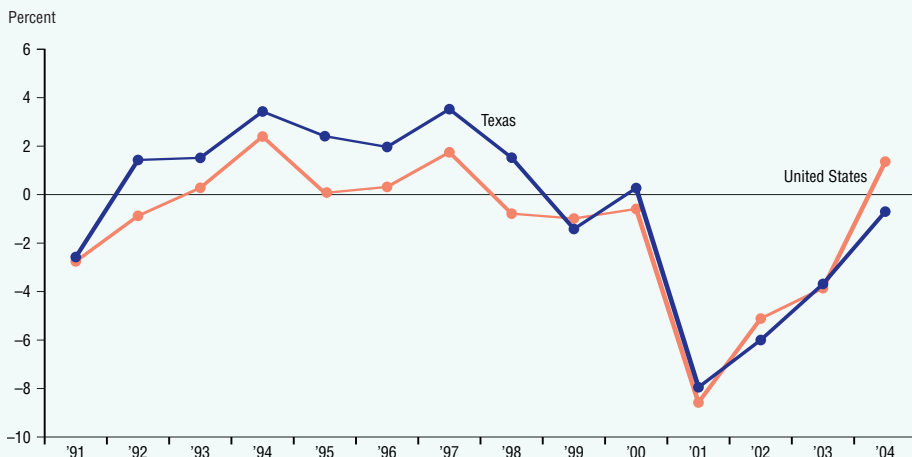
than an economy with older demographics. But the housing market will need a pickup in employment growth to remain strong. In the near term, the construction sector is not expected to contribute as much to the state's expansion as it has in the past few years.

Decline in Manufacturing Jobs. Manufacturing in Texas is on the mend but

Chart 6

Texas Manufacturing Employment Recovering More Slowly than the Nation

(Total manufacturing employment growth, December-over-December)

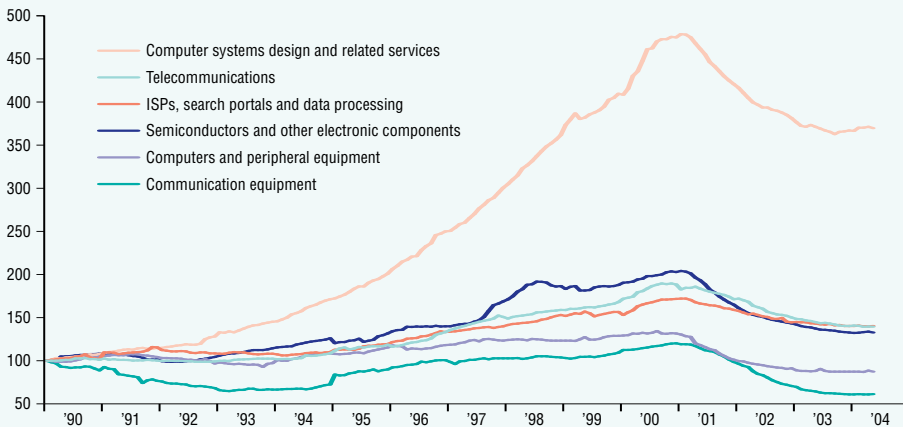


SOURCES: Bureau of Labor Statistics; Federal Reserve Bank of Dallas.

Chart 7

Texas High-Tech Employment Growth Remains Very Weak

Index, January 1990 = 100



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

has been underperforming the rate of job growth that occurred in the 1990s. The state's factories added workers at a faster pace than the United States during the 1990s expansion. Initially during the recession, manufacturers in Texas shed jobs at about the same rate as in the nation. Recently, however, the state has diverged slightly from this trend (*Chart 6*). Texas manufacturers continued to reduce employment, replacing workers with productivity-enhancing equipment or shifting production overseas. Manufacturing jobs are down just over a 1 percent annualized rate so far this year; U.S. factories have added workers at a 1.4 percent annual rate since January.

A number of the state's manufacturing industries continue to decline relative to their national counterparts, including apparel, wood, paper and printing, and high-tech firms, such as computers and electronics. Hours worked in manufacturing, which was much higher than in the nation during the expansion, has been on a downward trend since the late 1990s and recently dipped below its U.S. counterpart. There are a number of reasons for continued job losses and changes in the industrial mix in Texas.

Although the state remains a low-cost center of the United States, the region is facing increased competition from low-cost labor in other countries. While this trend has been apparent for

several decades, global integration accelerated in the 1990s because the North American Free Trade Agreement and other trade pacts further opened the markets of important trading partners, such as Mexico and China.

An increasingly global economy allows firms to reduce costs and increase efficiency, providing higher quality products to consumers at the same or lower

prices. For example, the apparel industry has been drastically reducing domestic production for most of the past decade.

As countries increase global integration, there is typically a shift in the industry mix within each country; resources are shifted to products or services that each country produces most efficiently—the product in which it has a comparative advantage. During the transition, adjustments can bring job losses or slower job growth in some industries.

Because firms are using more capital than labor to produce the same output, during this expansion it will take a higher level of output to produce the same level of job growth. That hasn't occurred yet.

High Tech Lagging During the Recovery.

Texas has the second largest share of the nation's high-tech employment, so it is not surprising that the economy was deeply affected by the shock to technology firms. Nationwide, the sector has begun a very slow recovery, but job growth remains weak.

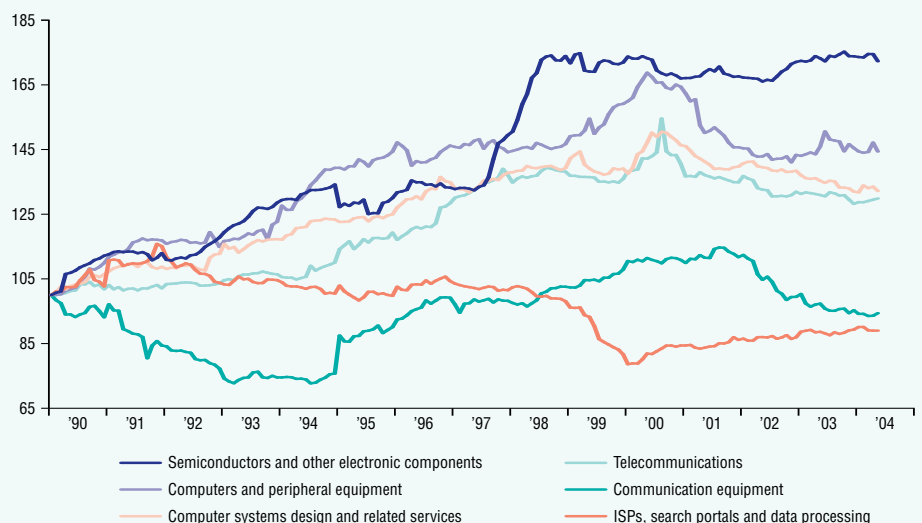
As shown in *Chart 7*, employment job losses in the high-tech sector were significant, with some industries losing many or all of the jobs added during the '90s. Texas lost more than 10 percent of high-tech employment from January

Chart 8

Texas High-Tech Sector No Longer Outperforming the Nation

(Texas high-tech employment as a percentage of U.S.)

Index, January 1990 = 100



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

2001 through the end of 2003. Slight job growth has emerged recently.

Chart 8 looks more closely at the Texas high-tech sector and its performance relative to the nation. Most sectors of high tech grew faster in Texas than in the nation, and most have been weaker in Texas than in the rest of the country since the recession. Between 1991 and 2000, the state's high-tech industry added jobs at about 1.9 percent per year faster than in the nation. A small portion of that growth came from the state's larger share of fast-growing high-tech industries. But most of it (1.6 percent) occurred because Texas high-tech industries grew faster than their national counterparts.

During the downturn, Texas high-tech employment fell about 2 percent per year faster than national high-tech firms. The comparatively worse job performance of Texas firms was mostly due to their shedding workers at a faster rate than similar firms across the country. Only a small amount of the state's comparative weakness was because Texas has a larger share of slow-growing industries.

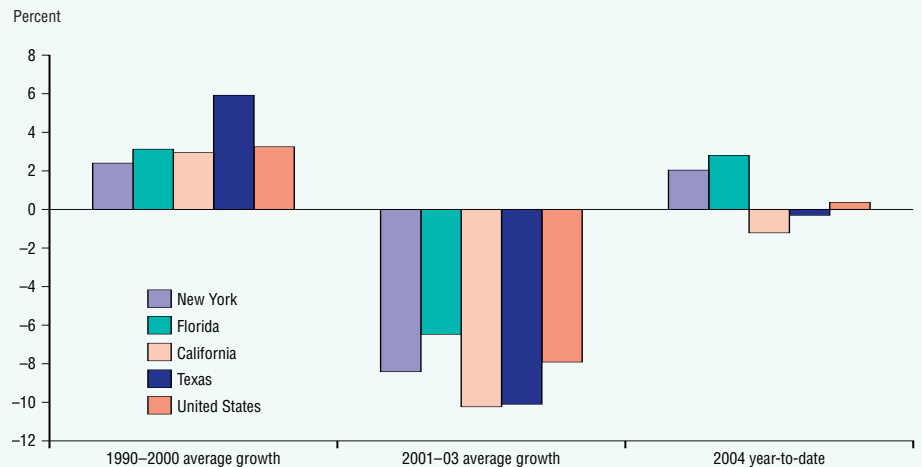
Chart 9 shows the job performance of high-tech industries in the four states with the largest share of the nation's high-tech employment. Texas added high-tech jobs at a faster pace than any of the other states. Texas also lost jobs at a faster pace than most states during the downturn.

Changes in Texas' high-tech production do not preclude a strong rebound in high-technology industries, but a rebirth of this sector will look very different from the 1990s boom. The high-tech bust occurred for a number of reasons, including overzealous expectations for growth, changing regulations and the competitive forces that drove the need for productivity increases. These factors likely have led to permanent changes.

In the semiconductor industry, for example, during the 1990s boom the state benefited from the construction of large manufacturing facilities (see Chart 9). Some of this production has been permanently shuttered as producers look for ways to lower costs by moving facilities overseas. Other producers are using productivity-enhancing technologies that allow increased production without significant hiring or construction.

Chart 9

Texas High-Tech Employment in Top High-Tech States



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

Changing Export Markets

The market for Texas exports dipped sharply in mid-2000 but recovered strongly, recently returning to the level achieved prior to the economic downturn (*Chart 10*). In the first quarter of 2004, Texas exports grew at the fastest pace in two years—faster than U.S. export growth. The strong rebound of Texas exports is a positive signal for the expansion. A closer examination of our trading partners illustrates the changing nature of the Texas economy.

Because Texas is one of the nation's largest states, it is not surprising that it is a top exporter. In 2002, Texas became the No. 1 exporting state, a feat accomplished in part because of producers' flexibility; the mix of goods being exported and the state's trading partners have changed since the 1990s.

Mexico has always been an important trading partner for Texas, but trade with Mexico dipped along with the Mexican economic decline and the maquiladoras' reduced competitiveness. Forty-six percent of Texas exports went to Mexico in late 2000. Despite a first-quarter increase in trade volume to Mexico, the country now accounts for just 41 percent of Texas' export consumption.

Recent growth in Texas exports has been driven by tremendous growth of exports to China and other Asian countries. Today, Asia consumes 25 percent of Texas exports. Texas ships more than

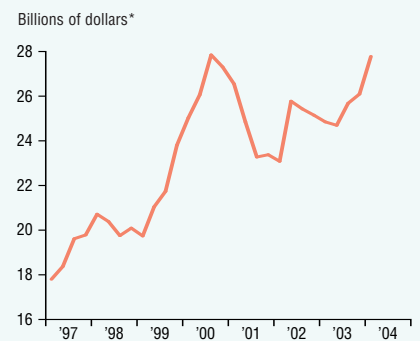
11 percent of all U.S. exports to China, up from 5 percent in 1998 (after the Asian financial crisis). Products shipped to Asia consist primarily of computers, chemicals and industrial machinery. Agricultural commodities are another fast-growing sector in Texas exports to China.

Short-Term Outlook: Not the Leader of the Pack

Each business cycle is unique, but this one has been particularly so for Texas. For a quarter century, Texas recessions have been accompanied by

Chart 10

Texas Exports to World Rebounding



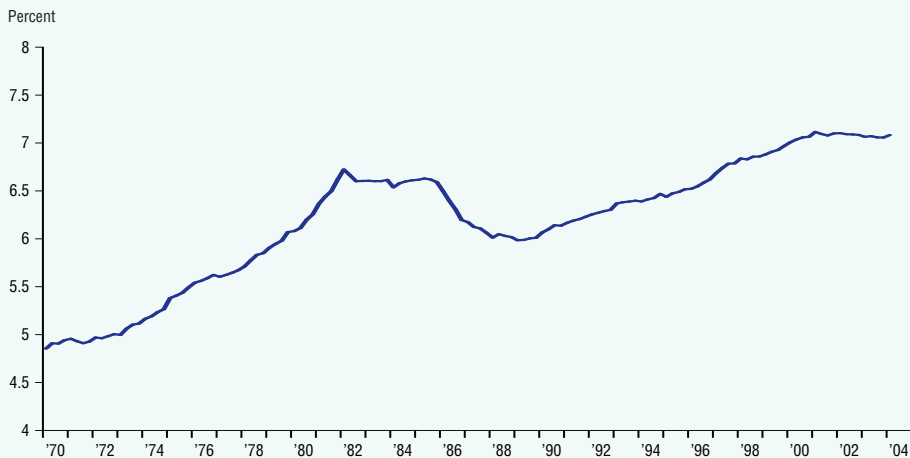
*Seasonally adjusted.

SOURCE: Massachusetts Institute for Social and Economic Research.

Chart 11

Texas Personal Income Growth Barely Keeping Pace with Nation

(Ratio of real Texas income as a percentage of real U.S. income)



SOURCE: Bureau of Economic Analysis.

slumping oil prices and recovery has been driven by a rebounding energy industry. Today's Texas economy has diversified and become more like the nation's. With an industrial structure more similar to the rest of the country, today's non-energy-driven recovery is harder to interpret from the perspective of the state's past experience. It seems surprising that Texas' economic rebound has not been faster. For now, a number of indicators suggest that economic growth is picking up, but that weakness remains.

The slow growth of personal income relative to the rest of the country is troubling. Chart 11 shows the ratio of Texas income as a percentage of U.S. income over the past 30 years. When the percentage is rising, income growth in Texas is faster than in the rest of the country. The percentage declined only during the 1980s energy bust, after the Texas economy contracted following a sharp drop in oil prices. The recent period is unusual because the share flattened and then declined slightly, suggesting that the state remains weak relative to the rest of the country's income gains.

The state's recent subpar growth is not necessarily indicative of a long-term trend but is expected to persist for the short term, and it is unclear how long the short term will be. Relatively weak Texas job growth is expected to continue throughout 2004.

The Dallas Fed's Texas Leading Index suggests that employment gains will accelerate slightly in the second half, ending 2004 with an increase of nearly 2 percent. While that is a healthy improvement from the job losses posted last year, it is still much slower than the growth rates posted during the 1990s and slower than forecasts for U.S. job growth.

Texas job growth will likely surpass the national average once again, but it is possible that when strong growth occurs, the state may have lost a bit of the edge it has had over the rest of the country.

Many factors contribute to historically strong economic growth in Texas. The state has a young, fast-growing labor force and favorable business climate, including a relatively low cost of living, low construction costs, and favorable government taxation and regulation. These factors make the state a good location for firms looking to expand quickly.

Positive attributes remain in place, but the state may have lost some of its comparative advantage as a low-cost base for economic expansion. Firms are looking overseas to diversify operations and cut costs. The state's fast-growing labor force may slow a little if job creation weakens because rapid immigration from other states and other countries is endogenous with a fast-growing

job base—workers are attracted by job growth.

Retaining a favorable business climate with smart and efficient government is essential to ensuring that the foundation for starting and building business and spurring strong growth remains. Increases in taxation or regulation that are not perceived to improve the quality of living and doing business in Texas will be harmful to future economic expansion.

—Fiona Sigalla

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Notes

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¹ "Another Great Texas Boom," by Fiona Sigalla and Mine K. Yücel, Federal Reserve Bank of Dallas *Southwest Economy*, January/February 2001.

² The recent gap between Texas and U.S. job growth may be ephemeral. The pattern of past data revisions suggests that it is likely this difference will narrow or disappear. It is also possible that the gap could be reversed. (See page 19 of this issue for a discussion of the challenges of interpreting regional economic data.) In any case, the Texas recovery has been unusually weak.

³ "Is Texas Still Helped by Rising Oil Prices?" by Steve Brown and Mine Yücel, 2004, unpublished material.

The Federal Budget: Developments and Outlook

(Continued from front page)

Recent Budgetary Developments Sharp Swing from Surplus to Deficit.

In March, the Congressional Budget Office (CBO) estimated a \$477 billion deficit for fiscal 2004, which began last October. Although CBO has not officially revised its projections, it has announced that fiscal 2004 revenue is running \$30 billion to \$40 billion higher than anticipated, with no change in expected spending. That would put the 2004 deficit at \$437 billion to \$447 billion.

In nominal terms, that would be the largest deficit in U.S. history. That fact, among others, has led to concern about a budget crisis.

It's more reasonable, though, to measure the deficit as a share of GDP. That measure puts the current deficit at about 3.8 percent of GDP, making the picture a little less dramatic (*Chart 1*). Since 1946, the deficit has been larger in eight years (1976, 1982 through 1986, 1991 and 1992) and roughly the same in two others (1990 and 1993).

Still, the recent swing from surplus to deficit has been stunning in both its size and speed. The budget was in surplus from 1998 through 2001, with the surplus peaking at 2.4 percent of GDP in 2000. Over the past four years, the budgetary position has shifted by more than 6 percentage points.

Deterioration in Budget Outlook.

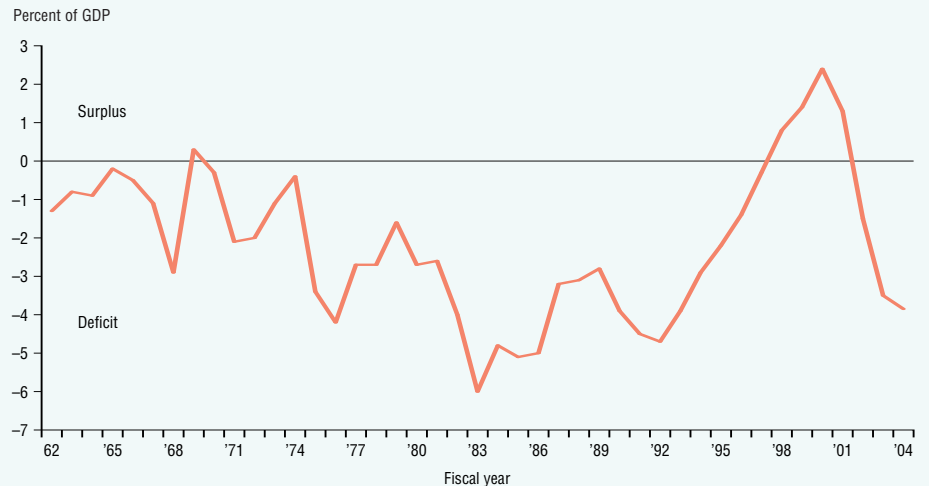
Chart 2 provides another perspective on recent developments—it compares the actual path of the budget with the path projected in CBO's January 2001 baseline. Today's deficit of 3.8 percent of GDP contrasts sharply with the 3.3 percent *surplus* projected then. CBO's March 2004 baseline, discussed further below, is also much less favorable than the baseline from three years ago.

A combination of factors changed the 2004 surplus projected three years ago into the deficit we now observe. About 40 percent of the change is due to economic factors CBO did not predict. The largest economic changes were the 2001 recession and the stock market slump, which lowered federal revenue.¹

Policy changes accounted for the

Chart 1

Sharp Swing from Surplus to Deficit



SOURCE: Congressional Budget Office.

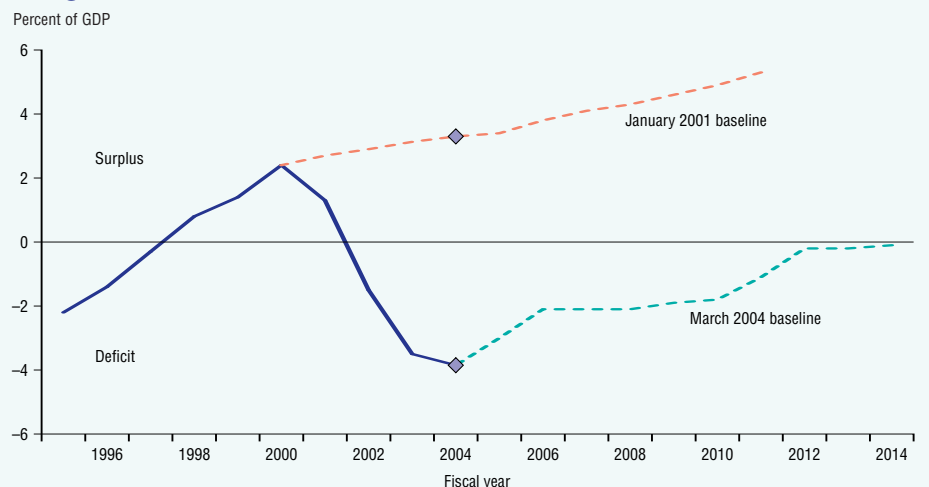
other 60 percent of the deterioration. The January 2001 baseline was CBO's prediction of what would happen to the deficit if the laws and policies then in place remained unchanged. But Congress and the president actually made policy changes that enlarged the deficit. Those policy changes were split

about equally between spending increases (27 percent) and tax cuts (33 percent).²

The spending increases have primarily been in discretionary programs—those whose funding levels are set annually by Congress in appropriation bills. About half of discretionary spending goes to defense and about half to non-

Chart 2

Budget Outlook Has Deteriorated Since 2001

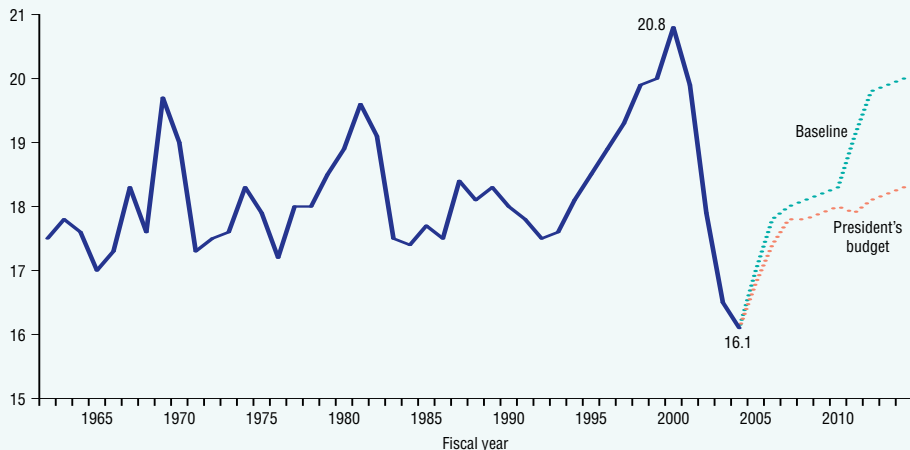


SOURCE: Congressional Budget Office.

Chart 3

Revenue Share Falls from Historic High to Historic Low

Percent of GDP



SOURCE: Congressional Budget Office.

defense programs. The 2001 baseline assumed that discretionary spending would stay at its 2001 level (adjusted for inflation), but actual 2004 spending is significantly higher.

The pickup in defense spending, from 3.0 percent of GDP in 2001 to 3.9 percent in 2004, largely occurred after the Sept. 11, 2001, terrorist attacks and includes military operations in Afghanistan and Iraq. As a share of GDP, defense spending remains well below the values observed during most of the past 40 years. Nondefense discretionary spending rose from 3.4 percent of GDP in 2001 to 3.9 percent in 2004; the recent values are the highest since 1985.

Tax cuts have come in three installments. A June 2001 law lowered income and estate and gift taxes; except for one minor provision later made permanent, this law is scheduled to expire in its entirety on Dec. 31, 2010. A tax stimulus package followed in March 2002. The latest tax cut, in May 2003, provided tax relief for dividends and capital gains through the end of 2008 and accelerated certain provisions of the 2001 tax cut.

In fiscal 2000, revenue reached 20.8 percent of GDP (*Chart 3*). This value was exceeded only in 1944. Without any tax cuts, economic factors would have reduced the revenue share by about 2.3 percentage points. The tax cuts reduced it by another 2.4 percentage points. The combined result is a 2004 revenue share

of about 16.1 percent, the lowest since 1959.

Official estimates of the revenue loss from the tax cuts may be overstated. These estimates assume that tax changes do not alter macroeconomic aggregates, such as GDP and employment. (The estimates do attempt to include the effects of tax changes on microeconomic variables, such as capital gains realizations and fringe benefit payments.) Under some circumstances, a tax cut can boost real GDP, causing a revenue feedback that partly offsets the direct revenue loss. Economists do not agree on the size of such a feedback, although there is a consensus that it would usually not be large enough to *fully* offset the direct revenue loss.

Economic Impact of Deficits

Government saving is the government's net investment in capital minus its budget deficit. Deficits therefore represent negative government saving, unless they finance investment in government capital. Running a deficit permits tax cuts or spending increases today. But servicing or repaying the resulting debt requires tax increases or spending cuts tomorrow.

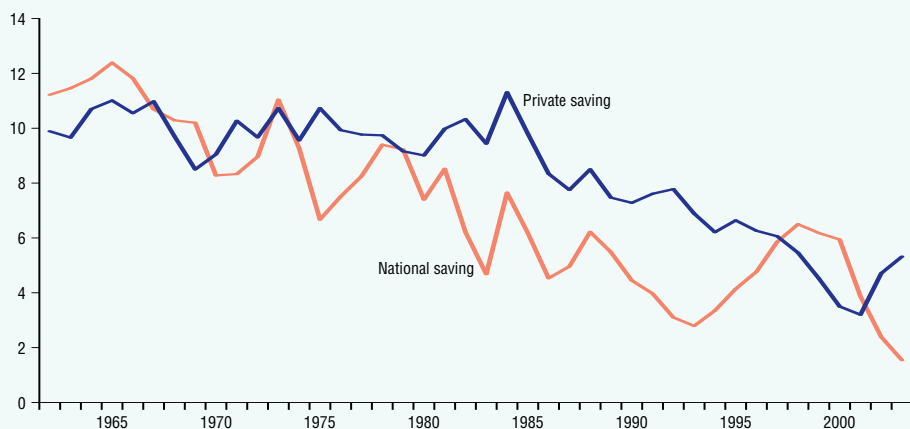
Government saving is of limited importance in its own right. It is just one component of national saving, which is the sum of government saving and private saving. (Private saving is the sum of

Running a deficit permits tax cuts or spending increases today. But servicing or repaying the resulting debt requires tax increases or spending cuts tomorrow.

Chart 4

National Saving Falls to Historic Low

Percent of GDP



SOURCE: Bureau of Economic Analysis.

personal and corporate saving). A reduction in government saving causes a reduction in national saving, unless there's an offsetting one-for-one rise in private saving.

Some policies that produce a deficit, such as tax cuts that enhance saving incentives, may cause an increase in private saving. Moreover, if households recognize that deficits will result in future tax increases or spending cuts, they may save more to prepare for those burdens. In most cases, though, it is likely that budget deficits reduce national saving to some extent.

A reduction in national saving has important economic consequences. It raises living standards today, as resources are consumed rather than saved. But it lowers living standards tomorrow, compared with what they otherwise would have been, by reducing future national income. The exact mechanism depends on whether the economy is closed or open to international trade and investment.

In a closed economy, a reduction in national saving raises interest rates and reduces investment. With less investment, the capital stock is smaller. With less capital available to aid in production, future output is lower. Lower output translates into lower incomes throughout the economy, including lower wages.

In an open economy, a reduction in national saving is likely to increase the inflow of foreign capital. This change in capital flows must be financed by a

larger trade deficit. In this case, investment need not fall—foreign savers can finance the investments for which domestic savers fail to supply funds. There is then no reduction in the capital stock or in the future output produced inside the United States. Nevertheless, the future incomes of Americans still fall, relative to what they otherwise would have been, because more of the output produced inside the United States must be paid to the foreign savers who financed the investment and own the capital.

As shown in Chart 4, private saving and national saving have generally fallen as a share of GDP throughout the past 40 years. The difference between the two series is government saving. During most of this period, national saving was lower than private saving, as government saving was negative. From 1998 through 2001, when the federal budget was in surplus, government saving was positive, so national saving was larger than private saving. In 2002 and 2003, when the federal budget moved back into deficit, government saving again turned negative.³

In 2003, private saving was 5.3 percent of GDP while government saving was negative 3.8 percent, putting national saving at 1.5 percent, the lowest value since 1934.

Although this chart shows how private saving and government saving add up to yield national saving, it does not

establish the extent to which changes in government saving have caused changes in national saving. We cannot conclusively determine what private saving would have been if government saving had been different.

Even if deficits have a significant effect on national saving, tax and spending proposals should not be evaluated solely by how they affect the deficit. The allocation of government spending across different programs is also important; for example, transfer payments do not have the same effects as spending on public infrastructure. Tax and spending changes can also affect incentives to work and save, the distribution of disposable income and the business cycle. Programs that make transfer payments from one age group to another, like Social Security and Medicare, can have profound effects on private saving and the fiscal burdens borne by different generations.

Budget Outlook During the Next Decade

Deficit Shrinks Under CBO Baseline.

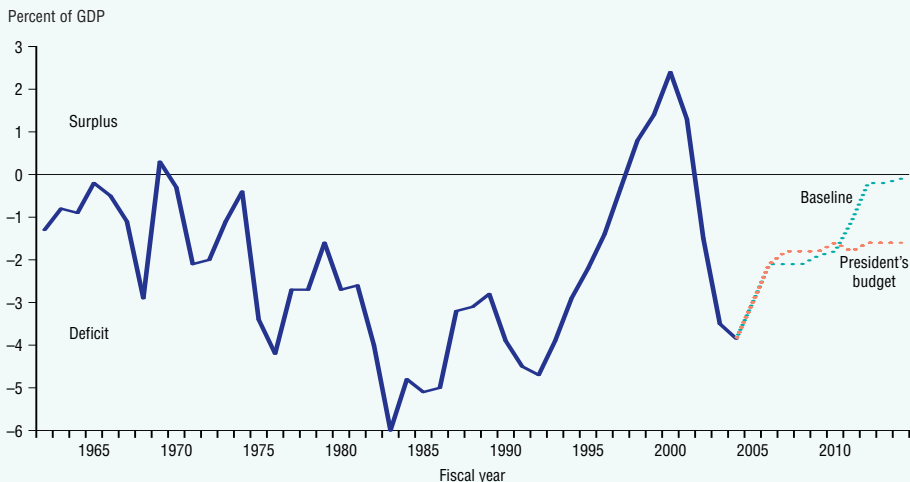
Under CBO's March 2004 baseline, the deficit shrinks, as a share of GDP, throughout the next decade, especially after 2010 (*Chart 5*). By 2014, the budget is almost in balance.

Several factors combine to produce this result. Under the baseline, discretionary spending keeps up only with inflation, meaning that it steadily declines relative to GDP. Meanwhile, revenue rises relative to GDP for three reasons:

- The brackets and exemption amounts for the regular individual income tax are adjusted each year only for inflation, not for real economic growth. As people's incomes rise faster than inflation, they move into higher brackets, a process called real bracket creep.
- The brackets and exemption amounts for the individual alternative minimum tax (AMT) are not adjusted at all, even for inflation. As a result, AMT payments will sharply increase in upcoming years—by 2010, one person in four will be on the AMT rather than the regular income tax.

Chart 5

Deficit Projected to Shrink



SOURCE: Congressional Budget Office.

A reduction in national saving raises living standards today but lowers living standards tomorrow.

- The tax cuts adopted in 2001, 2002 and 2003 become smaller after fiscal 2004 and completely expire by December 31, 2010. The expiration of the tax cuts explains the rapid shrinkage of the baseline deficit after fiscal 2010.

A countervailing factor is the growing cost of the Medicare drug benefit, which will take effect in 2006. Rising medical costs and the retirement of the first baby boomers also push up entitlement spending over the next decade. Nevertheless, the deficit still shrinks during this period under the baseline.

Deficit Shrinks Less Under President's Budget. As mentioned above, the baseline assumes that no policy changes occur. We can get a better picture of what may actually happen to the budget by examining the policy changes that Congress and the president might adopt. Consider, for example, the policy changes proposed by the president in the fiscal 2005 budget that he released in February.

While the baseline lets discretionary spending keep up with inflation, the president proposes a more restrictive policy. CBO estimates that under the president's proposals, nominal discretionary spending would grow at an average annual rate of 1.1 percent per year from 2004 to 2009, significantly less than inflation. Defense spending would grow at 1.4 percent and nondefense discre-

tionary spending at 0.7 percent. The slow growth rate for defense spending is facilitated by the fact that the costs incurred in Iraq and Afghanistan in 2004 are not expected to persist until 2009.

The president also proposes making most of the recent tax cuts permanent and adopting some other smaller tax cuts. The president's budget would therefore result in a lower revenue share than the baseline, particularly after 2010, as can be seen by referring back to Chart 3. Even so, the revenue share would still rise from the historic low reached in 2004 because of real bracket creep, the rise in AMT payments and the shrinkage of the tax cuts after 2004.

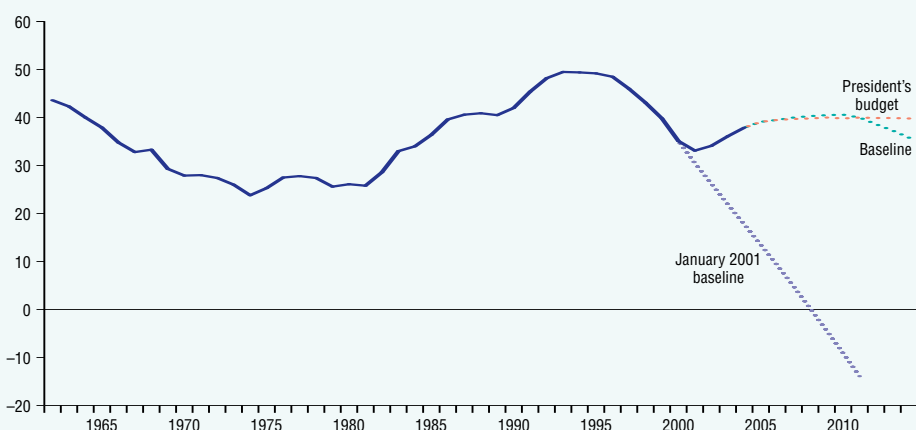
The net impact of the president's tax and spending proposals can be seen in Chart 5. The president's budget would result in slightly smaller deficits than the baseline during the next six years. After 2010, it would result in significantly larger deficits than the baseline because the tax cuts would not expire. The deficit would still shrink, though, from 3.8 or 3.9 percent of GDP today to 1.6 percent in 2014.

Debt Burden Remains Within Historical Range. Chart 6 shows the projected path of the federal debt. Under the baseline, the debt grows from 36 percent of annual GDP at the end of fiscal 2003 to 41 percent at the end of 2010. After the tax cuts expire, it declines, falling back to 36 percent at the end of 2014. Under

Chart 6

Debt Burden Projected to Remain Within Historical Range

Percent of annual GDP



SOURCE: Congressional Budget Office.

the president's budget, the debt grows from 36 to 40 percent of annual GDP over the next couple years and remains at roughly that level through 2014.

These debt burdens are within the range of recent experience—larger than those of the 1970s but smaller than those of the early 1990s. They are much larger, though, than the debt burdens projected in CBO's January 2001 baseline. Under that baseline, the entire federal debt would have been paid off by 2009.⁴

Other Factors Affecting Budget Outlook. Of course, the CBO baseline and the president's budget do not cover the full range of possible budget outcomes.

Both projections rely on CBO's economic assumptions, which, as CBO points out, are subject to great uncertainty. CBO assumes average annual real GDP growth of 2.9 percent over the next 10 years; a different growth rate would yield different budget outcomes. Interest rates, the stock market and medical costs are also uncertain.

Furthermore, the policies ultimately adopted by Congress and the president may differ from either the current policies in the baseline or those proposed in the president's budget.

Notably, neither the baseline nor the president's budget includes permanent AMT relief, even though there is a political consensus that such relief should and will be provided. The costs of such

relief grow over time and could approach 0.5 percent of GDP in 2010.

Also, there is likely to be pressure to increase discretionary spending, both defense and nondefense. Some have argued that the spending levels in the baseline, let alone those in the president's budget, are inadequate to meet public needs. In May, the president requested additional Iraq funding that had not been included in his budget.

The new Medicare drug benefit has also been criticized by some as inadequate, and there may be pressure to make it more generous. Finally, the president may propose Social Security changes that would increase deficits during the next decade, although no such proposals are in his 2005 budget.

These likely policy changes may slow or reverse the projected decline in the deficit during the next decade.

Conclusion

During the past four years, the budget has swung sharply from surplus to deficit, due to a combination of economic factors and policy changes. This development has probably reduced national saving relative to what it otherwise would have been. A reduction in national saving imposes significant economic costs—a sacrifice of Americans' future income.

Despite these costs, neither the current deficit nor those projected for the

next decade can be described as a crisis. The deficit and the debt are within their historical ranges, though toward the upper end of those ranges. Also, the deficit is projected to decline over the next decade, although that projection is subject to considerable uncertainty.

This does not mean, however, that there is no budget crisis. The short-term outlook is overshadowed by the looming Social Security–Medicare challenge, to which Federal Reserve Chairman Alan Greenspan and others have repeatedly called our attention. The projected long-run growth of these programs has profound implications for national saving, as well as for the fiscal burdens facing future generations.

—Alan D. Viard

Viard is a senior economist and research officer in the Research Department of the Federal Reserve Bank of Dallas.

Notes

- ¹ CBO distinguishes between "economic" and "technical" changes. The former are revisions to the variables in CBO's economic forecast, such as GDP, employment, inflation and interest rates. The latter are changes in any other factors (except policy changes) affecting revenue or spending, such as the stock market, medical costs and income distribution. For simplicity, I combine these changes and refer to them as "economic."
- ² I classify additional interest payments resulting from the tax cuts as part of the tax cuts rather than as spending increases. Increases in refundable income tax credits paid in cash to households that do not owe income tax are classified as spending increases.
- ³ Although government saving differs from the federal budget surplus (due to such factors as government capital investment and state and local government saving), the two series usually move closely together.
- ⁴ The baseline projection recognized that it would be difficult to actually repay some of the debt before it matured. By 2009, though, the cumulative surpluses would have allowed the government to buy financial assets equal to its remaining debt, leaving it with no *net* debt.

Five Years of the Euro: Successes and New Challenges

Europe embarked upon monetary union much the way Columbus set out across the Atlantic in 1492—full of hope but without a map.

Nothing like economic and monetary union (EMU) had ever been tried before its launch in 1999. Eleven countries—with a hodgepodge of languages, cultures and customs—tied their economic futures to a common central bank and single currency, the euro. Greece joined in 2001, expanding the euro zone to 310 million people in 12 nations.

After five years voyaging into the unknown, the European Union (EU) may not have discovered a new world of prosperity, but it at least proved wrong the pessimists who doomed EMU even before its launch. Bank of France Governor Christian Noyer summed up what many had predicted for EMU: It will never happen. If it does happen, it will be a disaster.

EMU has confounded those expectations by establishing itself without any major breakdowns—in iffy times for the global economy. The European Central Bank (ECB) has built a reputation as an independent, credible monetary authority. And the euro ranks as the world's second most important international currency, after the dollar.

Perhaps most important, the new monetary arrangement has achieved its primary goals—macroeconomic stability and, more specifically, low inflation. The ECB has defined price stability as consumer inflation of less than 2 percent. And as Chart 1 shows, EMU has largely delivered on that mandate. Tame inflation has given most member countries both short- and long-term interest rates lower than they would otherwise have had.

Monetary union has not been as successful in stimulating the economies of continental Europe. Chart 2 shows that the euro area has grown more slowly than the United States for much of the

past five years, with most of the poor performance arising from structural rigidities in product and labor markets. The first five years of the euro also saw instability in the currency's value. In 1999 and 2000, the euro fell against the dollar, reaching a low of 82 cents in October 2000. After 2002, the currency rose, peaking at \$1.28 in February 2004. Various explanations, including higher U.S. productivity, do not fully account for the exchange rate swings, which are no worse than the dollar's earlier ups and downs against the German mark and Japanese yen.

Twelve of the 25 EU member states currently participate in EMU, whose framework was established by the Maastricht Treaty of 1991. Some are not participants because they choose not to be. Denmark and the United Kingdom, for example, negotiated opt-out clauses to the treaty, which obliges EU members to adopt the single currency when they meet the qualifying criteria. Others are

not yet members because they only joined the EU earlier this year. (See map on page 15.)

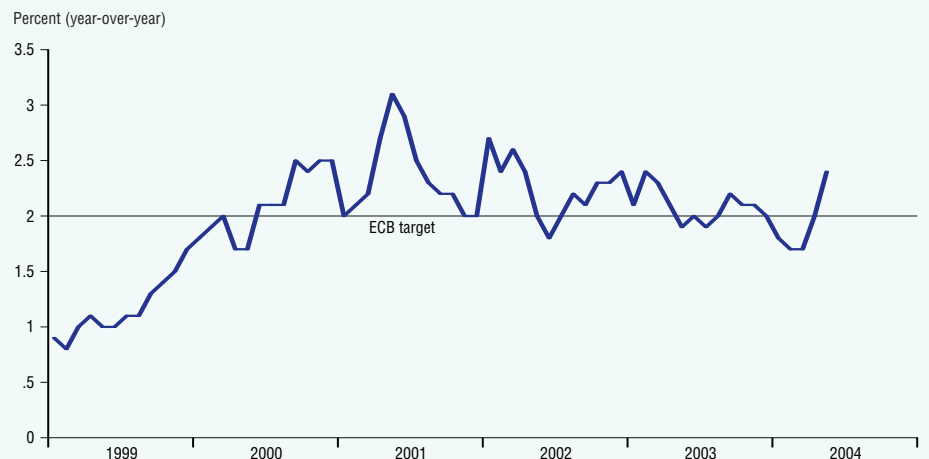
Economists and European central bankers recently gathered at the Federal Reserve Bank of Dallas to assess the first five years of the euro. Presentations focused on the currency's international role, its impact on global financial markets, the lessons learned and the challenges ahead. This article draws on conference presentations to review EMU from the perspectives of various countries.¹

Fringe Players: Ireland and Portugal

EMU gets its ballast from core heavyweights France and Germany, but the single currency involved leaps of faith for Ireland and Portugal, two smaller countries on the EU's periphery. They could have stayed out, like Britain, Sweden and Denmark, but chose to join, becoming integral parts of the European economy.

Chart 1

Inflation Under EMU



SOURCE: Statistical Office of the European Communities.

Fundamental to EMU's success in Portugal has been widespread recognition that long-term changes have been made to the economy.

Chart 2

Economic Growth in the United States and Euro Area



*Seasonally adjusted, annualized rate.

SOURCES: Office of the European Communities; U.S. Bureau of Economic Analysis.

In its first five years under EMU, Ireland achieved one of its primary goals—closing the credibility gap that saddled its economy with borrowing costs above Germany's. Had it not entered EMU, Ireland would almost certainly have ended up with higher interest rates than it has. They would have choked off the nation's 1990s growth spurt, a boom captured in the description of Ireland as the "Celtic Tiger."

In other ways, EMU membership hasn't turned out as expected. Perhaps most significant, Irish inflation accelerated following EMU's launch, rather than retreating to the euro zone average. This was partly due to the Irish market's heavy reliance on British retailers, whose pricing decisions reflect economic conditions outside EMU. With interest rates lower, the Irish saw the EU's biggest building boom, marked by double-digit increases in housing prices and rising construction costs.

As an EMU member, Ireland can no longer rely on monetary policy to cool inflation, leaving the budget as the primary lever for keeping excess demand from driving up prices. EMU membership requires adherence to the so-called Stability and Growth Pact, which limits governments' ability to run budget deficits. Like several other EU nations, Ireland has run afoul of the pact's guidelines in recent years. The country's

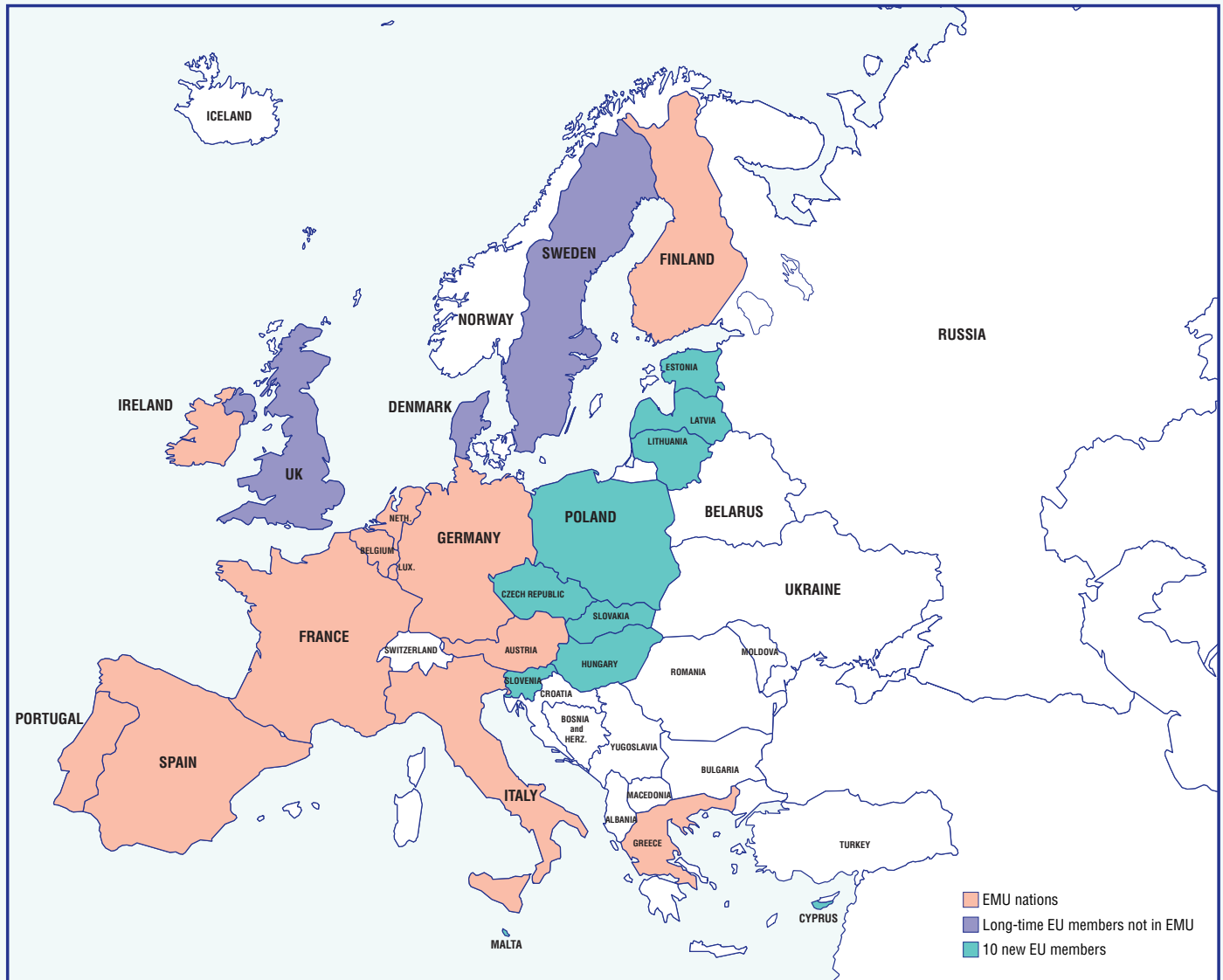
expansionary fiscal policy helped stoke the fires under wages and asset prices.

Entering EMU, Portugal received the same credibility boost Ireland did, bringing greater stability and lower interest rates. Consumers' incomes, firms' cash flows and the state's fiscal operations are all in euros, the same currency those agents are borrowing and lending in the domestic and foreign markets.

Operating in euros provides Portugal with certainty in its economic relations with the rest of the world. With a national currency, jitters about trade imbalances and central bank reserves fed into exchange rate and interest rate panics, causing problems for Portugal's solvent as well as its insolvent. When it comes to creditworthiness, families, firms and government entities are now judged on their own merits, not by conjectures about the national economy. By giving Portuguese companies greater access to international finance and removing exchange rate risks, the single currency created a surge in overseas investment for a nation once isolated economically.

Fundamental to EMU's success in Portugal has been widespread recognition that long-term changes have been made to the economy. This allowed nominal and real interest rates to fall to the EU average. Families and firms could then borrow more without assuming higher debt service. Households' total

Europe 5 Years Into Monetary Union



credit increased from 46.4 percent of GDP in 1996 to 103.7 percent in 2002. At the same time, borrowing by nonfinancial companies rose from 53.7 percent to 92.1 percent of GDP.

As in Ireland, EMU has raised questions about whether falling interest rates, coupled with budget deficits, have produced too much of a good thing. The signs are there—current account deficits, inflation above the EU average, rising asset prices. A more benign view of these developments is that they reflect market-led responses to the transition to EMU that will unwind without causing many problems.

On the Sidelines: Great Britain and Sweden

While Ireland and Portugal joined EMU, two other nations on Europe's fringes geographically opted out, retaining control of their own monetary policies and keeping their own currencies.

Some British euroskeptics believe the United Kingdom will never join the euro zone. Indeed, the UK Independence Party, which favors withdrawal from the EU, gained ground in recent European Parliament elections.

In its latest assessment of EMU membership, issued in 2003, the British government notes potential advances in

growth, trade and incoming investment, as well as a boost for financial services. But the government continues to worry that UK business cycles aren't in sync with the EU's and that EMU rules lack the flexibility needed to respond to the British economy's ups and downs.

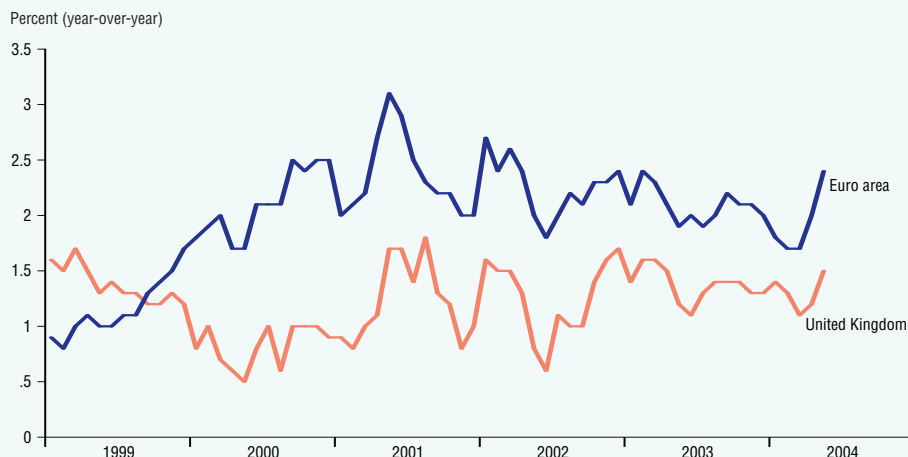
While the EMU nations spent the 1990s preparing for the euro, the UK enjoyed a decade of steady growth with tame inflation. Britain's economy continued to outperform the euro area's during the past five years, as Charts 3 and 4 show.

Economic models suggested that signing onto EMU would have made for a far bumpier ride, three-quarters of it

As a latecomer in deciding whether to join, Sweden had the advantage of looking at the experiences of other countries both inside and outside EMU.

Chart 3

Inflation in the United Kingdom and Euro Area



SOURCE: Statistical Office of the European Communities.

tied to the exchange rate of the euro and dollar. The last thing many skeptics wanted was to risk the UK's stability. Joining the euro zone, moreover, would not produce other tangible gains. Lower transaction costs for changing money would be offset by the cost of switching from pounds to euros. Fluctuating exchange rates would remain a risk, given Britain's trade patterns. The country divvies up its trade between the blocs dominated by the euro and the dollar. Joining EMU would eliminate risks with the former but increase them against the latter.

Whereas Britain long opposed entering EMU, Sweden's political elite wanted the country to join. Swedish voters rejected the idea in a September 2003 referendum, unpersuaded that potential gains from adopting the euro would outweigh the loss of independence in monetary policy and the risk of economic shocks. Charts 5 and 6 compare Sweden's inflation and growth with those of the euro area as a whole.

As a latecomer in deciding whether to join, Sweden had the advantage of looking at the experiences of other countries both inside and outside EMU.

Chart 4

Economic Growth in the United Kingdom and Euro Area

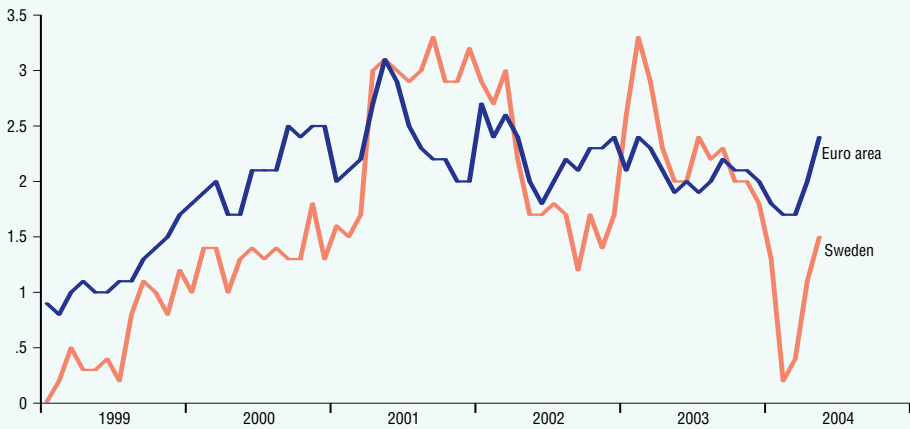


*Seasonally adjusted, annualized rate.
SOURCE: Statistical Office of the European Communities.

Chart 5

Inflation in Sweden and the Euro Area

Percent (year-over-year)



SOURCE: Statistical Office of the European Communities.

The big risk in joining EMU lies in vulnerability to Europe-wide policies that aren't appropriate for an individual country's economic conditions.

The evidence suggests that joining the euro zone might increase trade by 10 to 15 percent. Gains from lower transactions costs are small. Like Britain, Sweden would face exchange rate risks even inside EMU because of its significant trade with countries outside the euro zone. Joining EMU might produce lower inflation, cheaper credit and stable exchange rates, but they can also be achieved with sound domestic policies.

The big risk in joining EMU lies in vulnerability to Europe-wide policies that aren't appropriate for an individual country's economic conditions. Coun-

tries with higher inflation need tighter money—but may get the opposite. Countries trying to climb out of sluggish spots need looser policies—but may get the opposite. If Sweden's economy were to fall out of step with the rest of Europe, the common interest and exchange rate would have a destabilizing effect.

Outside EMU, Sweden can use both monetary and fiscal policies to manage its economy. Inside, fiscal policy becomes the primary lever, and government spending isn't always a good substitute for monetary policy.

Chart 6

Economic Growth in Sweden and the Euro Area

GDP (percent, year-over-year)



SOURCE: Statistical Office of the European Communities.

Table 1

European Union Newcomers Will Have to Work for EMU Entry

	Inflation rate (May 2004)	Long-term interest rate (2004:1)	Fiscal deficit (2002)	Public debt (2002)
Cyprus	1.2%	4.71%	-3.5%	58.6%
Czech Republic	2.6	4.24	-3.9	27.1
Estonia	3.7	4.94	1.3	5.8
Hungary	7.8	7.17	-9.2	56.3
Latvia	6.1	4.95	-2.0	22.7
Lithuania	1.0	5.16	-3.0	15.2
Malta	2.4	4.91	-6.2	66.4
Poland	3.5	5.96	-4.1	41.8
Slovakia	8.2	5.01	-7.2	42.6
Slovenia	3.9	6.14	-2.6	28.3
Target	2.7	6.27	-3.0	60

NOTES: Boldface numbers indicate areas in which countries do not meet the target. Fiscal deficit and public debt are as a percentage of GDP. Inflation and interest rate targets change with underlying economic conditions; those shown are for early 2004.

SOURCES: Statistical Office of the European Communities; Malta National Statistics Office.

Knocking on the Door: New EU Members

The EU's recent expansion brought into the fold 10 countries, most of which were part of the communist bloc only 13 or 14 years ago. So even before they've grown comfortable with capitalism, they face another round of restructuring tied to joining EMU.

These newcomers can't opt out of monetary union, so key issues boil down to timing and preparation. Some economists recommend entry into the euro zone as soon as possible to capture the benefits of price stability and lower interest rates. The newcomers are already integrated with the rest of Europe, making them vulnerable to the shocks and credibility premiums that once bedeviled two other small nations, Ireland and Portugal. Euro enthusiasts see national currencies as a luxury these 10 countries can no longer afford.

Joining will depend on meeting EMU entry criteria. As Table 1 shows, all the newcomers have work to do. The biggest hurdles are getting inflation to a target within 1.5 percentage points of the EU's three best performers and reducing fiscal deficits to 3 percent of GDP. Only Hungary fails to meet the standard for long-term interest rates, a target that is within 2 percentage points of the EU members with the lowest inflation. Only

Malta has a public debt above the threshold of 60 percent of GDP.

Rigid adherence to the targets may be unwise when it comes to the 10 newcomers. These standards were developed for established market economies, not countries in transition. Flexibility aimed at hastening entry could spare these countries some hard times. The EU might, for example, alter the target inflation rate from the average of the three best performers to the euro zone average. In any case, experience suggests prices stabilize quickly after entry. Getting the fiscal house in order should be the primary concern, and all the newcomers, save the Czech Republic, expect to do that by next year.

The goal is to bring the 10 newcomers into EMU between 2007 and 2010, but no dates have been fixed. As early as 2005, each country will enter a transitional phase in which the national currency is fixed against the euro. A minimum of two years later, the countries will fully adopt the euro. The strategies of the newly admitted countries put Estonia, Latvia, Lithuania and Slovenia into transition in 2007. Poland, Hungary and Slovakia may enter in 2008 or 2009; the Czech Republic may be ready in 2009 or 2010.

Incorporation of the new states will be among the important tasks facing

EMU now that it has established the euro zone. In its first five years, EMU did not fall prey to pessimists' worst fears, and it kept inflation under wraps. Ireland and Portugal did benefit from lower interest rates, but EMU failed to ignite growth in the larger member nations. Economic disparities and impediments still plague the EU, and the structural reforms to address them haven't been achieved.

Perhaps most important, the EU will continue to wrestle with the inherent contradictions between a centralized monetary policy and decentralized fiscal policies. Before the 2001 recession, nations did not get their budgets into cyclical balance, and they ran into trouble when times turned tougher. Germany's and France's deficits now exceed the limit of 3 percent of GDP. The deficits aren't as large as in previous downturns, but EMU's only leverage under the Stability and Growth Pact amounts to peer pressure, which hasn't worked. The real danger of deficits lies in overheating the economy, creating bubbles that will cause job losses and falling asset prices when they burst.

Past attempts at currency unions eventually faltered because of their failure to enforce fiscal discipline. How EMU handles fiscal policy might be just as important as how it directs the continent's monetary affairs.

—Richard Alm

Alm is an economics writer in the Research Department of the Federal Reserve Bank of Dallas.

Notes

¹ "Five Years of the Euro: Successes and New Challenges" was held May 14–16, 2004. The conference was organized by the Dallas Fed and the University of Texas at Austin and sponsored by the Commission of the European Communities. Information on participants and their presentations can be found at www.dallasfed.org/news/research/2004/04euro.html.

Revising Texas Economic History

Numerous times in the past few years, we have reported in these pages that a Texas recovery appeared to be just under way. How could we continue to make such statements for more than a year? The answer: Data revisions are changing our view of the economy.

Data revisions are a continuing difficulty in assessing the Texas economy. The effects of data revisions are quite visible in the Texas Coincident Index, which is one of the broadest and most reliable measures of state economic activity. Developed by the Federal Reserve Bank of Dallas, the index combines changes in employment, the unemployment rate and gross state product.

As shown in Chart 1, the Texas Coincident Index has given us a constantly changing picture of the Texas economy since May 2003. In that month, we thought the Texas economy reached its trough in October 2002 and grew during the next six months (November 2002

through April 2003). Subsequent revisions of the index indicated that the trough occurred later. As of June 2004, it looks as though the Texas economy reached its trough in August 2003 and grew during the next nine months (September 2003 through May 2004).

Although these revisions may prompt us to regard the index with some skepticism, the changes are the result of revisions to the underlying data series used to construct the index. In other words, the comprehensive measures of Texas economic activity represented in the index were undergoing constant revision, and the coincident index was dragged along for the ride.

At turning points in the economy, most economic data series are subject to substantial revision, which is one of the principal reasons why the National Bureau of Economic Research's Panel on Business Cycles waits so long after a recovery is under way to date the end of a national recession. For example, the

Table 1

What We Thought We Knew When

Information as of	Date of trough	Subsequent months of Texas growth
May 2003	Oct. 2002	6
June 2003	Sept. 2002	8
July 2003	Dec. 2002	6
Aug. 2003	April 2003	3
Sept. 2003	April 2003	3
Oct. 2003	March 2003	6
Nov. 2003	March 2003	6
Dec. 2003	June 2003	5
Jan. 2004	June 2003	6
Feb. 2004	Aug. 2003	5
March 2004	Sept. 2003	5
April 2004	Sept. 2003	6
May 2004	Sept. 2003	7
June 2004	Aug. 2003	9

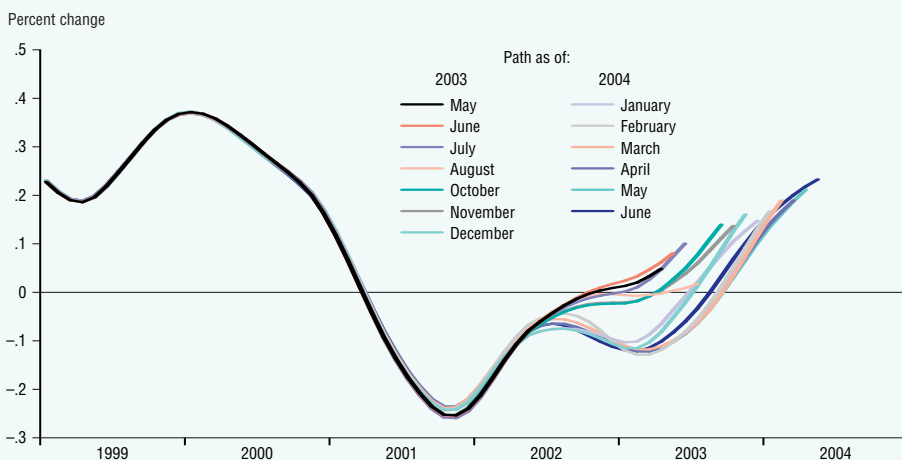
panel waited until July 17, 2003—more than a year and a half after the U.S. economy's most recent trough—to announce that the event had occurred in November 2001. Were Texas to have such a panel, it likely would be close to marking the Texas trough sometime in or near third quarter 2003, but it probably would want to wait for further data revisions before pinpointing the exact month.

—Stephen P. A. Brown
Keith Phillips

Brown is director of energy economics and microeconomic policy analysis in the Research Department of the Federal Reserve Bank of Dallas. Phillips is a senior economist at the Dallas Fed's San Antonio Branch.

Chart 1

Texas Coincident Index



NOTES: Because the chart represents changes in the coincident index, a trough is indicated when the data rise above the zero axis. No change in data for September 2003.

SOURCE: Federal Reserve Bank of Dallas.

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