1

The Economy in Perspective

*First impression, second thoughts…*Among connoisseurs of official economic statistics, the Commerce Department's recent revision to the national income and product data for the last few years has already caused quite a hubbub. The Department releases its revised estimates of these data annually, incorporating fresh source data and new methodologies. The revision for 1998–2000 indicates that the U.S. economy grew less rapidly than it seemed to do on first report, investment spending in the high-tech sector was less buoyant, and corporate profits were less plentiful. Current information indicates that for 1988–2000, real GDP expanded about 0.3% per year less quickly than we thought, with 1998 now appearing stronger and the two subsequent years weaker.

The revised data still depict a vigorous economy, but not one on steroids. The Bureau of Economic Analysis' news release informs us that instead of following a pattern of 4.6%, 5.0%, and 3.4%, the revised GDP growth rates are 4.8%, 4.4%, and 2.8%. GDP growth did not accelerate from 1998 to 1999—it decelerated. The factors accounting for the revisions differed from year to year, but the one factor common to all was downward revision to spending on computer equipment and software, especially software. Curiously, personal spending for the period was revised up, with wages and salaries especially robust in 2000, while corporate profits were revised down.

The picture that emerges shows that although the economy grew less rapidly during 1997–2000 than so-called final estimates had suggested, household income was somewhat better—and corporate profits somewhat worse—than imagined. This picture squares with news from the financial press, which has been riddled with reports of corporations restating their earnings for the period. Perhaps the enormous declines in many corporations' stock market valuations during the past show that investors' doubts about earnings potential extend beyond cyclical factors.

Although the revisions do not seem earth shattering, they will be grist for the macroeconomic policy mill, reviving debate about potential GDP and the nonaccelerating inflation rate of unemployment, or NAIRU. Now that output is believed to have expanded more slowly than previously thought, estimates of the growth rate in output per hour—productivity—will be downgraded; correspondingly, unit labor costs will increase more rapidly. Most important, because investment spending is so critical for the long-term path of productivity growth, some analysts will take near-term productivity revisions as evidence that the nation's underlying productivity situation has been oversold. We might find that the revised estimates point to an annual productivity growth rate near 2.5% for the three years ending in 2000. If so, the pace could be nearly a percentage point below some economists' estimates of the underlying trend.

Those who think about "potential GDP" will probably argue that the economy's actual performance is really closer to its potential than we might previously have thought, and that macroeconomic policy should take care not to be too aggressive. For example, if the NAIRU is really 5%, and not 4%, then the economy must now be approaching its equilibrium unemployment rate, rather than slipping away from it. The revised data will strengthen the voice of analysts who have contended all along that the U.S. economy did not change dramatically during the 1990s in terms of its potential or how policymakers should respond to its fluctuations.

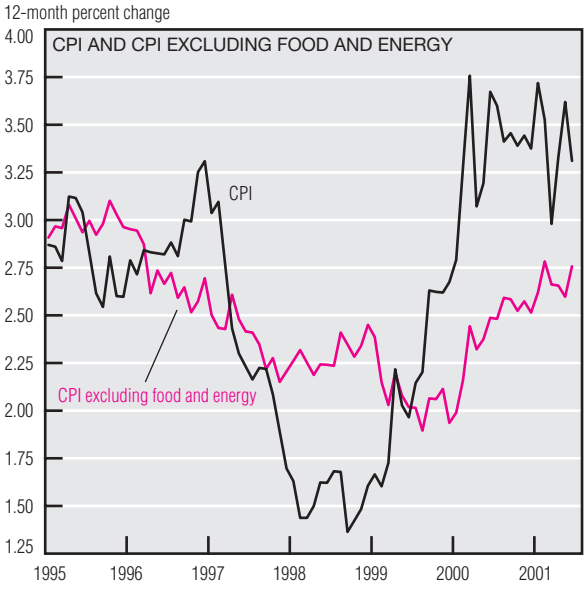
On balance, Fed watchers might say that monetary policy should have been somewhat tighter than it was because the Fed counted on a higher growth potential than was warranted. Tighter policy might have fostered a more sober economic climate and prevented some of the worst excesses. But those desiring to second-guess monetary policy must first make up their minds about inflation. The CPI-based indexes indicated that inflation has accelerated lately, fluctuating around a 3% trend, while the PCE-based indexes suggest that it has been holding fairly steady around a 2% trend. Analysis of monetary policy requires an understanding not only of the real economy but also of inflation. As the GDP revisions themselves suggest, there are important aspects of this business cycle—and this economy—that we have yet to understand.

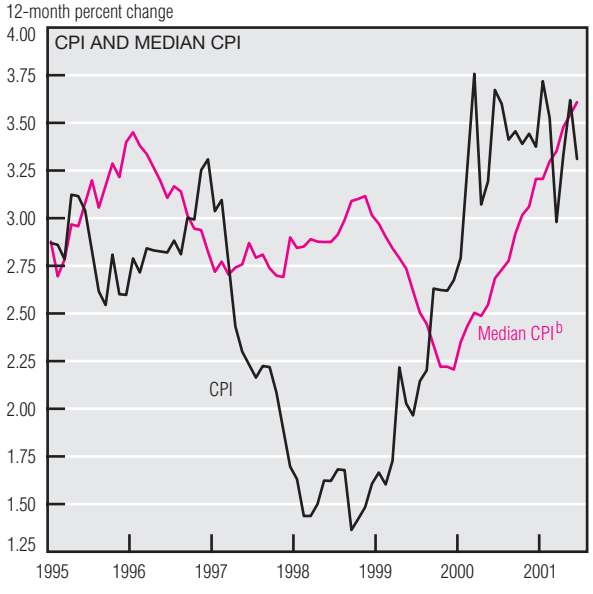
2

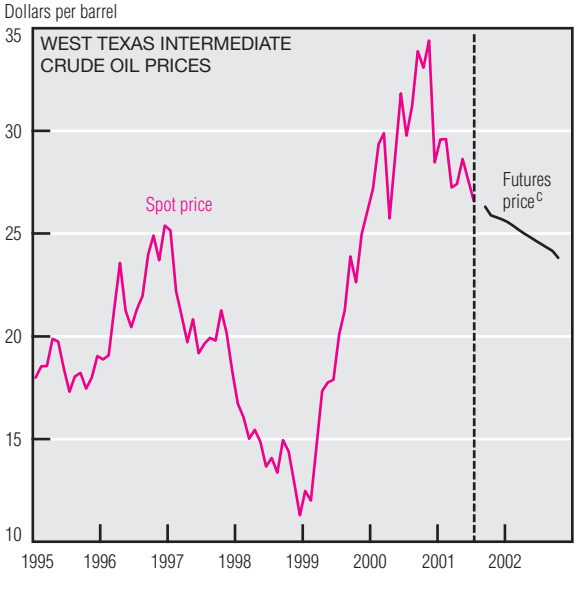
Inflation and Prices

June Price Statistics

	Percent change, last: 1 mo.[a]	3 mo.[a]	12 mo.	5 yr.[a]	2000 avg.
Consumer prices					
All items	2.7	3.7	3.3	2.6	3.4
Less food and energy	3.9	2.6	2.8	2.4	2.5
Median[b]	4.5	4.1	3.6	2.9	3.2
Producer prices					
Finished goods	–4.1	0	2.5	1.5	3.6
Less food and energy	0.8	1.9	1.6	1.1	1.3







a. Annualized.
b. Calculated by the Federal Reserve Bank of Cleveland.
c. As of July 24, 2001.
SOURCES: U.S. Department of Labor, Bureau of Labor Statistics; Federal Reserve Bank of Cleveland; Bloomberg Financial Information Services; and Dow Jones Energy Service.

The Consumer Price Index (CPI) rose 0.2% in June after a worrisome 0.4% increase in May. Falling energy prices accounted for much of the deceleration: The CPI's energy index fell 0.9% during the month, following May's increase of 3.1%. Prices of petroleum-based energy products, in particular, fell 2.2% in June. Food prices, by contrast, accelerated slightly, rising 0.4% after an increase of 0.3% in May.

Excluding food and energy, the CPI rose 0.3% in June, compared to 0.1% in May. The acceleration in core goods and services inflation indicated by the CPI excluding food and energy is also evident in the median CPI. After falling to historical lows at the end of 1999, the 12-month percent change in the index has ascended almost uninterruptedly and currently stands at 3.6%, its highest rate in nearly a decade. For June, the index posted its largest monthly percentage increase in more than seven years (4.5% annualized).

Even as core goods and services prices seem poised to continue their recent increases, energy product prices appear likely to resist this trend. Prices of crude oil have trended downward throughout 2001, in response to increasing supply and the reduced demand for petroleum products brought about by a slowing world economy. Buyers and sellers of futures contracts expect the spot price of crude oil to keep falling over the next several months, despite OPEC's recently announced intention to cut daily oil production by 1 million barrels, or about 4%.

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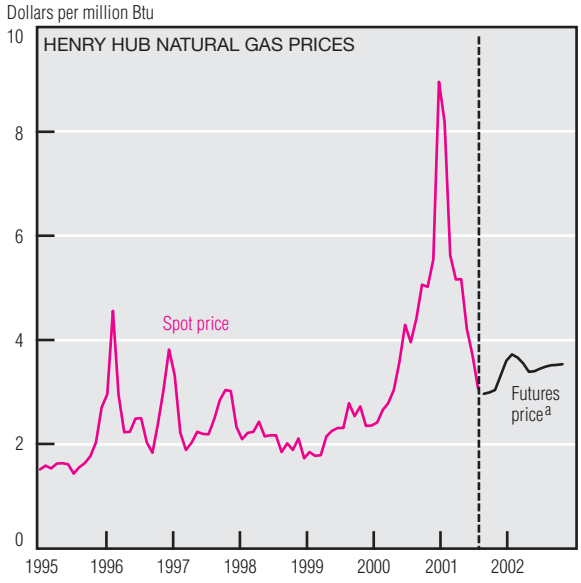
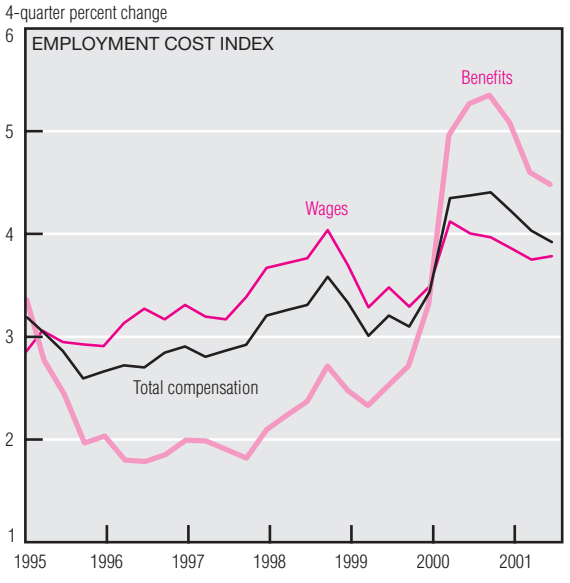
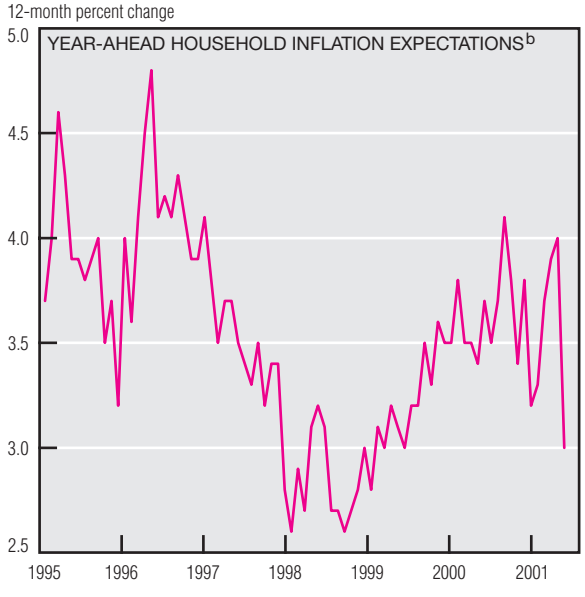
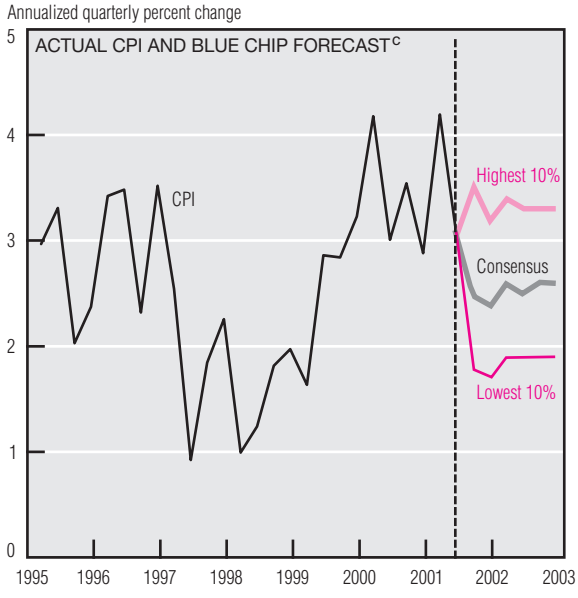
Inflation and Prices (cont.)









a. As of July 24, 2001.
b. Mean expected change in consumer prices as measured by the University of Michigan's *Survey of Consumers*.
c. Blue Chip Panel of economists.
SOURCES: U.S. Department of Labor, Bureau of Labor Statistics; Bloomberg Financial Information Services; Dow Jones Energy Service; University of Michigan; and *Blue Chip Economic Indicators*, July 10, 2001.

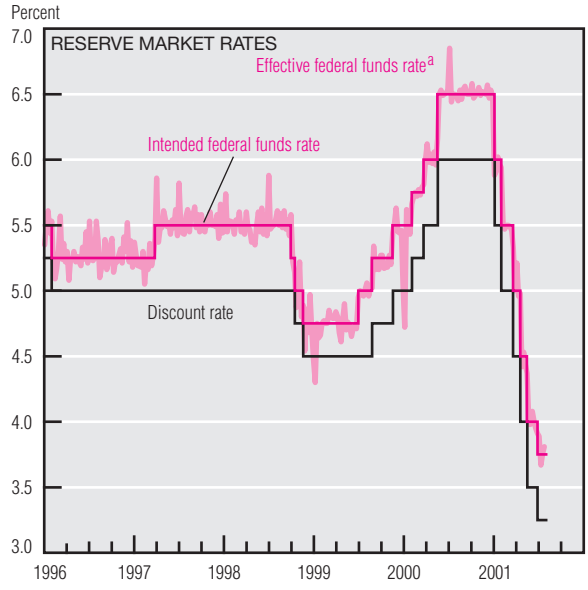
Natural gas prices have declined even more dramatically than crude oil prices. At the end of July, the spot price of natural gas was only one-third what it had been in January. Participants in the markets for natural gas futures contracts apparently expect spot prices to start trending modestly upward again as winter approaches but to remain below $4 per million Btu for the foreseeable future.

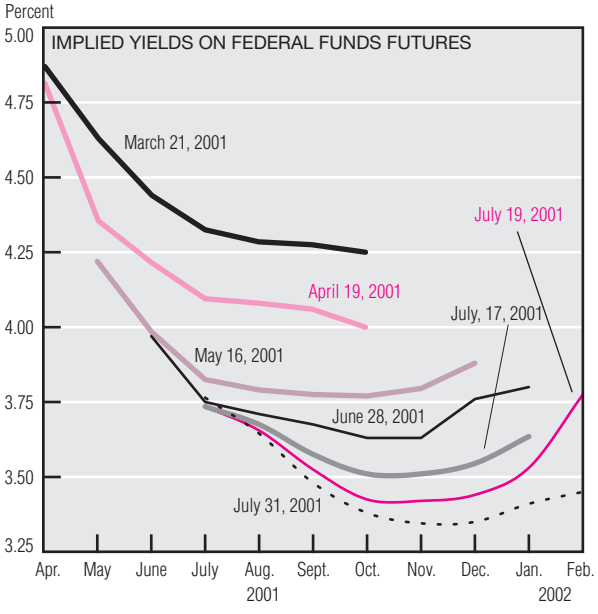
Forward-looking inflation indicators are increasingly positive. For example, growth in employment costs continues to trend downward. After rising 4.6% (annualized) in the first quarter, total compensation growth, as measured by the Employment Cost Index, rose a much more modest 3.7% (annualized) in the second quarter. The four-quarter percent change in the index also slowed from a rate of 4.4% in 2000:IIQ to a rate of 3.9% in 2001:IIQ

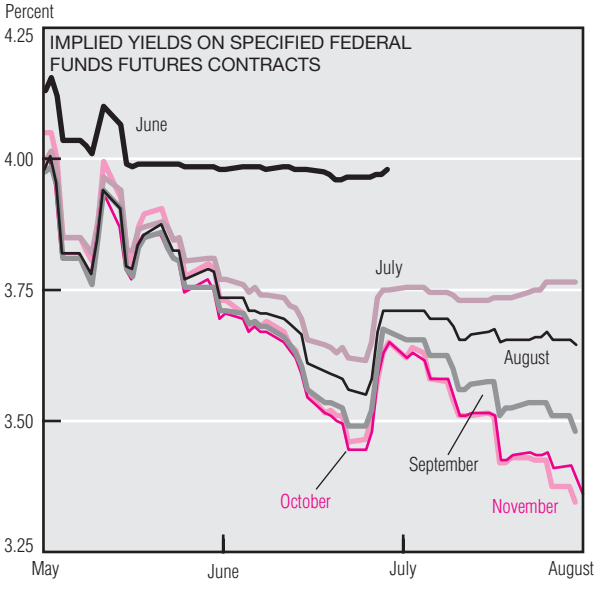
Survey measures also suggest improving inflation prospects in the months ahead. According to the University of Michigan's *Survey of Consumers*, households' inflation expectations fell sharply between June and July, from 4% to 3%. This marks the measure's largest monthly decline since December 1992. Like households, the consensus view of professional forecasters is that the inflation trend will moderate. The optimists expect inflation to fall below 2% later this year and to remain there through 2002, while the pessimists expect inflation to hover around 3¼% for the next 18 months.

4

Monetary Policy







Economic Projections, 2001 and 2002, percent
Federal Reserve Governors and Reserve Bank presidents

Indicator	July 18, 2001 Range	July 18, 2001 Central tendency	Feb. 13, 2001 Central tendency
	Forecast for 2001		
Nominal GDP[b]	3¼–5	3½–4¼	4–5
Real GDP[c]	1–2	1¼–2	2–2½
PCE Price Index[c]	2–2¾	2–2½	1¾–2¼
Civilian unemployment rate[d]	4¾–5	4¾–5	About 4½
	Forecast for 2002		
Nominal GDP[b]	4¾–6	5–5½	
Real GDP[c]	3–3½	3–3¼	
PCE Price Index[c]	1½–3	1¾–2½	
Civilian unemployment rate[d]	4¾–5½	4¾–5¼	

a. Weekly average.
b. Change, fourth quarter over fourth quarter.
c. Change, fourth quarter over fourth quarter. Chain weighted.
d. Average level, fourth quarter.
SOURCES: Board of Governors of the Federal Reserve System, "Selected Interest Rates," *Federal Reserve Statistical Releases*, H.15, and *Monetary Policy Report to the Congress*; Federal Reserve Bank of New York; Chicago Board of Trade; and Bloomberg Financial Information Services.

The Board of Governors of the Federal Reserve System submitted its semiannual *Monetary Policy Report to the Congress* on July 18. In his testimony on the *Report* before both houses of Congress, Federal Reserve Chairman Alan Greenspan stated that monetary policy in 2001 "has confronted an economy that slowed sharply last year and has remained weak this year, following an extraordinary period of buoyant expansion," but also noted projections of "a slight strengthening of real activity later this year."

Implied yields on federal funds futures, often used to gauge expected monetary policy, fell only slightly after the Chairman's testimony to the House. Although a sharp increase in implied yields occurred after the June 27 meeting of the Federal Open Market Committee, yields drifted downward throughout July. Since the June meeting, implied yields have fallen between 6 and 41 basis points (bp) across the various maturities beyond July. Although market participants continue to place a significant probability on a further 25 bp cut before year's end, implied yields reflect expectations that the Fed is near the end of an easing cycle.

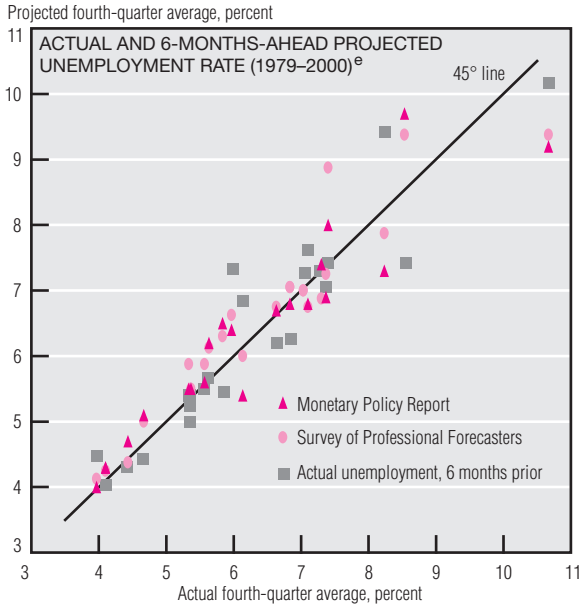
The *Report* also contains economic projections of the Board and Federal Reserve Bank presidents. The central tendency of the forecasts of real GDP growth for 2001 was revised downward from 2%–2½% in February to 1¼%–2% in July. Inflation projections according to the Personal Consumption Expenditures Price Index were adjusted upward from 1¾%–2¼% to 2%–2½%. The projections for the fourth-quarter civilian unemployment rate rose from about 4½% to 4¾–5%. The central tendency for 2002 real GDP growth is 3%–3¼%.

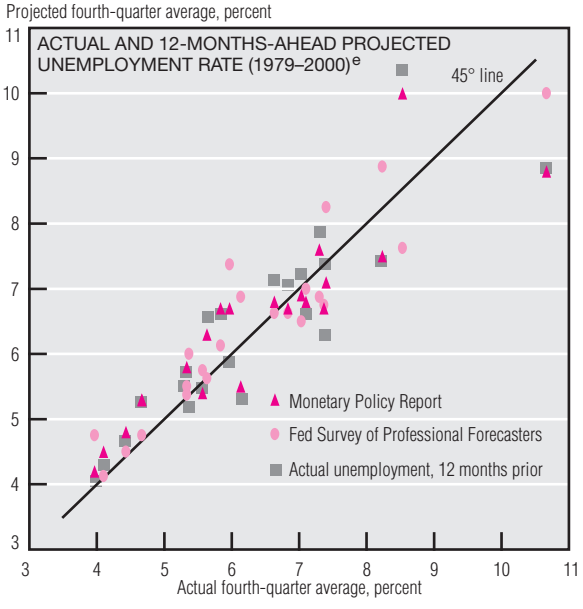
5

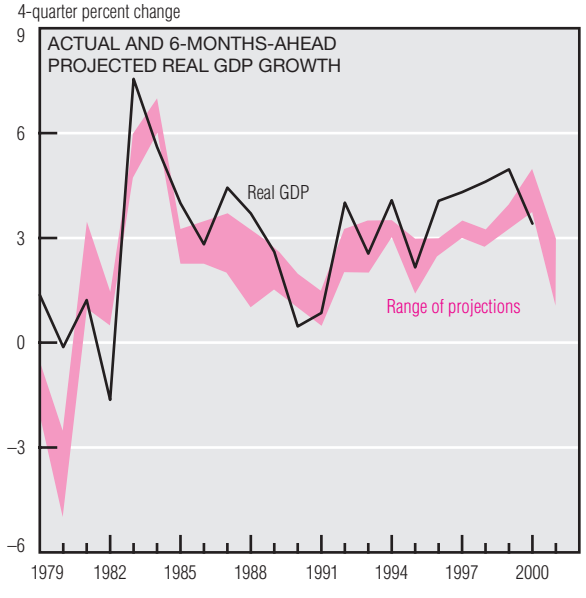
Money and Financial Markets

Recent Projections and Realizations, percent[a]

Indicator	Actual	February range	July range
		2000	
Nominal GDP[b]	5.8	5–6	6–7¼
Real GDP[c]	3.4	3¼–4¼	3¾–5
PCE Chain-type Price Index[b]	2.3	1½–2½	2–2¾
Civilian unemployment rate[d]	4.0	4–4¼	4–4¼
		1999	
Nominal GDP[b]	6.5	3¾–5	4¾–5½
Real GDP[c]	5.0	2–3½	3¼–4
PCE Chain-type Price Index[b]	2.0	1½–2½	1¾–2½
Civilian unemployment rate[d]	4.1	4¼–4¾	4–4½







a. Members of Board of Governors and Federal Reserve Bank presidents.
b. Change, fourth quarter to fourth quarter.
c. Change, fourth quarter to fourth quarter. Chain weighted.
d. Average level, fourth quarter.
e. The *Monetary Policy Report* projection is the midpoint of the range. The *Survey of Professional Forecasters* projection is the median response.
SOURCES: U.S. Department of Commerce, Bureau of Economic Analysis; U.S. Department of Labor, Bureau of Labor Statistics; Board of Governors of the Federal Reserve System, *Monetary Policy Report to the Congress;* and Federal Reserve Bank of Philadelphia, *Survey of Professional Forecasters*.

The *Monetary Policy Report* that the Federal Reserve recently submitted to Congress includes an updated set of economic projections from the Board of Governors and the Federal Reserve Bank presidents, all of whom participate in the deliberations of the Federal Open Market Committee. (These projections are also discussed on page 4.) How accurate have these projections been? For example, looking back over the past two years, only about half the realized (actual) values fell within their projected ranges. It may also come as a surprise that the July projection of a year's fourth-quarter number (essentially a 6-months-ahead projection) was not always more accurate than the February (or 12-months-ahead) projection. In fact, the ranges given in February 2000 for nominal and real GDP did contain the actual values, whereas the July updates did not.

If the summary statistic of the projections were always exact, a plot of the actual value versus the summary statistic would lie on a 45° line. Using the unemployment rate, we see that the projected values mostly fall near the 45° line over the period since the *Monetary Policy Report*'s first published projections, but there are occasional large deviations. Furthermore, there is no clear bias—that is, no consistent deviation on either the high or low end—for either the 6-month or 12-month projection.

The unemployment projections also can be compared to the accuracy of

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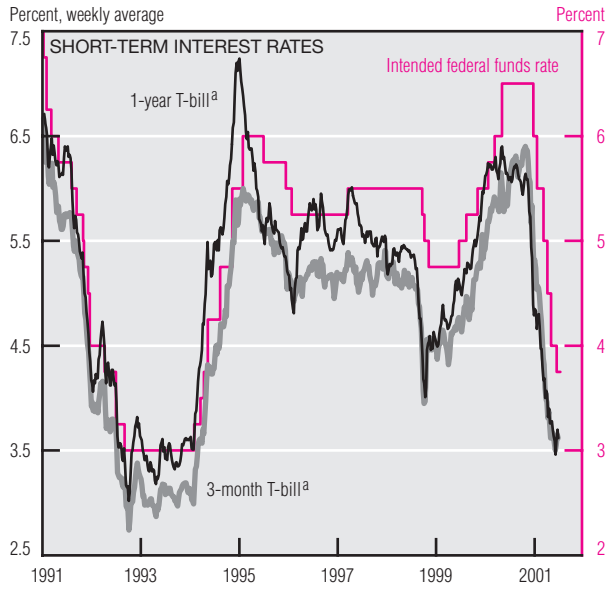
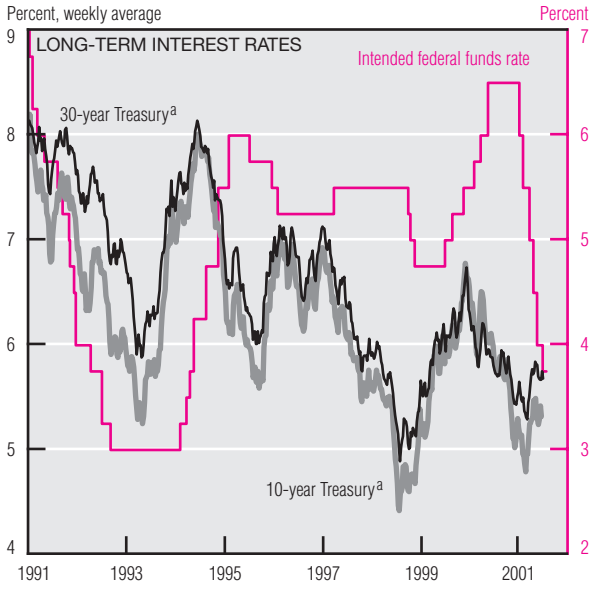
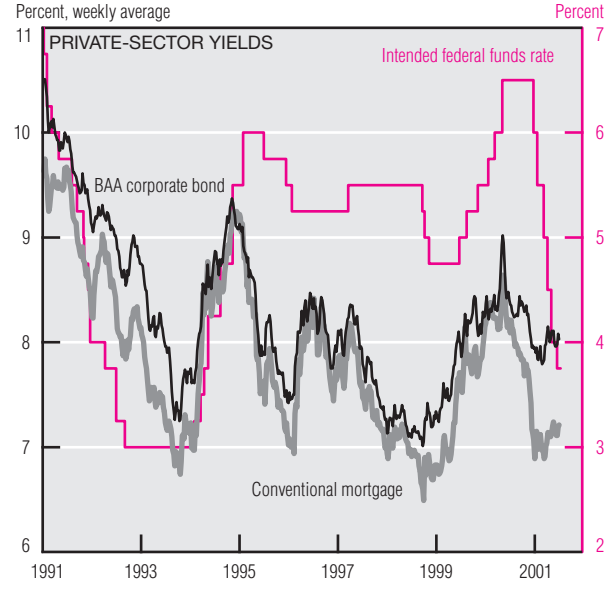
Money and Financial Markets (cont.)







a. Constant maturity.
SOURCES: Board of Governors of the Federal Reserve System; and Bloomberg Financial Information Services.

private forecasts (the median response to the Philadelphia Federal Reserve Bank's *Survey of Professional Forecasters*) and to unemployment rates at the time the projections were made. The latter comparison is analogous to testing whether the projection predicts the future more accurately than a simple backward-looking view that today will be like yesterday. One way to choose the "best" projection is to calculate which one misses by the smallest amount on average. At a 12-month horizon, the average absolute error is 0.55% for the professional forecasters and 0.38% for the Fed projection. Using current unemployment to predict future unemployment does just as well as the professional forecasters at this horizon (0.55%). At a 6-month horizon, the error from using the Philadelphia survey and current unemployment decreases, but the Fed does no better (0.42%, 0.40%, and 0.40%, respectively). Perhaps most striking is how similarly the different measures perform.

Short-term interest rates usually follow the intended federal funds rate much more closely than do long-term rates. Since the last week of 2000, yields on the 3-month and 1-year T-bills have declined 2.22% and 1.72%, respectively, through the week ending July 13. Their movement parallels the cumulative decrease of 2.75 percentage points in the intended federal funds rate so far this year.

Factors such as inflation expectations and the long-term potential for economic growth can have sizeable effects on long-term interest rates, sometimes causing them to move in the opposite direction from short-term rates. Long-term Treasury yields,

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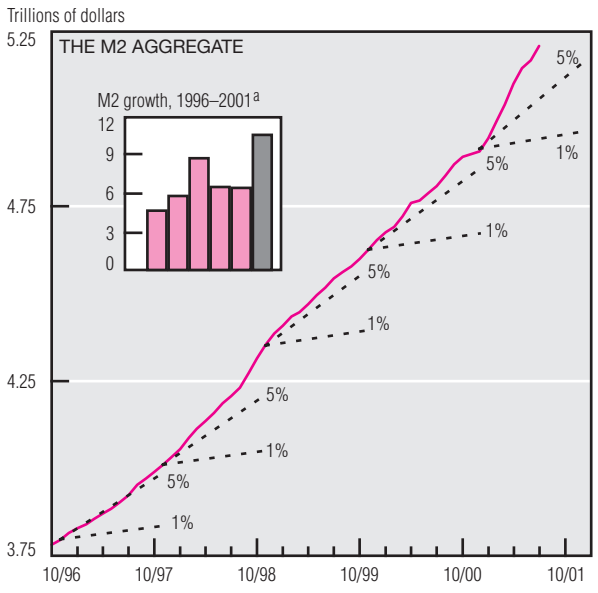
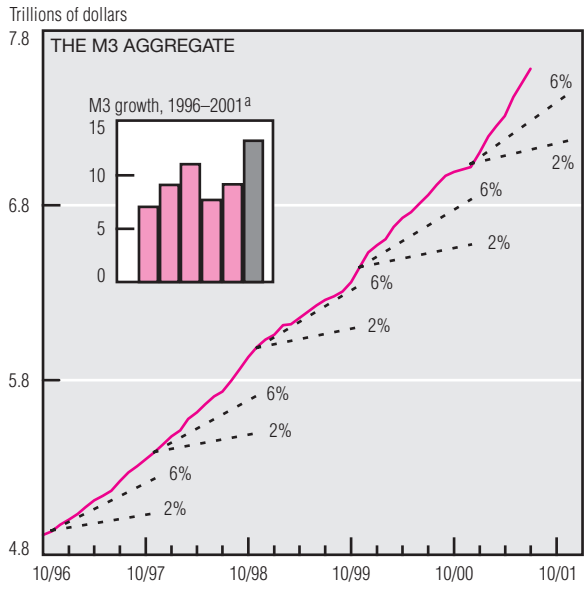
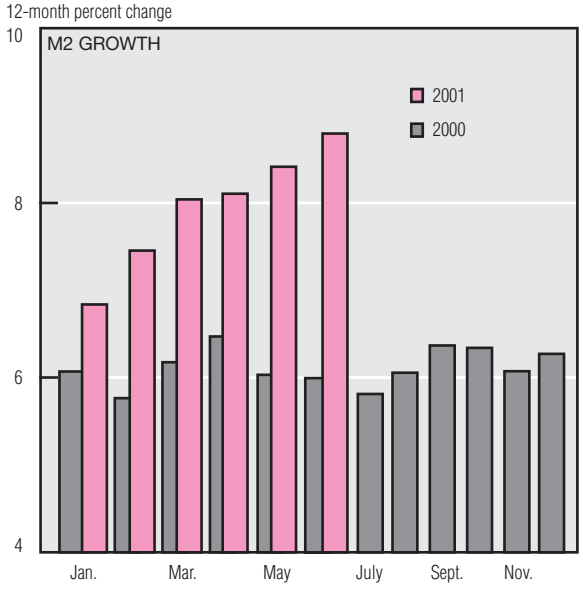
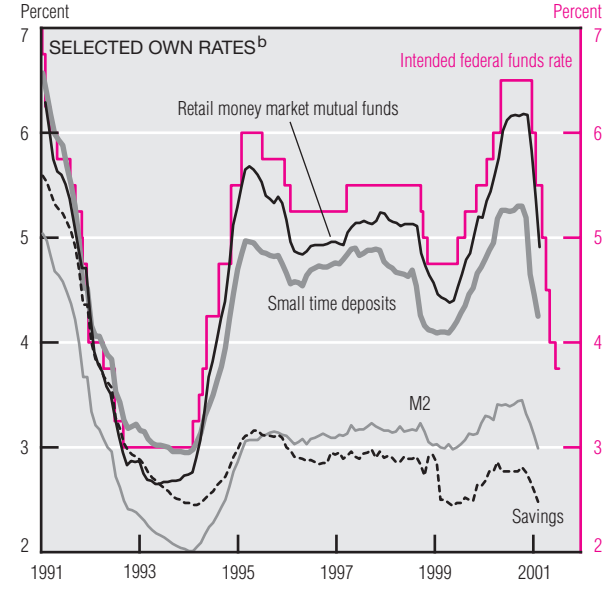
Money and Financial Markets (cont.)









a. Growth rates are percentage rates calculated on a fourth-quarter over fourth-quarter basis. The 2001 growth rates for M2 and M3 are calculated on a June over 2000:IVQ basis. Data are seasonally adjusted.
b. Weighted average return from holding individual components.
NOTE: Last plots for M2 and M3 are June 2001. Prior to November 2000, dotted lines for are FOMC-determined provisional ranges. Subsequent dotted lines represent growth rates and are for reference only.
SOURCE: Board of Governors of the Federal Reserve System.

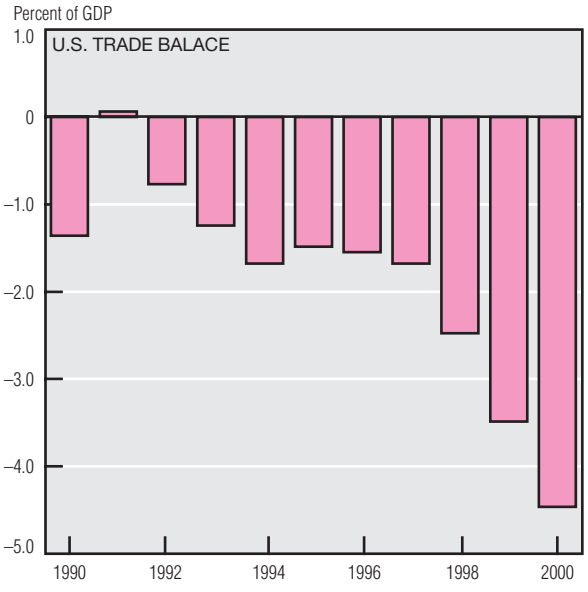
the 30-year conventional mortgage rate, and yields on midgrade corporate debt all have moved up slightly, despite the drop in short-term yields. Over the same period, the spread between the 10-year Treasury bond and 10-year Treasury inflation-indexed securities (TIIS), often used to gauge inflation expectations, has risen 0.40% although other measures of inflation expectations have not.

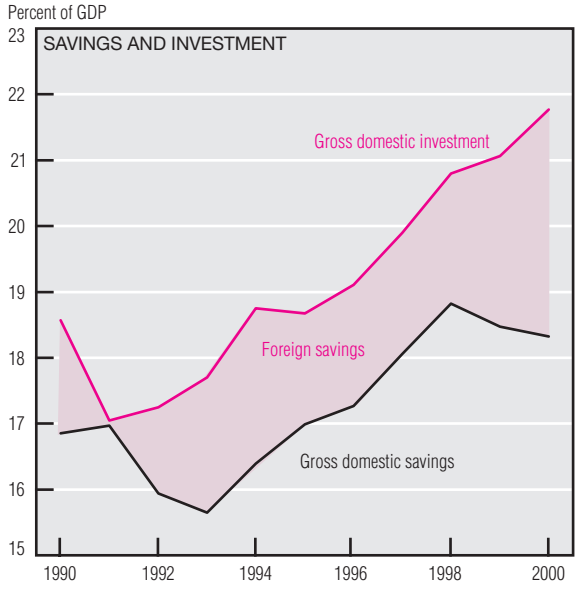
The decline in short-term rates has had a noticeable impact on the broad monetary aggregates, which have grown robustly so far this year. At annualized rates, M2 has grown 10.3% and M3 13.3% through June 2001. In contrast, M2 and M3 growth rates for 2000 were only 6.2% and 9.2% (four-quarter percent changes).

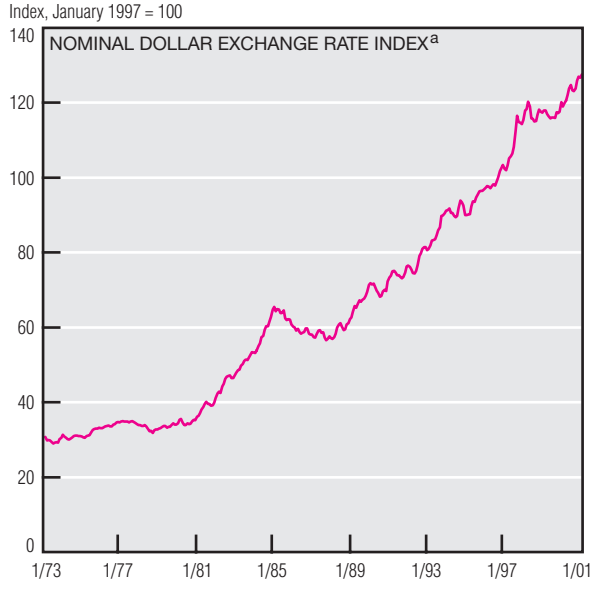
When short-term interest rates drop, so does the opportunity cost of holding M2- and M3-denominated assets. Put another way, one has to give up less in terms of potential earnings to hold more liquid assets with no market risk. However, returns on many of the broad monetary aggregates' components, such as savings and small time deposits, adjust less rapidly to changes in short-term rates, making these components relatively more attractive in times of falling rates.

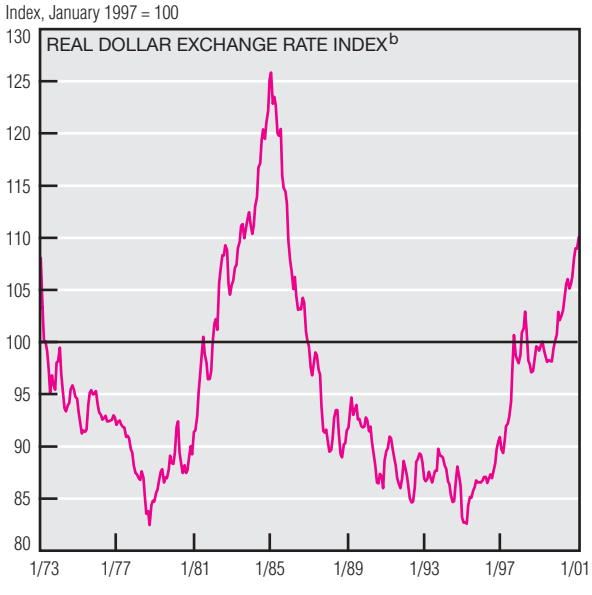
The surge in money growth shows no signs of slackening. Quite the contrary, growth in M2 and M3 will likely accelerate when taxpayers begin depositing and spending their rebate checks. Compared to 2000, this year's increase in the broad monetary aggregates may turn out to be quite remarkable.

Money, Manufacturing, and the Strong Dollar









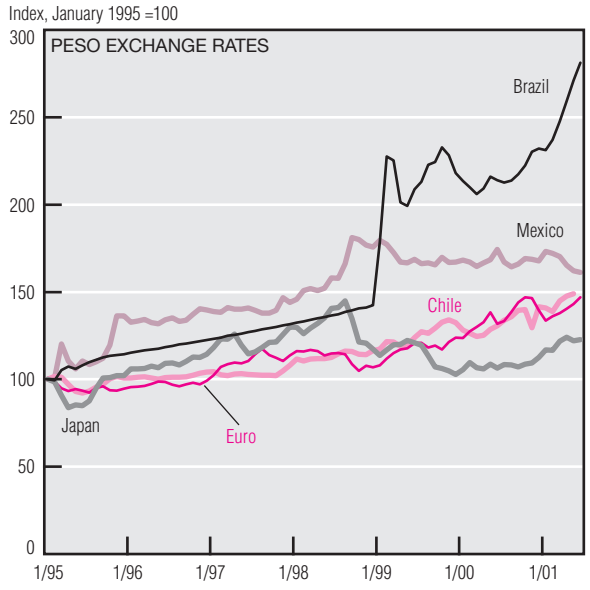
a. The Nominal Dollar Exchange Rate Index is the Federal Reserve Board's Nominal Broad Dollar Index, a trade-weighted average of the dollar's foreign exchange values against 26 important trading partners, including the euro area.
b. The Real Dollar Exchange Rate Index is the ratio of the U.S. Consumer Price Index to a trade-weighted average of foreign consumer price indexes, multiplied by the Nominal Dollar Index.
SOURCES: U.S. Department of Commerce, Bureau of Economic Analysis; and Board of Governors of the Federal Reserve System.

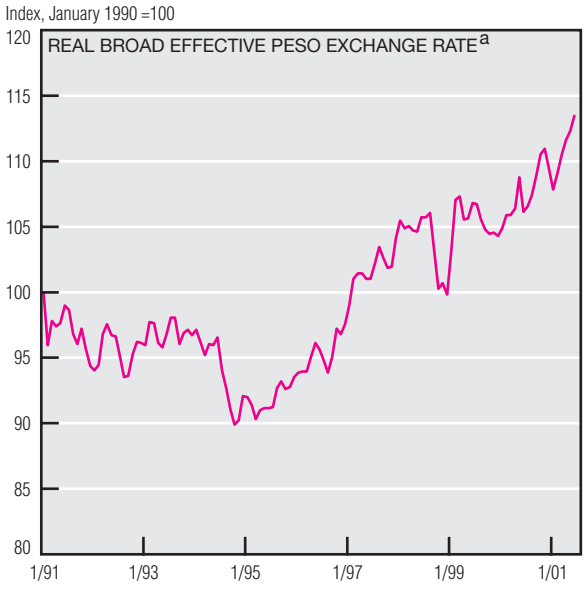
Some commentators have urged the Federal Reserve to help U.S. firms that export or that compete against imports by easing monetary policy and fostering a dollar depreciation. This is a bad idea, and not just because it ultimately won't help the traded-goods sector.

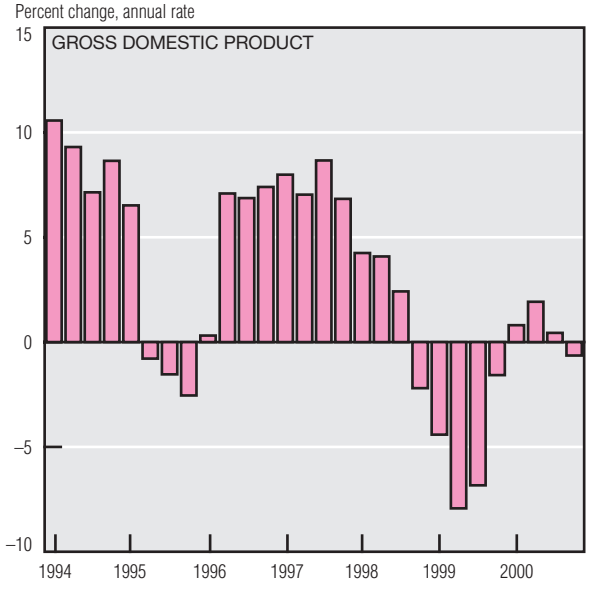
An inflow of foreign savings helped finance the 1995–2000 investment boom in the U.S. Despite the slower pace of recent U.S. economic activity, these inflows have continued, enabling a higher rate of investment than would otherwise have been possible. The acquisition of capital improves our nation's capacity for long-term economic growth and our prospects for a higher standard of living.

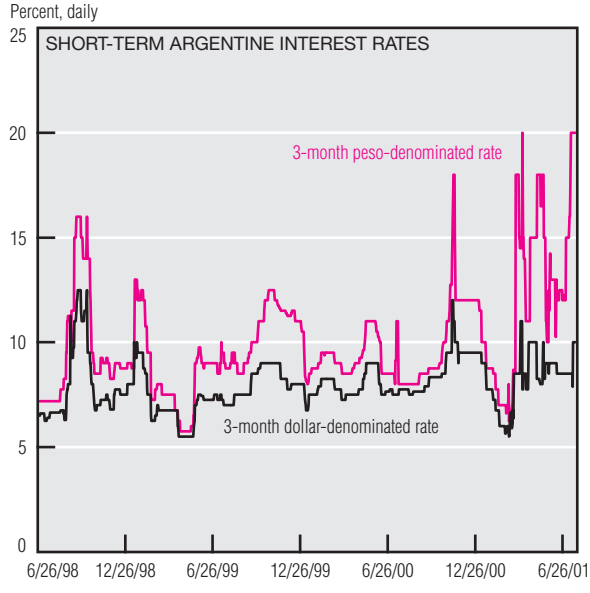
As international investors move funds into the U.S., however, they bid up the exchange value of the dollar, thereby putting domestic firms that compete in global markets at a disadvantage. Although a sufficiently expansionary monetary policy could certainly result in a quick depreciation of the dollar, the competitive edge that domestic manufacturers might gain would eventually be eroded by higher inflation. The cost of the temporary improvement in our competitive position would be a permanent hike in the inflation rate. Moreover, a reduced inflow of foreign savings would accompany any transitory reduction in the trade deficit. Some would gain a trading advantage, but others would find financing investments more difficult.

9 Argentina









a. The real peso exchange rate index is a ratio of the Argentine consumer price index to the trade-weighted average of foreign consumer price indexes, multiplied by the broad nominal peso index.
SOURCES: U.S. Department of Commerce, Bureau of Economic Analysis; Board of Governors of the Federal Reserve System; International Monetary Fund; J.P. Morgan Securities, Inc.; and Bloomberg Financial Information Services.

In 1991, Argentina adopted the "convertibility plan" to reduce its four-digit annual inflation rate. Under this plan, Argentina pegged the peso one-to-one to the U.S. dollar and held a dollar in reserve for every peso the central bank issued. This currency board arrangement enabled the government to eliminate inflation.

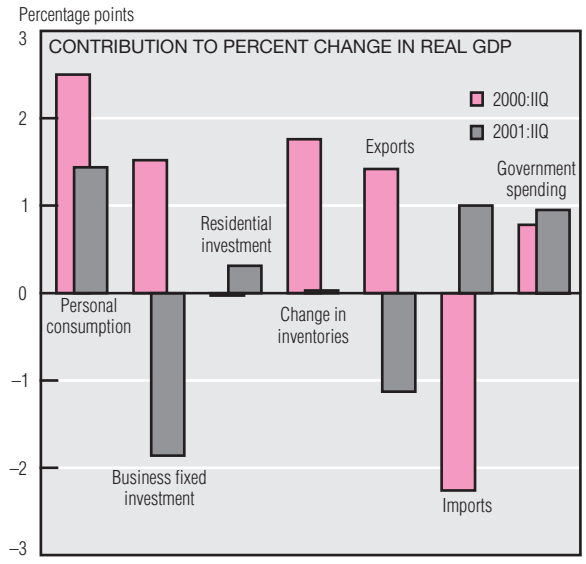
Brazil's 1999 devaluation and the dollar's sustained appreciation represent serious shocks to the Argentine economy. With the peso pegged to the dollar, domestic prices and wages must decline if Argentine products are to remain competitive with Brazilian and other non-U.S. goods; however, prices and wages adjust slowly, typically only after the country slips into recession. Looking for a little exchange rate flexibility, Argentina has modified its currency board arrangement so that the peso effectively depreciates for non-energy trade but is unaltered for all other transactions. The proposal has weakened investors' already-waning confidence in the nation's economy.

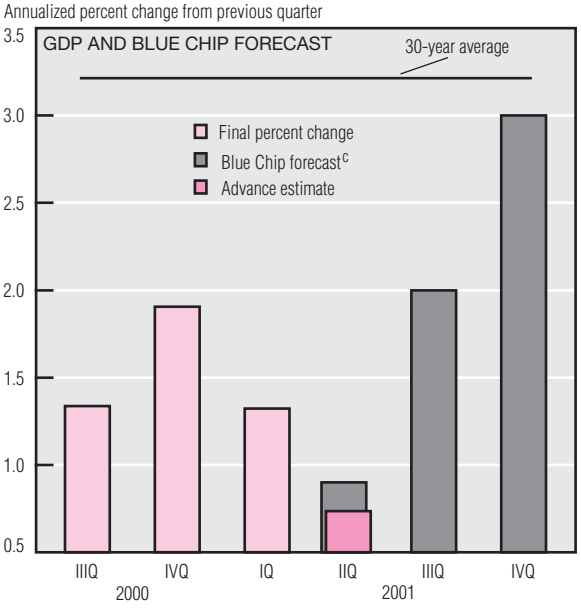
The sustainability of the currency board hinges on Argentina's fiscal position. The country runs persistent budget deficits and has amassed nearly $130 billion in external debts, most of them dollar denominated. Reflecting devaluation concerns and uncertainties, the market has recently been attaching a substantial—and volatile—risk premium to peso-denominated debt in Argentina. The International Monetary Fund continues to offer financial assistance, but this will prove only palliative in the absence of fiscal reform.

Economic Activity

Real GDP and Components, 2001:IIQ[a,b]
(Advance estimate)

	Change, billions of 1996 $	Percent change, last: Quarter	Four quarters
Real GDP	17.1	0.7	1.3
Personal consumption	34.0	2.1	3.2
Durables	13.5	6.0	5.6
Nondurables	2.1	0.4	1.9
Services	20.1	2.2	3.3
Business fixed investment	–49.4	–13.6	–1.7
Equipment	–41.7	–14.5	–4.0
Structures	–8.6	–11.3	5.4
Residential investment	6.7	7.4	0.8
Government spending	21.6	5.5	3.0
National defense	1.7	1.9	2.0
Net exports	–2.9	—	—
Exports	–29.5	–9.9	–1.4
Imports	–26.6	–6.7	–0.1
Change in business inventories	0.2	—	—





a. Chain-weighted data in billions of 1996 dollars.
b. Components of real GDP need not add to totals because current dollar values are deflated at the most detailed level for which all required data are available.
c. Blue Chip panel of economists.
NOTE: All data are seasonally adjusted and annualized.
SOURCES: U.S. Department of Commerce, Bureau of Economic Analysis and Bureau of the Census; and *Blue Chip Economic Indicators*, July 10, 2001.

The advance estimate for the national income and product accounts, released July 27, reported that gross domestic product grew at a meager annualized rate of 0.7% during 2001:IIQ. This growth was slightly weaker than expected; the Blue Chip forecast for the quarter was 0.9% growth. The major factor in the second-quarter slowdown was business fixed investment, which fell 13.6% (annualized) from 2001:IQ and 1.7% from 2000:IIQ.

The quarter's decline in business investment was partly offset by personal consumption and government spending, which rose 2.1% and 5.5%, respectively. Personal consumption was up 3.2% from 2000:IIQ, while government spending increased 3.0%. Residential investment remains strong and has even accelerated recently.

Blue Chip forecasters are more optimistic about the last two quarters of 2001; they expect GDP growth of about 2% in the third quarter and 3% in the fourth. The anticipated increase may reflect this year's many reductions in the intended federal funds rate, whose effects usually are felt some time after the rate reductions.

Almost all sectors of the economy slowed in the second quarter, but manufacturing took an especially severe beating. Manufacturing's slump is reflected in industrial production, which has declined steadily over the last nine months. In June, industrial production fell 0.7% from its May level—a hefty 8.7% annualized decline. Growth in industrial production was considerably lower than in 2000.

(continued on next page)

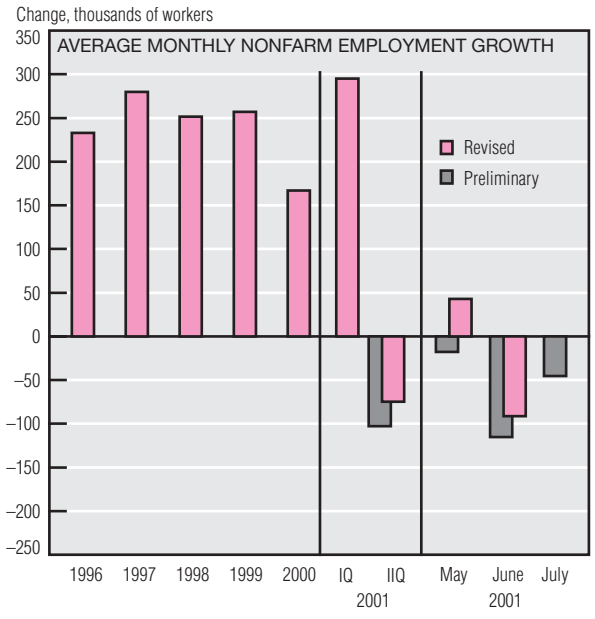
Economic Activity (cont.)

a. Measured as output per hour.
NOTE: All data are seasonally adjusted and annualized.
SOURCES: U.S. Department of Commerce, Bureau of Economic Analysis and Bureau of the Census; and Board of Governors of the Federal Reserve System.

The sharp drop in industrial production seems partially due to a considerable decline in the rate of productivity growth over the past few months. Consistent with an unanticipated drop in productivity growth, manufacturing inventories have fallen precipitously over the past two quarters. And given the fall in productivity growth, it is no surprise that growth in manufacturing workers' earnings has also been declining over the last year, or that it continues to lag growth in total nonfarm earnings. An earlier drop in manufacturing wages (relative to the U.S. average), which began late in 1998, occurred at a time when manufacturing productivity growth was outstripping the rest of the economy. This suggests that a decline in the demand for manufactured goods was responsible for that earlier earnings gap.

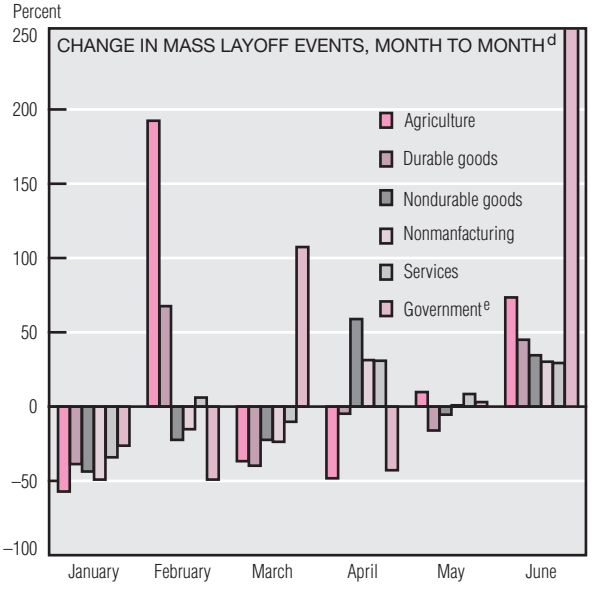
Although the growth rate of manufacturing productivity has declined recently, productivity remains stronger in the manufacturing sector than in the U.S. as a whole. But lower overall productivity growth has damaged corporate manufacturing profits, which have also fallen steadily over the last few quarters. While the deceleration in profits is evident in almost all sectors of the economy, the manufacturing sector has been especially hurt. The next few quarters remain critical for manufacturing and should show whether the sector's slump will continue or whether it has bottomed out.

Labor Markets



Labor Market Conditions

	Average monthly change (thousands of employees)				
	1997	1998	1999	2000	July 2001
Payroll employment	280	251	257	167	–42
Goods-producing	47	22	7	8	–47
Mining	2	–3	–3	1	1
Construction	21	37	26	18	1
Manufacturing	25	–13	–16	–12	–49
Durable goods	26	–2	–5	1	–49
Nondurable goods	–2	–11	–11	–13	0
Service-producing	232	230	250	159	5
TPU[a]	16	20	18	14	–4
Retail trade	24	30	49	26	6
FIRE[b]	21	22	7	0	–5
Services[c]	141	120	131	93	–23
Government	17	28	35	18	31
	Average for period (percent)				
Civilian unemployment rate	4.9	4.5	4.2	4.0	4.5



a. Transportation and public utilities.
b. Finance, insurance, and real estate.
c. The services industry includes travel; business support; recreation and entertainment; private and/or parochial education; personal services; and health services.
d. Not seasonally adjusted.
e. In June, the government sector had a 473% change in layoff events.
NOTE: All data are seasonally adjusted unless otherwise noted.
SOURCE: U.S. Department of Labor, Bureau of Labor Statistics.

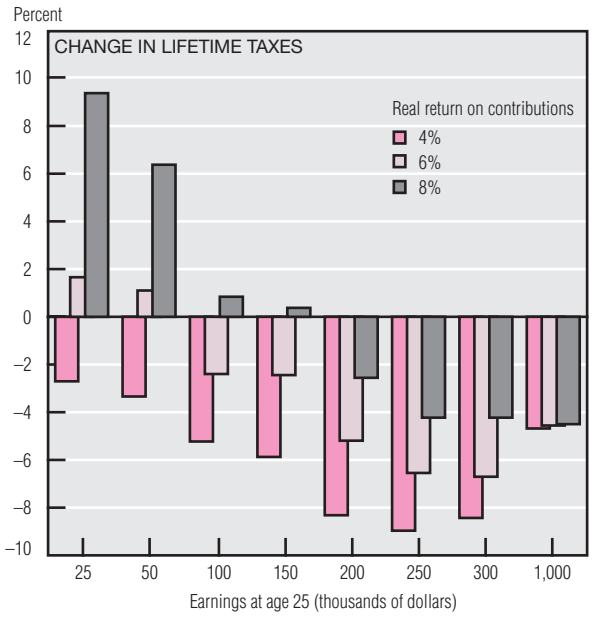
Nonfarm payroll employment fell again in July, although the loss of 42,000 is much smaller than the 93,000 posted in June. Job losses were heaviest in goods-producing industries, where employment fell 47,000 in July, while service-producing industries showed a small net employment gain of 5,000. Industries with no significant net employment loss are now showing very little growth.

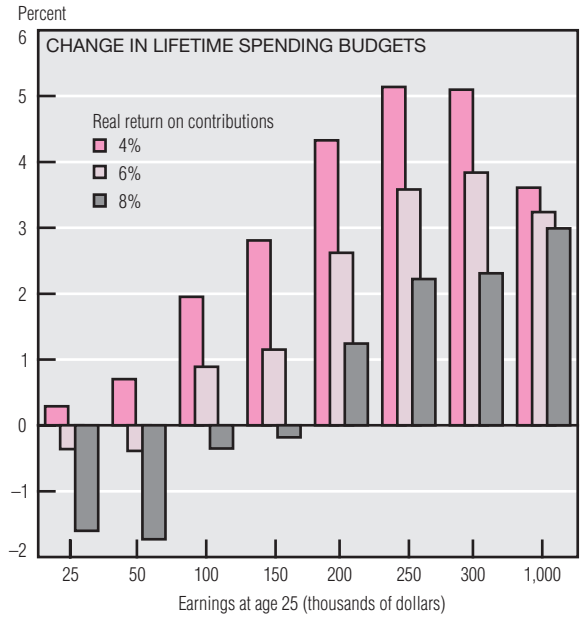
The most disturbing changes occurred in durable goods manufacturing and services, which lost 47,000 and 23,000 employees, respectively, in July. Services, a steady source of employment growth over past decades, has shown no net gain since March. Since service-sector output is an intermediate input in other industries, such as manufacturing, its employment losses reflect continued weakness in other sectors. Nondurable goods showed no employment change this month, an interesting departure from consistent month-to-month losses.

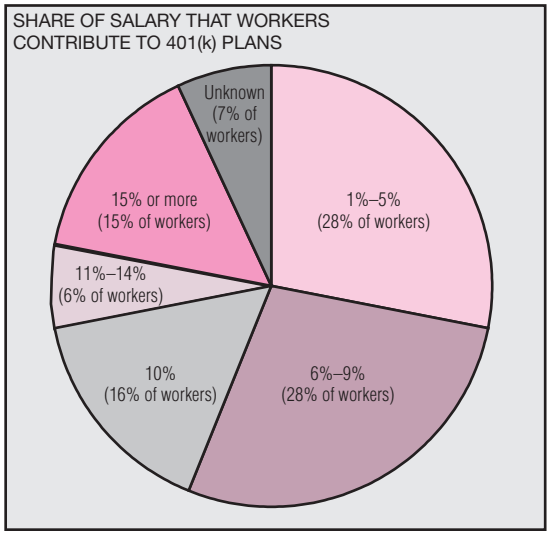
Unemployment held steady in July at 4.5%, a rate that has been relatively unchanged since April, while the employment-to-population ratio increased slightly to 63.9%.

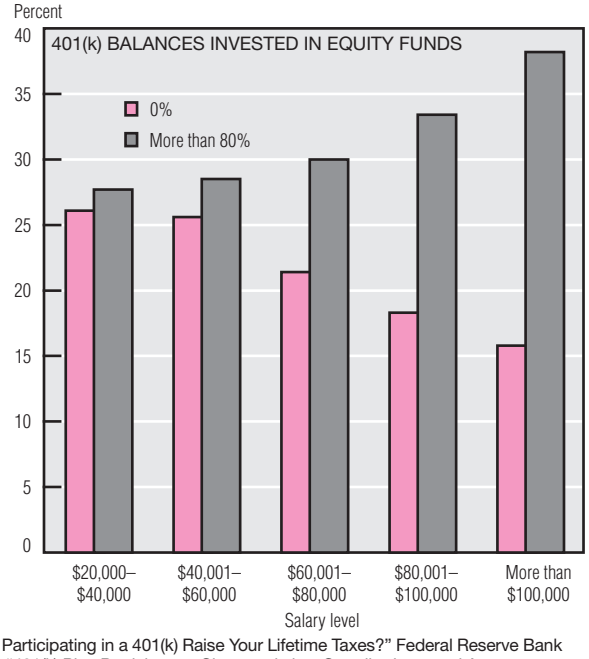
Mass layoff events in June increased across all industries, mostly as a result of seasonal factors (production cycles, agriculture). However, the increase in layoff events in July approached 50% for all industries except government. In that sector, mass layoffs increased 473% because public school teachers had recently completed a school year.

401(k) Plans and Lifetime Taxes









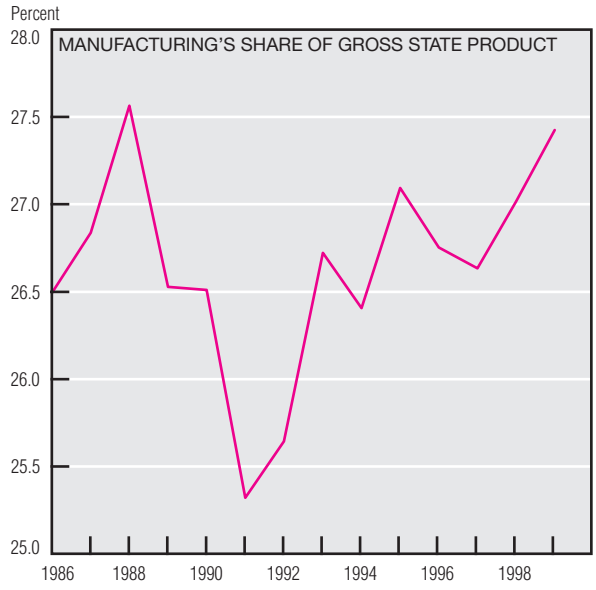
SOURCES: Jagadeesh Gokhale, Laurence J. Kotlikoff, and Todd Neumann, "Does Participating in a 401(k) Raise Your Lifetime Taxes?" Federal Reserve Bank of Cleveland, Working Paper no. 01–08, June 2001; Investment Company Institute, "401(k) Plan Participants: Characteristics, Contributions, and Account Activity," Spring 2000; and Sarah Holden and Jack VanDerhei, "401(k) Plan Asset Allocation, Account Balances, and Loan Activity in 1999," Employee Benefit Research Institute, Issue Brief no. 230, February 2001.

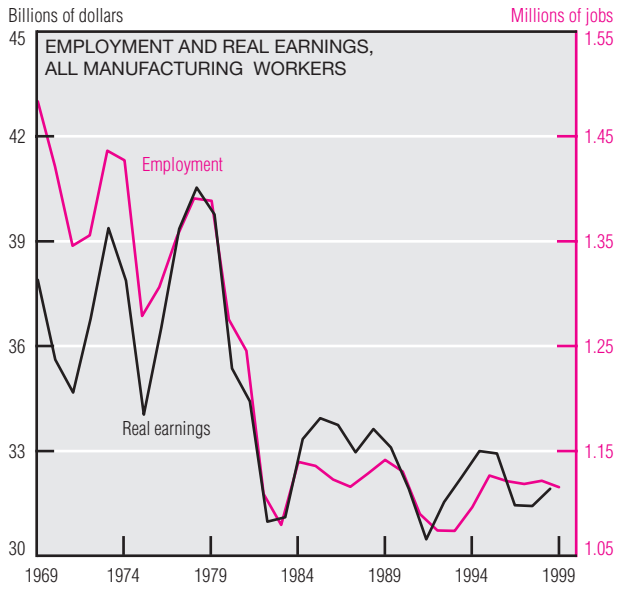
Slightly less than half of all workers are covered under some type of employer-sponsored defined-contribution pension plan; over one-fifth contribute more than 11% of their salary to such plans. Although 401(k) and similar plans lower one's current taxes, they may not have the same effect on lifetime taxes. The lifetime result depends partly on future changes in tax rates. Even if taxes do not increase, taxable withdrawals from qualified plans upon retirement may place some individuals in higher marginal tax brackets. Similarly, tax-favored saving plans may reduce a younger person's current marginal tax bracket and lower the value of current mortgage-interest deductions. Most important, large plan withdrawals in the future may subject a greater fraction of one's Social Security benefits to income taxation.

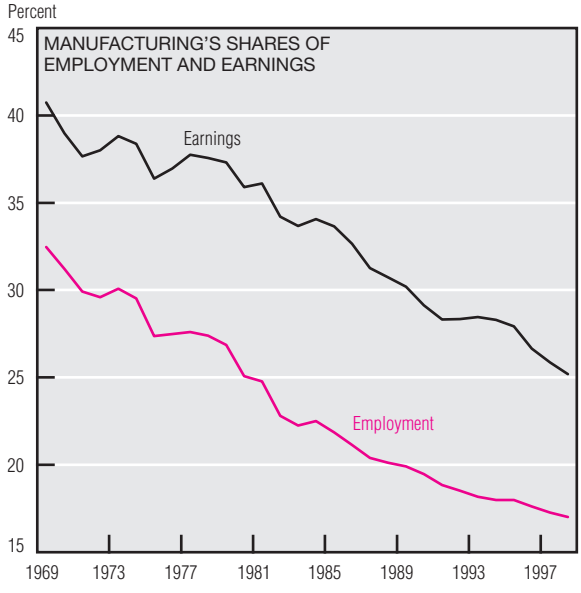
These factors could pack enough punch to raise an individual's lifetime tax liability and reduce lifetime spending, especially for low earners who participate heavily in such plans. A recent study shows that those who earn less than $50,000 and receive a 6% rate of return on their contributions may lose money over a lifetime through larger tax liabilities and smaller spending budgets.

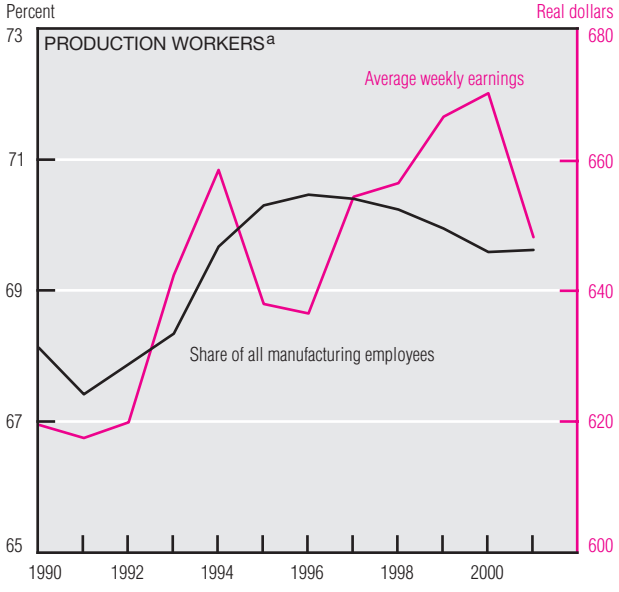
Most 401(k) account balances are invested in equities, which may earn a high rate of return, increasing the likelihood that future plan withdrawals will push individuals into higher income tax brackets. Hence, low earners' conservative approach to investing plan assets—as evidenced by the fact that more low earners invest none of these assets in equities—seems justified.

Manufacturing in Ohio









a. Includes workers involved in fabricating, processing, assembling, inspecting, receiving, storing, handling, packing, warehousing, and shipping products as well as maintenance, repair, and the physical operations of production plants.
NOTE: 2001 figures are year-to-date monthly averages.
SOURCES: U.S. Department of Commerce, Bureau of Economic Analysis; U.S. Department of Labor, Bureau of Labor Statistics: and Ohio Department of Job and Family Services, Bureau of Labor Market Information, *Labor Market Review*, various issues.

It is no surprise that Ohio, long considered to have a heavily industrial economy, derives more than 25% of its gross state product from the manufacturing industry. Since the mid-1980s, manufacturing's share of gross state product has fluctuated only slightly, ranging from roughly 25% to 27.5%. A close look at the fluctuations, however, suggests that manufacturing is more sensitive to business cycle phenomena than other industries; as the economy contracts and expands, so does manufacturing's share.

The 1980 recession marked the beginning of a definitive drop in the average number of jobs and the average amount of real dollars earned from manufacturing. The 1969–80 average was 1.37 million workers and $37 billion in annual earnings, while post-recession averages fell to 1.11 million workers and $31 billion in annual earnings. Both employment and earnings have continued to fall since 1980, with a sharp drop during the 1990–91 recession and slight recovery in the years immediately following. Manufacturing's employment and real earnings, as shares of employment and earnings for all Ohio industries, have shown a considerable and fairly steady decline over the last 30 years.

The number of production workers reached its peak (for the current expansion) in 1995. Production workers' share of total manufacturing employment tends to fall during periods of recession, when plants are idled and workers are temporarily laid off; it rises during periods of expansion, when plants are producing near or at

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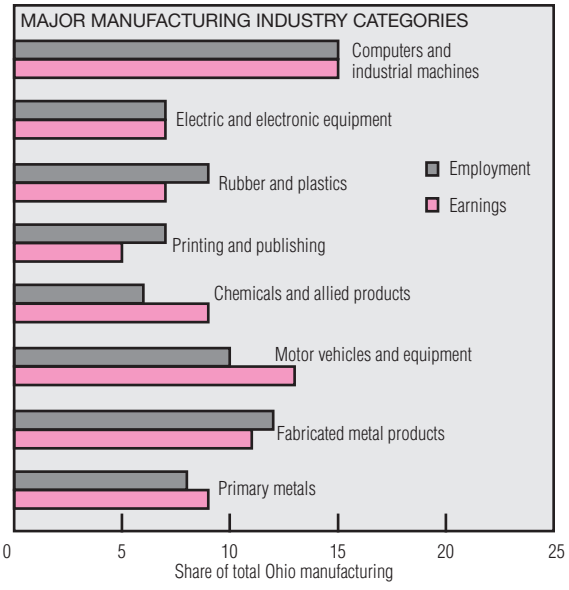
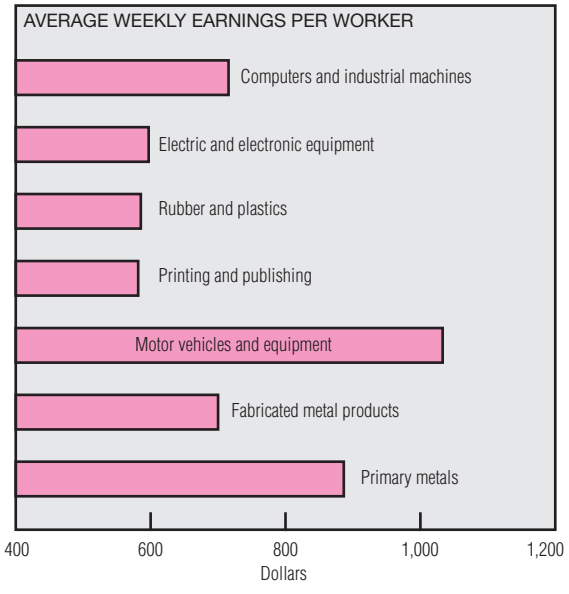
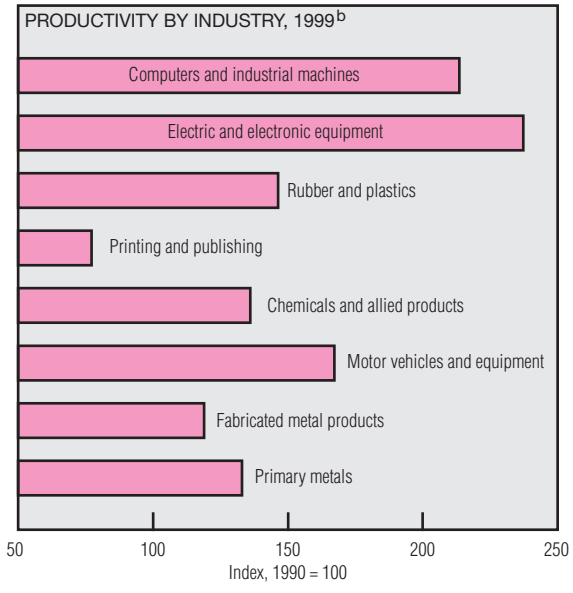
Manufacturing in Ohio (cont.)



Ohio's Largest Manufacturing Establishments

Company	City	Employees[a]
Honda	Marysville	13,000
Delphi Packard Electric Systems (HQ)	Warren	9,000
General Electric (HQ)	Evandale	8,500
Lucent Technologies	Columbus	7,000
Daimler Chrysler	Toledo	5,500
General Motors	Lordstown	5,000
Goodyear Tire and Rubber (HQ)	Akron	5,000
LTV Steel/Cleveland Works	Cleveland	4,700
General Motors	Toledo	4,500
International Truck and Engine	Springfield	4,070





a. Figures may not reflect layoffs occurring in 2001.
b. Industry's gross state product per worker hour.
SOURCES: U.S. Department of Commerce, Bureau of Economic Analysis; U.S. Department of Labor, Bureau of Labor Statistics; Federal Reserve Bank of Cleveland calculations based on data from the Ohio Department of Job and Family Services, Bureau of Labor Market Information, *Labor Market Review*, various issues; and Harris InfoSource, in cooperation with the Ohio Department of Development, *Ohio Industrial Directory 2001*.

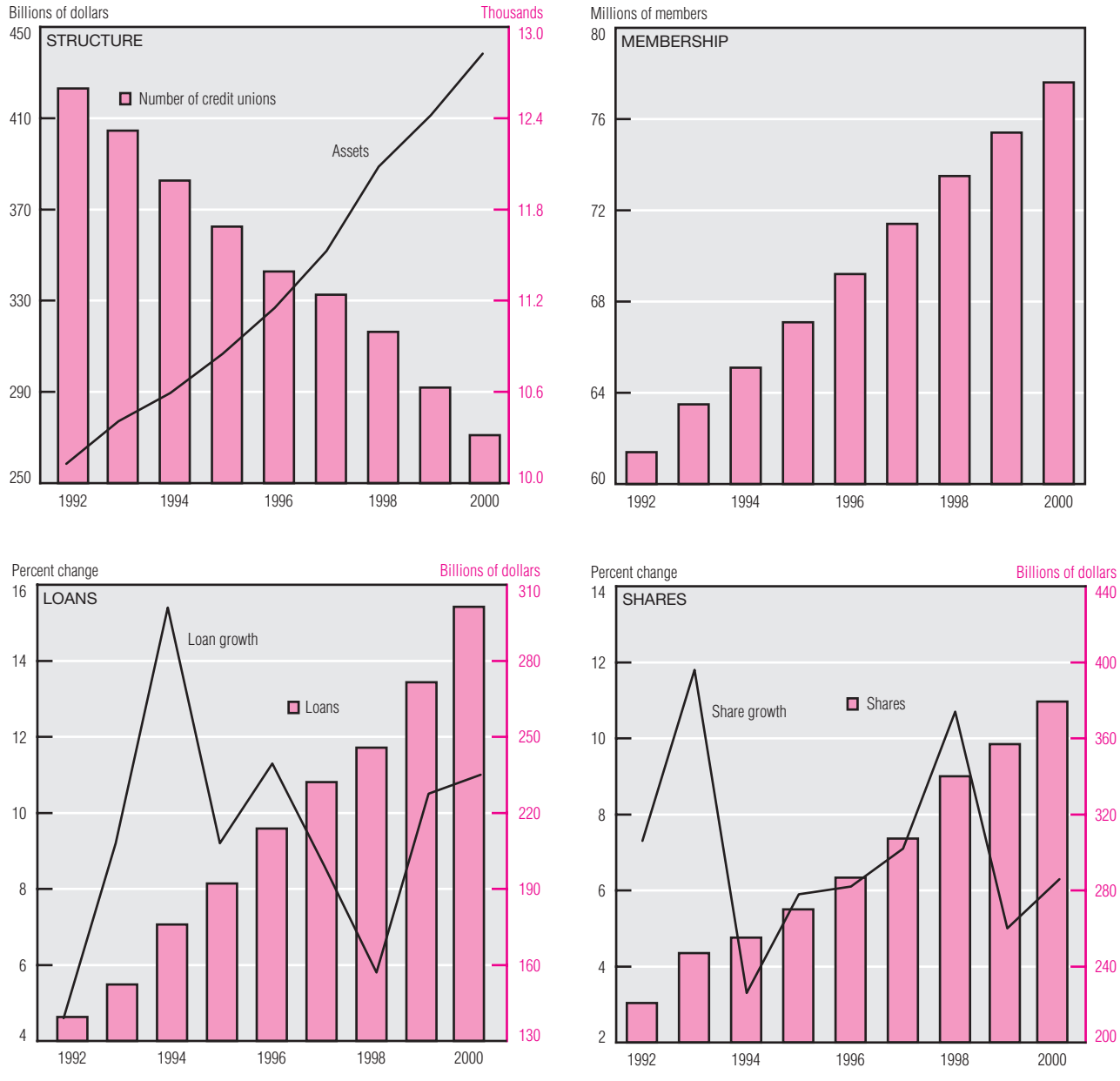
capacity. During the current expansion, production workers' share peaked in 1996, then began to decrease gradually. For 2001 to date, the share has remained level with 2000 figures. Production workers' real wages, most set in nominal terms through union contracts made long before the wages are paid, dropped sharply in 2000 and 2001.

Manufacturing in Ohio is diverse, with industries in the durable goods sector making the largest contributions to employment and earnings. Although the state is known for its automobiles and primary and fabricated metal work (probably because its largest manufacturers almost all make autos, trucks, or their components), computers and industrial machines contribute the most jobs and the highest amount of earnings to Ohio's economy. Of the eight largest subindustries within manufacturing, only three are nondurable industries: rubber and plastics; chemicals and allied products; and printing and publishing.

Workers in the "traditional" Ohio industries—automobiles, primary metals, and fabricated metals—receive the highest weekly average pay; workers in the motor vehicles and equipment subindustry averaged the highest pay overall ($1,030 per week). The nondurable goods industries tend to pay considerably less (under $600 per week on average).

Productivity in manufacturing industries has grown throughout the 1990s, with the exception of printing and publishing. Productivity levels in two industries, computers and industrial machines and electric and electronic equipment, doubled between 1990 and 1999.

Credit Unions



SOURCE: National Credit Union Association, *Year-end Statistics for Federally Insured Credit Unions*.

Credit unions are mutually organized depository institutions that provide financial services to their members. Like banks and savings associations, the credit union industry appears to be consolidating. The number of credit unions fell from 12,596 in 1992 to 10,316 at the end of 2000. However, total credit union assets rose 64.58% over the same period, from $258.4 billion to $438.2 billion. The number of credit union members also increased steadily from 61.4 million in 1992 to 77.6 million at year-end 2000.

Growth in credit union assets was fueled by positive loan growth throughout the period: Loans grew from $139.5 billion to $301.3 billion, and loans as a share of assets grew from 54% to 68.8%. Loan growth was remarkably strong in the early 1990s, but tapered off in the middle of the decade; it accelerated after 1998, reaching a rate of 11% in 2000.

Credit union shares have risen steadily since 1992. The equivalent of deposits in banks and savings associations, shares account for roughly 87% of total sources of funds for credit unions. The growth rate of shares increased every year from 1994 to 1998, when it peaked at 10.7%. Share growth fell in 1999, but rebounded somewhat during 2000. The slowdown in 1999 and 2000 may be attributed to high stock market returns in 1998 and 1999—prior to the market correction of 2000.

Credit unions' capital continued to accumulate between the end of 1992 and the end of 2000, increasing

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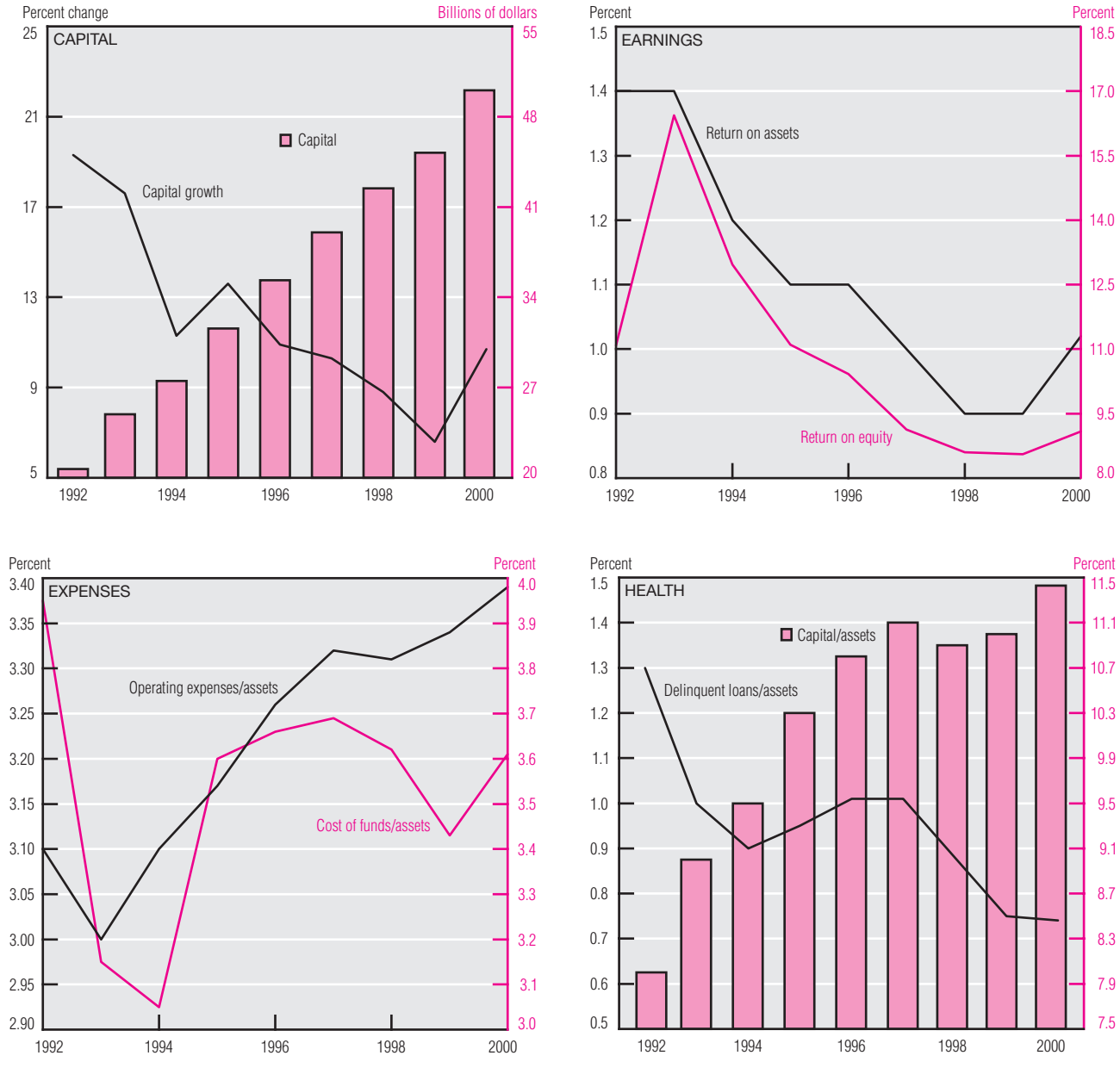
Credit Unions (cont.)



SOURCE: National Credit Union Association, *Year-end Statistics for Federally Insured Credit Unions*.

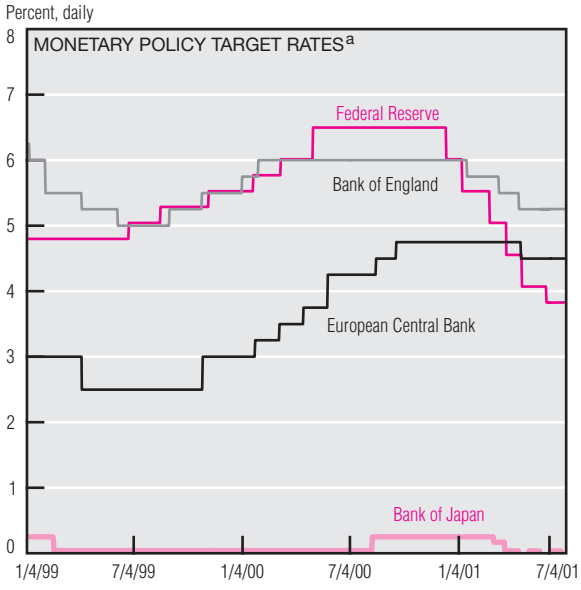
twice as rapidly as assets. However, the annual rate of capital growth fell from a lofty 19.3% in 1992 to 6.6% at the end of 1999. The 10.7% growth rate in capital for 2000 represented its first increase since 1995.

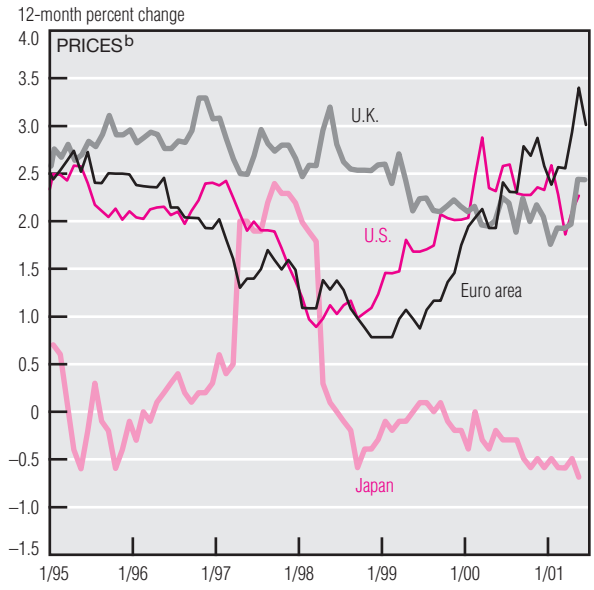
Because retained earnings are credit unions' only source of capital, the pace of capital accumulation mirrored the decline in return on assets and return on equity after 1995. Return on assets fell from a high of 1.4% in 1992 to 0.9% in 1999 before rising to 1.0% in 2000. Return on equity peaked at 16.4 % in 1993 and fell steadily to 8.6% by 1998 before increasing to 9.1% for 2000. The decline in credit unions' profitability during most of the 1990s is partly the result of steadily increasing operating expenses per dollar of assets since 1993 and a sharp increase in the cost of funds in 1995, a consequence of rising market interest rates.

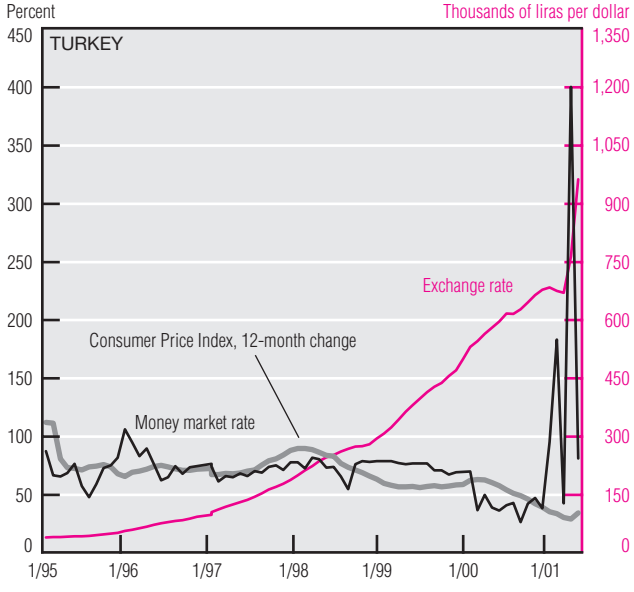
Overall, the credit union industry appears to be healthy. Capital as a share of assets stood at 11.4% at year-end 2000. Delinquent loans as a share of assets fell from 0.67% in 1997 to 0.50% at the end of 1999 before rising slightly to 0.51% at the end of 2000. By the end of 2000, credit unions held over $22 of capital for every $1 of delinquent loans.

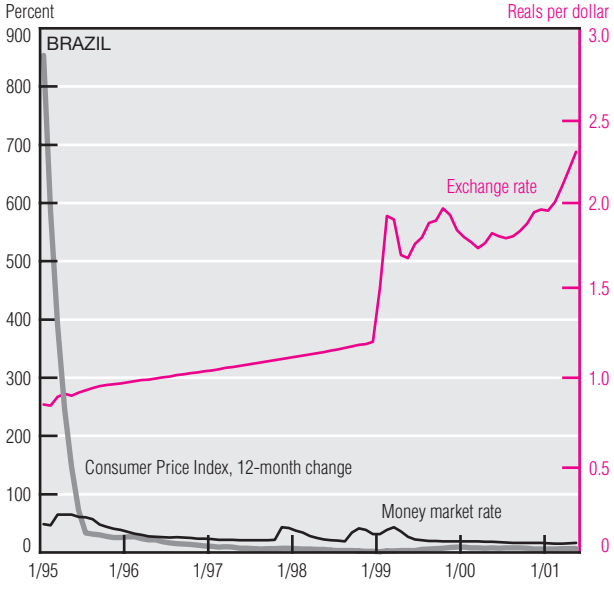
Credit unions remain a viable alternative to commercial banks and savings associations for basic depository institution services such as consumer loans, checking accounts, and savings accounts.

Foreign Central Banks









a. Two-week repo rate for the Bank of England and the European Central Bank. Overnight interbank rates for the Federal Reserve and the Bank of Japan. (Since March 19, 2001, the Bank of Japan has targeted a quantity of current account balances that is expected to be consistent with a zero overnight rate.)
b. U.S.: Personal Consumption Expenditures Chain-type Price Index; Euro area: Harmonized Consumer Price Index; Japan: Consumer Price Index excluding fresh food; U.K.: Retail Price Index excluding mortgage interest payments.
SOURCES: Board of Governors of the Federal Reserve System; Bank of Japan; European Central Bank; Wholesale Markets Brokers Association; and Bloomberg Financial Information Services.

None of the four major central banks has changed its policy setting since the Federal Reserve shaved 25 basis points from the federal funds rate target in late June. Inflation performance has remained relatively benign in the U.S., at least as measured by the personal consumption deflator. In the U.K., inflation remains near its 2.5% target, having increased each month since February. Inflation in the euro area currently exceeds the 0%–2% target zone, while the struggle against deflation continues in Japan.

Both Turkey and Brazil have attracted international concern over the past year or so because their currencies have depreciated significantly against the U.S. dollar. Turkey's phaseout of its managed float of the exchange rate had been part of an International Monetary Fund package until February, when intense pressure on the lira led to a decision to let the exchange rate float freely. Since then, money market interest rates have declined from crisis levels. Unlike 2000, though, interest rates remain above the declining inflation rate this year, suggesting that monetary expansion may be better controlled.

Brazil's exchange rate also has depreciated this year, although it is more in line with the depreciation of the euro and yen. Money market rates have remained above the relatively low inflation rate, as they have for many years. Brazil's neighbor, Argentina, with its currency pegged to the U.S. dollar, had borne the brunt of dollar appreciation until dual exchange rates for non-energy exports and imports were introduced last month. In Brazil, whose major trading partners are the U.S. and Argentina, depreciation of the exchange rate has tended to insulate exports from declining demand.