

## *The Economy in Perspective*

*Malaise*...In 1979, Jimmy Carter told the American people that we were experiencing a “crisis of confidence” in our country. The Misery Index, the sum of the unemployment and inflation rates, registered 18. The U.S. economy was heading into recession, inflation was measured in double digits, and the stock market was mired in a slump. The president feared that prior assassinations of political leaders, the “agony of Vietnam,” and the “shock of Watergate” had inflicted deep wounds on the nation’s psyche, wounds that had not yet healed. He believed that people were struggling to find meaning in their lives and a sense of national purpose.

The proximate cause of the president’s melancholy was the country’s dependence on imported oil. His “crisis of confidence” speech culminated in a promise that the United States would never use more foreign oil than it did in 1977. Even though the nation was at peace, the president claimed that dependence on foreign oil threatened our economic independence and national security. He proposed a massive program to develop domestic fuel sources, encourage energy conservation, and promote public transportation.

President Carter believed that the nation’s inability to come to grips with its foreign energy dependence lay behind the public’s lack of confidence in government, the economy, and themselves. Ironically, his speech ultimately caused many to lose confidence in him. The president’s political opponents succeeded in portraying him as a weak leader. Ronald Reagan accepted his party’s nomination as their presidential candidate almost exactly one year after Carter’s plea for public support. In his convention speech, Reagan lamented that the country faced “three grave threats to our very existence, any one of which could destroy us...a disintegrating economy, a weakened defense, and an energy policy based on the sharing of scarcity.”

Few recognized on election day in 1980 that the United States stood on the threshold of a far more

prosperous era, one of dramatically lower inflation, vigorous employment and economic growth, significant improvements in productivity, and a soaring stock market. Many explanations have been offered for this extraordinary reversal of national fortune. Some analysts emphasize the economic or political policies of various people and parties; others stress the importance of simultaneous developments in Asia and the former Soviet Union. Technology certainly deserves credit for shaping the environment. And then there is the random contribution of luck. How history will ultimately allocate the credits and the blames remains to be seen, but it is certainly true that our nation and the spirit of its citizens did not fulfill Jimmy Carter’s worst fears.

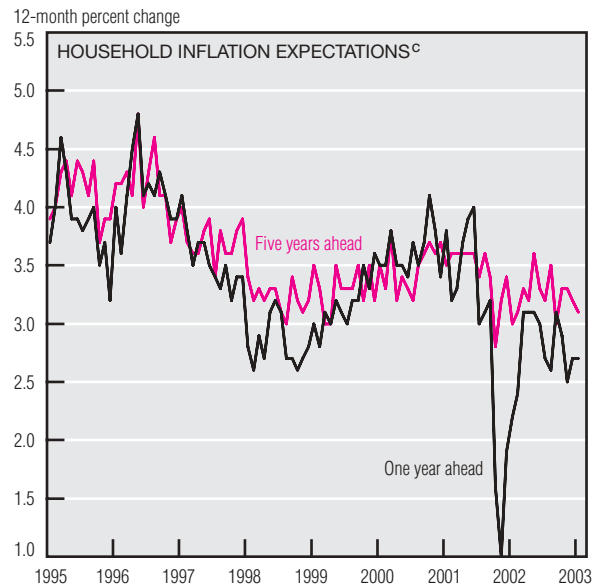
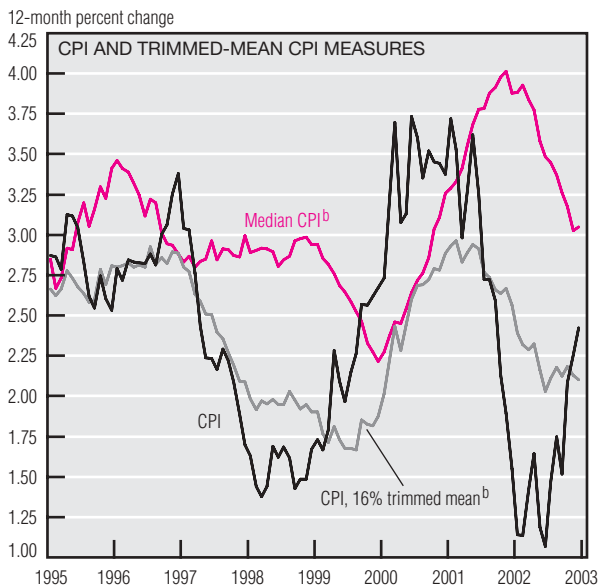
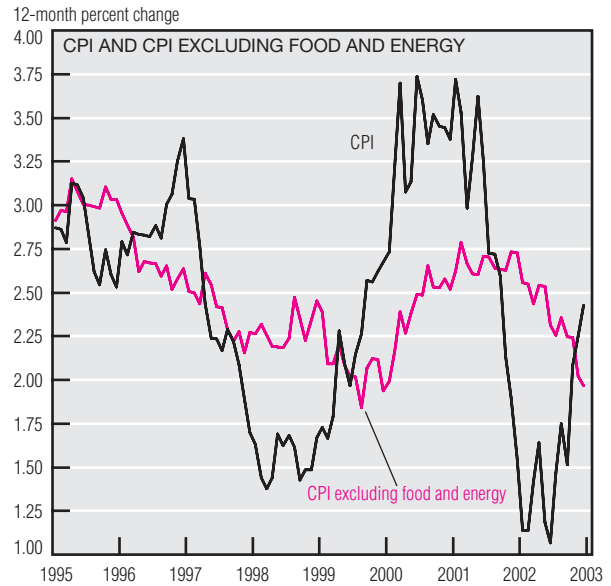
Today, by many measures, the U.S. economy is stronger than it was 25 years ago. Living standards are significantly higher. The Misery Index stands at 9, half the rate in 1979. Yet consumer and business confidence in the economy languishes once again as the economy works its way out of another recession. The stock market, once the embodiment of the nation’s preeminence in global capitalism, remains flat on its face after a painful collapse.

Terrorism threatens the safety of American and pro-Western interests around the world, and, in conjunction with religious fundamentalism, menaces the stability of some allied political regimes. Oil prices have been rising as geopolitical tensions have escalated. Although the U.S. economy is far more energy efficient today than it was in 1979, the energy independence Jimmy Carter so desperately sought has never been achieved. The circumstances differ, but Ronald Reagan’s citation of national defense, our energy policy, and the economy as the critical issues of his time regrettably rings true again today.

Will today’s worries be succeeded by the kind of future that followed Jimmy Carter’s presidency? Will domestic and international actions, combined with good fortune, be enough to create such a future again? The nation and the world await the answers.

# Inflation and Prices

	Percent change, last:				2001 avg.
	1 mo. <sup>a</sup>	3 mo. <sup>a</sup>	12 mo.	5 yr. <sup>a</sup>	
<b>Consumer prices</b>					
All items	0.7	1.8	2.4	2.3	1.5
Less food and energy	0.6	1.5	2.0	2.3	2.7
Median <sup>b</sup>	2.3	2.4	3.1	3.1	3.9
<b>Producer prices</b>					
Finished goods	0.0	2.6	1.2	1.2	-1.7
Less food and energy	-3.9	-0.5	-0.4	1.0	0.9



a. Annualized.  
 b. Calculated by the Federal Reserve Bank of Cleveland.  
 c. Mean expected change in consumer prices as measured by the University of Michigan's *Survey of Consumers*.  
 SOURCES: U.S. Department of Labor, Bureau of Labor Statistics; Federal Reserve Bank of Cleveland; and University of Michigan.

The major inflation statistics slowed to a virtual standstill in January, as retail prices (measured by the Consumer Price Index) as well as wholesale prices (measured by the Producer Price Index), grew at an annualized rate of less than 1%. For the CPI, the January data add to a string of fairly moderate cost-of-living reports dating back to last fall. These recent numbers follow the downward inflation trajectory that has been suggested by the so-called "core" inflation statistics (the CPI excluding food and energy items and the median CPI) for about a year.

While the various CPI measures still differ rather widely in their readings for the past 12 months, a growing consensus among them seems to point to an inflation trend in the 2%–3% range. For the median CPI, produced by the Federal Reserve Bank of Cleveland, this represents a decline of about a percentage point from last January's reading; over the same period, the growth of the overall CPI has risen by a similarly large amount.

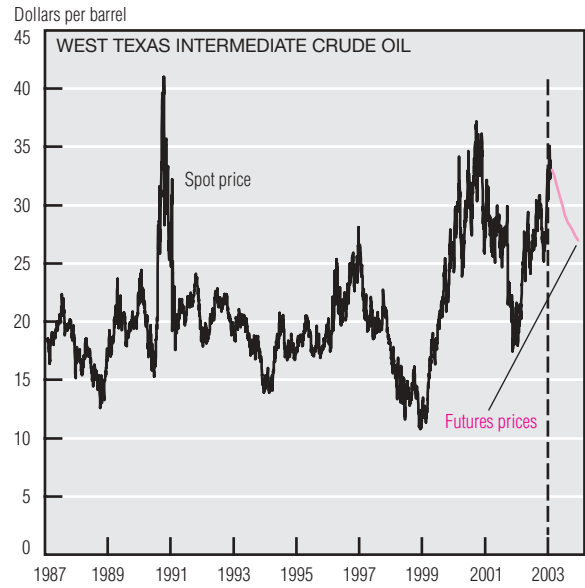
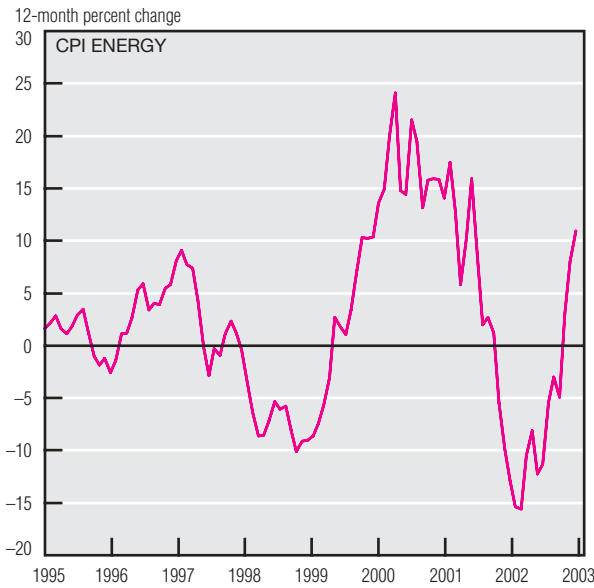
Economists' inflation outlook is fairly sanguine, with CPI forecasts mostly in the 2%–3% range over the

next few years—and a consensus view that the inflation measure will stay at the lower end of that range. This projection generally conforms to households' inflation expectations. The University of Michigan's survey shows that U.S. consumers expect prices to rise slightly more than 2½% over the next 12 months and to remain at (or slightly above) the 3% level for the next five years.

Over the near term, the price outlook is unclear. U.S. households' budgets have been whipsawed in recent years by wide fluctuations in energy

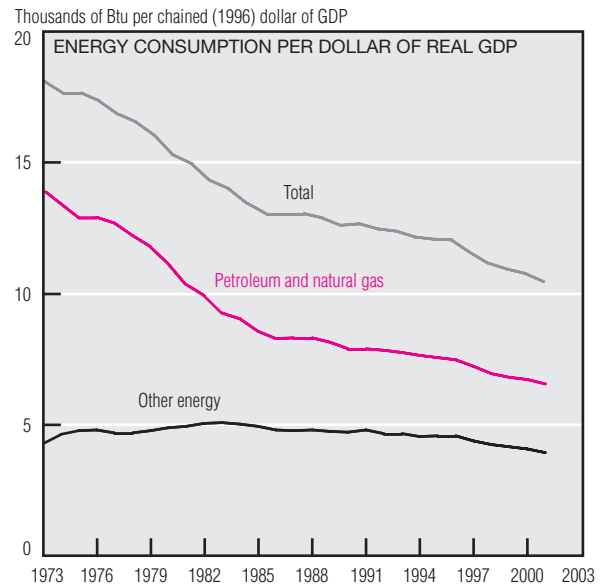
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## Inflation and Prices (cont.)



**OPEC Crude Oil Production, February 2003**  
(thousands of barrels per day)

	February 2003, estimated	Change from production in November 2002	Spare capacity
Venezuela	600	-2,305	0
Saudi Arabia	8,700	600	1,550
Iran	3,700	200	50
Nigeria	2,225	215	75
United Arab Emirates	2,200	190	300
Kuwait	2,125	185	75
All other OPEC countries (excluding Iraq)	4,185	95	200



SOURCES: U.S. Department of Labor, Bureau of Labor Statistics; U.S. Department of Energy, Energy Information Administration; Dow Jones Energy Service; and Bloomberg Financial Information Services.

prices, particularly petroleum products; that rather extreme volatility may continue this year as well. The CPI's energy price index leaped at double-digit rates in 2000 and much of 2001, but fell with nearly equal intensity last year. Recently, households' budgets have felt the pinch of energy price increases once again as the cost of crude oil has steadily climbed in tandem with tensions concerning Iraq.

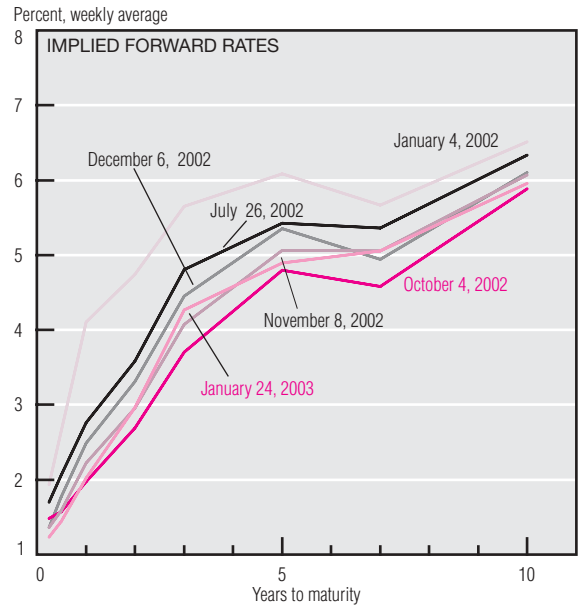
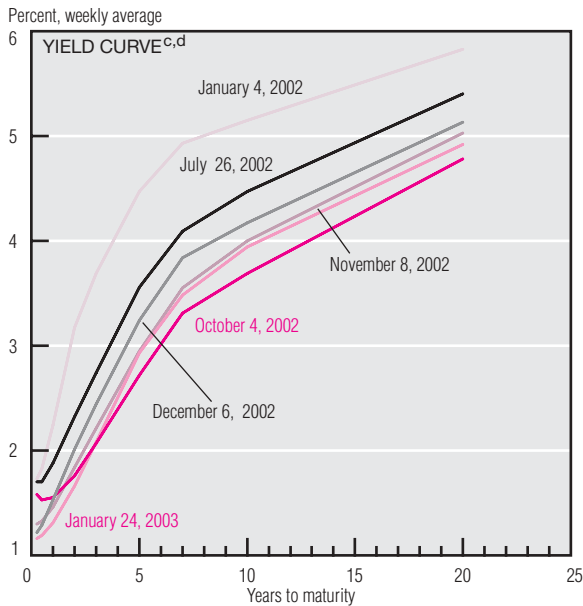
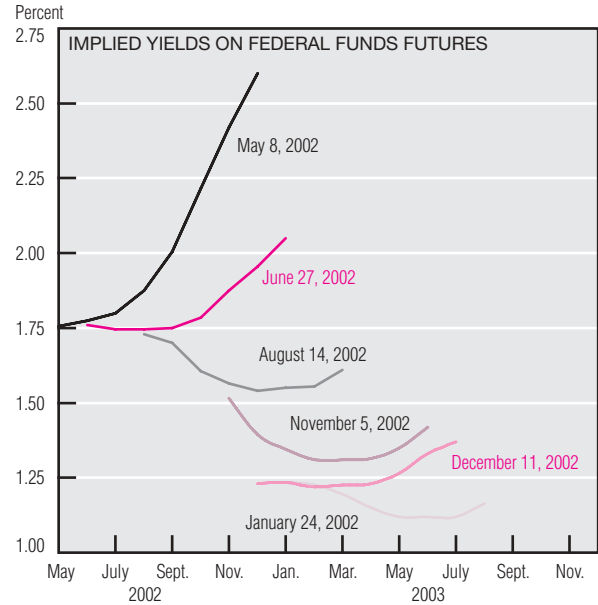
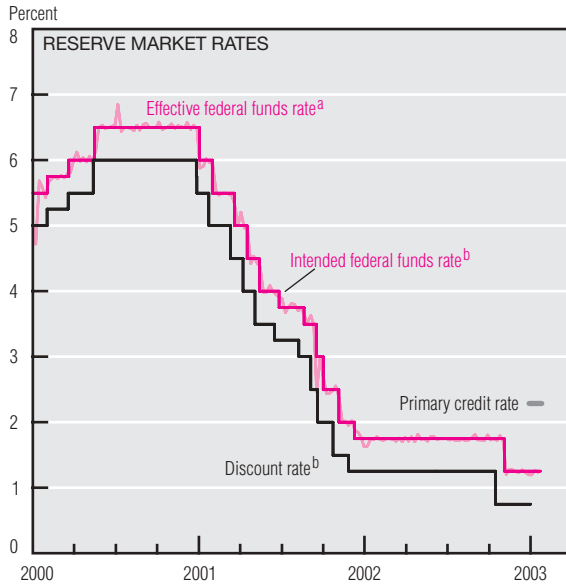
Anxiety over rising energy prices has been further heightened by an oil workers' strike in Venezuela. Between November and January, this OPEC

member's production fell from an estimated 2.9 million barrels per day to only 600,000. About two-thirds of that production shortfall apparently was made up by expanded production by other members of the oil cartel, particularly Saudi Arabia, which boosted production by about 600,000 barrels daily over the three-month period. The rather large excess capacity of Saudi Arabia (among others) and expectations that Venezuelan oil production may soon rebound have probably contributed to the downward slide in futures markets' projected oil prices. The markets recently

priced a barrel of West Texas intermediate crude oil at \$35; this is expected to fall to about \$29 by summer.

Certainly energy consumption per dollar of U.S. production has fallen over time, indeed by roughly 40% in the past 30 years. This trend obviously mitigates the severity of energy price fluctuations on economic performance and households' cost of living. Nevertheless, large, unexpected fluctuations in energy prices are still an important unknown in assessing the outlook for the economy's performance, particularly retail prices.

# Monetary Policy



- a. Weekly average of daily figures.  
 b. Daily observations.  
 c. Average for the week ending on the date shown.  
 d. All yields are from constant-maturity series.  
 SOURCES: Board of Governors of the Federal Reserve System, "Selected Interest Rates," *Federal Reserve Statistical Releases*, H.15; and Bloomberg Financial Information Services.

As of January 9, 2003, instead of the discount rate, Federal Reserve Banks began to offer depository institutions two discount window programs: primary credit and secondary credit. Primary credit loans are extended for a very short term (usually overnight) to depository institutions in generally sound financial condition. This rate (currently 2.25%) will initially be 100 basis points (bp) above the target federal funds rate set by the Federal Open Market Committee (FOMC). Depository institutions not eligible for primary credit may apply

for secondary credit, which will initially be set 50 bp above the primary credit rate.

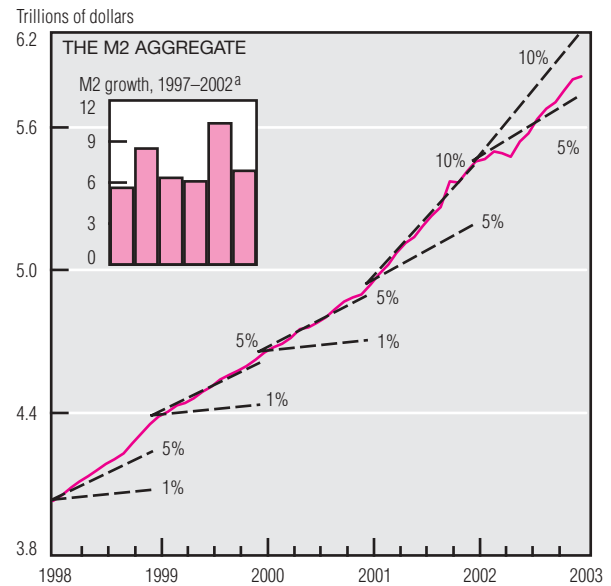
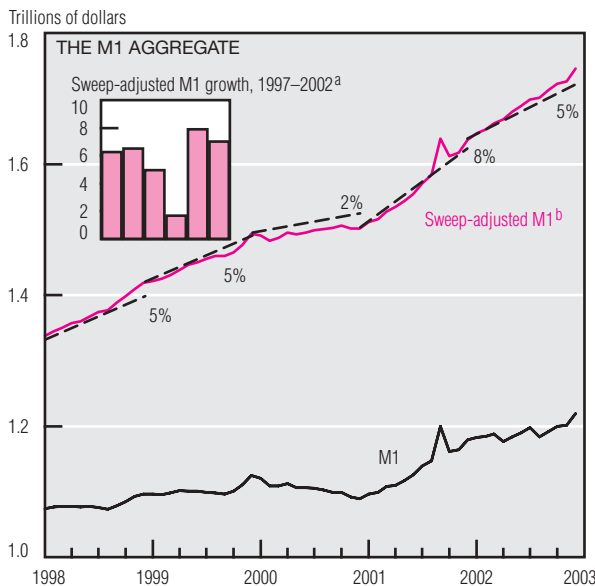
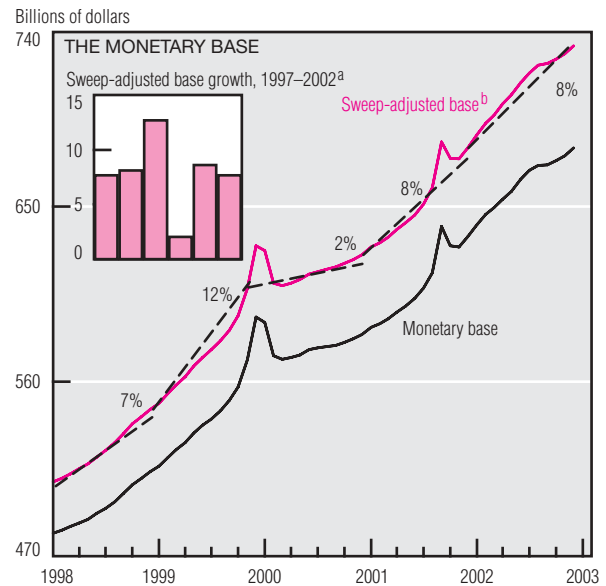
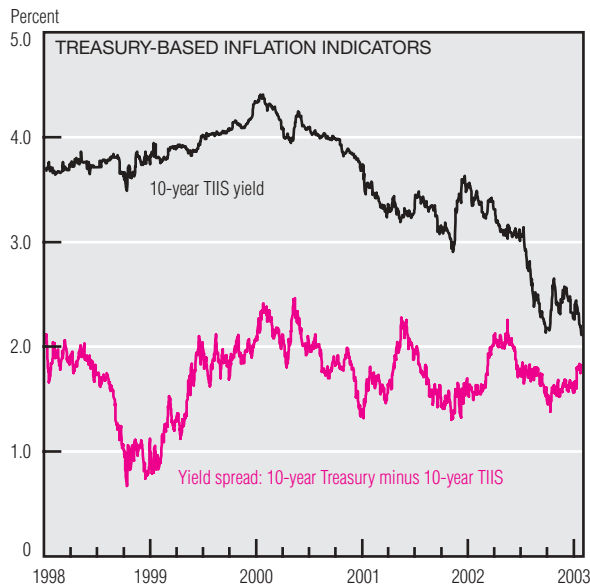
At its January 28–29 meeting, the FOMC left the intended federal funds rate unchanged at 1.25%. As of January 24, the federal funds futures' June contract traded at 1.12%, 13 bp below the current federal funds rate target, suggesting that market participants are betting the next change will be down.

Long-term rates respond to changes in inflationary expectations. Since last July, the yield curve has

shifted down at both the short and the long end. Long-term rates are an average of current and implied future short-term rates. Implied forward rates have fallen since July, suggesting that long-term inflationary expectations have dropped. Since December, long-term rates have fallen and short-term rates have been essentially unchanged. Both long-term and implied forward rates suggest that long-term inflationary expectations continue to fall.

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## Monetary Policy (cont.)



a. Growth rates are calculated on a fourth-quarter over fourth-quarter basis. Data are seasonally adjusted.

b. The sweep-adjusted base contains an estimate of required reserves saved when balances are shifted from reservable to nonreservable accounts. Sweep-adjusted M1 contains an estimate of balances temporarily moved from M1 to non-M1 accounts.

SOURCES: Board of Governors of the Federal Reserve System, "Selected Interest Rates," *Federal Reserve Statistical Releases*, H.15; and Bloomberg Financial Information Services.

Another way to gauge long-term inflation expectations is by subtracting the yield on 10-year Treasury inflation-indexed securities (TIIS), a signal of the real rate of interest, from the 10-year Treasury bill. This measure of the average inflation rate that is expected to prevail over the next 10 years has changed little in the last 18 months.

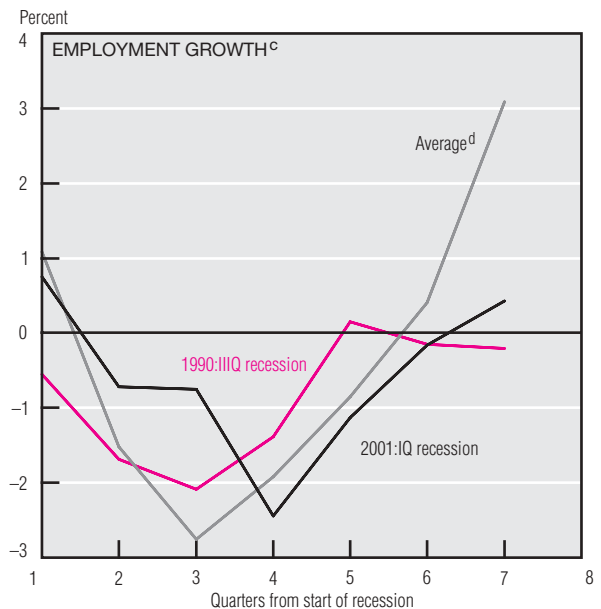
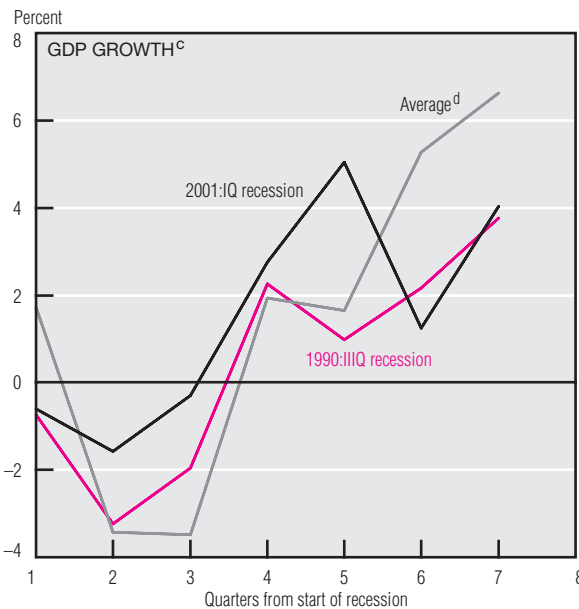
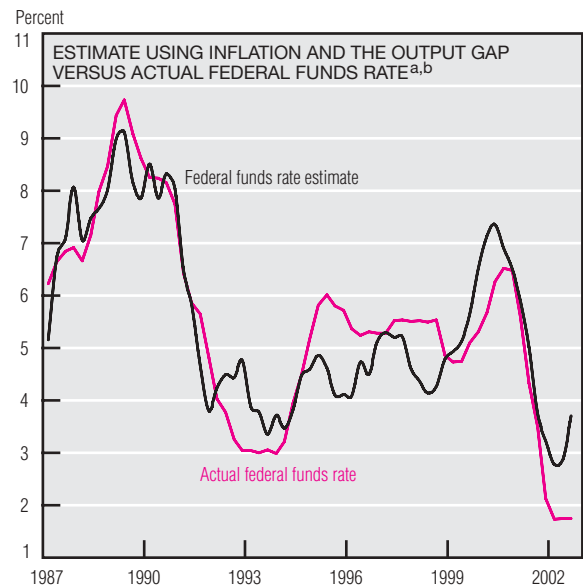
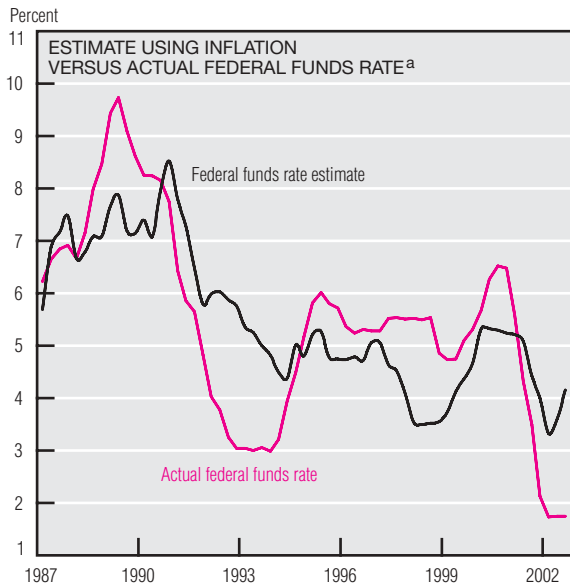
Money is the primary driver of inflation, but it is unclear which money measure is the best. The monetary base represents the liabilities of the

Federal Reserve and, although noisy, it is arguably the best measure of monetary policy. If the funds rate is held below short-term market rates, base growth tends to rise. The sweep-adjusted monetary base currently is rising at 7.7% per year. Its growth accelerated in mid-2000 and subsequently has been fairly stable. Its acceleration corresponds roughly with the beginning of rate cuts in early 2000, which suggests that monetary policy eased unambiguously with the initial cuts. Since then, however, the Federal Reserve has lowered the funds rate

substantially, but this has followed other market interest rates and may not truly reflect an easing of monetary policy.

The broader monetary aggregates sometimes track future inflation more closely. Sweep-adjusted M1 rose at a steady pace over 2002, ending the year at 7.0%. M2 slowed from its rapid growth of 10.3% in 2001 to 6.9% in 2002. The number for January 2003 probably will indicate further slowing and should come in below 0%.

# The Taylor Rule



a. Inflation is from the Personal Consumption Expenditures Chain Price Index.

b. The output gap is calculated from real potential GDP as measured by the Congressional Budget Office, and real GDP from the Bureau of Economic Analysis.

c. Quarterly change, annualized.

d. Recessions in the postwar period.

SOURCES: U.S. Department of Commerce, Bureau of Economic Analysis; U.S. Department of Labor, Bureau of Labor Statistics; Congressional Budget Office; and Board of Governors of the Federal Reserve System, "Selected Interest Rates," *Federal Reserve Statistical Releases*, H.15.

Monetary policy can often be described as a rule or strategy for changing the federal funds rate in response to inflation and other indicators of real economic activity. Obviously, no rule can capture every variable that the Federal Open Market Committee considers in setting the fed funds rate. Nevertheless, a rule that roughly describes past behavior can provide a benchmark for setting policy. An extremely simple rule, in which the central bank responds only to past inflation, tracks movements in the fed funds rate fairly closely, as shown in the upper

left chart, although large misses are not uncommon.

The problem is that the Federal Reserve responds to both inflation and some measure of real economic activity. The Taylor rule posits that the Fed lowers (raises) the funds rate when inflation falls (rises) or real output is lower (higher) than potential output.

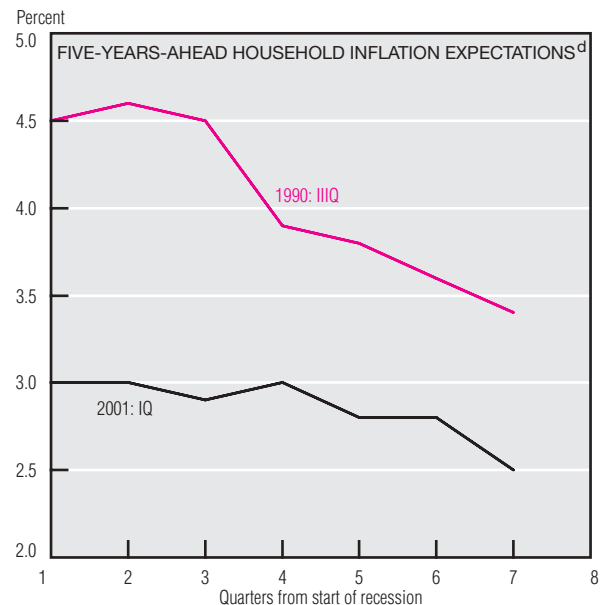
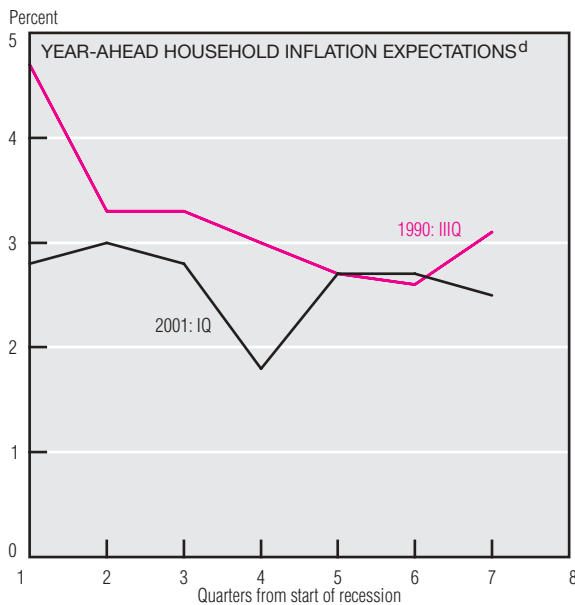
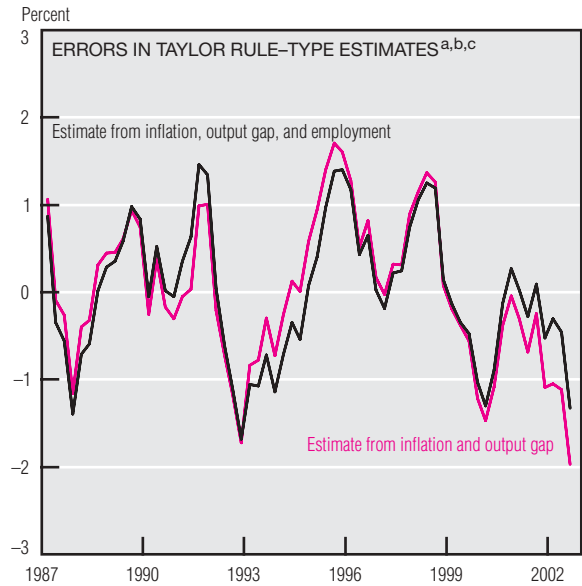
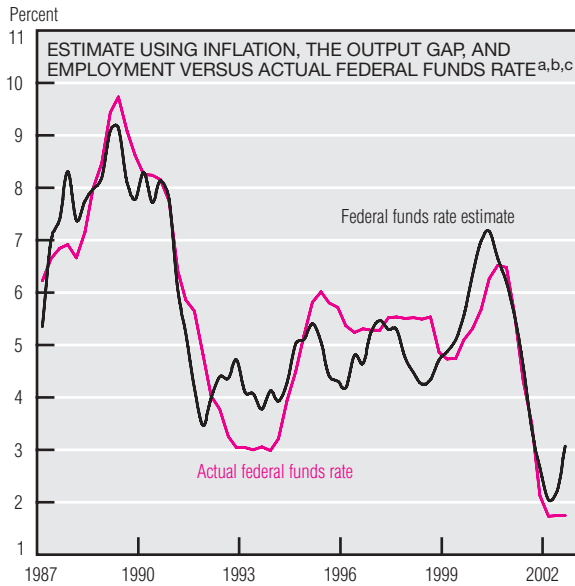
A fairly simple rule, in which the Fed responds to inflation and the output gap, seems to track the funds rate quite closely, as shown in the upper right chart. By this measure, current monetary policy seems relatively easy. On the basis of historical trends, the

Taylor rule would say that the current funds rate should be almost 2% higher than it is.

This large gap suggests that another factor may be important in setting interest rates. The 1992–93 period was another in which the funds rate was significantly below the Taylor rule prediction. The gap appeared at about the same stage of recovery from the recession of 1990:IIIQ as we are from 2001:IQ, which suggests that the two recessions may have a common factor.

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## The Taylor Rule (cont.)



a. Inflation is from the Personal Consumption Expenditures Chain Price Index.

b. The output gap is calculated from real potential GDP as measured by the Congressional Budget Office, and real GDP from the Bureau of Economic Analysis.

c. Employment is from the Establishment Survey, nonfarm employment.

d. Median expected change in consumer prices as measured by the University of Michigan's Survey of Consumers.

SOURCES: U.S. Department of Commerce, Bureau of Economic Analysis; U.S. Department of Labor, Bureau of Labor Statistics; Congressional Budget Office; Board of Governors of the Federal Reserve System, "Selected Interest Rates," *Federal Reserve Statistical Releases*, H.15; and University of Michigan.

Both the current recession and that of 1990 have had so-called jobless recoveries. Although their GDP growth rates were similar to those in earlier downturns, employment growth stagnated five quarters into the recession. Employment now and during the same phase of the 1990 recession was essentially flat; in earlier recessions, it grew at an average annual rate of almost 3%.

This suggests that employment growth might be another variable that the Fed considers in setting interest rates. Its addition seems important, indicating that the Fed might respond

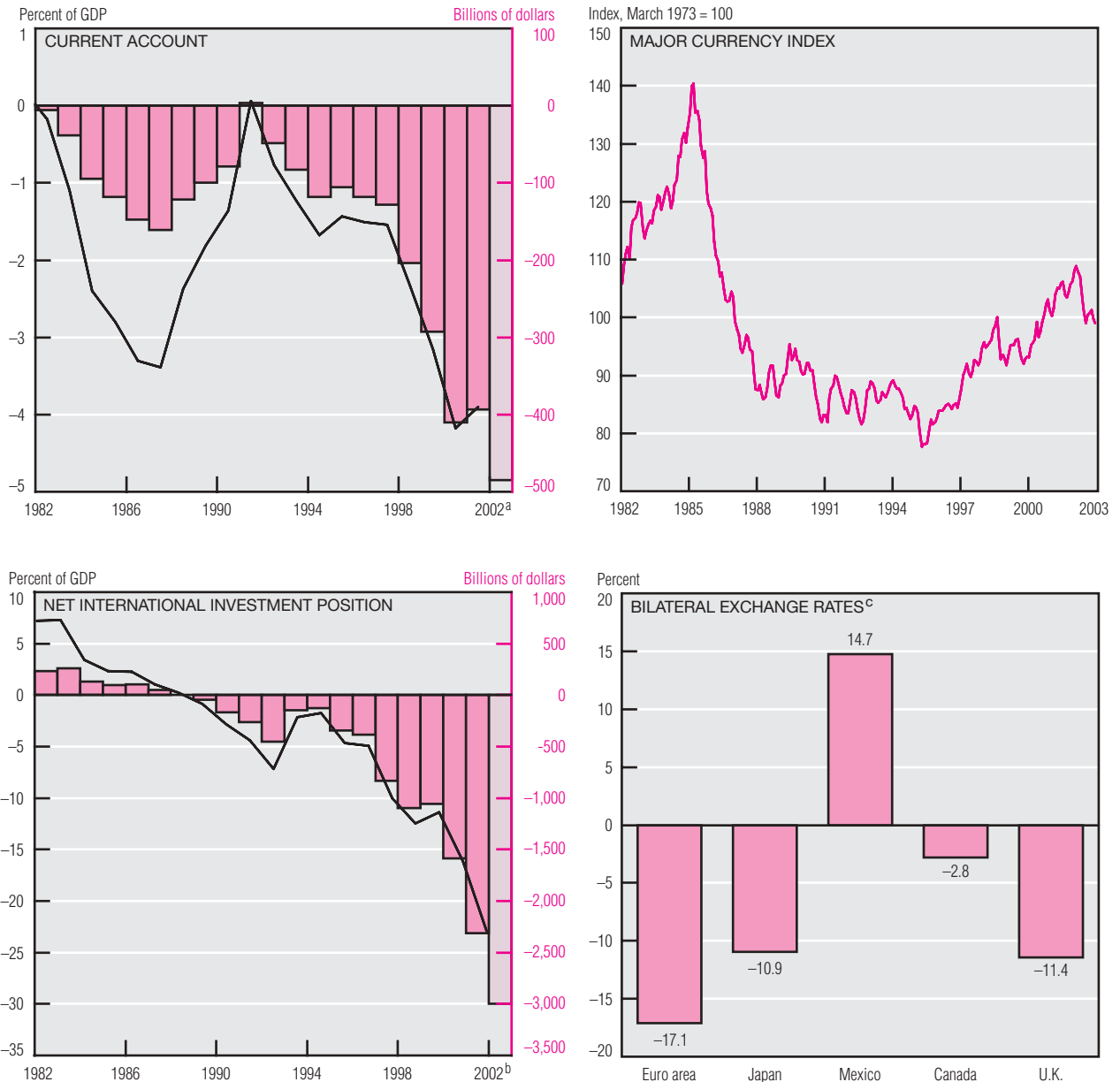
to inflation, the output gap, and employment growth. In fact, until less than a year ago, the actual and predicted funds rates were virtually identical. Now policy appears to be slightly easier than past experience would have predicted. The discrepancy of almost 2% that now exists between them is reduced to just over 1%.

Despite this improvement, it seems possible that the Fed has not been responding consistently to both the output gap and employment growth. Improvement over the normal Taylor rule was especially dramatic during the current recession, whereas

improvement during the last recession and jobless recovery was slight.

The puzzle of why policy appears relatively easy is even greater when one considers the likelihood that the long-term inflation "target" has changed. Looking five years out, households expect the inflation rate to average 2.5%. At the same phase of the last recovery, inflation expectations were almost a full percentage point higher. A partial solution to the puzzle might be that the Fed is also acting more aggressively in response to inflation's deviations from its "long-term target."

# Dollar Depreciation and the Current Account



a. Annualized average of the first two quarters.

b. Author's estimate.

c. Percent change in bilateral exchange rates since February 2002 peak.

SOURCES: U.S. Department of Commerce, Bureau of Economic Analysis; and Board of Governors of the Federal Reserve System.

Since its most recent peak in February 2002, the U.S. dollar has depreciated nearly 11% on a trade-weighted-average basis against the currencies of the major industrial countries. Although the dollar's recent movements may reflect a number of factors, many observers have long claimed that persistent U.S. current account deficits must eventually exert a downward pressure on the dollar.

For 20 of the past 21 years, the U.S. has posted a current account deficit, primarily because we import more goods and services than we export.

In the first half of 2002, the current account shortfall equaled \$485 billion (annual rate), roughly 4.7% of GDP.

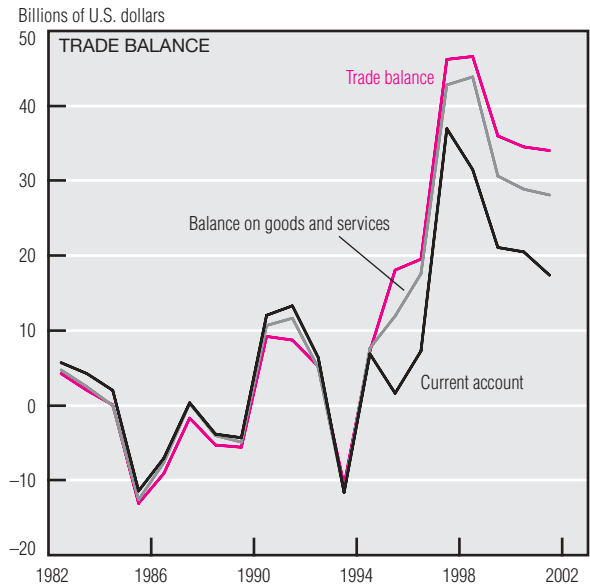
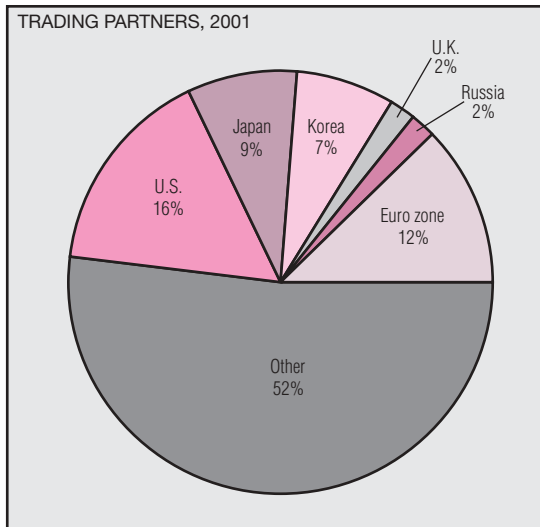
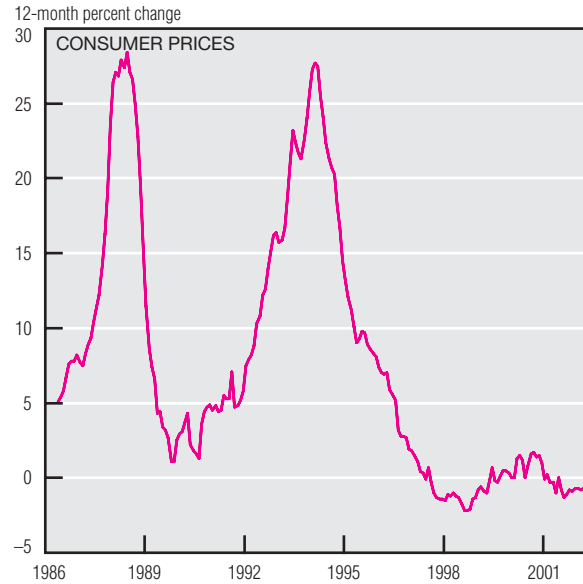
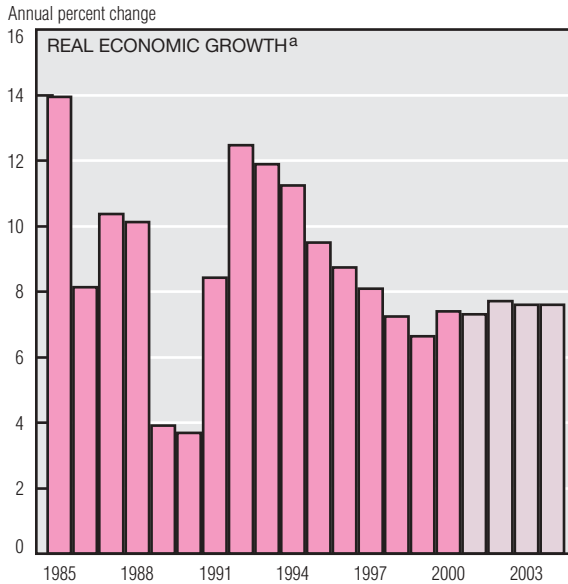
To finance these deficits, we have given foreigners various financial claims against future U.S. output and have reduced our claims on output abroad. This process creates financial inflows that, abstracting from measurement error, exactly equal the current account deficit. Since the late 1980s, the stock of foreign claims against the U.S. has exceeded the stock of U.S. claims on other countries; last year, the market value of

the nation's negative net international investment position equaled nearly \$3 trillion or 29% of GDP.

Our net international investment position cannot continue to decline relative to GDP indefinitely. At some point, international investors will become reluctant to hold additional claims against the U.S. Then, real interest rates will rise and the exchange value of the dollar will fall to attract additional financing. We cannot claim to have reached that point, but it's a point worth considering.



# China's Deflation



a. Data for 2001–04 are Blue Chip forecasts.

SOURCES: International Monetary Fund, *Direction of Trade Statistics*; and Bloomberg Financial Information Services.

Those who think deflation is always and everywhere a bad thing must have overlooked the People's Republic of China, whose economy is growing by leaps and bounds despite a falling price level. Why?

As prices fall, the real return on holding money balances rises, enticing people to hold cash. If the real return on money balances exceeds the real return on capital, deflation will destroy incentives to invest;

economic growth will slow and unemployment will rise.

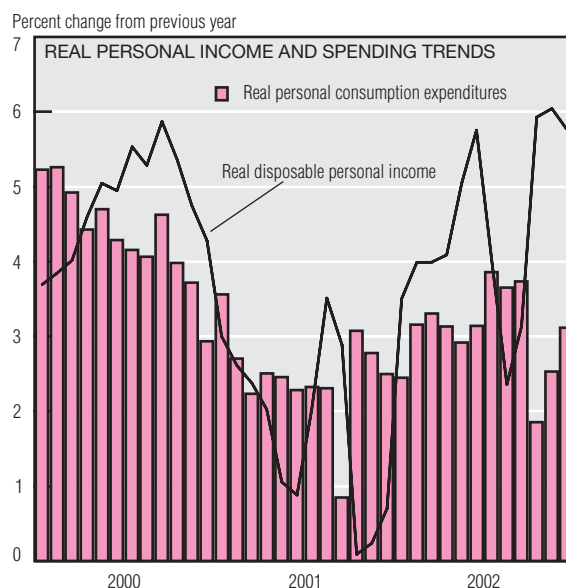
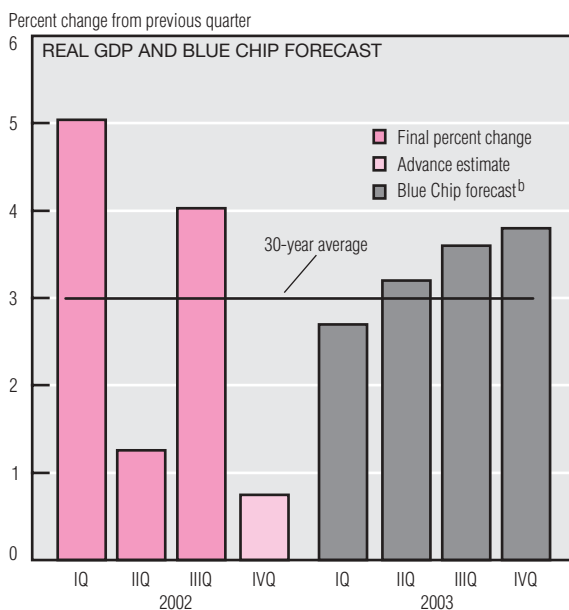
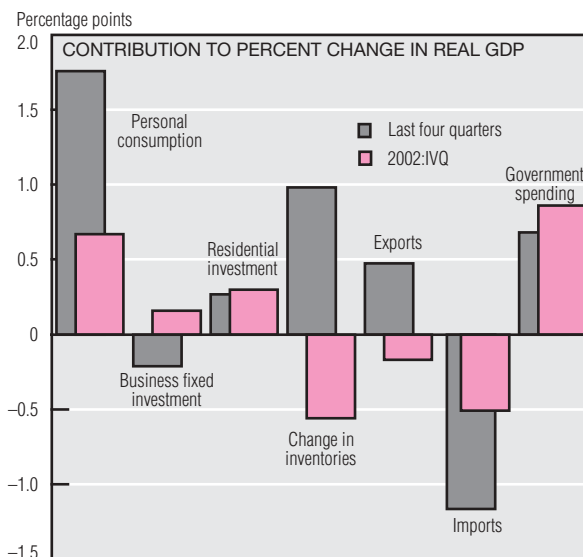
In emerging markets, capital is relatively scarce and the return on investment promises to be fairly high. China's rapid growth—despite deflation—and a substantial inflow of direct investment capital suggest that the real return on capital there is high and offers an attractive alternative to holding cash.

Falling prices may also help China compete in global markets where the

rest of the world is not hoarding cash. In 2001, the country's rapidly growing current account surplus topped \$17 billion, or 1.5% of GDP. The People's Republic of China is the fifth-largest trading partner of the U.S., accounting for 7% of our total trade (exports plus imports). And we are the single biggest trading partner of the People's Republic, accounting for 16% of their total trade.

# Economic Activity

Real GDP and Components, 2002:IVQ <sup>a</sup> (Advance estimate)	Quarterly change, billions of 1996 \$	Annualized percent change, last:	
		Quarter	Four quarters
Real GDP	17.6	0.7	2.8
Personal consumption	15.8	1.0	2.5
Durables	-19.5	-7.3	2.1
Nondurables	18.4	3.9	3.1
Services	12.1	1.3	2.3
Business fixed investment	4.5	1.5	-1.9
Equipment	12.1	5.0	3.0
Structures	-5.3	-9.3	-15.7
Residential investment	6.5	6.8	6.1
Government spending	19.5	4.6	3.6
National defense	10.8	11.2	9.4
Net exports	-18.9	—	—
Exports	-4.7	-1.7	5.0
Imports	14.2	3.7	9.2
Change in business inventories	-15.5	—	—



NOTE: All data are seasonally adjusted and annualized.

a. Chain-weighted data in billions of 1996 dollars. Components of real GDP need not sum to the total because the total and all components are deflated using independent chain-weighted price indexes.

b. Blue Chip panel of economists.

SOURCES: U.S. Department of Commerce, Bureau of Economic Analysis; and *Blue Chip Economic Indicators*, January 10, 2003.

The advance estimate from the national income and product accounts shows that growth in real gross domestic product (GDP) slowed from 4.0% in 2002:IIIQ to 0.7% in 2002:IVQ (annual rates). Consumer spending increased at a modest 1.0% annual rate during the quarter. Declining sales in motor vehicles and parts accounted for a reduction of \$19.5 billion (chained 1996 dollars) in durable goods spending. On a brighter note, real business fixed investment rose 1.5% (annual rate), marking the first increase in the

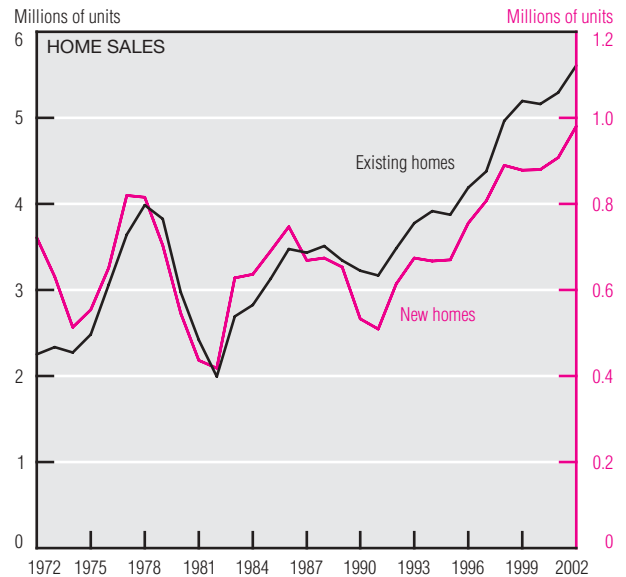
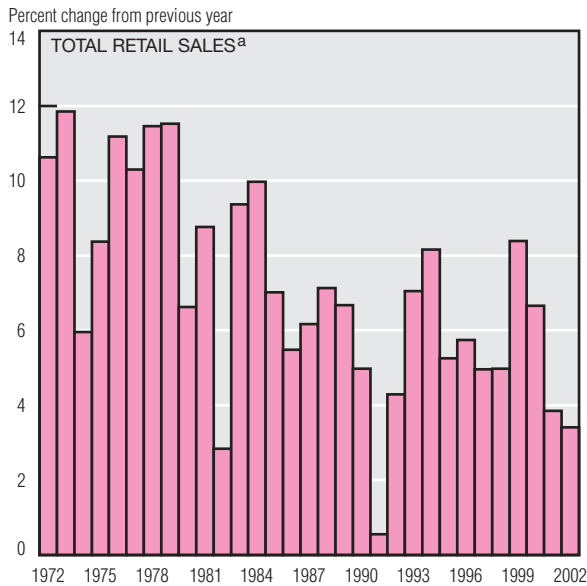
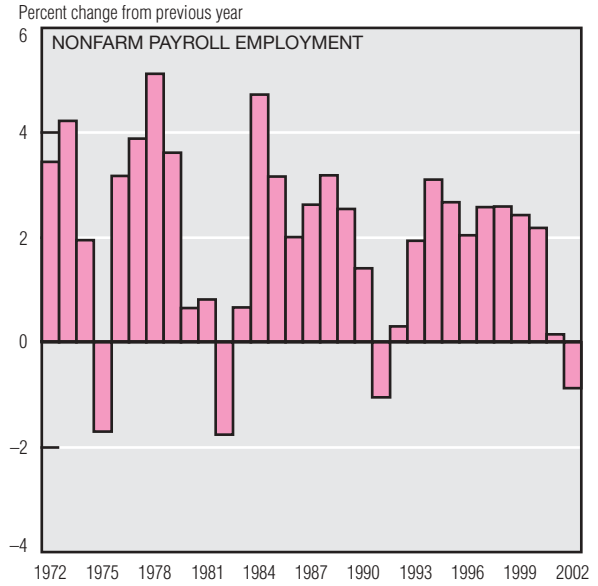
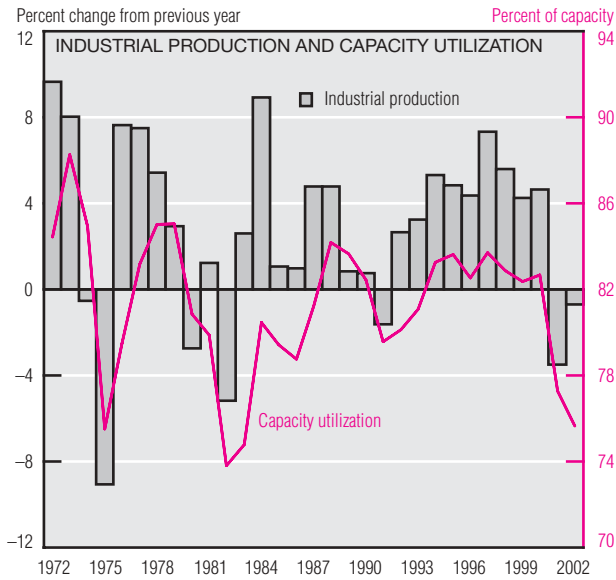
series since 2000:IIIQ. Business fixed investment contributed 0.2 percentage point to real GDP growth—a reversal from the 0.2 percentage point it took away over the previous four quarters. Government spending, which added 0.9 percentage point, was the largest contributor to real GDP growth in 2002:IVQ. Business inventories were the heaviest drag on overall economic growth: they fell \$15.5 billion (chained 1996 dollars) from the previous quarter, subtracting 0.6 percentage point from GDP growth.

Total output growth fell far short of its long-term average of 3.0% (annual rate). However, Blue Chip forecasters predict that real GDP growth will increase progressively throughout 2003 and will surpass its long-term average by the second quarter.

Real disposable personal income increased a robust 5.8% (year over year) in December 2002, exceeding the year-over-year growth of 3.1% in real consumer spending. After increasing more slowly than consumer spending for much of 2001,

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## Economic Activity (cont.)



NOTE: All data are seasonally adjusted.

a. Includes retail sales and food services.

SOURCES: U.S. Department of Commerce, Bureau of the Census; U.S. Department of Labor, Bureau of Labor Statistics; Board of Governors of the Federal Reserve System; and National Association of Realtors.

income growth surpassed it in all but two months of 2002.

The National Bureau of Economic Research put the beginning of the recent recession at March 2001 and has not yet declared the date in 2001 or 2002 when it ended. Trends in industrial production, nonfarm payroll employment, and retail sales for 2002 resemble those of earlier recessions. Industrial production declined a slight 0.7% in 2002, but this drop, coupled with a 3.5% decrease in 2001, marked the first time since 1974–75 that industrial production contracted for

two consecutive years. (The economy was in a recession from November 1973 to March 1975.) Capacity utilization also declined in 2001 and 2002. At 75.6% in 2002, it stood at its lowest level since 1984 and nearly 6% below its 1972–2001 average of 81.5%.

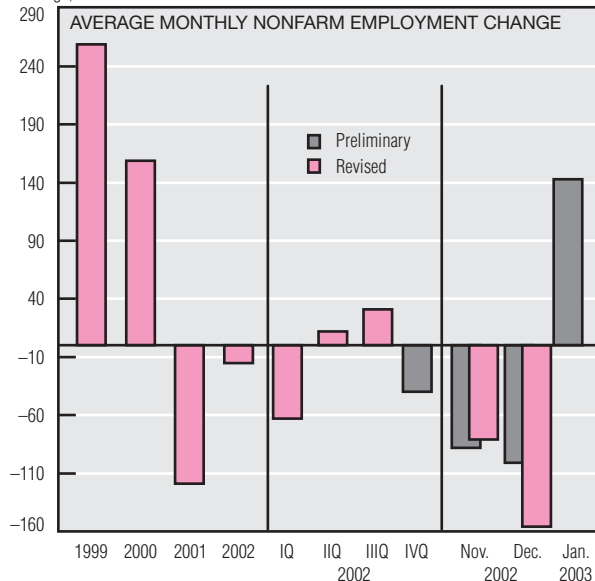
Nonfarm payroll employment's 0.9% contraction in 2002 appeared quite modest when viewed by itself. However, since 1972, growth in this series has decreased only three other times—1975, 1982, and 1991. The previous contractions all occurred in years in which recessions were taking

place. Patterns in the retail sector in 2002 also looked like past recessions. Although retail sales grew 3.4% in 2002, this represented the smallest annual increase since 1991.

In contrast to industrial production, nonfarm payroll employment, and retail sales, the housing sector offered a positive sign for the economy in 2002, when sales rose to historic highs. During the year, nearly 1 million new homes and 5.6 million existing homes were sold. Housing sales support most economists' belief that the recession ended in January 2002.

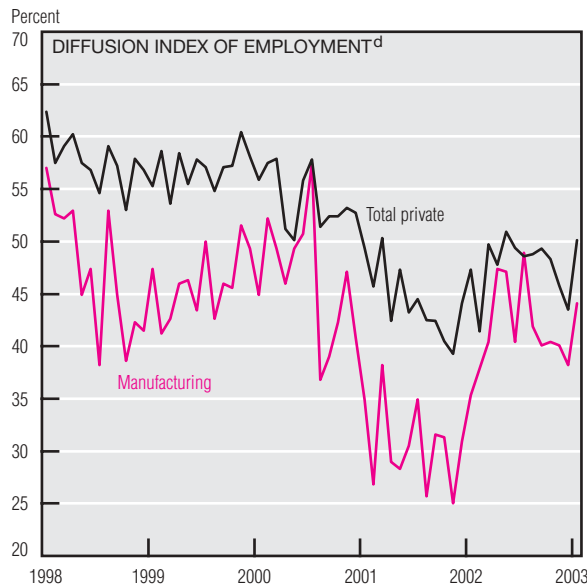
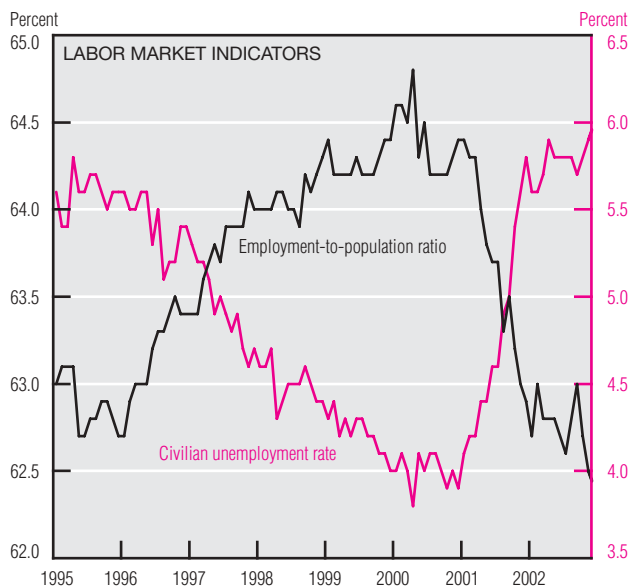
# Labor Markets

Change, thousands of workers



## Labor Market Conditions

	Average monthly change (thousands of employees)				
	1999	2000	2001	2002	Jan. 2003
Payroll employment	259	159	-119	-19	143
Goods-producing	8	-1	-111	-59	0
Mining	-3	1	1	-1	-5
Construction	26	8	-3	-7	21
Manufacturing	-16	-11	-109	-50	-16
Durable goods	-5	1	-79	-39	-11
Nondurable goods	-11	-12	-30	-12	-5
Service-producing	252	161	-8	40	143
TPU <sup>a</sup>	19	17	-23	-14	4
Wholesale and retail trade	60	25	-31	-20	98
FIRE <sup>b</sup>	7	5	10	6	2
Services <sup>c</sup>	132	92	-2	48	35
Health services	9	15	27	21	-18
Help supply	32	0	-54	7	-2
Government	35	22	39	20	4
<b>Average for period (percent)</b>					
Civilian unemployment rate	4.2	4.0	4.8	5.8	5.7



NOTE: All data are seasonally adjusted.

- a. Transportation and public utilities.
- b. Finance, insurance, and real estate.
- c. The service industry includes travel; business support; recreation and entertainment; private and/or parochial education; personal services; and health services.
- d. An index value of 50 indicates that employment is rising in half of the industries and declining in the other half.

SOURCES: U.S. Department of Labor, Bureau of Labor of Statistics.

Nonfarm payroll employment gained 143,000 in January. December 2002 losses were revised from 101,000 jobs to 156,000. Payrolls fell 210,000 in 2002. In the goods-producing sector, manufacturing employment continued downward, losing 16,000 jobs, far less than December's 80,000 loss or the average monthly loss of 50,000 in 2002. Construction added 21,000 jobs in January. Since its recent peak in March 2001, this industry has lost about 214,000 jobs.

In the services sector, retail trade, which lost 99,000 jobs in December,

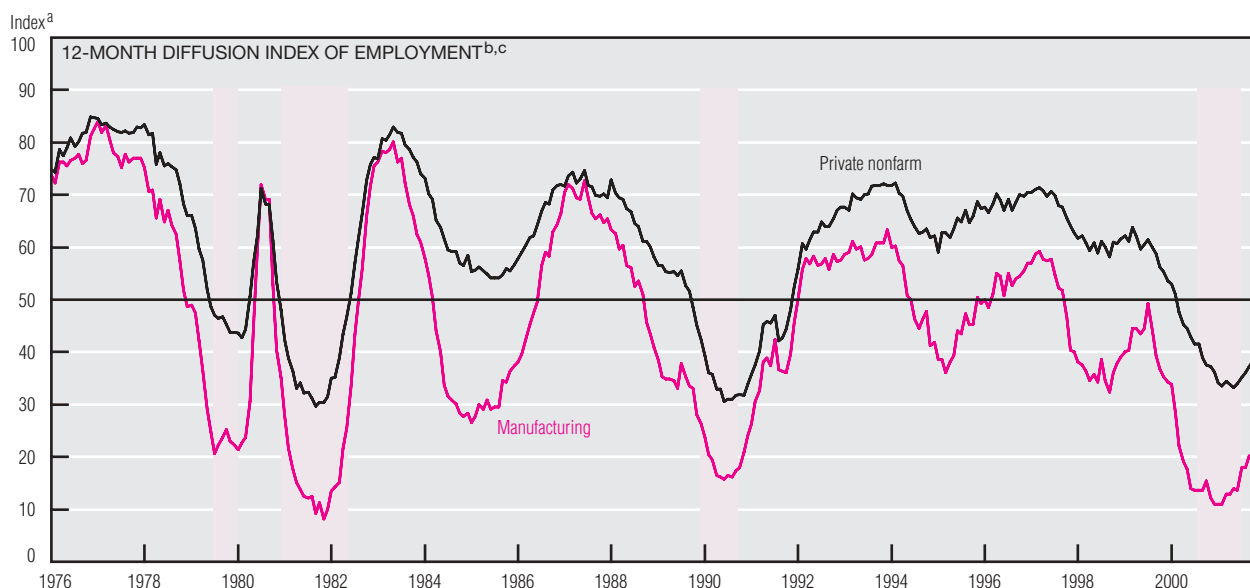
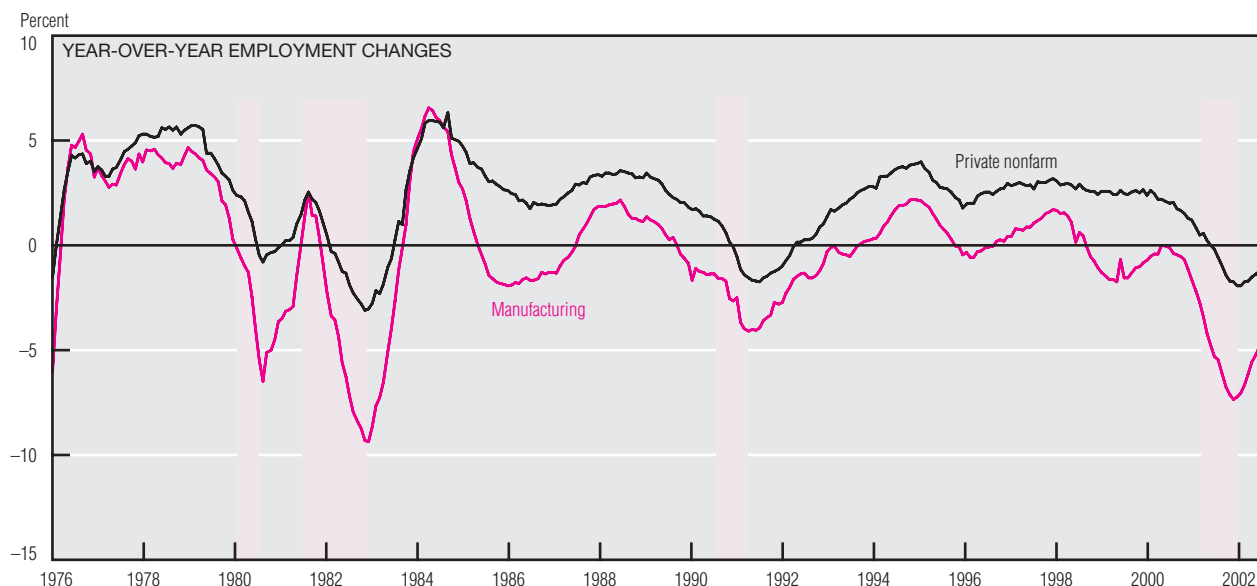
gained 101,000 in January, about two-thirds of all employment gains. The large gain results from seasonal adjustment factors. The services industry added 35,000 jobs, most of them (18,000) in health services; help supply remained essentially flat.

The unemployment rate dropped 0.3 percentage point in January to 5.7%, equal to the monthly average in 2002. Effective this month, the BLS has implemented several changes in the household survey, using new population controls from the 2000 census to benchmark the data. However, the

effect of this change on the unemployment rate data was small.

Manufacturing's one-month-span diffusion index for employment jumped to 44.1% from 39.6% last December. This is a significant increase from the 25% recorded in November 2001, the lowest level since December 1981. From July 2000 when it measured 57%, its recent high, the manufacturing index has declined sharply, never touching the 50% level. The diffusion index for total private employment hit 50% in January for the first time since May 2002.

# Manufacturing Employment



NOTES: All data are seasonally adjusted unless otherwise noted. Shaded bands indicate NBER-defined recessions. The most recent recession is assumed to have ended December 2001.

a. An index value of 50 indicates that employment is rising in half of the industries and declining in half.

b. Not seasonally adjusted.

c. The diffusion index is effectively the share of three-digit SIC industries that are growing.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics.

The manufacturing industry tends to bear the brunt of U.S. recessions, when the industry's employment typically falls more sharply than total nonfarm private employment. In the 1970s and 1980s, manufacturing was quick to rebound, but this has not been the case in the two most recent recoveries.

In the current recovery (which many economists believe began in January 2002), manufacturing employment has not yet begun to rise. This results partly from the industry's

technological advances and robust productivity growth (5.5% for 2002:IIIQ), which have caused manufacturers to downsize their workforce. In addition, these firms are relying more heavily on temporary workers (who are counted as service workers) to complement their permanent labor force.

The manufacturing industry's current behavior parallels its experience in the 1990–91 recession, when its employment level did not stabilize until October 1993 and then fell

again in November 1995. Productivity growth was also very strong during that recovery, averaging 3.4% annually (from 1992 to 1995) versus 1.6% for the whole economy.

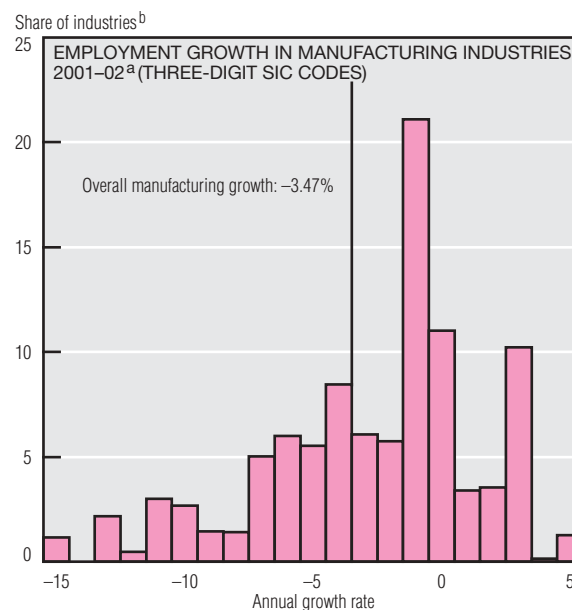
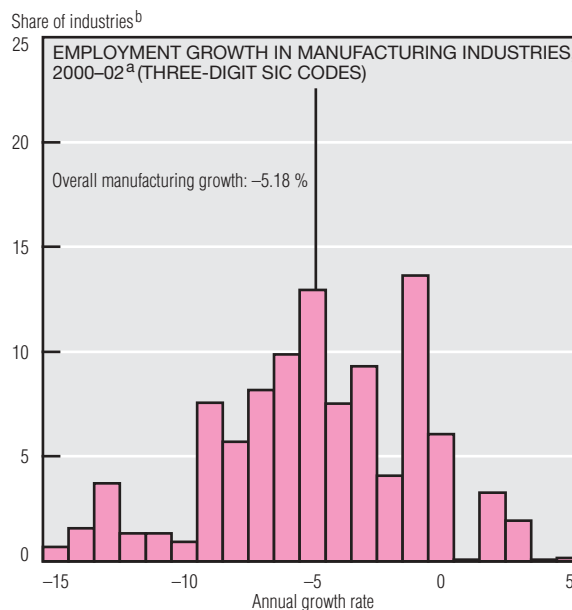
Despite manufacturing's overall employment decline during recessions, some of its sub-industries show employment growth. This can be seen in the diffusion index of employment, which measures the share of sub-industries in which employment is rising at any one point in time. Even during the 1981–82 recession (when

*(continued on next page)*

## Manufacturing Employment (cont.)

**Employment Growth in Manufacturing Industries (two-digit SIC codes)**

	Annual Percent Growth	
	Dec. 2000– Dec. 2002	Dec 2001– Dec. 2002
<b>MANUFACTURING</b>	-5.18	-3.47
<b>Durable goods</b>	<b>-6.33</b>	<b>-4.49</b>
Electronic and other electrical equipment	-11.21	-9.07
Industrial machinery and equipment	-7.99	-5.46
Primary metals	-7.96	-5.84
Furniture and fixtures	-6.51	-2.63
Transportation equipment	-5.16	-4.39
Fabricated metal products	-4.77	-2.99
Lumber and wood products	-3.09	-1.43
Stone, clay, and glass products	-2.25	-0.90
<b>Nondurable goods</b>	<b>-3.42</b>	<b>-1.97</b>
Leather and leather products	-9.09	-3.57
Textile mill products	-8.82	-5.13
Apparel and other textile products	-8.09	-5.40
Printing and publishing	-4.71	-3.39
Rubber and miscellaneous plastic products	-3.97	-1.40
Paper and allied products	-3.16	-2.40
Chemicals and allied products	-1.12	-0.49
Petroleum and coal products	-0.40	-0.79
Food and kindred products	-0.21	0
Tobacco products	1.47	2.94



NOTE: All data are seasonally adjusted unless otherwise noted.  
 a. Not seasonally adjusted.  
 b. Shares are weighted based on employment.  
 SOURCE: U.S. Department of Labor, Bureau of Labor Statistics.

manufacturing employment declines were the sharpest in 30 years), 10% of manufacturing sub-industries continued to add new workers despite the decline in overall economic activity.

Although the most recent recession officially started in March 2001, manufacturers reported contraction much earlier. In fact, most of them argue that their industry was in recession for much of 2000, and the employment data support this contention. A look at the most commonly reported components of manufacturing employment

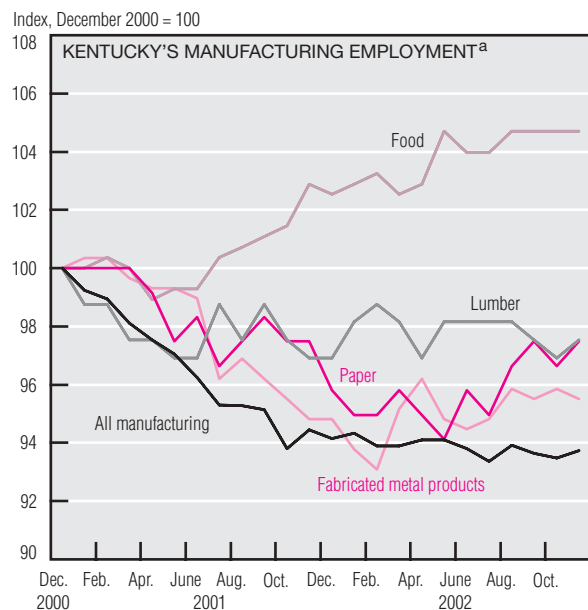
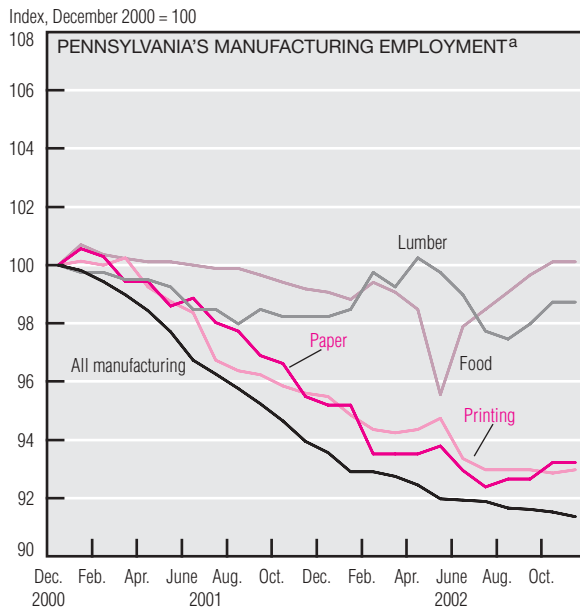
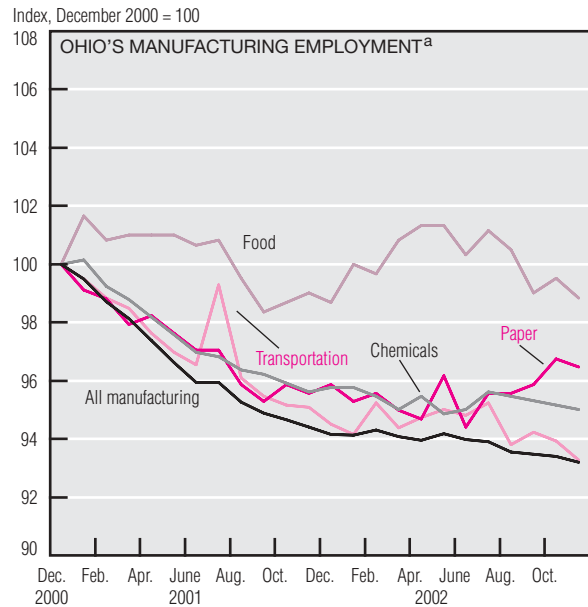
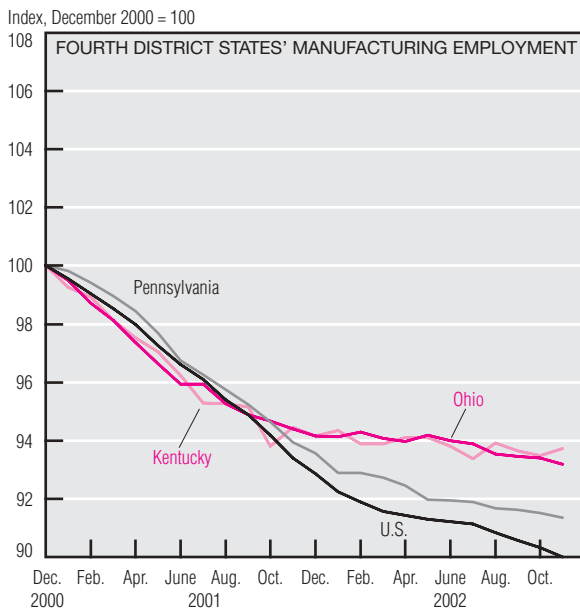
at the two-digit level of the Standard Industrial Classification (SIC) code shows growth in only one industry—tobacco—in either 2001 or 2002.

However, an examination of the three-digit sub-industries reveals that several of them grew over the last two years. From 2000 to 2002, manufacturing employment declined about 10%, but three-digit industries, representing 7% of employment posted gains. Based on employment-weighted shares, more than half of the sub-industries decreased only modestly (less than 1%) or grew in 2002.

The largest employment declines between November 2001 and November 2002 (the most recent data available) came from industries associated with clothing and travel. This is not surprising, considering anecdotal reports that retail clothing chains, as well as travel and tourism, were hit especially hard in this recession. Wool producers' employment declined more than 35%; job losses for makers of luggage and of women's and children's undergarments were roughly 20%. Just as

(continued on next page)

## Manufacturing Employment (cont.)



NOTE: All data are seasonally adjusted.

a. Sub-industries are two-digit SIC industries.

SOURCES: U.S. Department of Labor, Bureau of Labor Statistics; and Federal Reserve Bank of Cleveland calculations.

manufacturing industries associated with struggling sectors of the economy underwent steep employment losses in 2002, those associated with more resilient sectors, such as residential construction, gained employment that year. Hydraulic cement producers increased employment by almost 5%, while producers of asphalt paving and roofing materials increased 4%, despite contraction in total manufacturing employment.

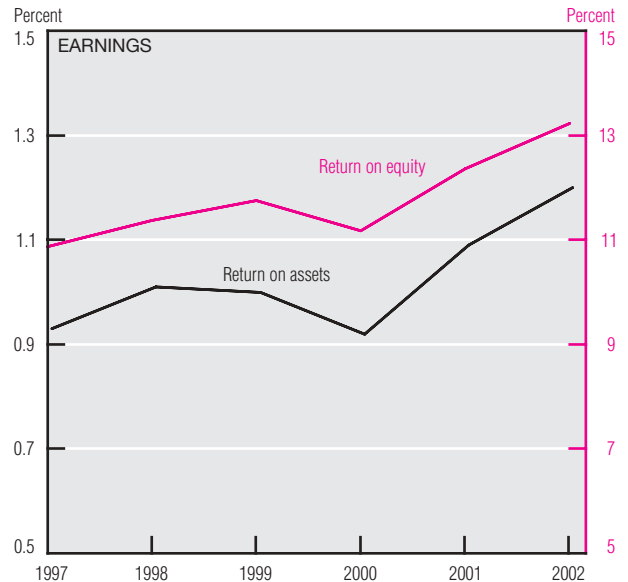
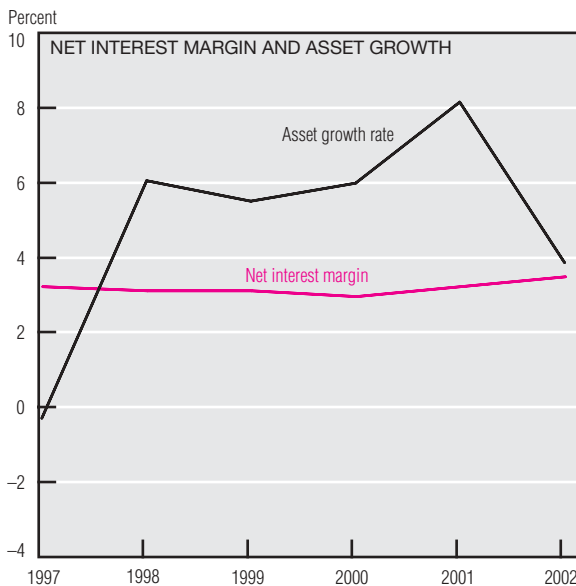
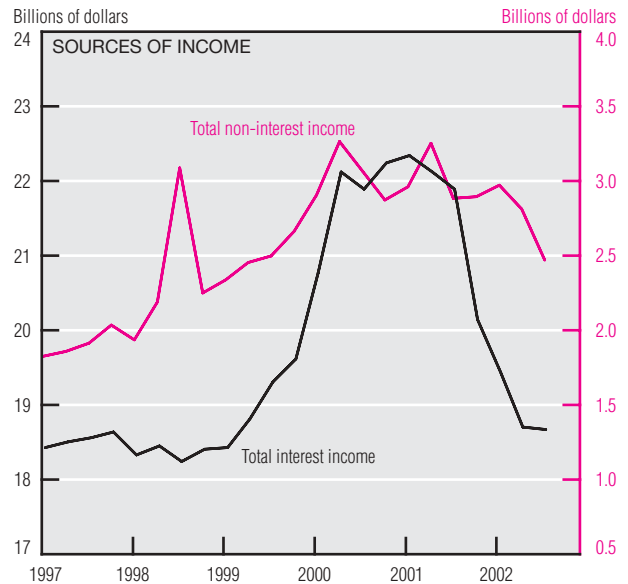
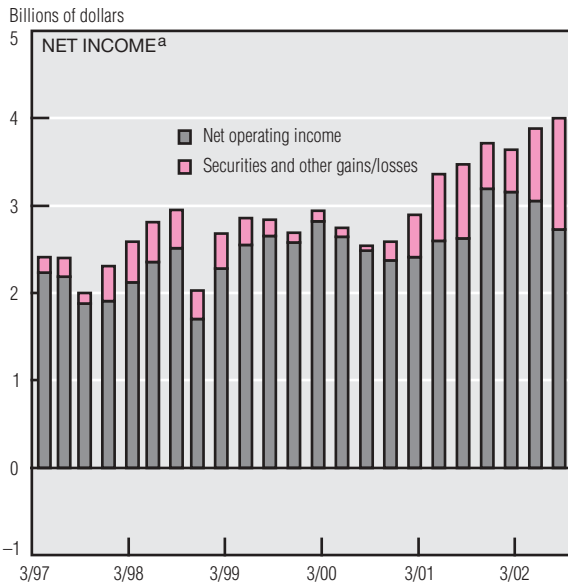
The Fourth District has a higher concentration of manufacturing

employment than does the rest of the country; in 2000 (last data available), roughly 16% of the District's jobs were derived from manufacturing, compared with 12% for the U.S. as a whole. Consequently, one might expect that manufacturing employment in Fourth District states would decline more steeply than the nation during recessions. This has not been true for Ohio, Kentucky, and Pennsylvania in the most recent recession. In these states, manufacturing employment losses at the

close of 2000 were smaller than the roughly 10% drop in the nation.

Each state had several two-digit sub-industries that fared better than its manufacturing industry as a whole. Employment in both paper and non-farm food production have done well in all three states; in both Kentucky and Pennsylvania, employment in food manufacturing has increased from December 2000 levels.

# Savings Institutions



NOTE: Observations for 2002 are third-quarter annualized data.  
 a. Net income equals net operating income plus securities and other gains and losses.  
 SOURCE: Federal Deposit Insurance Corporation, *Quarterly Banking Profile*, various issues.

FDIC-insured saving institutions reported net income of \$3.97 billion for 2002:IIIQ, which was \$511 million (14.8%) higher than a year earlier. Compared to the previous quarter, it increased by \$90 million. As in recent quarters, net income was buttressed by one-time gains in securities sales—to the tune of \$1.87 billion.

S&Ls' non-interest (fee) income decreased slightly from the previous quarter to \$2.5 billion and was 14.7% lower than the third quarter a year

earlier. Total interest income in 2002:IIIQ was 12.9% lower than the same quarter of 2001. However, lower interest rates reduced the cost of borrowing faster than interest income, resulting in a 7.3% increase in net interest income.

Saving institutions' strong earnings performance is once again apparent in the net interest margin (calculated as interest plus dividends earned on interest-bearing assets minus interest paid to depositors and creditors; it is

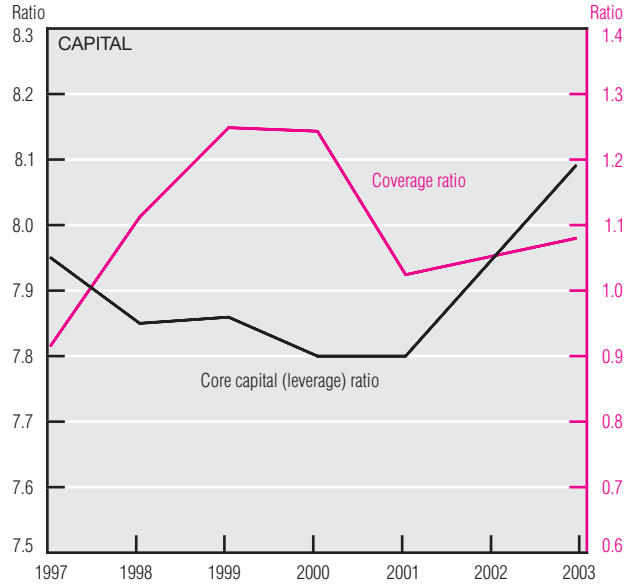
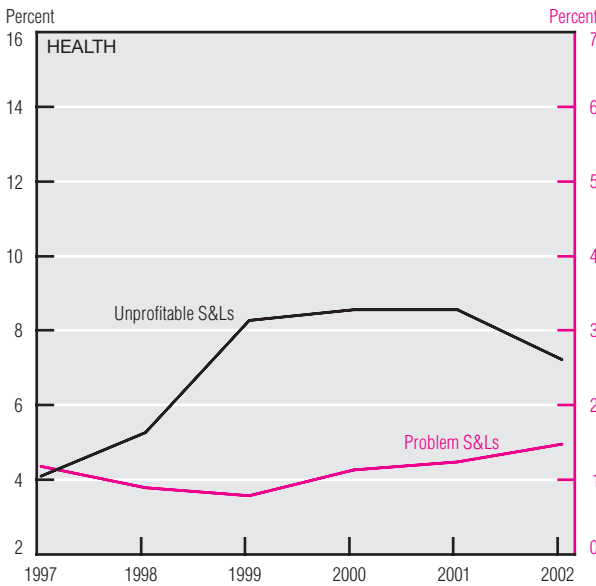
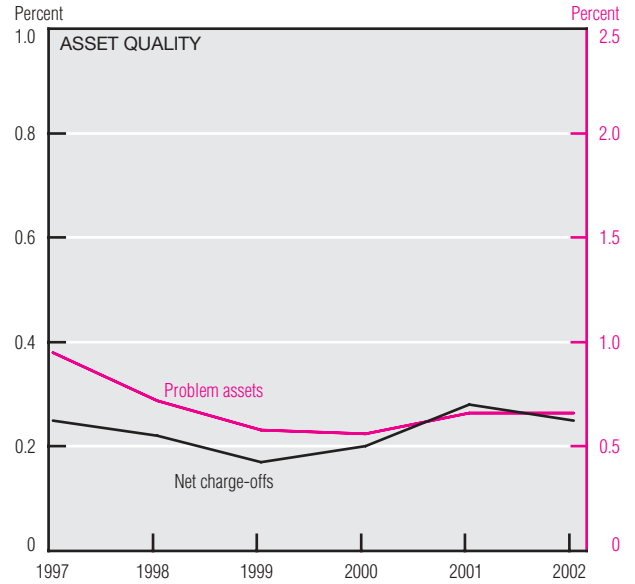
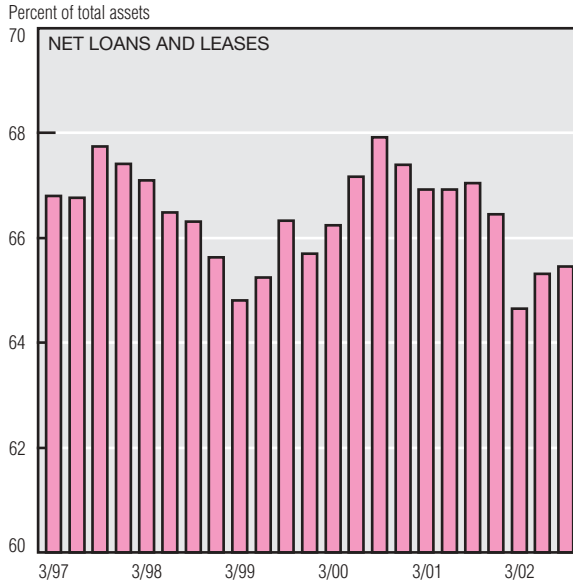
expressed as a percentage of average earning assets). During 2002:IIIQ, S&Ls' net interest margin declined only slightly to 3.48% from 3.52% in the second quarter, its highest level since 1993. This factor, coupled with a decline in asset growth to 3.87%, pushed S&Ls' return on assets to 12.2% and their return on equity to 13.19%.

In 2002:IIIQ, net loans and leases as a share of total assets increased to 65.4%. This is less than the recent

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# Savings Institutions (cont.)



NOTE: Observations for 2002 are third-quarter annualized data.  
 SOURCE: Federal Deposit Insurance Corporation, *Quarterly Banking Profile*, various issues.

high of 67.9% in 2000:IIIQ and indicates a continued decline in savings institutions' direct holdings of loans.

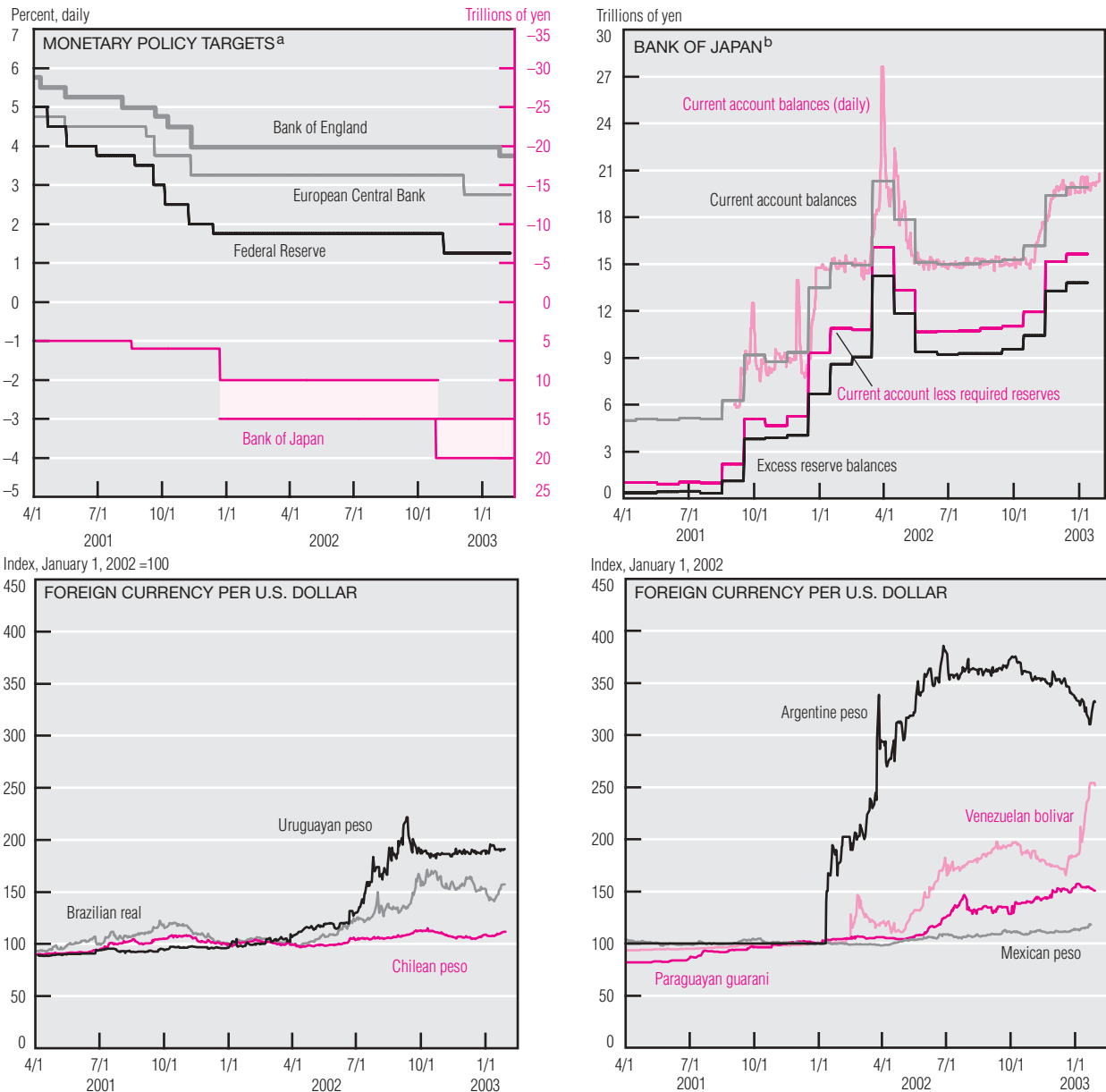
Asset quality improved slightly in the third quarter. Net charge-offs (gross charge-offs minus recoveries) improved slightly from the end of 2001. The ratio of net charge-offs to loans stood at 0.25%. Problem assets (non-current assets plus other real estate) made up 0.66% of total assets. This represented only a slight in-

crease in the problem asset ratio from 2002:IIQ and mirrors the results from 2001:IIIQ.

Problem S&Ls (those with substandard exam ratings) reached 1.48%, the highest level since 1997. However, asset quality is not a significant problem for FDIC-insured saving institutions, where the percent of unprofitable institutions is falling. The coverage ratio in 2002:IIIQ was \$1.08 in loan-loss reserves for every

dollar of non-current loans, up from \$1.02 at the end of 2001. The increase in the coverage ratio resulted from a \$687 million increase in loan loss reserves, which more than offset the \$239 million rise in non-current loans since the end of 2001. For 2002:IIIQ, core capital, which protects saving institutions against unexpected losses, increased to 8.09% from 7.77% in 2001.

# Foreign Central Banks



a. Federal Reserve: overnight interbank rate. Bank of Japan: a quantity of current account balances (since December 19, 2001, a range of the quantity of current account balances). Bank of England and European Central Bank: two-week repo rate.

b. Current account balances at the Bank of Japan are required and excess reserve balances at depository institutions subject to reserve requirements plus the balances of certain other financial institutions not subject to reserve requirements. Reserve requirements are satisfied on the basis of the average of a bank's daily balances at the Bank of Japan starting the sixteenth of one month and ending the fifteenth of the next.

SOURCES: Board of Governors of the Federal Reserve System; Bank of Japan; European Central Bank; Bank of England; and Bloomberg Financial Information Services.

The Bank of England reduced its policy rate by 25 basis points to 3.75% on February 6. Its Monetary Policy Committee said the cut was necessary to keep inflation on track, given weaker-than-anticipated demand both globally and domestically. The quantity-setting Bank of Japan has been supplying slightly more than ¥20 trillion in current account balances, the upper end of its target range for the past three months. The Bank has added about ¥15 trillion to the level of current account balances over the past two years, whereas required reserves have grown by less than half a trillion.

In the Americas, several currencies have depreciated sharply in recent months. The Venezuelan bolivar has lost about 30% of its value since the onset of a widespread national strike on December 2, 2002. In late January, the central bank suspended foreign currency trading for a week in response to declining foreign exchange reserves. Since then, the nation's president has announced the imposition of exchange controls, now in the process of being formulated.

Brazil's real has depreciated somewhat, despite the country's smooth transition to a new administration.

The central bank raised its policy rate 50 basis points in mid-January but decided to accept most of the immediate impacts of last year's depreciation on the 2003 inflation rate. Argentina's peso depreciated sharply at the end of January, even though the country's new credit agreement with the International Monetary Fund averted imminent default. For both of these currencies (as well as the Mexican peso), depreciation is said to be partly a response to an increasing likelihood of U.S. military action in the Middle East.