

## *The Economy in Perspective*

*Connecting the dots...* Economic policymakers can sympathize with the national security analysts who are criticized for not putting together the pieces that seem—after the fact—to have formed an unmistakable picture. After all, critics ask, if an intelligence agency can't see the whole picture, who can? And if policymakers can't fill in the blanks, then what?

But predicting the future is just plain difficult, so many professional analysts don't look only at the single most likely event, they construct several scenarios and weigh the probability of each. Financial corporations rely heavily on risk management techniques to estimate their exposures from various events and design strategies to mitigate their losses in any eventuality. So do national security and economic policy analysts. To use risk management techniques successfully, they need the imagination to envision many possible outcomes, the willingness to incur costs to cover the undesirable ones, and the flexibility to adjust strategy when conditions change.

Now consider current economic conditions in the U.S. Some observers consider them far weaker than expected, and abandon hope of even a moderate recovery. Others think conditions are reasonably sound and gradually brightening. Everyone recognizes that future economic growth would be compromised by a war with Iraq, renewed terrorist attacks, or both. How does the U.S. economy accommodate these diverse opinions, and how do policymakers set their course?

The disappointed camp points to weak corporate profits, dismal stock market performance, moribund capital spending, declining goods prices, rising oil prices, stagnant labor markets, and dormant export sales. Because of these conditions and the prospect of military action, many unhappy campers advocate tax cuts and/or easier monetary policy to stimulate the economy.

The upbeat camp emphasizes record auto sales, a buoyant housing market, and strong productivity growth. Just as important are labor markets' restabilization—a lagging cyclical indicator—and signs that spending on capital equipment and software is picking up. They expect the mix of activity to shift

away from consumers and toward business investment as the economy consolidates its gains in the year ahead. These happier campers regard fiscal policy as stimulating and monetary policy as accommodative to economic expansion.

Financial markets digest these disparate viewpoints and reflect their net effect through prices, volume, quality spreads, and write-offs. Demand for U.S. Treasury instruments—especially short-term securities—has strengthened in the past six months as sagging confidence boosted the premium investors were willing to pay for claims in the world's safest and most liquid financial markets. Private debt issuers have been forced to offer higher yields to float their paper; even so, the reception has often been tepid. Bond defaults are rising, as are loan-loss charge-offs at commercial banks. The volatility index of the S&P 500 stocks stands at record levels, showing wide swings of opinion about corporate valuations, and new issuance remains dormant. Cash is king.

For economic policymakers, the key issue is the likelihood that expansion can continue under these circumstances. Fortunately, policymakers who wish to see the big picture are aided powerfully by the markets, which have an enormous, gyroscopic capacity to rebalance economic activity after turbulence. By absorbing and retransmitting millions of individual corporate and household decisions, market economies channel resources toward their highest-valued use. So the fixed-investment famine has become the consumers' feast. Liquidity sloshing around in financial markets, looking for safe harbors, has been washing up on households' shores, financing homes and cars.

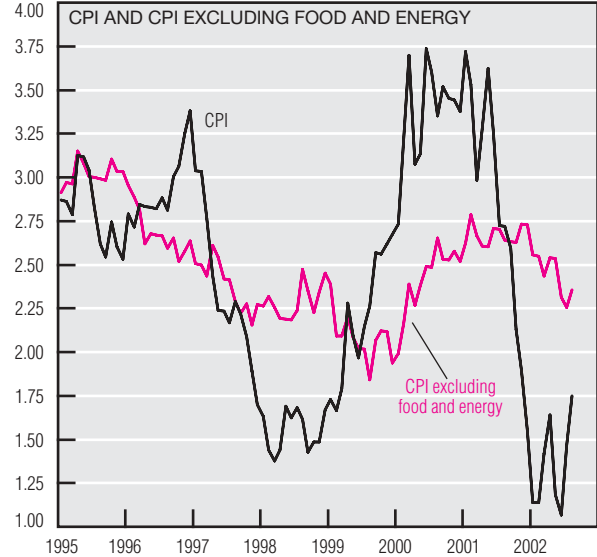
The Federal Open Market Committee's self-described accommodative monetary policy stance has been supporting the public's demand for cash and liquid assets at near-zero real interest rates. The question now is whether even lower nominal rates would be salutary. As the debate ensues, policymakers should draw comfort from knowing that while they are busy connecting the dots, market forces are hard at work piecing together the bigger picture.

# Inflation and Prices

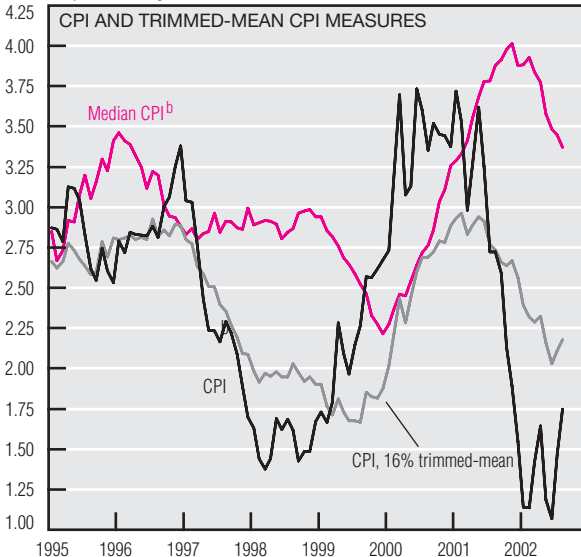
## August Price Statistics

	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	4.1	2.2	1.7	2.3	1.5
Less food and energy	3.8	2.1	2.4	2.4	2.7
Median <sup>b</sup>	3.3	3.1	3.4	3.1	3.9
<b>Producer prices</b>					
Finished goods	0.0	-0.3	-1.5	1.1	-1.7
Less food and energy	-1.6	-1.1	-0.3	1.0	0.9

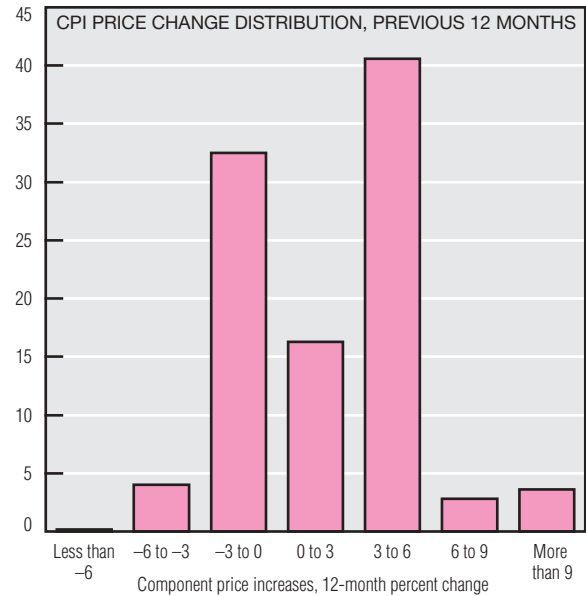
12-month percent change



12-month percent change



Percent of CPI items



a. Annualized.

b. Calculated by the Federal Reserve Bank of Cleveland.

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

After monthly increases of 0.1% in June and July, the Consumer Price Index rose 0.3% (4.1% annual rate) in August. The Labor Department reported that an outsized increase in apparel prices was partly responsible for the CPI's advance: After falling for the previous four months, apparel prices rose 1.1% in August. This, combined with price increases for tobacco and smoking products as well as larger increases than July's in energy and shelter prices, offset falling food prices. Overall, the CPI had its largest monthly increase in four

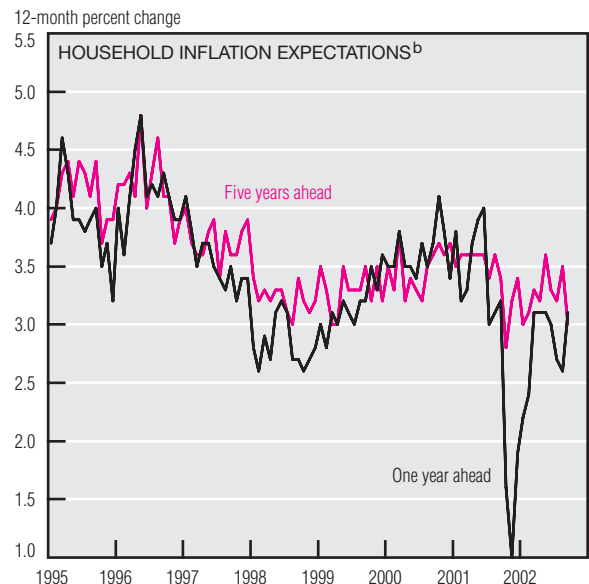
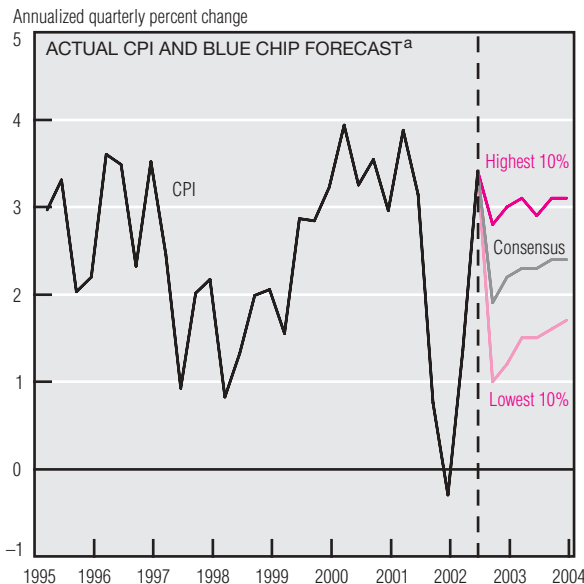
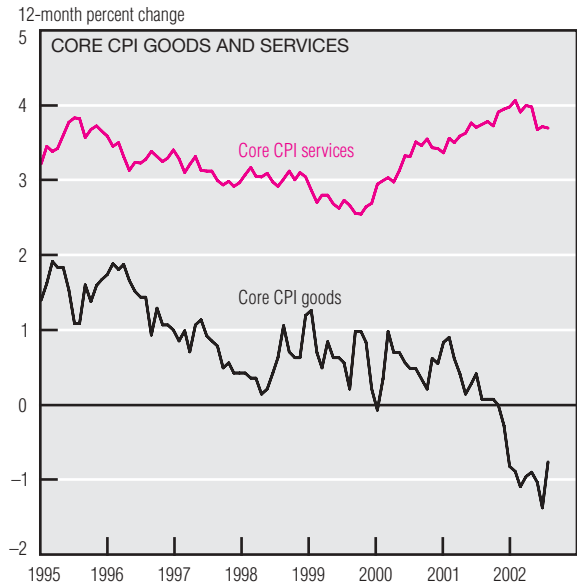
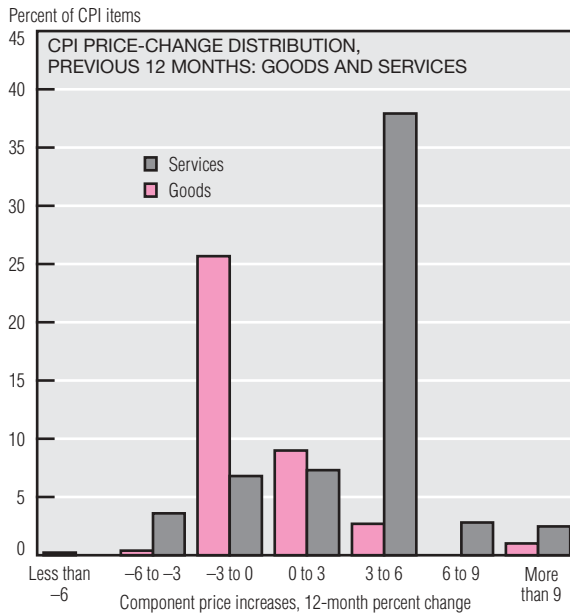
months. Over the last 12 months, the CPI has risen 1.7%.

Core measures of inflation, for the most part, also rose sharply in August. The CPI excluding food and energy went up 3.8% and the median CPI rose 3.3% (both annual rates); the 16% trimmed-mean CPI rose at an annual rate of almost 3%. Although the 12-month percent changes in the CPI's trimmed mean and the CPI less food and energy ticked up in August, the year-over-year changes in all of the core measures has been trending down since the beginning of this year.

Instead of scrutinizing every price change, we rely on central tendency measures to describe the distribution of prices in the economy. The CPI is the mean change in the price distribution; however, there are other central tendency measures, including core measures like the trimmed mean and the median. Each measure has advantages and disadvantages, depending on how the price data are distributed. For example, imagine that prices rose at a 3% rate for everything except food products, whose prices doubled because of bad

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## Inflation and Prices (cont.)



a. Blue Chip panel of economists.

b. Mean expected change in consumer prices as measured by the University of Michigan Survey of Consumers.

SOURCES: U.S. Department of Labor, Bureau of Labor Statistics; University of Michigan; and *Blue Chip Economic Indicators*, September 10, 2002.

weather. If we relied only on the mean, we might mistakenly believe that most prices in the economy rose more than 3%. But the mean need not be representative of any particular price change in the economy.

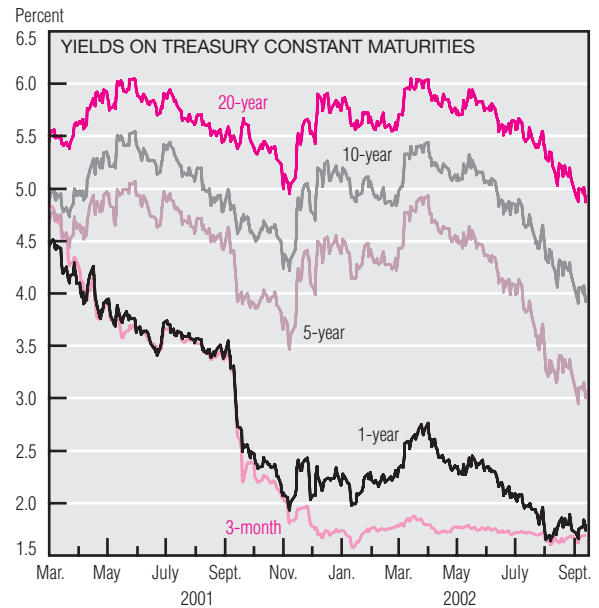
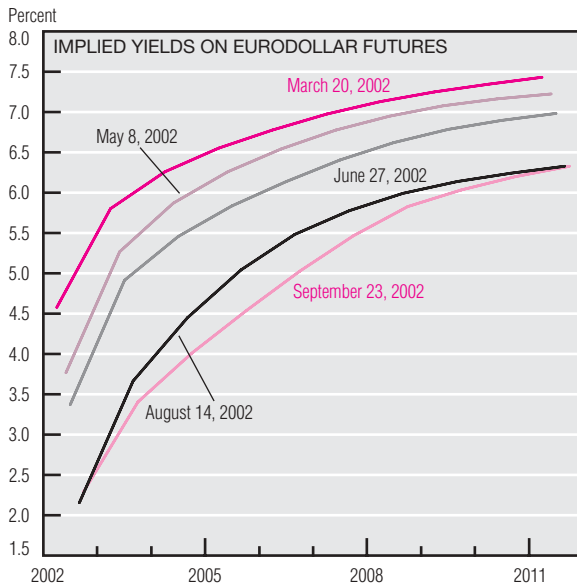
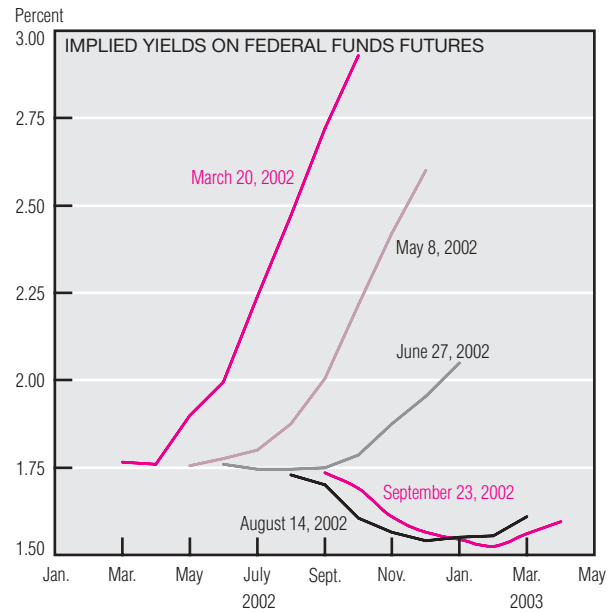
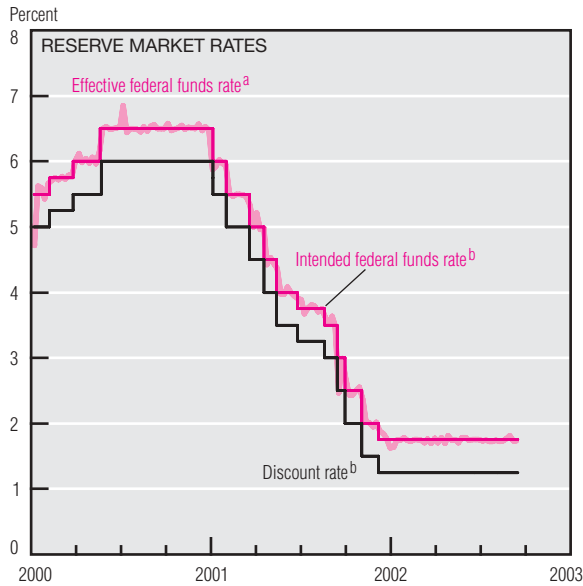
Indeed, the current distribution of the CPI's price changes for the last 12 months illustrates that the mean can sometimes conceal as much as it reveals. The mean of this distribution is 1.7%, but that is not the rate at which the largest share of prices is rising. Instead, the distribution has more components with price changes above the mean than below it, as

evidenced by the median (3.4%) and the trimmed mean (2.2%). Moreover, none of these measures truly captures the "two-peaked," or bimodal, nature of this distribution.

Such a distribution sometimes suggests that two different price-change processes are at work in the economy. If we split the changes into those for services and those for commodities, we see that there are, in fact, two overlapping price-change distributions. A look at a longer time series of data for CPI services and commodities suggests that these distributions have been diverging for several years.

Economists still expect inflation to accelerate very little in the foreseeable future, with most pessimistic professional forecasters expecting an inflation rate of about 3% through 2003. Economists' consensus expectation, by contrast, is that the inflation rate will settle in just below 2.5% by the end of next year. After about a year in which households' long-run inflation expectations persistently exceeded their short-run expectations, these measures have recently converged at around 3%, about equal to the inflation expectations of pessimistic professional forecasters.

# Monetary Policy



a. Weekly average of daily figures.

b. Daily observations.

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

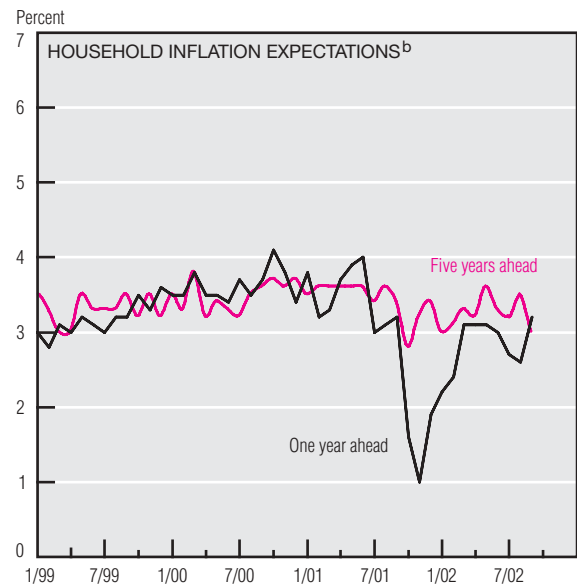
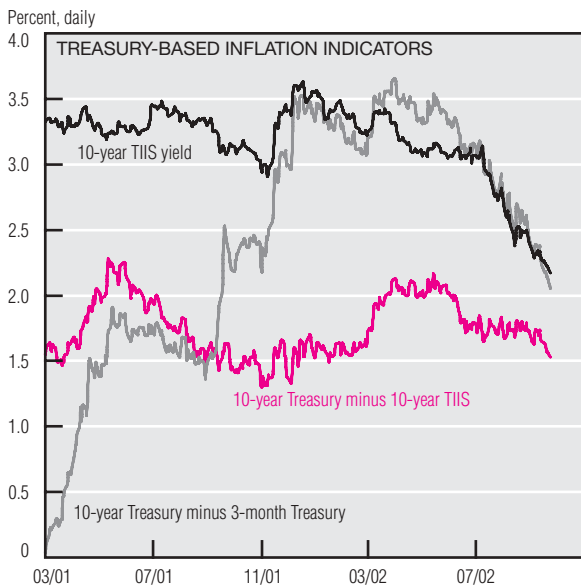
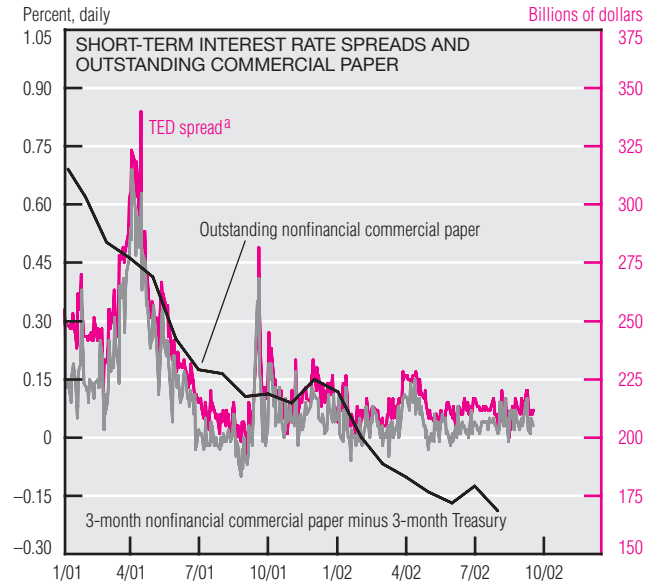
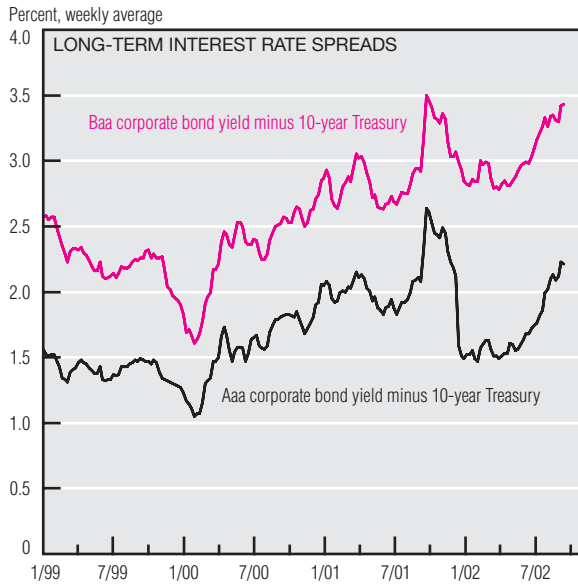
At its September 24 meeting, the Federal Open Market Committee (FOMC) left the federal funds rate target unchanged at 1.75%, citing "robust underlying productivity growth" as the basis for maintaining monetary policy's current stance. However, the Committee expressed concern over the extent and timing of the economic recovery, stating that "the risks are weighted mainly toward conditions that may generate economic weakness." The dissenters, Governor Gramlich and President McTeer, preferred reducing the federal funds rate target.

Implied yields on federal funds futures often are used to gauge market participants' expectations of monetary policy. By this measure, few expected the intended federal funds rate to change at the September meeting. However, current yields indicate that market participants estimate roughly a 90% probability of a 25 basis point (bp) rate cut by the end of February 2003. Eurodollar futures, too, can gauge expectations about federal funds rate changes and, unlike federal funds futures, can do so many years out. By September 23,

the implied yield on the September 2012 contract had reached 6.33%, 458 bp above the current target rate, but this represents a decline of 110 bp since the March FOMC meeting.

Treasury yields have continued to decline over the past several months for maturities of one year and longer, a sign that market participants have lowered their expectations of future inflation and/or real interest rates. Since March, the decrease in the yield curve for eurodollar futures 10 years out has resembled the decline in the 10-year Treasury bond yield.

# Money and Financial Markets



NOTE: All Treasuries shown are constant maturity.

a. Three-month rate on eurodollar deposits minus three-month Treasury bill yield.

b. Mean expected change in consumer prices as measured by the University of Michigan *Survey of Consumers*.

SOURCES: Board of Governors of the Federal Reserve System; Bloomberg Financial Information Services; and University of Michigan.

The spread between corporate and government interest rates typically rises during recessions and then declines when the recovery gets under way. Although many consider the recession to be over, long rate spreads have risen more than 50 basis points (bp) so far this year, despite a drop of about 50 bp in AAA- and BAA-rated corporate bonds. This decline, however, has been more than offset by the fall in the 10-year Treasury rate. On the other hand, the spread between

three-month commercial paper and the three-month Treasury bill has remained fairly flat in 2002 so far, with little movement in either rate.

One possible explanation for the drop in long rates is that the real interest rate has fallen. This explanation is confirmed by a fall in the 10-year Treasury inflation-indexed securities (TIIS) yield, which is a real interest rate.

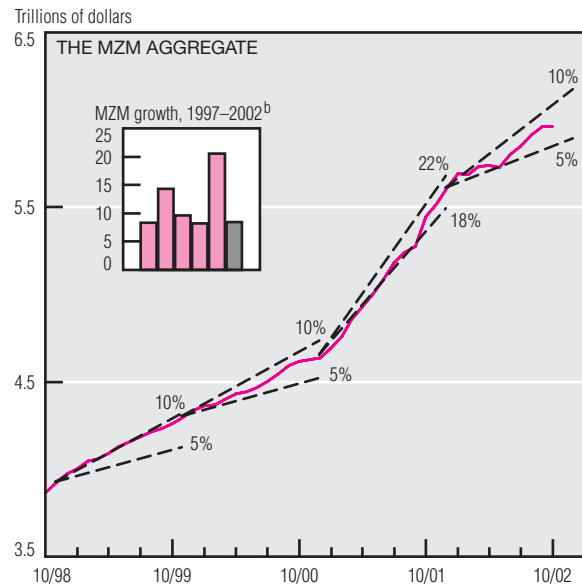
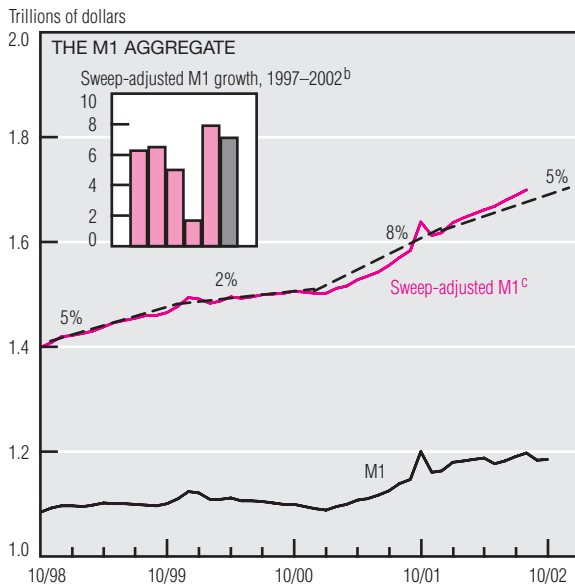
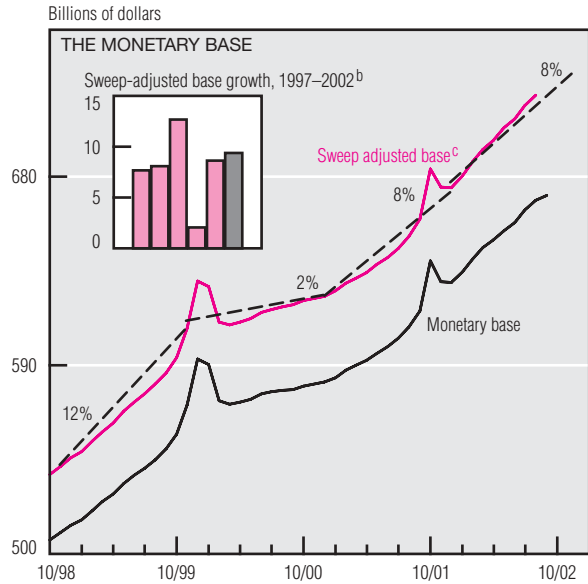
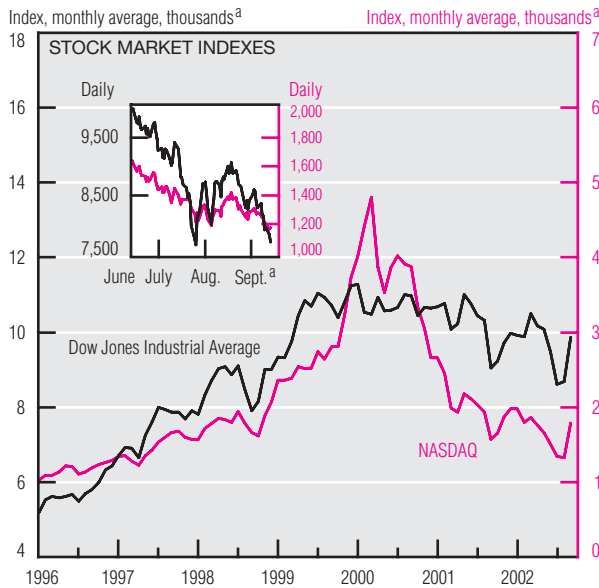
Alternatively, the fall in long rates could result from lower inflation expectations, but there is scant

support for this view. First, the spread between the 10-year Treasury rate and the 10-year TIIS yield, a fairly direct measure of the expected inflation rate for the next 10 years, has not changed much since the start of the year. Second, the University of Michigan survey of household inflation expectations shows little change at either the one- or the five-year horizon.

Stock prices have dropped in tandem with real interest rates, a surprising relationship at first glance

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## Money and Financial Markets (cont.)



a. Monthly average through September 24.

b. Growth rates are calculated on a fourth-quarter over fourth-quarter basis.

c. 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; and Bloomberg Financial Information Services.

because standard asset-pricing theory predicts that a stock's price should equal the present discounted value of its dividends. A fall in the real interest rate implies that future dividends will be less heavily discounted, which would increase stock prices. These prices would then be expected to increase more slowly because the return on holding stocks after adjusting for risk should roughly equal the return on bonds or the real interest rate. Most

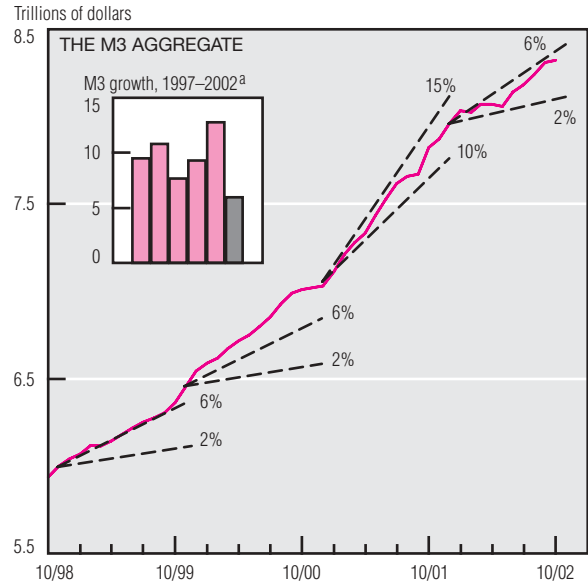
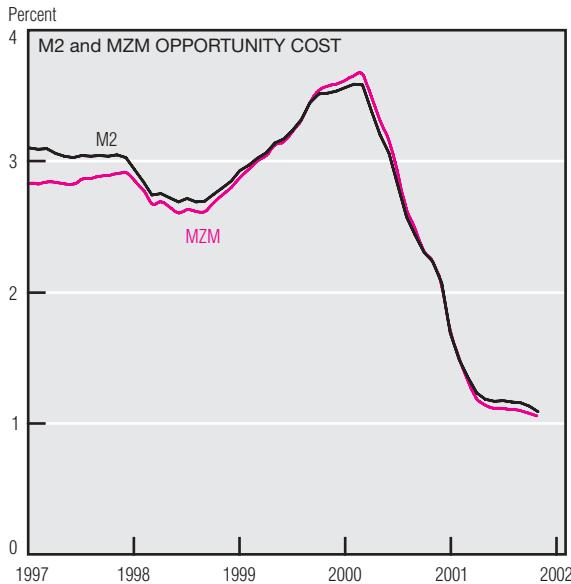
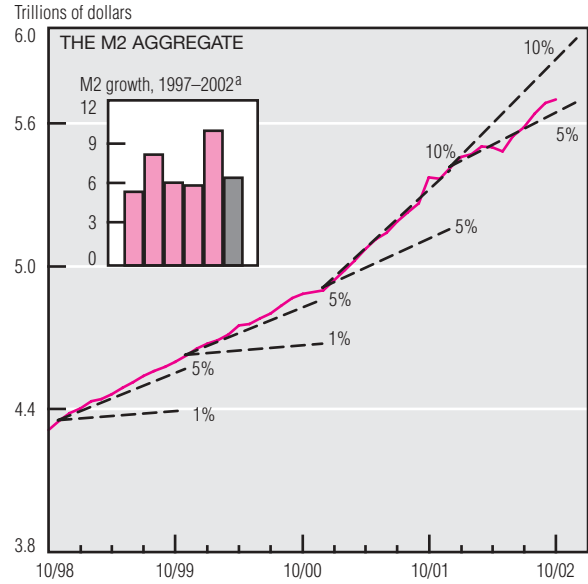
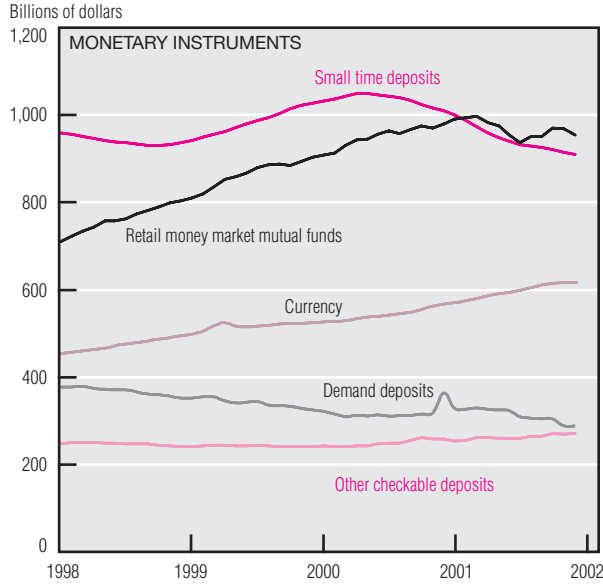
likely, the economy's continuing weakness, evidenced by the decline in the rate spread between the 10-year and the three-month Treasuries in 2002, has pushed down both real interest rates and stock prices. In September, the Dow Jones Industrial Average hit a four-year low, and the NASDAQ a six-year low.

The longer-term inflation outlook may also be gauged by the monetary aggregates, which present a mixed picture of future inflation. The

growth rates for the narrow aggregates, such as the sweep-adjusted base and sweep-adjusted M1, are roughly 1.5 percentage points above their five-year averages, and both exceed nominal income's current growth rate. The increase in M1 growth resulted from a 7.2% increase in currency (52% of M1) and a 5.9% increase in other checkable deposits, offsetting a 12% decline in demand deposits (24% of

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## Money and Financial Markets (cont.)



a. Growth rates are calculated on a fourth-quarter over fourth-quarter basis. Data are seasonally adjusted.  
SOURCE: Board of Governors of the Federal Reserve System.

M1). This strong growth suggests an upsurge in future inflation.

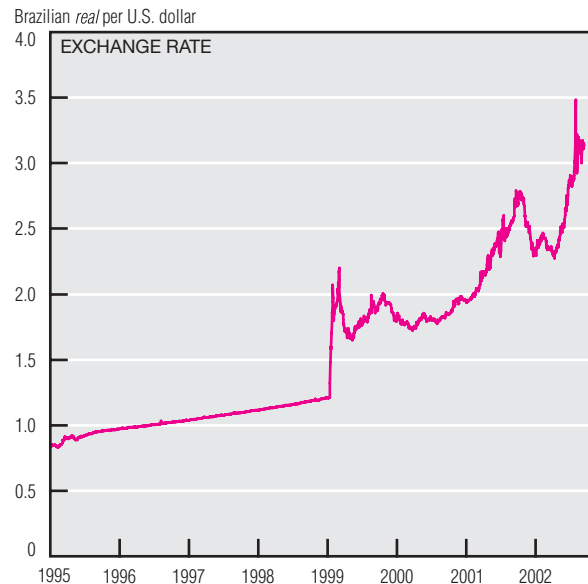
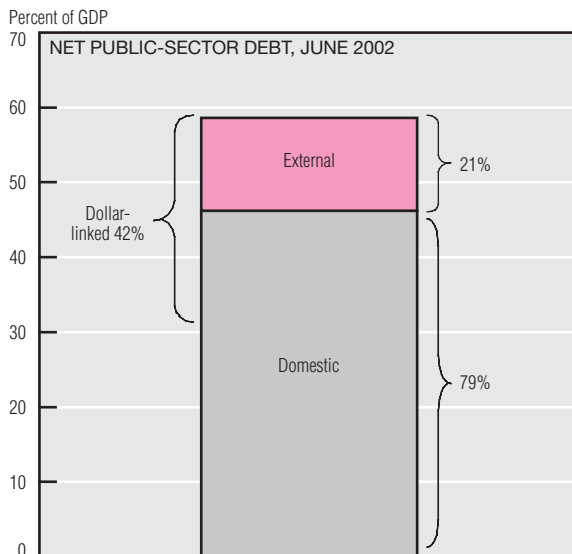
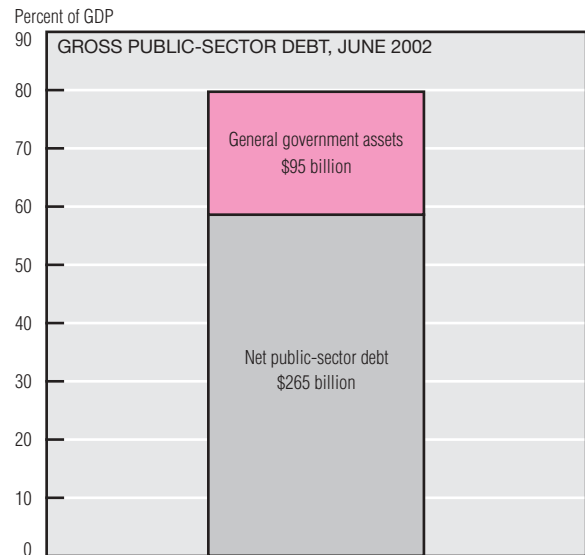
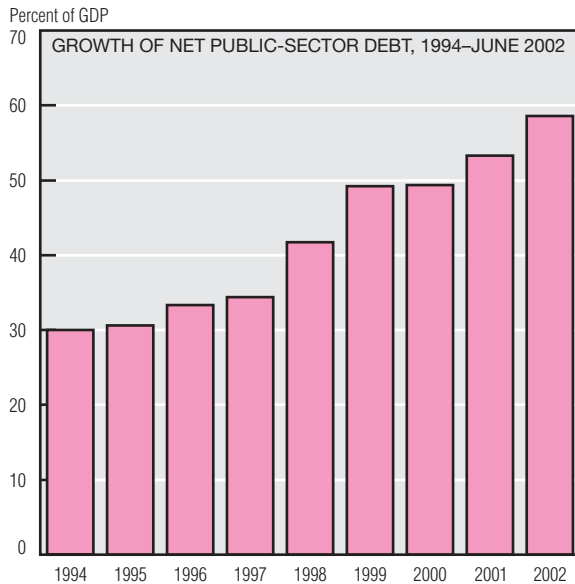
Money of zero maturity (MZM) has grown 8.5% so far this year. While this may seem robust, it is lower than the 20.5% growth of 2001. Recent strong growth reflects a drop in its opportunity cost (the difference between rates on three-month Treasury bills and the share-weighted rates of return on MZM's components). Historically, such pat-

terns of money growth have been portents of future inflation.

The broader M2 monetary aggregate has grown at more moderate rates, 10.3% in 2001 and an annualized 6.7% so far this year. This slower growth results from declines in retail money-market mutual funds (8%) and small time deposits (4%), which have more than offset the rise in M1 growth and savings deposits, the second of which has advanced 17%. As with MZM, the fall in M2

growth also reflects a drop in its opportunity cost, the return paid on M2 deposits. An even broader aggregate, M3, includes M2 plus large time deposits, eurodollars, and repurchase agreements. The M3 growth rate has been 5.95% so far this year, much the same rate as M2. Growth in the broader aggregates is more in line with that of nominal income, suggesting that inflation may not be a problem going forward.

## Brazil's Public-Sector Debt



SOURCES: International Monetary Fund; Ilan Goldfajn, "Are There Reasons to Doubt Fiscal Sustainability in Brazil?" Central Bank of Brazil, *Technical Notes 25* (July 2002); and John Williamson, "Is Brazil Next?" Institute for International Economics, *International Economics Policy Briefs*, no. PB 02-7.

Economic activity in South America remains weak. The immediate prospects depend largely on how Brazil, the region's biggest economy, manages its current public-sector debt problems. A Brazilian default could have major consequences for South America and repercussions for U.S. economic policies.

Brazil's net public-sector debt has burgeoned since 1995. At the end of June 2002, it equaled 58.6% of the country's GDP or roughly

\$265 billion (equivalent), of which foreign investors held approximately 21%. About 42% of Brazil's net public-sector debt is linked to the U.S. dollar, so that movements in the dollar's exchange rate against the Brazilian *real* directly affect the *real* value of the debt.

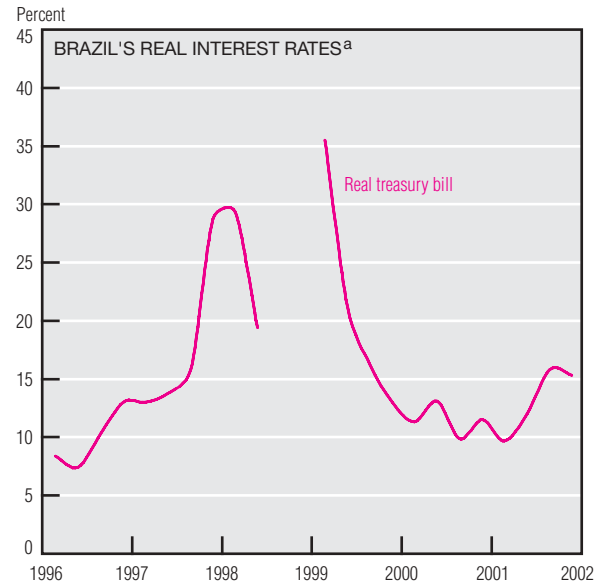
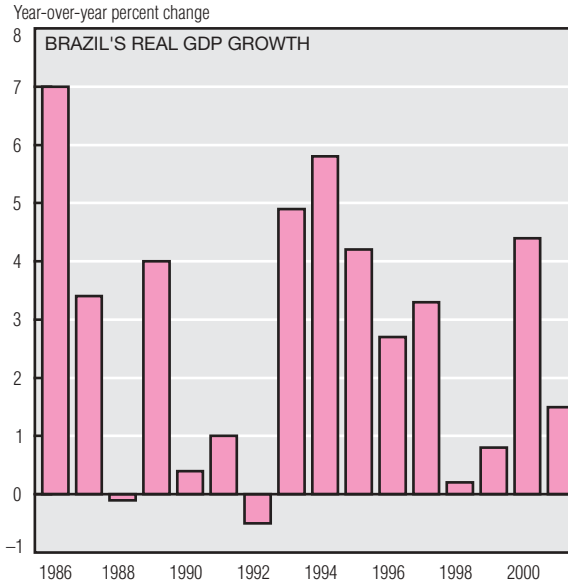
If the cost of servicing its debt outpaces its ability to raise revenue for that purpose, Brazil's debt-to-GDP ratio will continue to rise. Economists typically measure the

costs of servicing debt by a real (or inflation-adjusted) interest rate and use the nation's real GDP growth as a proxy for its ability to service debt. We do not know how real interest rates and Brazil's economic growth will evolve over the coming years, but we can measure the prospects for its debt-to-GDP ratio under a range of possibilities. In the calculations, these values represent 10-year averages, so the exercise permits some variation, provided that any

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## Brazil's Public-Sector Debt (cont.)



**Percentage-point Change in Brazil's Debt Ratio, 2002–2010**

Real interest rate	Real growth			
	2.0%	3.0%	3.5%	4.0%
9%	3.3	-2.8	-5.7	-8.4
10%	9.5	2.9	-0.2	-3.2
11%	16.2	9.0	5.7	2.5
12%	23.3	15.6	12.0	8.5
13%	30.9	22.6	18.7	15.0

**Stabilizing Percentage-point Change in Brazil's Primary Surplus, 2002–2010<sup>b</sup>**

Real interest rate	Real growth			
	2.0%	3.0%	3.5%	4.0%
9%	0.5	—	—	—
10%	1.5	0.4	—	—
11%	2.6	1.4	0.8	0.3
12%	3.9	2.5	1.9	1.3
13%	5.3	3.8	3.1	2.4

a. Data for the third and fourth quarters of 1998 are not available.

b. Annual average increase in the primary surplus-to-GDP ratio necessary to stabilize the debt-to-GDP ratio.

SOURCES: International Monetary Fund; Ilan Goldfajn, "Are There Reasons to Doubt Fiscal Sustainability in Brazil?" Central Bank of Brazil, *Technical Notes* 25 (July 2002); and John Williamson, "Is Brazil Next?" Institute for International Economics, *International Economics Policy Briefs*, no. PB 02-7.

deviations from these values are eventually offset.

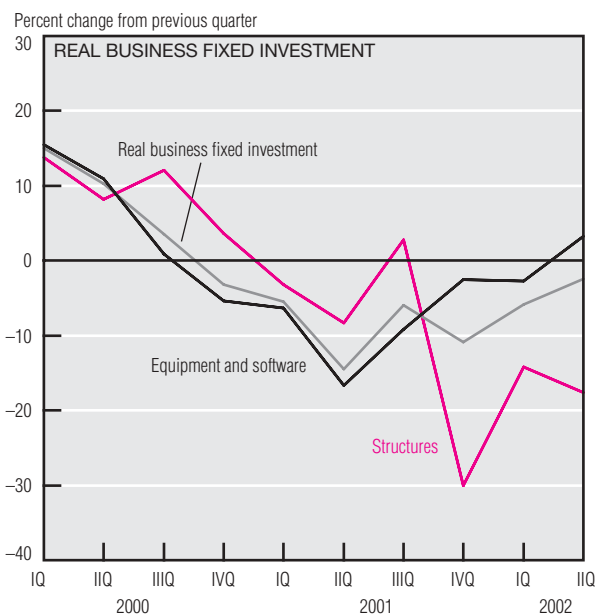
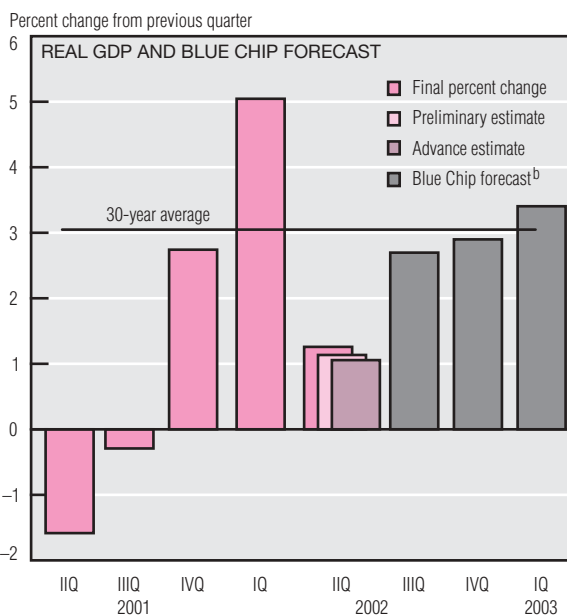
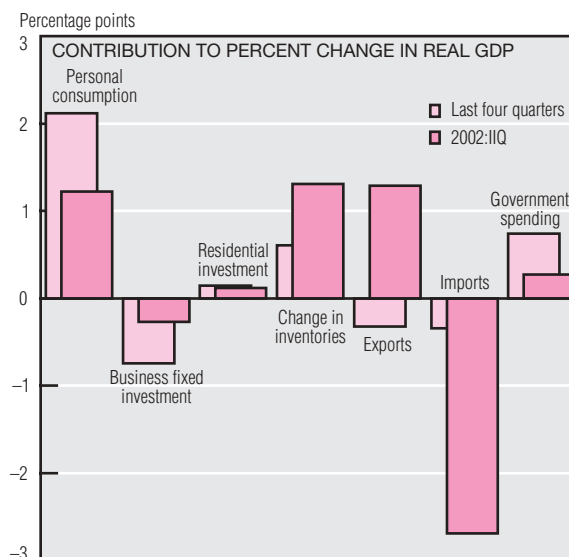
While the interest rate and GDP combinations in the table fall within the range of its past year-to-year experience, Brazil's GDP has grown only 2.7% per year on average since 1986, with a range of -0.5% in 1992 to 7.0% in 1986. Similarly, between 1996:1Q and 2001:4Q, the average annual real interest rate on Brazil's treasury bills equaled 15%, with a median value of 13%.

Our simple calculations suggest that Brazil must maintain a rate of economic growth consistent with that achieved in its relatively prosperous years. The key uncertainty is real interest rates. Interest rates in large part mirror investors' confidence, which depends partially on developments that Brazil can affect and partially on world events beyond Brazil's control. The recent \$30 billion IMF loan package may assuage investors' fears in the short run.

One adjustment that Brazil can undertake to avoid default is increasing its budget surplus by selling state-owned assets, raising taxes, or cutting public spending. Brazil currently has a primary surplus, consisting of its budget balance less interest payments, equal to 3.75% of its GDP. A higher primary surplus expands the range of real interest rates and economic growth that is consistent with a lower debt ratio. This is a hard task, but the alternative may be harder.

# Economic Activity

	Change, billions of 1996 \$	Percent change, last:	
		Quarter	Four quarters
Real GDP	29.2	1.3	2.2
Personal consumption	28.6	1.8	3.1
Durables	4.8	2.0	7.5
Nondurables	-0.5	-0.1	3.1
Services	24.0	2.7	2.1
Business fixed investment	-7.3	-2.4	-6.3
Equipment	7.7	3.3	-2.9
Structures	-11.5	-17.6	-15.6
Residential investment	2.5	2.7	3.2
Government spending	6.0	1.4	4.0
National defense	7.3	7.8	9.5
Net exports	-40.8	—	—
Exports	34.9	14.3	-3.0
Imports	75.8	22.2	2.6
Change in business inventories	33.8	—	—



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*, September 10, 2002.

According to the final estimate from the national income and product accounts, real gross domestic product (GDP) increased at a 1.3% annual rate in 2002:IIQ, substantially lower than its vigorous showing in 2002:IQ. Personal consumption expenditures rose a moderate 1.8%; this category alone contributed 1.2 percentage points to GDP growth. Exports and changes in inventories also contributed significantly to the second-quarter increase in real GDP. Exports increased almost \$35 billion (chained 1996 dollars). This reversed the trend

of the last four quarters and contributed 1.3 percentage points to real GDP growth. But import spending increased more than twice as much as export spending. Imports were the heaviest drag, subtracting 2.7 percentage points from GDP growth.

The final estimate of real GDP growth in 2002:IIQ barely surpassed the advance and preliminary estimates. However, Blue Chip forecasters do not expect real GDP growth to exceed its long-term average until 2003:IQ.

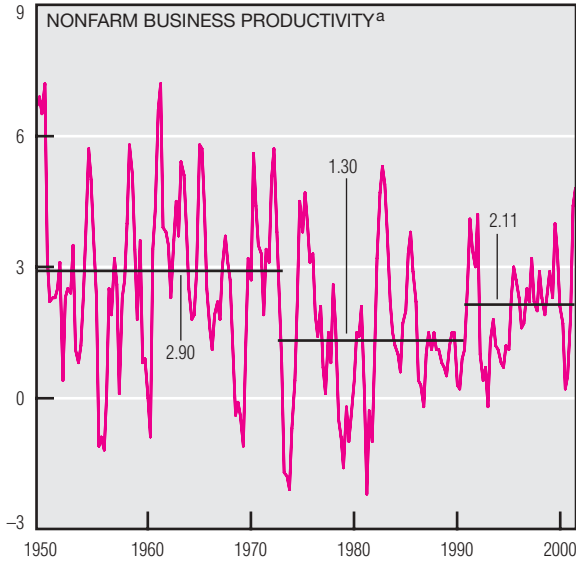
Spending on business fixed investment has shown signs of weakness

for nearly two years. This weakness is evident in its failure to post a quarterly gain since 2000. Some encouragement comes from spending on equipment and software (one of the major sub-indexes of business fixed investment); in 2002:IIQ, it showed an increase of 3.3% (annual rate), its first quarterly gain since 2000:IIIQ. In another favorable development, overall business fixed investment fell only 2.4% (annual rate) in 2002:IIQ, rather than the 6.3% decrease it posted over the last four quarters.

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# Economic Activity (cont.)

Percent change from previous year



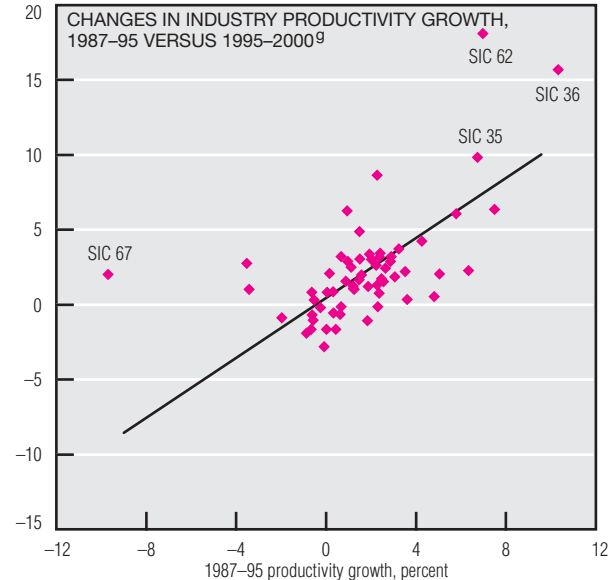
## Output, Hours, and Productivity during Recessions<sup>a,b</sup>

	Percent change, peak to trough:		
	Current recession	1990 recession	Average of last six recessions
<b>Nonfarm business sector</b>			
Output	-0.2	-2.1	-2.5
Hours	-2.4	-1.9	-3.1
Productivity	2.2	-0.3	0.7
<b>Manufacturing sector</b>			
Output	-4.4	-4.1	-6.5
Hours	-5.9	-3.7	-8.2
Productivity	1.6	-0.3	1.9
<b>Nonfinancial corporate sector</b>			
Output	1.2	-1.3	-2.7
Hours	-2.7	-2.4	-3.7
Productivity	4.0	1.2	1.0

## Contributions to Growth in Labor Productivity, Using Latest Data<sup>c</sup>

	1974-1990	1991-1995	1996-2001	Post-1995 change <sup>d</sup>
Growth of labor productivity <sup>e</sup>	1.36	1.54	2.25	0.89
Contributions from: <sup>f</sup>				
Capital deepening	0.77	0.52	1.17	0.40
Information technology capital	0.41	0.46	0.97	0.56
Computer hardware	0.23	0.19	0.50	0.27
Software	0.09	0.21	0.34	0.25
Communication equipment	0.09	0.05	0.13	0.04
Other capital	0.37	0.06	0.20	-0.17
Labor quality	0.22	0.45	0.25	0.03
Multifactor productivity	0.37	0.58	0.83	0.46
Semiconductors	0.08	0.13	0.42	0.34
Computer hardware	0.11	0.13	0.18	0.07
Software	0.04	0.09	0.09	0.05
Communication equipment	0.04	0.06	0.04	0.00
Other sectors	0.11	0.17	0.10	-0.01
Total IT contribution	0.68	0.87	1.70	1.02

1995–2000 productivity growth, percent



a. Data are seasonally adjusted.

b. Due to rounding, productivity change may not equal change in output minus change in hours. The current recession is assumed to have ended in 2001:IVQ.

c. Unpublished update to Stephen D. Oliner and Daniel E. Sichel, "Information Technology and Productivity: Where Are We Now and Where are We Going?" Federal Reserve Bank of Atlanta, Economic Review no. 87 (2002:IIIQ). Details may not sum to totals due to rounding.

d. Change equals the 1996–2001 period minus the 1974–90 period.

e. Nonfarm business sector. Measured as the average annual log difference for the years shown, multiplied by 100.

f. Percentage points per year.

g. The chart is reprinted from Kevin J. Stiroh, "Information Technology and the U.S. Productivity Revival: What Do the Industry Data Say?" Federal Reserve Bank of New York, December 2001. SIC numbers refer to the Standard Industrial Code.

SOURCES: U.S. Department of Commerce, Bureau of the Census; and U.S. Department of Labor, Bureau of Labor Statistics.

In the 1990s, productivity accelerated from the anemic 1.3% growth rate it posted for much of the 1970s and throughout the 1980s. Since 1991, productivity has increased at an average annual rate of 2.11%. But this is still less than productivity's average 2.9% advance before the slowdown of the mid-1970s.

Some worry that the past decade's strong productivity gains may prove ephemeral. Productivity has recently rebounded, but it slowed to a crawl, advancing only 0.2% between

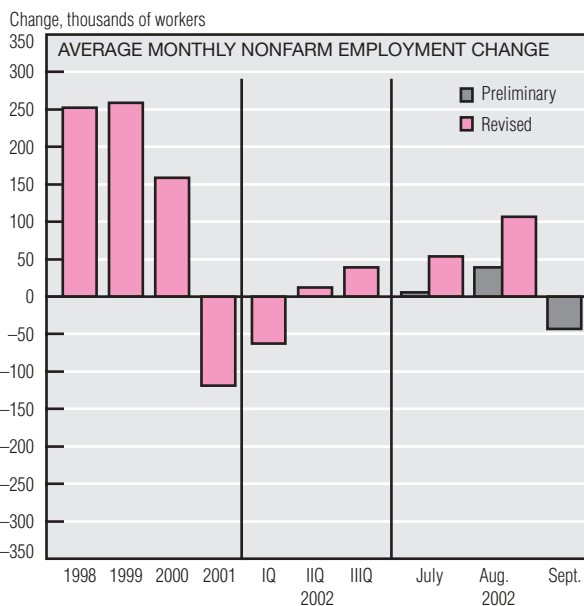
2000:IIQ and 2001:IIQ. Certainly, 0.2% is a slow growth rate, but it is robust considering that the economy slipped into a recession in March 2001. In fact, productivity held up far better during the latest recession than in earlier downturns.

Where does this strong productivity growth come from? Simply, it is the result of information technology, whose contribution to growth leaped from 0.68% in 1974–90 to 1.70% in 1996–2001. This increase of 1.02 percentage points exceeds the 0.89

percentage point increase in total labor productivity between the same two periods.

The IT revolution's responsibility for recent productivity gains explains the widespread belief that we have passed into a "new economy." Dis-senters from this view fear that strong productivity growth is concentrated in certain high-tech sectors, but this fear seems unwarranted because 38 of 61 industries showed an uptick in productivity between 1987–95 and 1995–2000.

# Labor Markets



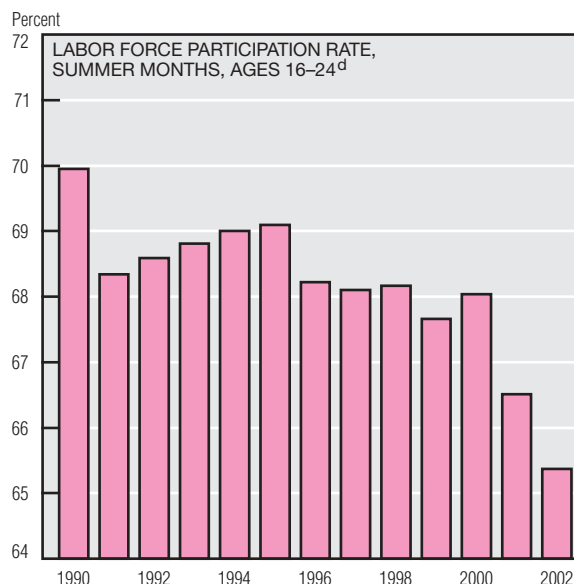
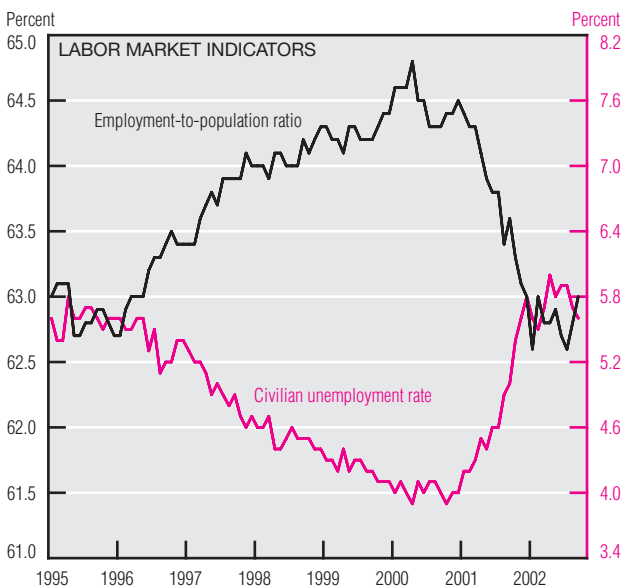
**Labor Market Conditions**

Average monthly change (thousands of employees)

	1999	2000	2001	Jan.-Aug. 2002	Sept. 2002
Payroll employment	259	159	-119	1	-43
Goods-producing	8	-1	-111	-59	-38
Mining	-3	1	1	-1	-2
Construction	26	8	-3	-10	-1
Manufacturing	-16	-11	-109	-48	-35
Durable goods	-5	1	-79	-36	-42
Nondurable goods	-11	-12	-30	-12	7
Service-producing	252	161	-8	60	-5
TPU <sup>a</sup>	19	17	-23	-12	-32
Wholesale and retail trade	60	25	-31	-7	-21
FIRE <sup>b</sup>	7	5	10	0	16
Services <sup>c</sup>	132	92	-2	59	28
Health services	9	15	27	23	21
Help supply	32	0	-54	18	2
Government	35	22	39	20	4

Average for period (percent)

	1999	2000	2001	Jan.-Aug. 2002	Sept. 2002
Civilian unemployment rate	4.2	4.0	4.8	5.8	5.6



NOTE: All data are seasonally adjusted, unless otherwise noted.  
 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. This is the average labor force participation rate for this age group for the months of April, May, June, and July.  
 SOURCE: U.S. Department of Labor, Bureau of Labor Statistics.

Preliminary September nonfarm employment figures show a decline of 43,000, but revisions to both July and August suggest much stronger growth than was initially thought.

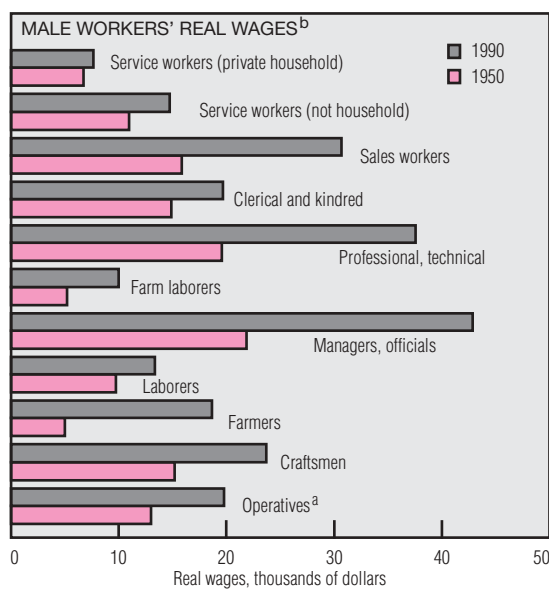
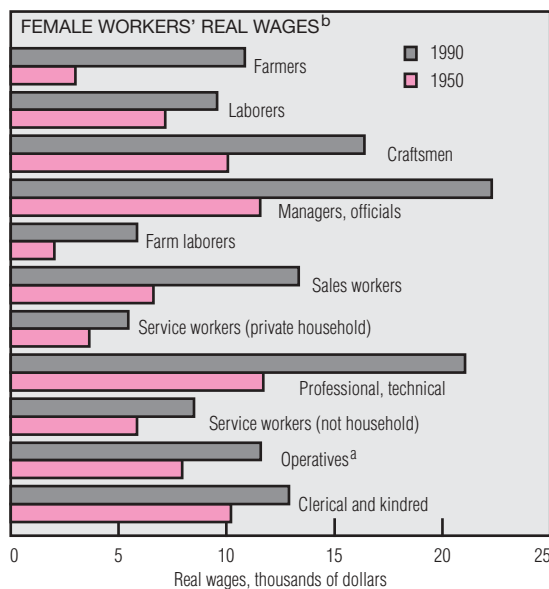
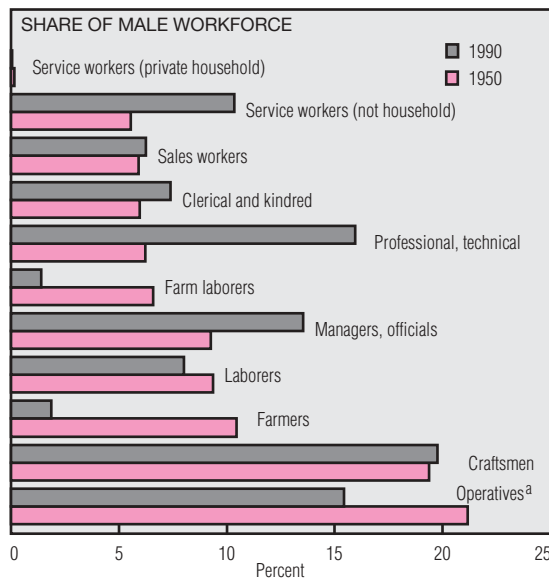
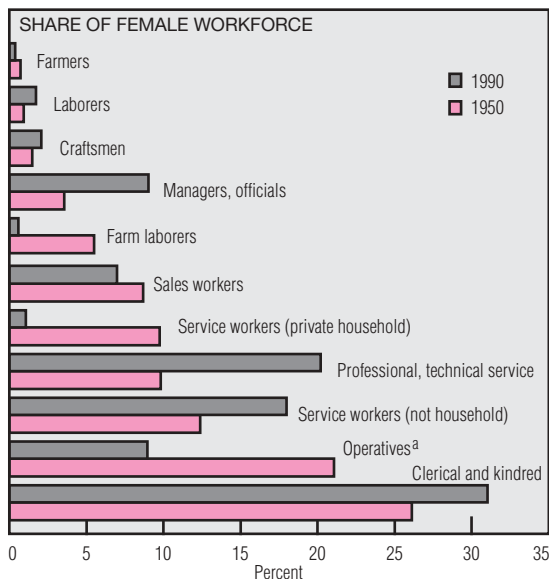
Job losses in September were not limited to goods producers service producers lost 5,000 jobs. The largest employment declines were concentrated in durable goods manufacturing (42,000), transportation (32,000), and wholesale and retail trade (21,000). Most of September's decline in transportation employ-

ment results from unusually high job losses in trucking (17,000). Nondurable goods manufacturing gained employment in September, as did services; finance, insurance, and real estate; and government. In fact, FIRE has not gained this many jobs in a single month (16,000) since May 2001.

The monthly unemployment rate inched down in September to 5.6%, its lowest level since February. Similarly, the employment-to-population ratio increased 0.2 percentage points to 63.0, its post-February high.

The Bureau of Labor Statistics reports specifically on employment and unemployment data for the summer months (April-July) for the 16-24 age group, an important part of the seasonal workforce. The summertime labor force participation rate for this age group has dropped almost 5 percentage points since 1990 to an average rate of 65.4% in 2002. BLS analysts suggest that higher summer school enrollment may be a proximate cause of this decline.

# Distribution of Occupations in 1950 and 1990



a. Includes bus drivers, taxi drivers, dressmakers, dyers, motormen, blasters, plumbers, sailors, welders, and so forth.  
 b. Real wages calculated using the CPI-U.  
 SOURCES: U.S. Department of Labor, Bureau of Labor Statistics; and the University of Minnesota's Population Center, Integrated Public Use Microdata Series.

The labor market has undergone fundamental changes since the middle of the last century. The most significant of these has been the shift away from factory jobs and manual labor to jobs that require more skill and perhaps have better working conditions.

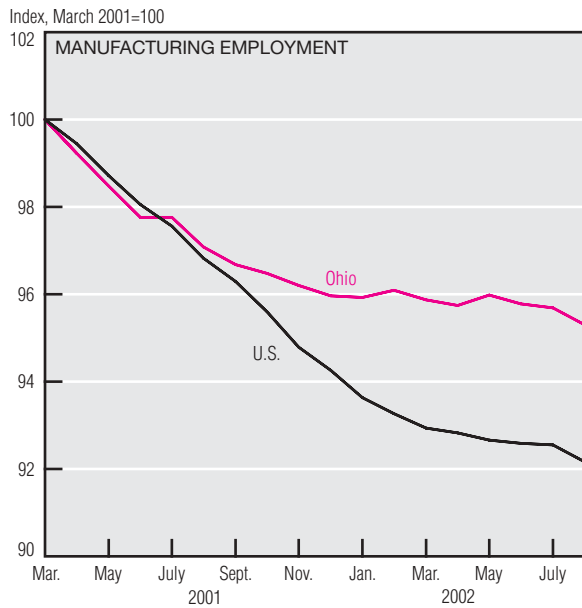
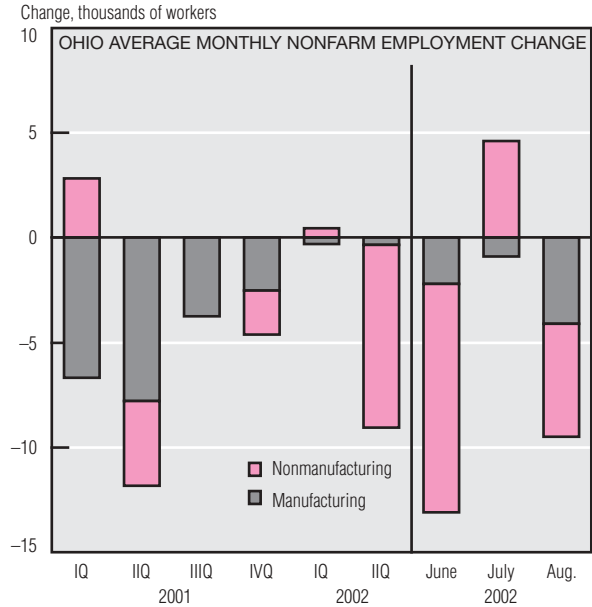
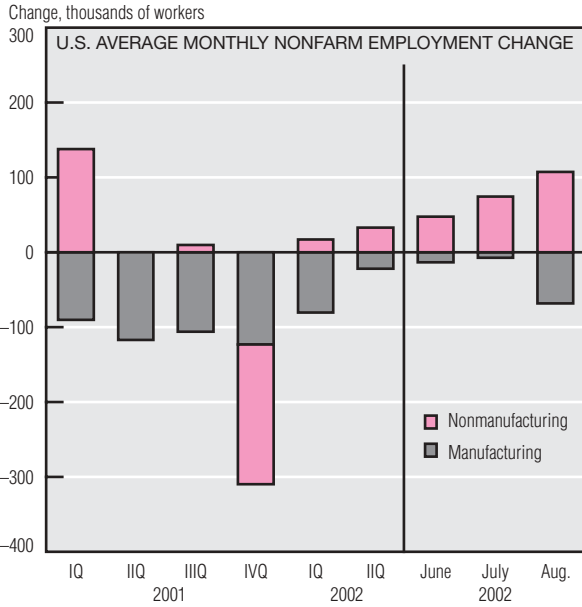
The occupational distribution of women in the workforce, shown with 1950's ranking for the share of working females in each occupation, indicates that clerical and kindred is still the largest category. In 1950, roughly 25% of all female workers were employed in this occupation; in 1990

(the most recent census year for which data have been released), that share had increased to nearly one-third. The largest declines occurred among operatives, service workers in private households, and farm laborers. In 1950, about 21% of all working women were categorized as operatives; by 1990, this figure had fallen to only 9%. A striking gain has been observed for female professional and technical workers, an occupation that grew from about 10% of the female workforce in 1950 to more than 20% in 1990, and is now the second-largest employer of women.

Males show a similar pattern of occupational shifts. In 1950, operatives formed the largest occupational group, accounting for more than 20% of all men employed. By 1990, just over 15% of the male workforce were employed as operatives, a smaller share than craftsmen (20%) and professional and technical (16%).

For both males and females, the largest wage gains outside the farming sector occurred in three occupations: managers and officials, professional and technical, and sales workers.

# Manufacturing Employment



**Ohio's Share of U.S. Manufacturing Losses**

	Percent	
	March 2001–December 2001	January 2002–August 2002
Total manufacturing	4.1	2.4
Durable goods	4.2	3.1
Fabricated metals	7.1	6.0
Industrial machinery	4.9	3.4
Electronic and electrical equipment	1.4	1.4
Transportation equipment	7.1	9.2
Nondurable goods	3.8	0.7
Food processing	15.6	-0.4
Printing and publishing	4.2	2.1
Chemicals and products	13.3	2.5

NOTE: All data are seasonally adjusted.  
 SOURCES: U.S. Department of Labor, Bureau of Labor Statistics; and Federal Reserve Bank of Cleveland calculations.

Manufacturing employment declined significantly during the most recent recession. From the recession's beginning in March 2001 until December 2001 (which many economists consider its end), U.S. manufacturing suffered a net loss of more than 1 million jobs, or 5.7% of all jobs that existed in the industry when the recession began.

Although employment in non-manufacturing industries has grown throughout 2002, manufacturing continues to register monthly losses. The nation's rate of job loss

in manufacturing seemed to slow in 2002:IQ, but preliminary figures suggest that it increased again in August, nearing the average monthly losses of 2002:IQ.

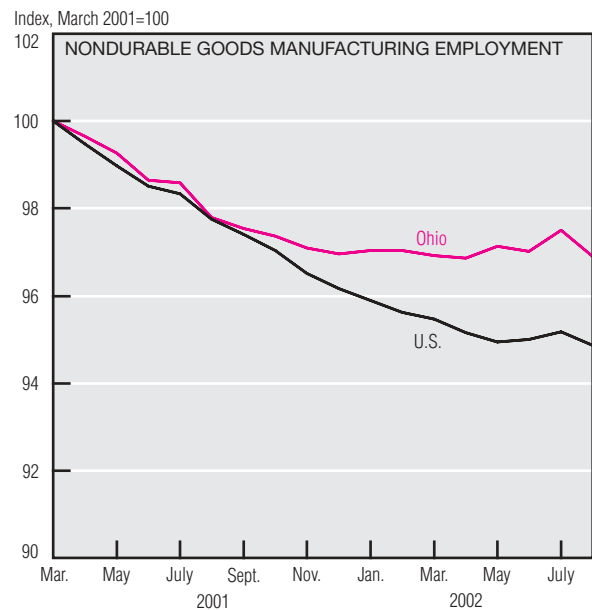
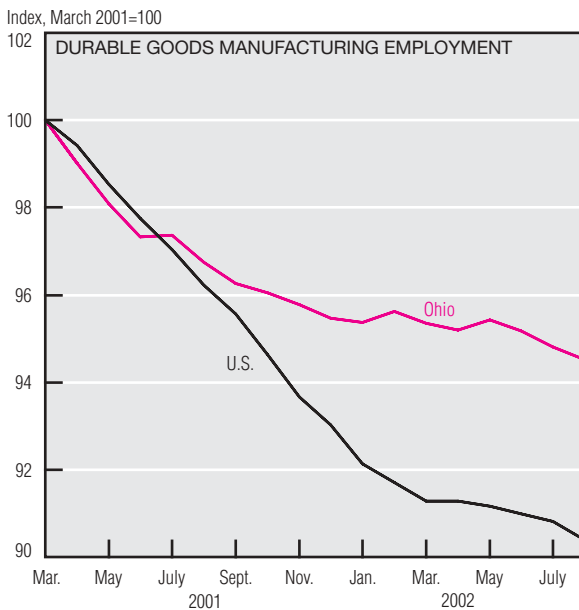
Ohio's manufacturing industry also has struggled, showing a net loss of almost 43,000 jobs from March to December 2001—roughly 4% of all manufacturing jobs that existed in Ohio when the recession started. Unlike the U.S. as a whole, however, Ohio's manufacturing employment losses began to moderate in 2001:IIIQ, before the recession

ended. In August 2002, however, Ohio's rate of losses worsened, and the state's monthly employment decline in manufacturing was the largest since September 2001.

In the first four months of the recession, the rate of manufacturing employment decline was higher in Ohio than in the U.S., but since July 2001, the U.S. rate of job loss has exceeded Ohio's. By November 2001, steep manufacturing declines had slowed in Ohio, but U.S. declines did not start to moderate until February 2002. Indeed, Ohio's share of the

*(continued on next page)*

## Manufacturing Employment (cont.)



**Percent Change in Manufacturing Employment (March–December 2001)<sup>a</sup>**

	U.S.	Ohio
Total manufacturing	-7.6	-5.4
Durable goods	-9.2	-6.0
Fabricated metals	-6.6	-5.6
Industrial machinery	-12.3	-8.6
Electronic and electrical equipment	-17.3	-6.0
Transportation equipment	-5.8	-5.3
Nondurable goods	-5.1	-4.0
Food processing	-0.7	-3.0
Printing and publishing	-6.8	-6.2
Chemicals and products	-1.9	-4.1

**Percent Change in Manufacturing Employment (January–August 2002)<sup>a</sup>**

	U.S.	Ohio
Total manufacturing	-2.3	-1.0
Durable goods	-2.8	-1.3
Fabricated metals	-1.0	-0.7
Industrial machinery	-4.5	-2.0
Electronic and electrical equipment	-6.9	-2.1
Transportation equipment	-1.2	-1.5
Nondurable goods	-1.6	-0.2
Food processing	-0.1	1.0
Printing and publishing	-3.4	-1.6
Chemicals and products	-0.6	-0.2

NOTE: All data are seasonally adjusted.

a. Annualized rate

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

nation's manufacturing job losses fell sharply with the onset of the recovery. With the exception of transportation equipment, Ohio's share of U.S. losses fell in manufacturing as a whole and in each of its major sub-industries. In fact, food processing added jobs from January to August 2002, reducing U.S. losses in that sub-industry by 0.4%.

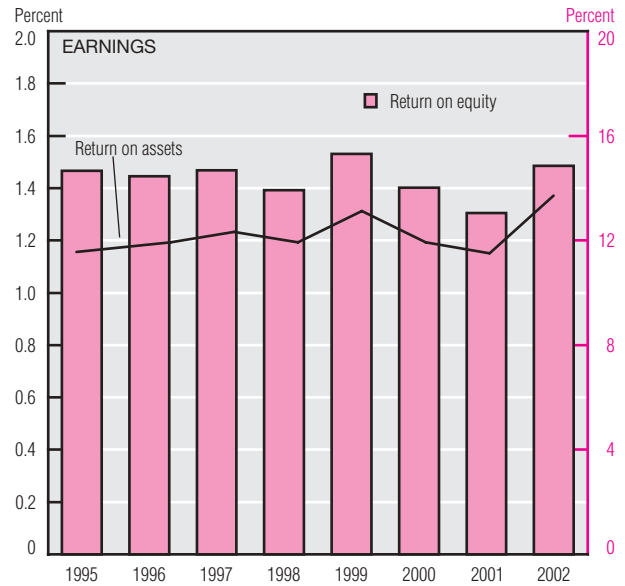
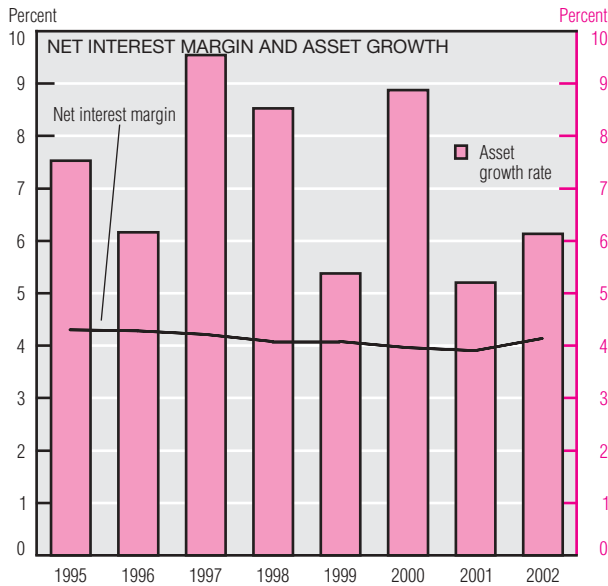
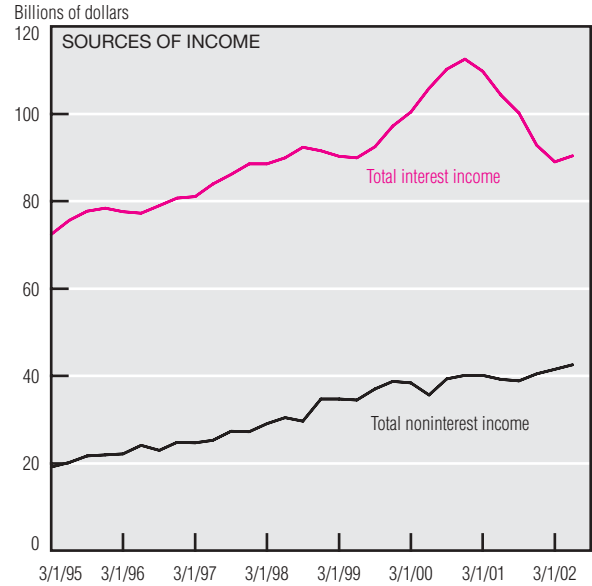
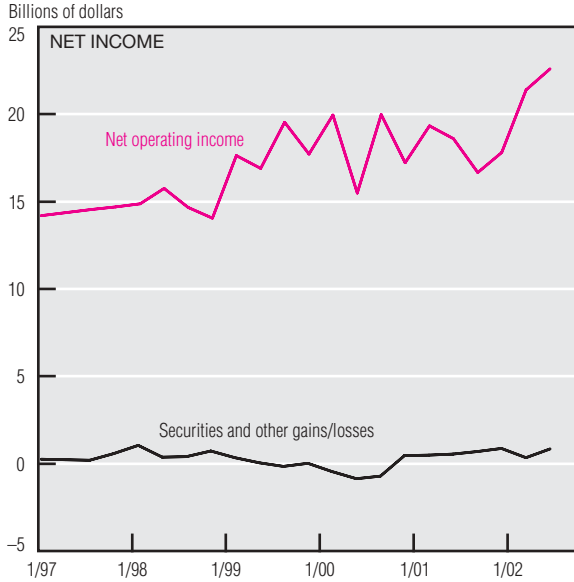
Trends in the manufacturing industry as a whole are closely mirrored in durable goods production, which creates more than 60% of U.S.

manufacturing employment (in Ohio, that figure is nearly 67%). Although Ohio's durable goods manufacturing posted net employment gains in both February and May 2002, these were offset by declines in March and June. Conditions for nondurable goods in Ohio have remained fairly steady since the recovery began; throughout 2002, employment has held near December 2001 levels.

Sub-industries' performance during the recession and the recovery further supports the point that

Ohio's manufacturing troubles in the most recent recession were less severe than those of the U.S. Even during the recession, most sub-industries fared better in Ohio than in the nation. Employment declines in food processing and chemicals and in allied products, however, were more severe in Ohio than in the nation as a whole. During the recovery, only one Ohio industry, transportation equipment, has had greater percentage declines than the nation as a whole.

# Commercial Banks



NOTE: Observation for 2002 is second-quarter annualized data.  
 SOURCE: Federal Deposit Insurance Corporation, *Quarterly Banking Profile*, various issues.

In 2002:IIQ, FDIC-insured depository institutions reported net income of \$23.4 billion, representing a 7.9% increase from the previous quarter. Strong demand for consumer loans offset weaker demand for commercial loans, producing an increase in net income.

Depository institutions' total interest income increased slightly to \$90 billion in 2002:IIQ, the first improvement in interest income since 2000. However, total noninterest income

was 8.6% higher than in the same quarter a year ago, another sign that the earnings pressures that tormented banks in the second and third quarters of 2001 are finally abating.

Commercial banks' strong earnings performance is once again apparent in the net interest margin. Net interest is equal to interest plus dividends earned on interest-bearing assets minus interest paid to depositors and creditors. In 2002:IIQ, the net interest margin, which is

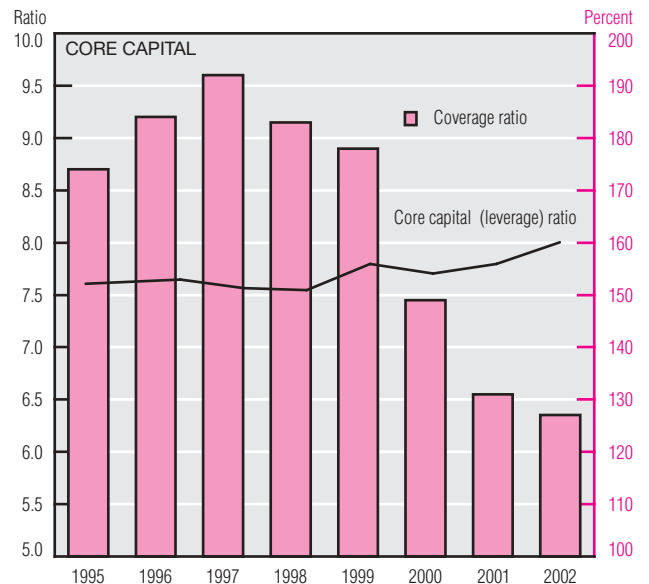
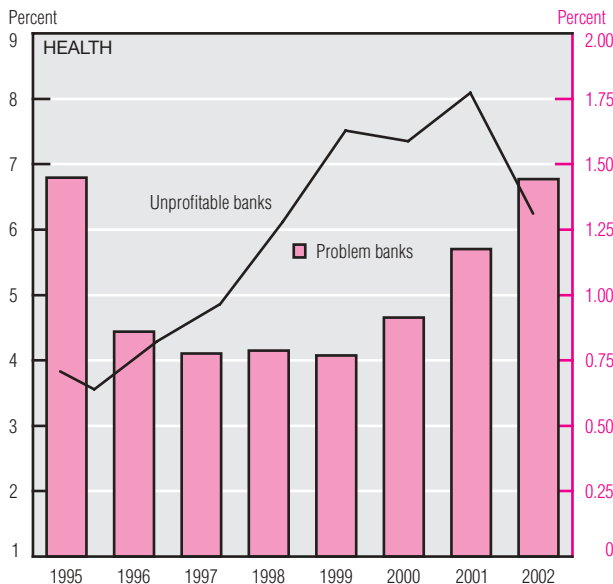
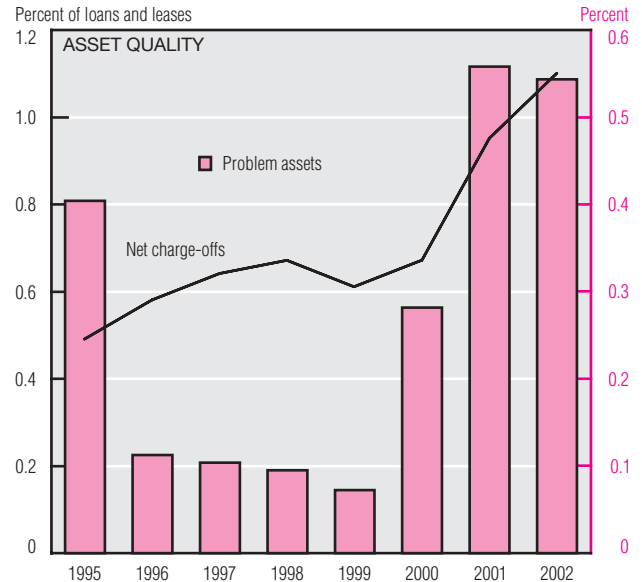
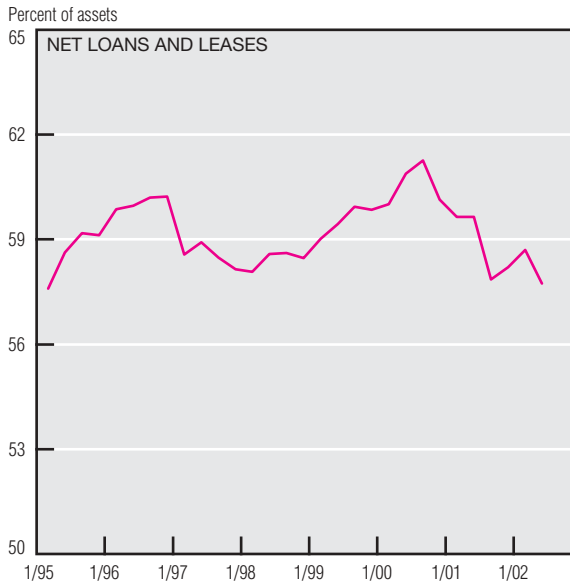
net interest expressed as a percentage of average earning assets, rose to 4.13%, its highest level since 1997. This rise offset depository institutions' asset growth of 6.13%, pushing their return on assets to 1.37%, which matched the all-time high reached in 1999:IIIQ. Second-quarter return on equity, 14.85%, was also at its highest level since 1999.

Net loans and leases as a share of total assets decreased from 58.7% in 2002:IQ to 57.7% in 2002:IIQ. Net

(continued on next page)



## Commercial Banks (cont.)



NOTE: Observations for 2002 are second-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.

loans and leases grew 2.1%, but total assets grew 3.8%, resulting in a slight drop in the ratio from the first quarter to the second. Although the ratio was well below its recent high of 61.3% in 2000:IIIQ, lending was brisk during the second quarter, partly because of refinancing activity spurred by low interest rates.

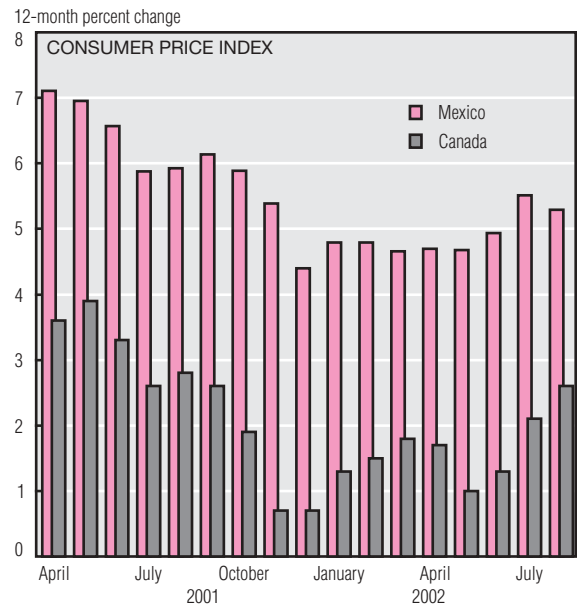
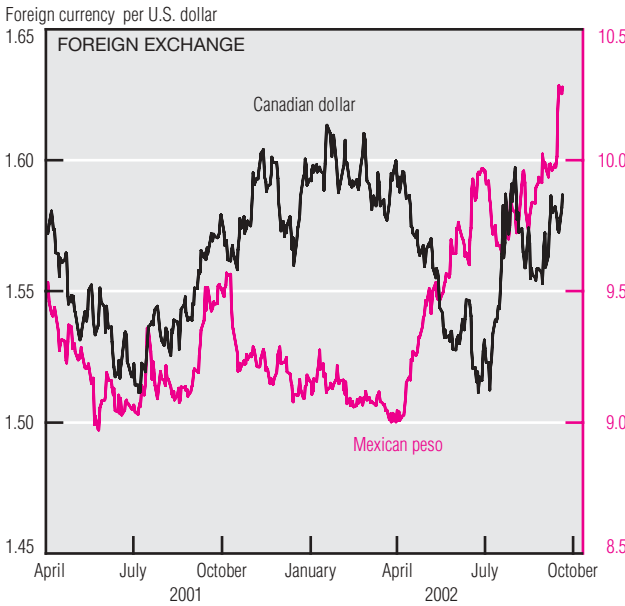
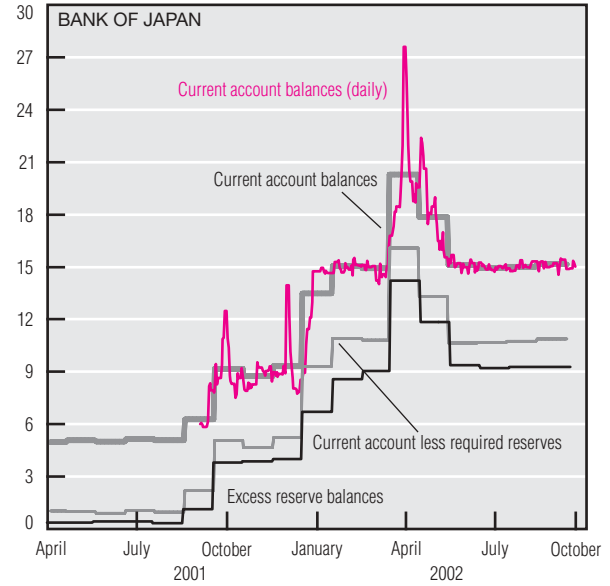
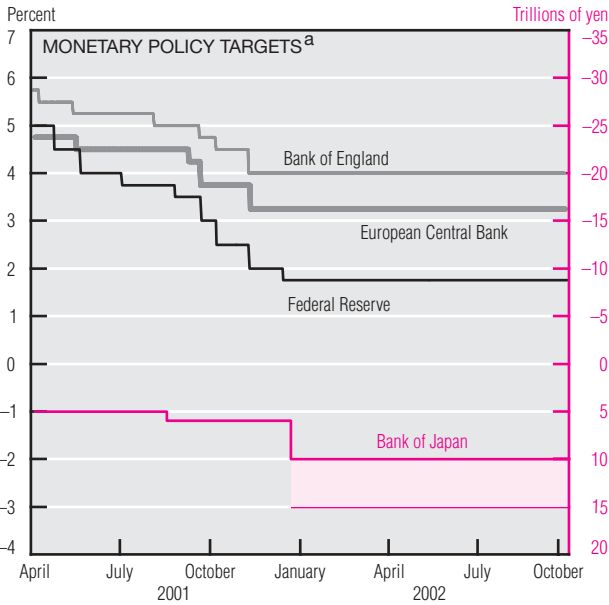
Asset quality gave mixed signals in the second quarter. Net charge-offs (total noncollectable loans and leases removed from balance sheet,

minus recoveries), which have been rising since 1999, stood at \$10.6 billion or about 1.1% of depository institutions' commercial and industrial loans. However, problem assets (nonperforming loans and repossessed real estate) as a share of loans and leases fell slightly to 0.54%, its first decrease since 1998.

Problem banks (those with substandard exam ratings) reached 1.44%, the highest level since 1995. However, declining asset quality is

not a significant problem for FDIC-insured depository institutions, where the percent of unprofitable institutions is falling and currently stands at 6.24%. The coverage ratio (prudential reserves as a share of noncurrent loans and leases) fell to 127%. Core capital, which protects depository institutions against unexpected losses, is at 8%, its highest recorded level, up from 7.89% in 2001. Most of these performance indicators point to a strong banking sector.

# Foreign Central Banks



a. Federal Reserve and Bank of Japan: overnight interbank rates (since March 19, 2001, the Bank of Japan has targeted a quantity of current account balances; since December 19, 2001, it has targeted the range of a quantity of current account balances). Bank of England and European Central Bank: two-week repo rate. SOURCES: Board of Governors of the Federal Reserve System; Bank of Japan; European Central Bank; Bank of England; Bank of Canada; and Bloomberg Financial Information Services.

None of the four major central banks changed its policy setting over the past month, although all acknowledge a potential for weakness in the global outlook.

The Bank of Japan has maintained its steady pattern of supplying about ¥15 trillion in current operating balances. Without intending to alter that policy position, it is considering a program to reduce what it views as the potentially destabilizing influence of stock market volatility on the banking system. The plan's details have not been announced, but published

remarks by Bank of Japan officials suggest its outlines. The Bank would purchase from banks, at market prices, equities in nonfinancial corporations to the extent that they exceed a bank's primary capital. For a dozen or so large banks, the aggregate amount of this excess is thought to be roughly ¥8 trillion. Currently, stock market volatility is said to affect banks' capital directly because 60% of unrealized capital losses must be charged off. While selling stocks might force banks to realize residual losses, their portfolios would be subject to less market risk in the future. The Bank of

Japan would hold the equities for up to 10 years.

The exchange rates of the Mexican peso and the Canadian dollar against the U.S. dollar have depreciated recently. The Bank of Canada has increased its interest-rate policy target a total of 75 basis points this year. In September, the Bank of Mexico added 100 billion pesos to the amount by which it leaves the banking system "short" of nonborrowed reserves. This was expected to increase the year's run-up in short-term interest rates, which is already several hundred basis points.