

The Economy in Perspective

“We must proceed with our own energy development. Exploitation of domestic petroleum and natural gas potentialities, along with nuclear, solar, geothermal, and non-fossil fuels is vital. We will never again permit any foreign nation to have Uncle Sam over a barrel of oil.”

—Vice President Gerald R. Ford, 1974

The monetary policy situation now facing the FOMC is a textbook classic of advanced macroeconomics courses: How should the monetary authority respond to an adverse energy shock? A reduced supply of oil to the United States can be expected to raise oil’s price and to slow economic activity. Central banks want to do all they can to cushion the economy against the shock to growth by pursuing an easier monetary policy, but concerns about rising inflation can pull policymakers in the opposite direction. How does the savvy central bank navigate such troubled waters?

Credibility is crucial. If the public believes the central bank is committed to keeping inflation within a known range, then their wage- and price-setting decisions will probably be consistent with that range. If people fear the central bank will allow inflation to escalate over time, their actions today will be predicated on that expectation. For example, employees might demand higher wages or companies might ask higher prices for their goods and services. Nominal interest rates would probably rise as savers seek protection against erosion in the purchasing power of the funds they lend. The dollar’s foreign exchange value would tend to depreciate: Dollar purchasers would want to get more dollars for each unit of their currency because they expect the dollar’s purchasing power to shrink. But to the extent that people expect the central bank to preserve price stability over time, these actions will be muted or nonexistent.

Can a central bank ignore the economic slowdown that would probably accompany energy price shocks, especially if the bank has a mandate to support economic growth? The key insight here is that a large energy price increase really represents a reduction in supply that cannot be offset merely by printing more money. The economy’s necessary adjustment to the supply reduction could manifest itself as a period of sub-par growth. Ordinarily, the central bank would reduce its policy interest rate

path in anticipation of sagging economic activity, especially if the policy adjustment would not stimulate inflation expectations. In this way, the central bank could cushion the economy against the energy price shock.

Although the prescription is straightforward, implementing it is complicated because the policy path will depend on the central bank’s credibility and the inflation dynamics already at work when energy shocks hit the economy. For example, the FOMC had been pursuing a very accommodative monetary policy when energy shocks began to hit the economy in 2003. Although the shocks undoubtedly trimmed its rate, the expansion continued at a solid pace nonetheless. As resource slack diminished, the FOMC began reducing the degree of policy accommodation and has continued to do so since last summer.

Under perfect conditions, the FOMC would finish removing its policy accommodation just as the economy reaches its growth potential and with little chance of core inflation accelerating. This could still happen, but the energy price shocks are obscuring the true inflation picture. Has monetary policy already been so accommodative that even core inflation has begun creeping upward? If so, should the policy path tilt up as well? Or does weakness in various economic data signal that energy price shocks are taking a greater toll and the measured pace of policy actions is nearly at an end?

As this drama has played out, the public has displayed a great deal of confidence in the long-term inflation trend. Although people have correctly anticipated the rise in short-term inflation, they maintain their belief that the inflation rate will drop once the energy price shocks work their way through the economy. Consistent with that perspective, people also seem to expect the first quarter’s economic lull to be temporary.

The April labor market report contained hopeful news: Besides indicating that April job growth exceeded analysts’ expectations by about 100,000, the report also revised up the employment levels for February and March by nearly 100,000 in total. However, that optimism immediately translated into caution about the future course of short-term interest rates. In this environment, it seems, good economic news is welcome, but only up to a point.

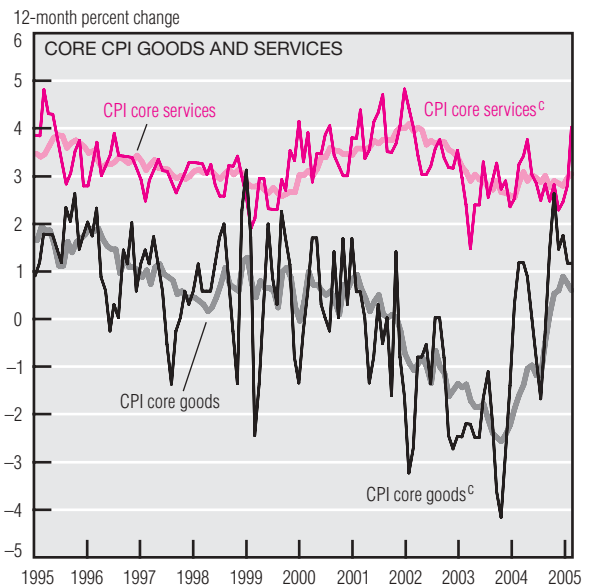
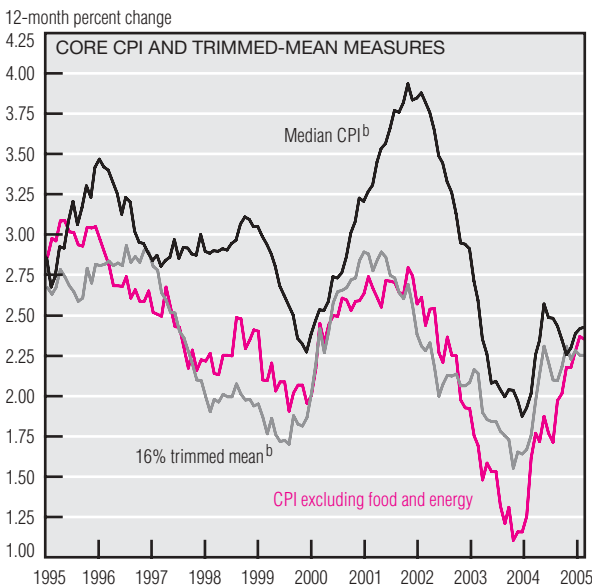
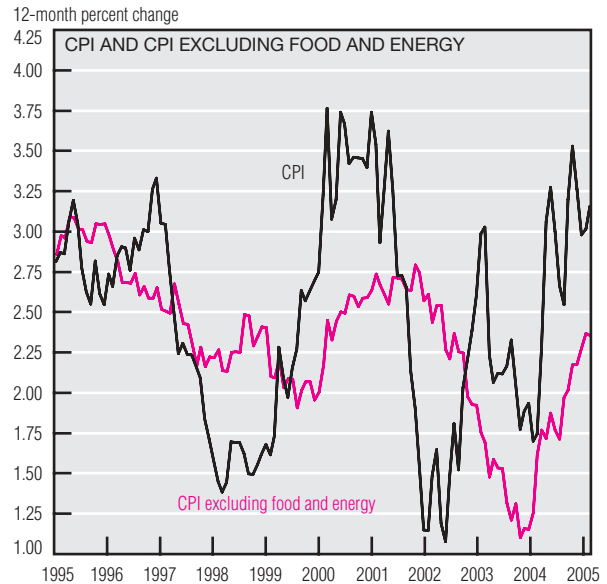
Answers to April crossword puzzle

Across: 1. DEFICIT; 3. COLA; 4. MINIMUM; 6. SARBOX; 7. MEASURED; 8. CAPITAL; 11. CHINA; 12. OFFSHORE; 13. PERSONAL; 14. GSE; 15. TEXTILES; 16. AIG; 17. BERNANKE

Down: 2. TIPS; 3. CARTEL; 5. INSURANCE; 9. INFLATION; 10. CURRENT; 11. CBOT; 13. PAYGO

Inflation and Prices

	Percent change, last:				2004 avg.
	1 mo. ^a	3 mo. ^a	12 mo.	5 yr. ^a	
Consumer prices					
All items	7.8	4.3	3.1	2.5	3.4
Less food and energy	4.3	3.3	2.3	2.1	2.2
Median ^b	2.8	2.9	2.4	2.8	2.3
Producer prices					
Finished goods	9.0	5.7	4.9	2.3	4.4
Less food and energy	0.8	3.7	2.6	1.1	2.2



a. Annualized.

b. Calculated by the Federal Reserve Bank of Cleveland.

c. Three-month annualized percent change.

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

In March, retail prices jumped but longer-term inflation trends held steady. The Consumer Price Index (CPI) rose 7.8%, following a 4.5% rise in February. The core CPI, which excludes the volatile food and energy prices, also surged ahead (4.3% at an annualized rate, its highest monthly growth rate since August 2002). However, the median CPI, which attempts to control for volatile monthly price changes by considering the center of the monthly price change distribution, increased a more moderate 2.8%.

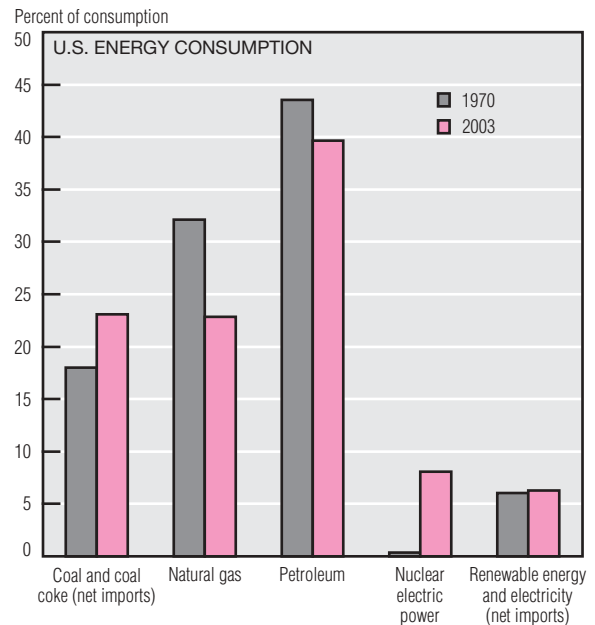
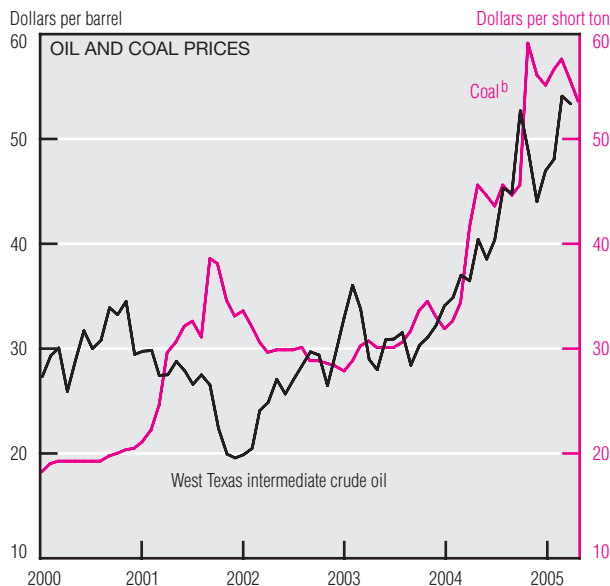
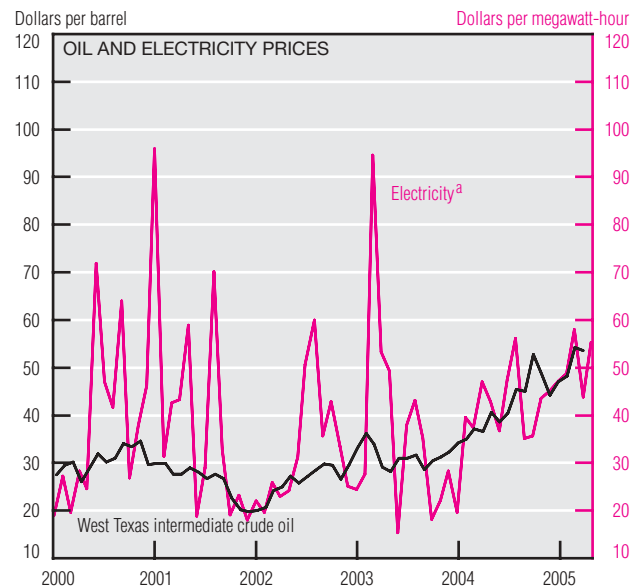
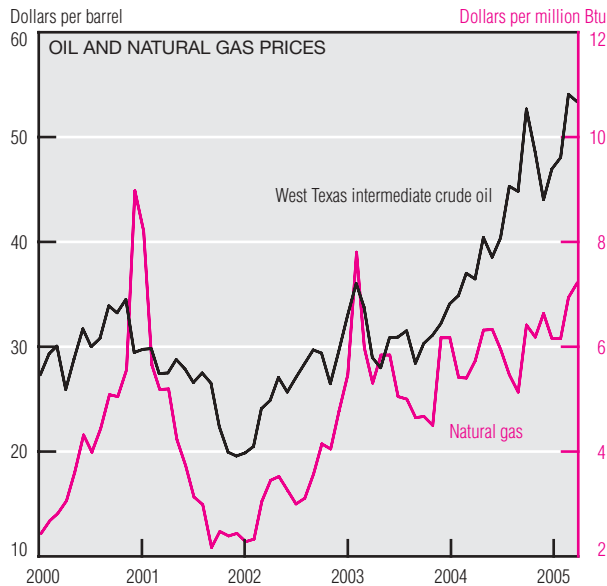
Meanwhile, longer-term inflation trends in the various retail price measures remained stable in March. The core CPI's 12-month growth rate ticked downward from 2.4% to 2.3%. The 16% trimmed mean and the median CPI's 12-month growth rates held steady at 2.2% and 2.4%, respectively. And the CPI's 12-month growth rate only ticked upward from 3.0% to 3.1%. However, the core CPI has risen nearly 1.5%, the median CPI 0.6%, and the 16% trimmed-mean CPI about 0.7% since late 2003, when retail prices began trending upward.

The increased inflation rates are partly the result of rising core goods prices. Core service price growth has remained relatively steady for nearly two years (roughly in the 2½%–3% range); however, core goods price deflation has stopped. Core goods prices have risen on a year-to-year basis since October 2004. These trends may reflect the upward pressure on import prices caused by the dollar depreciation that occurred in 2004.

Increasing pressure on retail prices may also reflect producers' attempts to recoup some of their dramatically

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Inflation and Prices (cont.)



a. Cinergy, on-peak day-ahead electricity spot price.

b. Pennsylvania railcar seam coal spot price.

SOURCES: U.S. Department of Energy, Energy Information Administration; Bloomberg Financial Information Services, and *Wall Street Journal*.

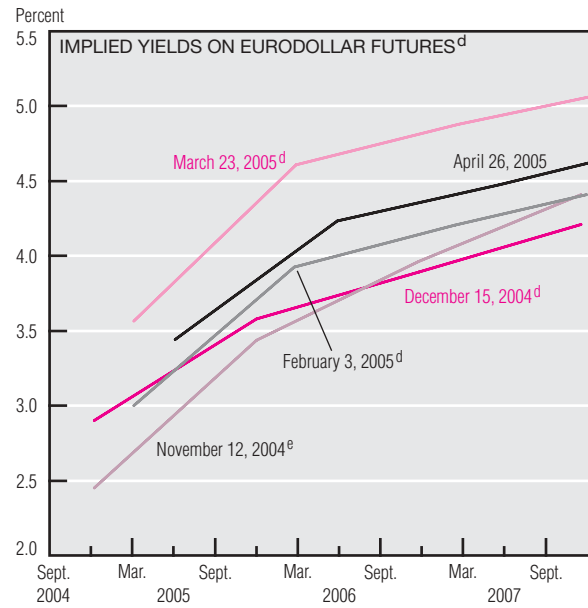
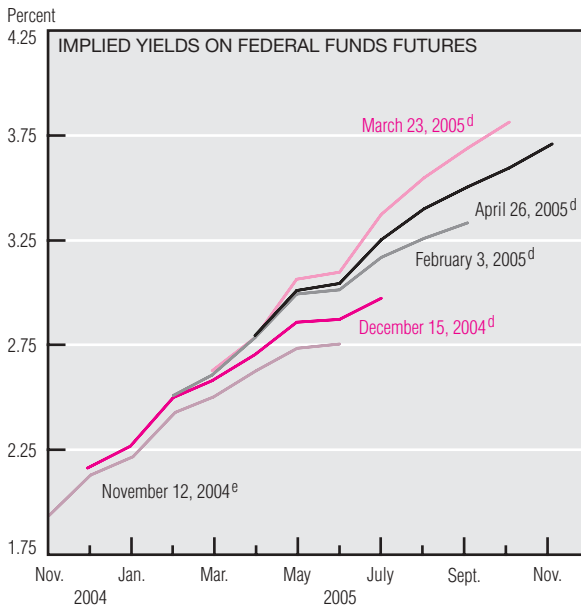
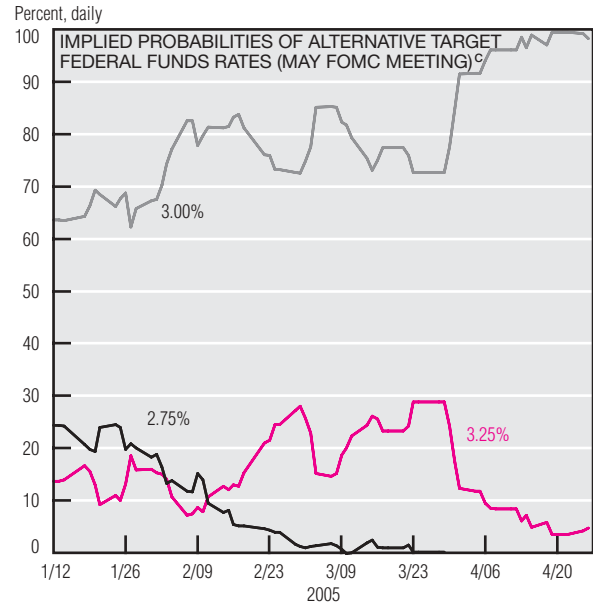
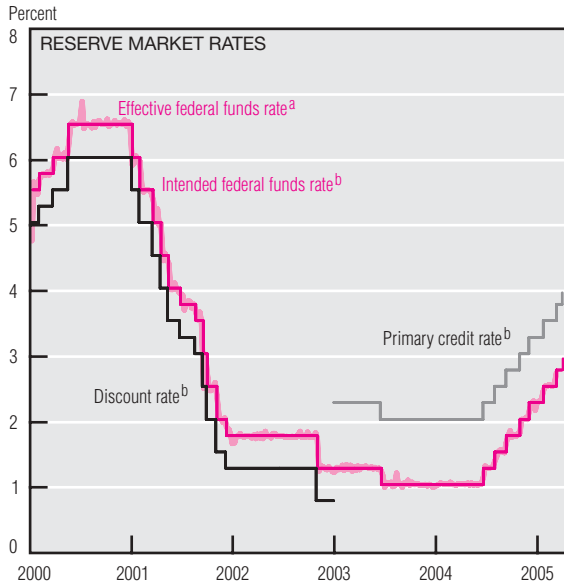
rising energy costs. Recent crude oil prices have receded slightly but the cost of crude oil, which accounts for nearly 40% of U.S. energy consumption, has continued to rise at an alarming pace, reaching more than \$50.00 a barrel for West Texas intermediate crude in April. This is an increase of nearly 57.0% since the beginning of 2004 and nearly 14% since the beginning of this year.

Rising crude oil prices appear to be affecting costs for energy that is not based directly on petroleum. The

price of natural gas, which accounts for about 23% of U.S. energy consumption, has increased at a slower pace than crude oil, rising about 17% since the beginning of 2004. However, since the beginning of 2002, the rate of increase in natural gas prices is nearly 1.3 times that of crude oil prices. Electricity accounts for about 6% of energy consumption and 2½% of the CPI. Although it is more volatile than other energy prices, it also has trended upward since 2004, rising about 40% since January 2004.

Finally, coal and coal coke account for about 23% of U.S. energy consumption. Coal price increases have generally kept pace with the spectacular rise in crude oil prices, jumping nearly 65% since the beginning of 2004. Although natural gas and petroleum consumption as a share of total energy consumption has declined over the past 33 years, reliance on coal and nuclear energy has increased. Renewable energy's share of consumption has remained stable over the past 33 years.

Monetary Policy



a. Weekly average of daily figures.

b. Daily observations.

c. Probabilities are calculated using trading-day closing prices from options on May 2005 federal funds futures that trade on the Chicago Board of Trade.

d. One day after the FOMC meeting.

e. Two days after the FOMC meeting.

SOURCES: U.S. Department of Commerce, Bureau of Economic Analysis; Board of Governors of the Federal Reserve System, "Selected Interest Rates," *Federal Reserve Statistical Releases*, H.15; Chicago Board of Trade; and Bloomberg Financial Information Services.

Since the current round of monetary policy tightening began in late June 2004, the Federal Open Market Committee has increased the federal funds rate a total of 2.00%. This total increase is the result of eight rate hikes of 25 basis points (bp) at that and each subsequent meeting, including the most recent meeting on May 3.

Contracts in the options market for federal funds futures can be used to estimate the probabilities placed by market participants on a range of possible future values for the funds rate. These probabilities change frequently

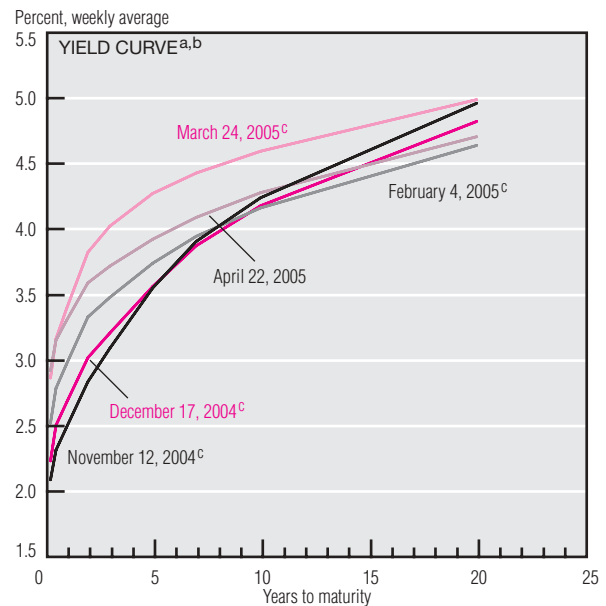
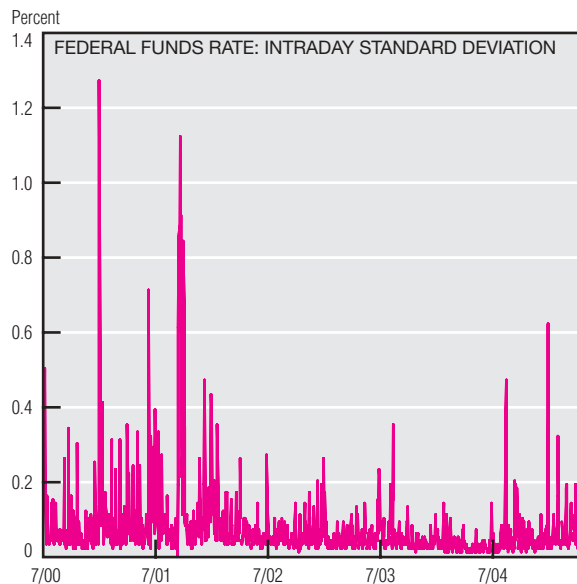
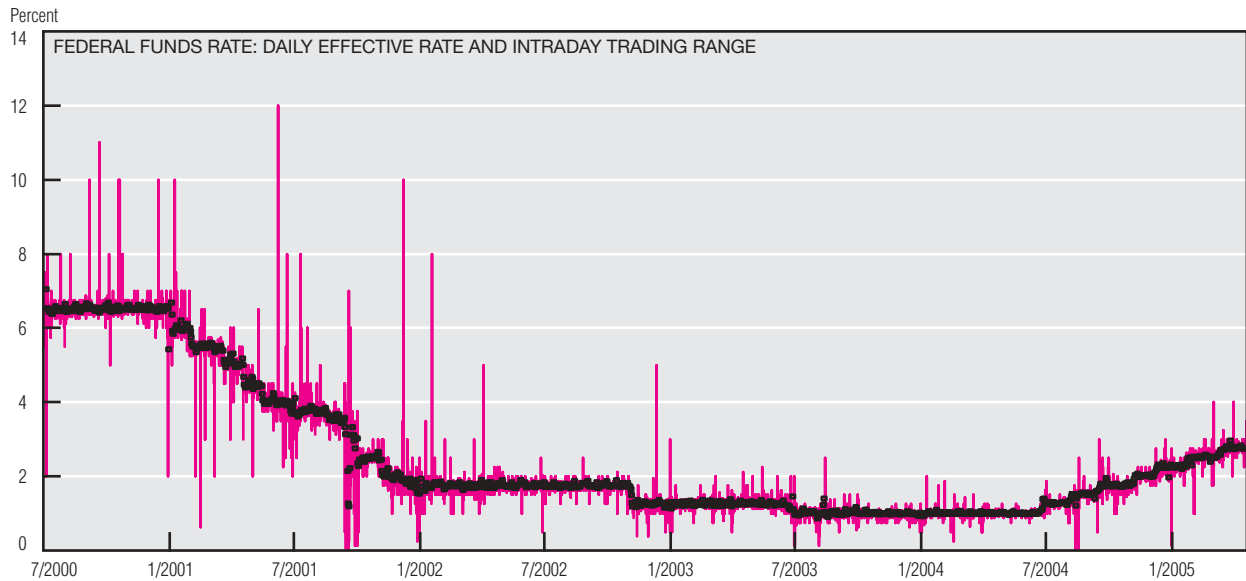
in response to Federal Reserve officials' statements and important data releases.

For example, from March 29 to April 7, the probability associated with a 25 bp increase in the funds rate at the May meeting rose around 20 percentage points, while the probability of a 50 bp increase fell a similar amount. These movements reflected an unexpected increase in first-time jobless claims and a favorable March 31 data release that put February's core PCE inflation at 1.6%. This news apparently convinced

market participants that the Fed could stick to its "measured pace" of increases in the funds rate for the short term. Just before the May meeting, participants in the options market placed a probability of nearly 100% on a 25 bp increase in the federal funds rate.

Federal funds futures told a similar story. Participants almost fully priced in a 25 bp increase in the funds rate at the May meeting. Implied yields on eurodollar futures indicate expectations of further rate increases throughout this year and into 2006.

Money and Financial Markets



- a. All yields are from constant-maturity series.
 b. Average for the week ending on the date shown.
 c. First weekly average available after the FOMC meeting.

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

Before January 9, 2003, the Federal Reserve discount rate was set lower than the FOMC's federal funds rate target for open market operations. The Reserve Banks had to use administrative means to discourage borrowing at this attractive rate. Since that date, the discount rate has been set 100 basis points (bp) above the targeted funds rate and the Reserve Banks no longer have to discourage borrowing administratively. One expected result was reduced variability of the funds rate, which

would be capped by the discount rate. If potential lenders were to ask more than that, qualified institutions would turn to the discount window to borrow at the more attractive primary credit rate.

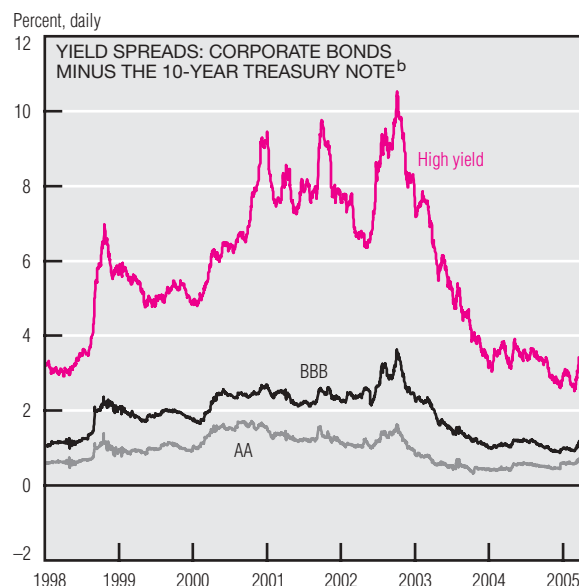
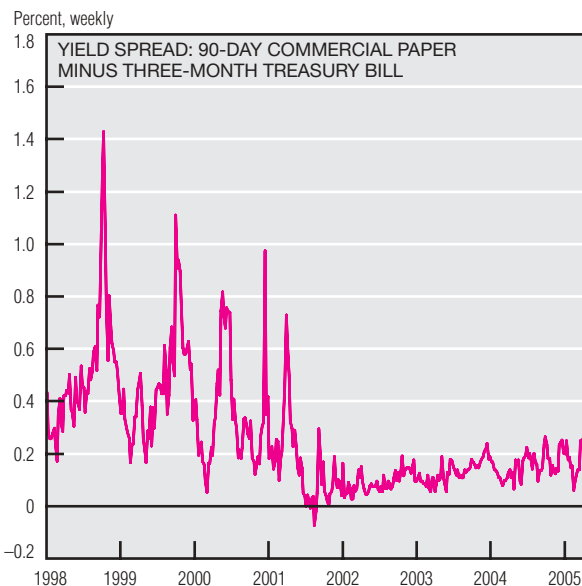
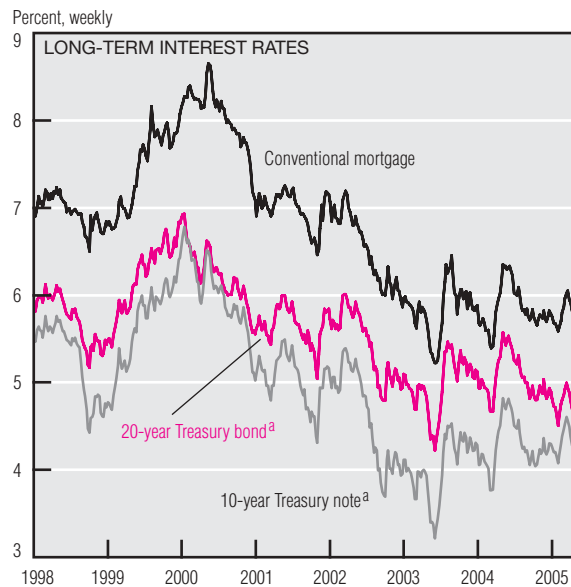
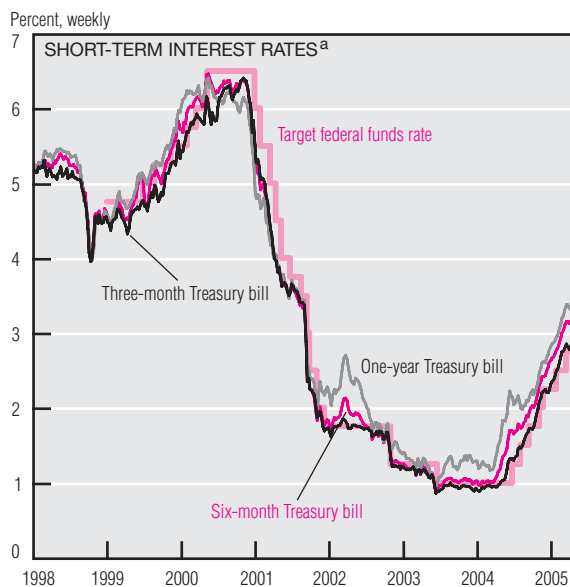
Since this policy change was implemented, the intraday federal funds rate has exceeded the primary credit rate on only four days, most recently on March 31, 2005 when it reached 4%, 25 bp above the primary credit rate. Before the policy change, the intraday range in the federal funds rate averaged 68 bp; since the

change, it has averaged only 33 bp. The standard deviation of the intraday federal funds rate, which measures volatility weighted by the volume traded, also declined from an average of 9 bp to 5 bp.

The yield curve has flattened significantly since the March FOMC meeting, with the most pronounced decline in the intermediate range. The yield on five-year Treasury securities has fallen more than 35 bp since the March meeting and more than 28 bp at the long end of the curve.

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Money and Financial Markets (cont.)



a. Yields from constant-maturity series

b. Merrill Lynch AA, BBB, and High Yield Master II indexes, each minus the yield on the 10-year Treasury note.

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

Since monetary policy tightening began in June 2004, short-term interest rates have tracked the federal funds rate fairly closely. After rising markedly in February and March, long-term Treasury security yields fell in April, possibly because of weak economic data releases during the month. The yield decline could also indicate downward revisions in investors' long-term inflation expectations or possibly their "flight to quality." Some of the major slips in Treasury yields have occurred on days of major declines in equity

markets. The pattern in conventional mortgage rates has mimicked long-term Treasury yields.

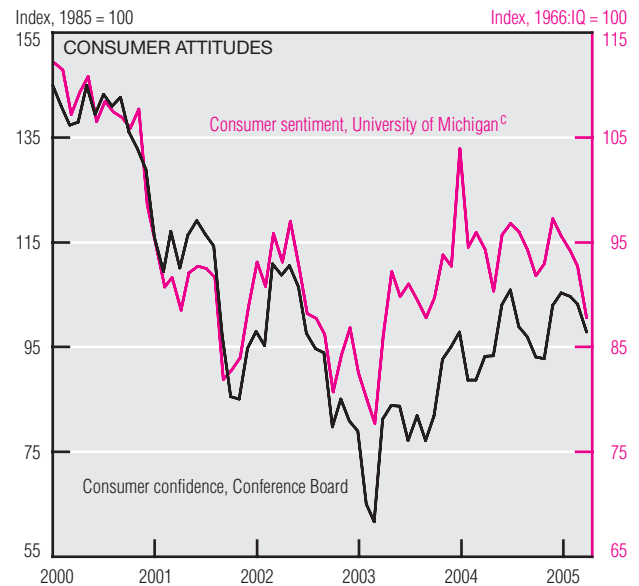
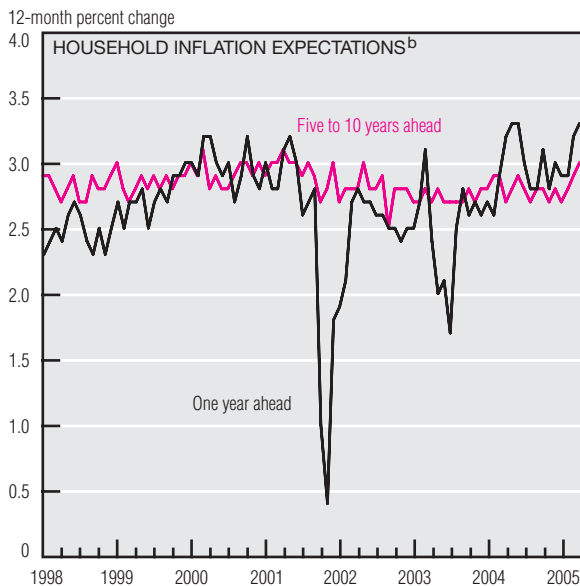
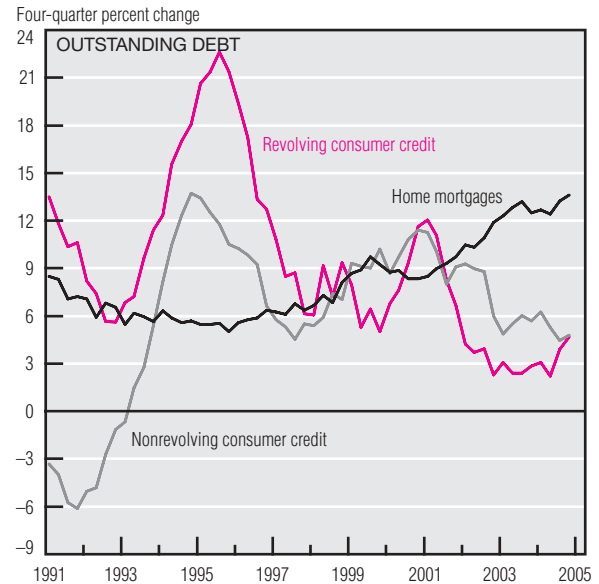
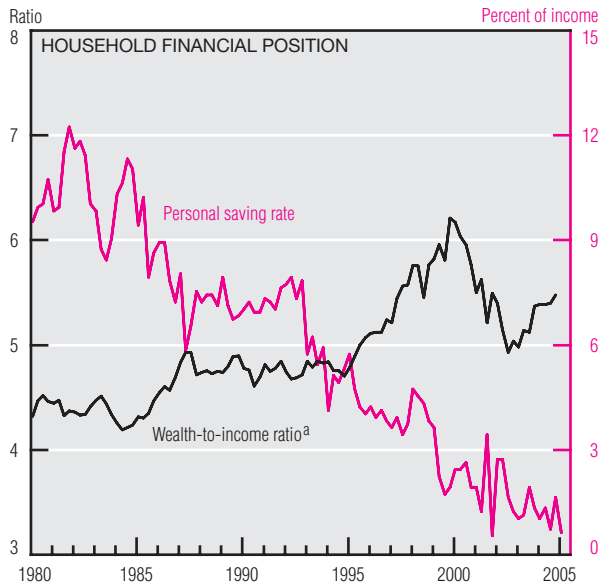
The risk spread on short-term commercial paper has varied between zero and 25 bp for three years. Although the spread increased in March and the first half of April, it has since retrenched to near its three-year average.

Corporate bond yields remain near historic lows, suggesting investors' willingness to take on risk as well as their confidence in the overall economic outlook. However, risk

spreads on corporate bonds have increased since the beginning of March, with the spread on high-yield corporate bonds increasing more than a percentage point. Increases in spreads on less risky corporate bonds have been more moderate. The risk spread on AA- and BBB-rated corporate bonds have risen 12 bp and 31 bp, respectively, which may indicate that investors have become more cautious.

Low home mortgage rates over the last few years have contributed to a run-up in residential real estate
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Money and Financial Markets (cont.)



a. Wealth is defined as household net worth; income is defined as personal disposable income. Data are not seasonally adjusted.

b. Median expected inflation as measured by the University of Michigan's *Survey of Consumers*.

c. Data are not seasonally adjusted

SOURCES: U.S. Department of Commerce, Bureau of Economic Analysis; Board of Governors of the Federal Reserve System, "Flow of Funds Accounts of the United States," Z.1, *Federal Reserve Statistical Releases*; University of Michigan; and the Conference Board.

prices. Higher home prices, in turn, have contributed to a higher wealth-to-income ratio. In contrast, the personal saving rate has been falling since the mid-1980s; in the first quarter of 2005, it stood at only 0.6%. The saving rate is near its historic low, in marked contrast to its average of 7.3% from the late 1940s to the present. Increased wealth relative to income has undoubtedly contributed to households' comfort with a lower saving rate.

Historically low mortgages rates encouraged households to expand

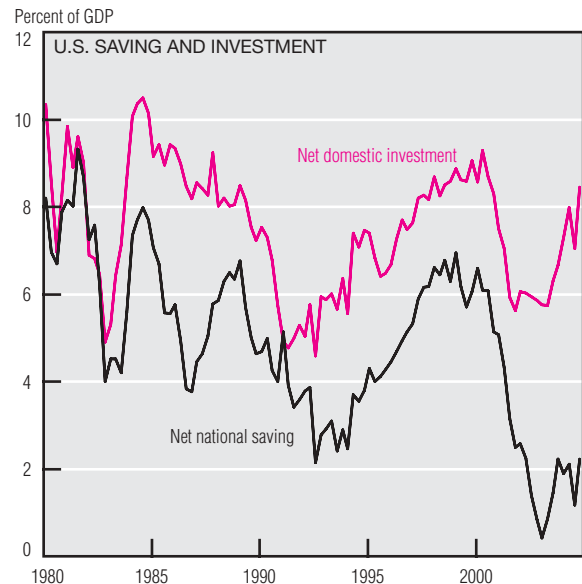
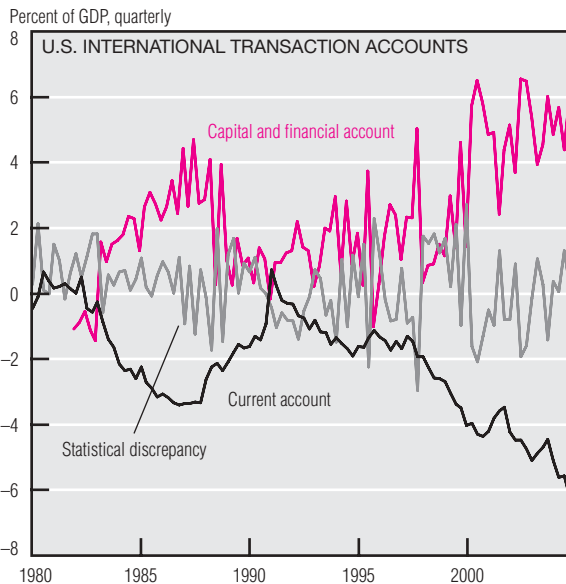
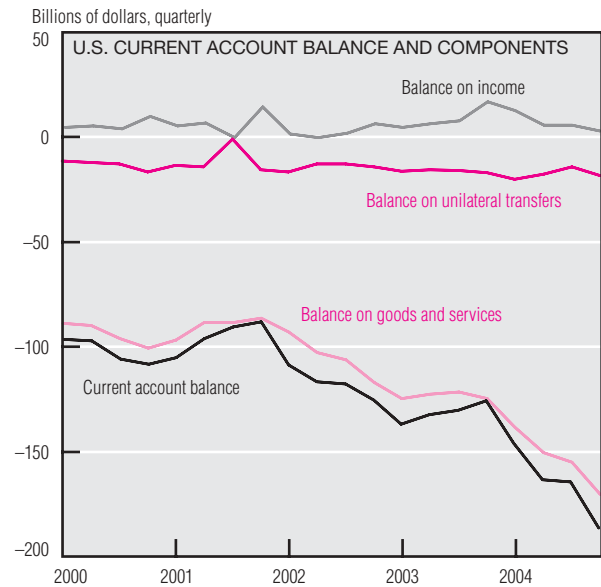
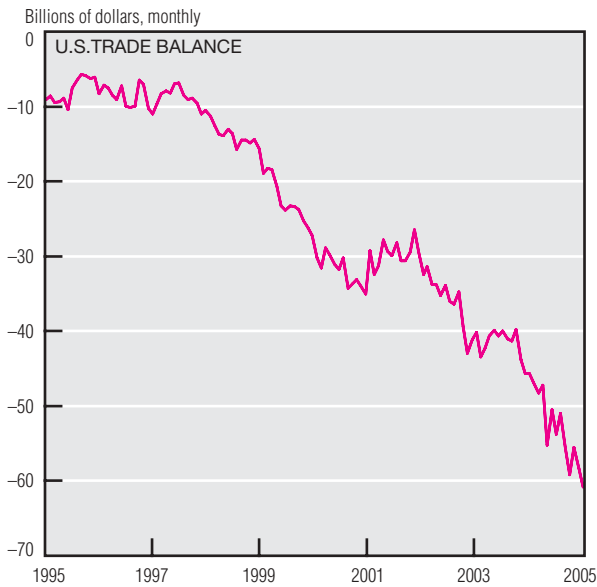
their mortgage debt at a robust pace throughout 2004; however, revolving and nonrevolving household credit increased at much more moderate rates.

Survey data show that households' longer-term inflation expectations have risen modestly since the beginning of 2005. Year-ahead inflation expectations have risen 0.5% since November 2004, undoubtedly because of higher energy prices.

In April, the University of Michigan's Consumer Sentiment Index fell for the fourth consecutive month.

Respondents' views regarding their current economic situation deteriorated, as did their views about their future personal finances. The Index's expectations component has taken a particularly large hit in recent months, falling to its two-year low in April; soaring energy prices are cited as the primary factor behind the loss of confidence. The Conference Board's Index of Consumer Confidence also fell in April, with a broad-based decline in most of its components.

The U.S. Current Account Deficit



SOURCES: U.S. Department of Commerce, Bureau of Economic Analysis and Bureau of the Census.

The nominal U.S. deficit for trade on goods and services increased in February to \$61 billion, the largest on record. The trade deficit has been increasing for the last three years.

The current account deficit, a broader, quarterly measure, reached an all-time high of \$188 billion in 2004:IVQ, the latest in a series of steady increases that began in mid-2001. The current account balance includes a country's trade deficit, net income from abroad, and net unilateral transfers. In the fourth quarter, the balance on goods and services

was -\$171 billion, net income \$2 billion, and net unilateral transfers -\$19 billion.

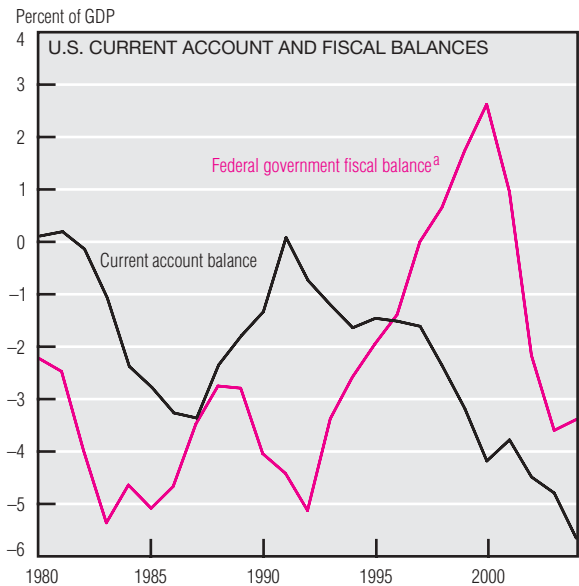
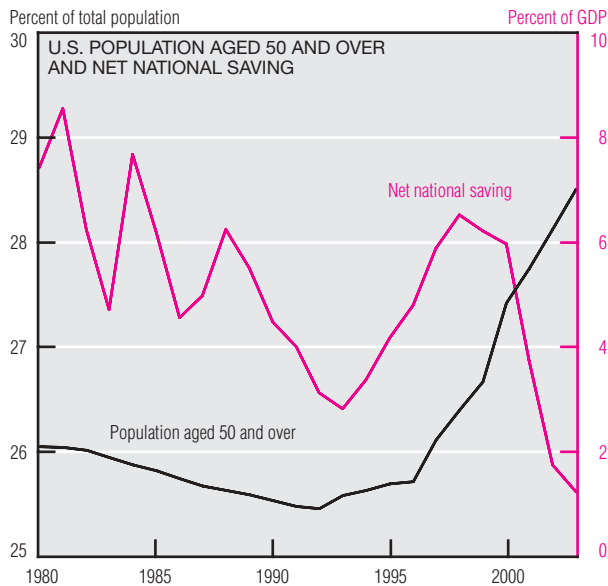
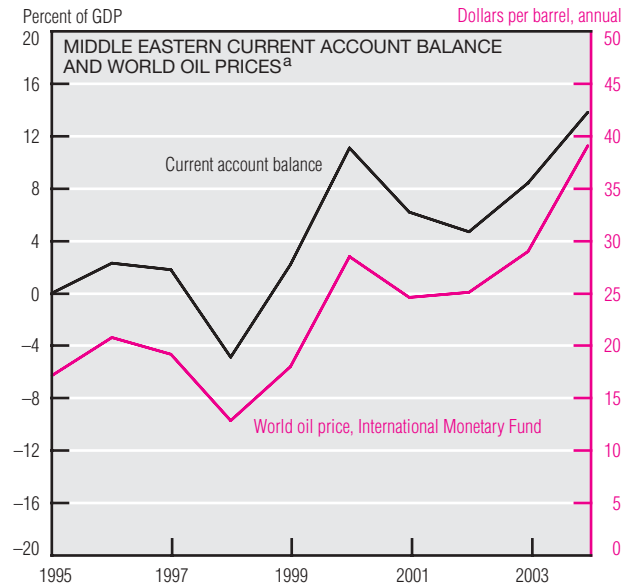
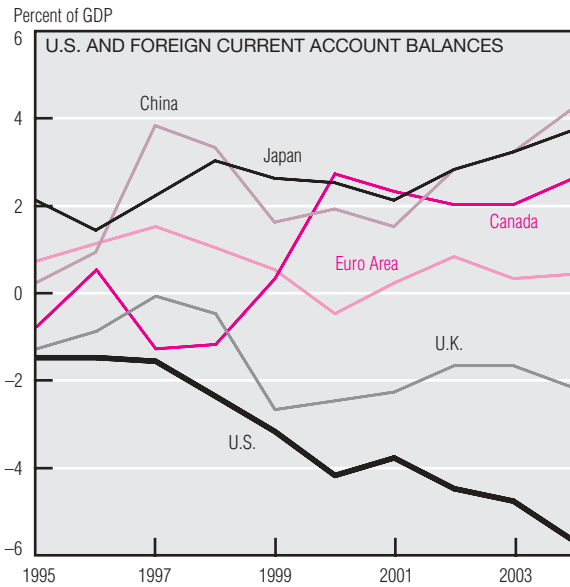
A country with a current account deficit is buying from and paying and transferring income to the rest of the world in excess of what it receives in sales, income payments, and transfers. This means that the rest of the world must lend to or take equity positions in that country to make up the difference. The capital and financial account balance measures this net inflow of funds; the capital account balance records

direct investments; and the financial account balance includes net borrowing, lending, and securities transactions involving foreigners. The current account balance should equal the negative of the capital and financial account balance. In practice, however, measurement difficulties create a statistical discrepancy between the two.

The difference between national (domestic) savings and national investment necessarily is financed by net foreign capital and financial flows, which equal the current account

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The U.S. Current Account Deficit (cont.)



a. Cumulative balance for the calendar year.

SOURCES: U.S. Department of Commerce, Bureau of Economic Analysis and Bureau of the Census; U.S. Department of the Treasury, *Monthly Treasury Statement*; and International Monetary Fund, "World Economic Outlook," April 2005.

deficit. For the past two decades, excluding the early 1980s and 1991, U.S. national investment has exceeded national savings and foreigners have been financing a significant portion of U.S. domestic investment.

If the U.S. runs a current account deficit, other countries must be running current account surpluses. In 1995, Japan and the Euro Area posted current account surpluses. Since then, China and Canada have emerged with such surpluses, whereas the U.S. and the U.K. continue to run deficits. For the last six years, Middle Eastern

countries have had current account surpluses; not surprisingly, the sign and size of their current account balances are positively correlated with the world price of oil.

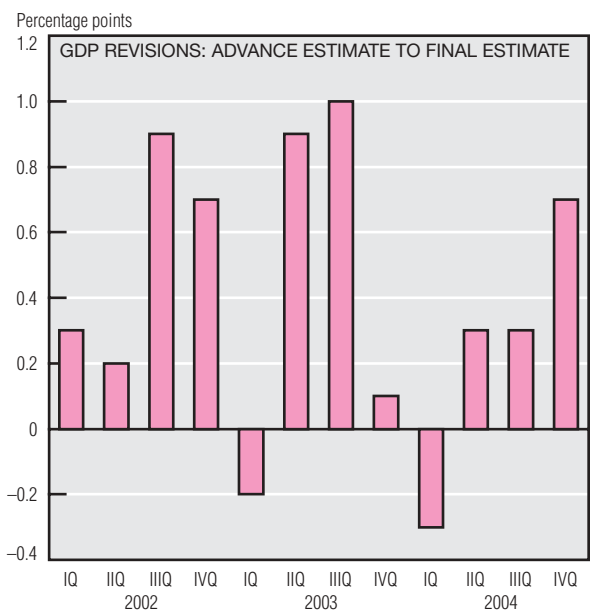
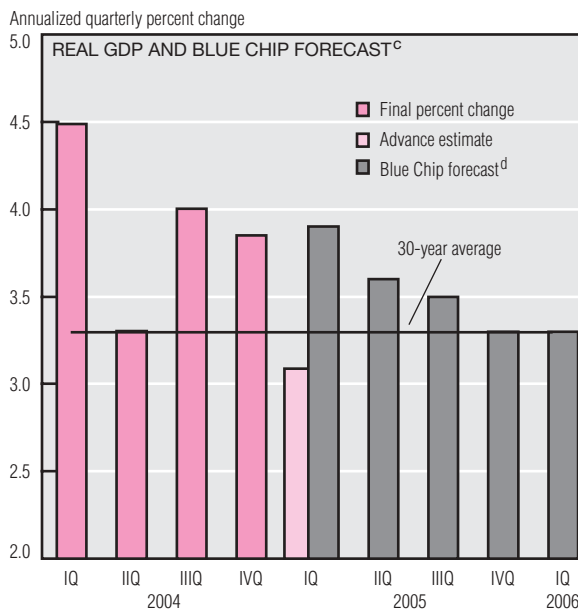
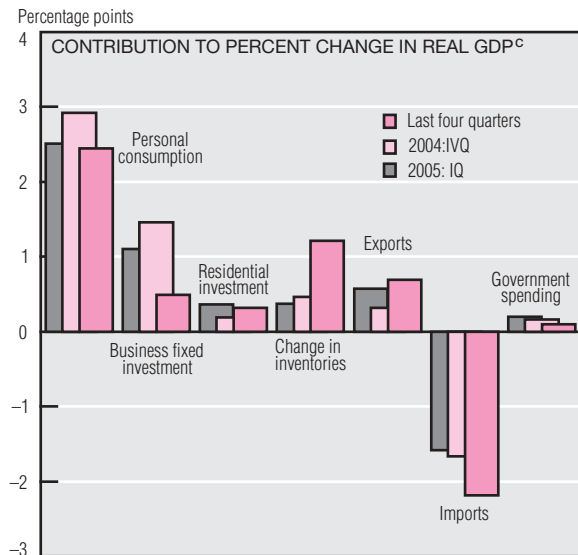
Holding all other things constant, lowering the U.S. saving rate will worsen the current account balance. The national saving rate has declined steadily since the late 1990s. This puzzles some analysts because the share of the population aged 50 and over has increased significantly since mid-1990. One might think that the national saving rate would rise as a

larger proportion of the population saves for retirement. However, interest rates have been low by historical standards since 2001; low interest rates tend to depress savings.

Although it is difficult to identify what is causing the high U.S. current account deficit, some analysts believe that an increase in the federal budget deficit has this effect. Although it is quite possible for both of these deficits to move in tandem, as they did in the early 1980s and since 2000, they can also move in opposite directions, as they did during most of the 1990s.

GDP Growth

	Change, billions of 2000 \$	Annualized percent change	
		Current quarter	Four quarters
Real GDP	83.9	3.1	3.6
Personal consumption	67.2	3.5	3.6
Durables	0.0	0.0	5.0
Nondurables	26.9	4.9	3.9
Services	38.6	3.6	3.2
Business fixed investment	14.7	4.6	11.1
Equipment	17.7	6.9	14.1
Structures	-1.6	-2.6	1.3
Residential investment	8.0	5.7	6.7
Government spending	2.7	0.6	1.1
National defense	0.3	0.2	2.8
Net exports	-42.1	—	—
Exports	19.5	7.0	5.9
Imports	61.5	14.7	10.8
Change in business inventories	33.0	—	—



a. Chain-weighted data in billions of 2000 dollars.

b. Components of real GDP need not add to the total because the total and all components are deflated using independent chain-weighted price indexes.

c. Data are seasonally adjusted and annualized.

d. Blue Chip panel of economists.

SOURCES: U.S. Department of Commerce, Bureau of Economic Analysis; and *Blue Chip Economic Indicators*, April 10, 2005.

The U.S. Commerce Department's advance estimate of real GDP growth in 2005:1Q was 3.1%, substantially lower than the final 2004:IVQ estimate of 3.8%. The slowdown in real GDP growth primarily reflected a deceleration in investment in equipment and software from an 18.4% annual rate in 2004:IVQ to 6.9% in 2005:1Q, an acceleration in imports from 11.4% to 14.7%, and a deceleration in personal consumption from 4.2% to 3.5%. However, this was partly offset by an acceleration in exports from 3.2% to 7.0% and a very large increase in

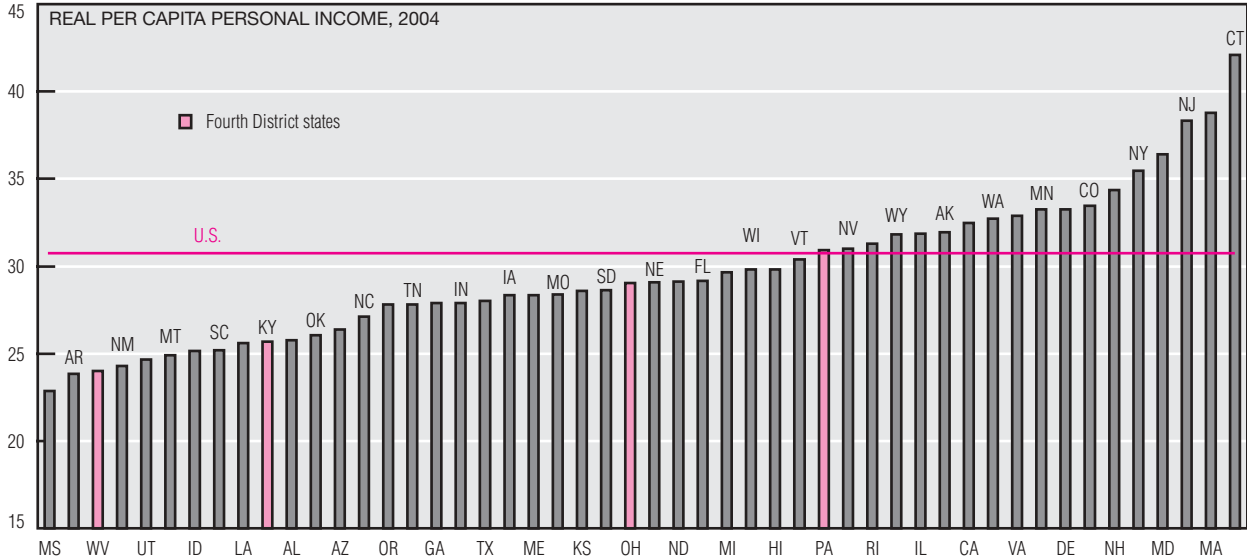
private inventory investment. Inventories (see chart at upper right) added 1.2 percentage points (pp) to the change in real GDP compared to 0.5 in 2004:IVQ. Only two other categories, residential investment and exports, made increased contributions to the change in real GDP.

The advance estimate fell far short of Blue Chip expectations of 3.9% real GDP growth. This forecast for 2005:1Q, published April 10, was revised upward from the March prediction of 3.7%. They predict that by year's end, growth will converge with GDP's 30-year average of 3.3%.

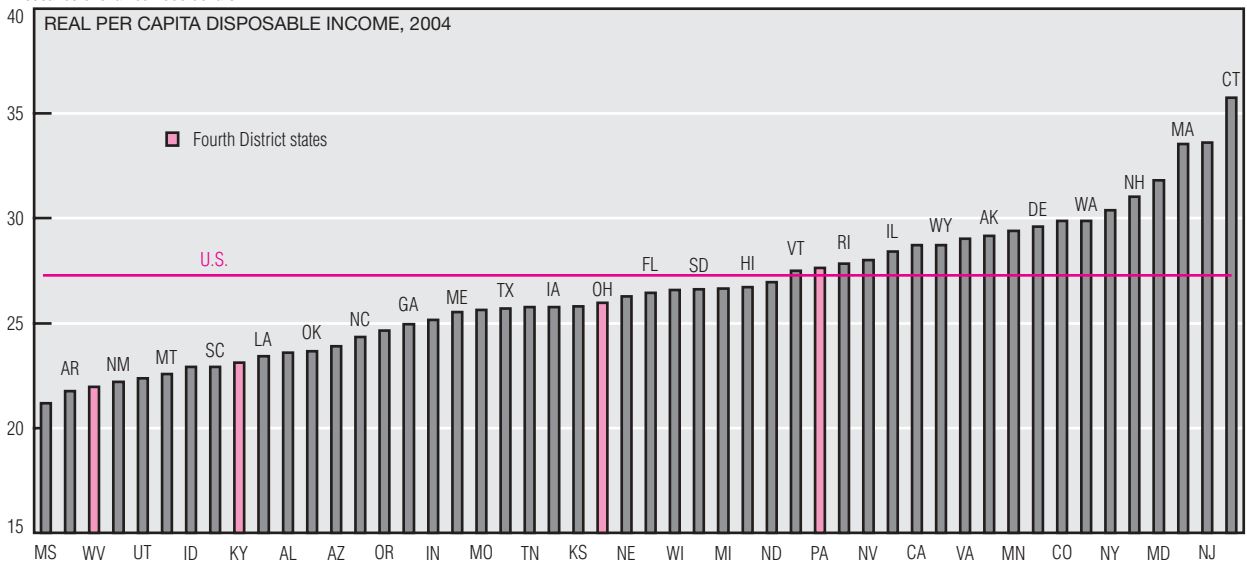
Regarding the low advance estimate of GDP for 2005:1Q, it is important to remember that substantial revisions often occur between the advance and final estimates. The 2004:IVQ advance estimate was identical to 2005:1Q at 3.1%. However, the preliminary and final readings were 0.7 pp higher at 3.8%. According to the Commerce Department, the average revision between the advance and the final estimate for 1978–2003, without regard to sign, was 0.6 pp. Given this average, we can expect a final reading for GDP growth in 2005:1Q that is substantially different from the current 3.1%.

Income Variation

Thousands of chained 2000 dollars



Thousands of chained 2000 dollars



SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis.

Americans' average income varies considerably across states. In 2004, Connecticut had the highest real per capita personal income at \$42,107; Mississippi had the lowest at \$22,863. Of the Fourth District states, only Pennsylvania, at \$30,930, exceeded the U.S. average of \$30,558.

Another measure of income is per capita disposable income, which equals personal income minus taxes plus transfer payments. States' rankings in terms of real per capita disposable income are fairly similar to

those for real per capita personal income. Connecticut was at the top with \$35,769 in 2004, whereas Mississippi was at the bottom with \$21,172. Pennsylvania, with disposable income of \$27,634, was the only Fourth District state that exceeded the national average of \$27,289.

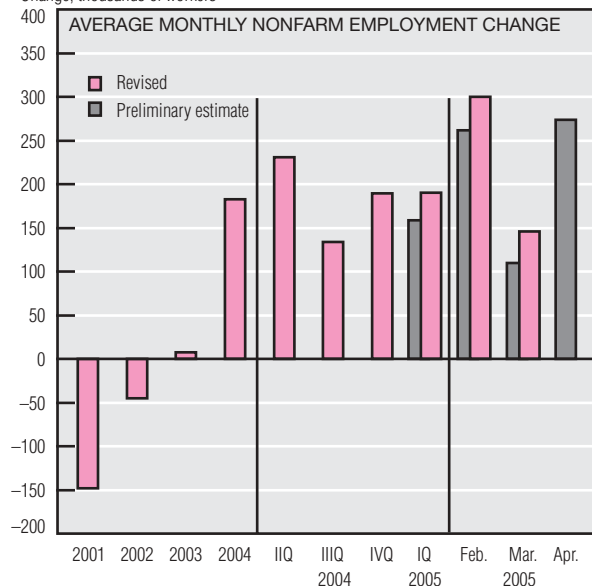
One reason governments levy taxes is to transfer income from high- to low-income earners. The state data give some insight into the federal government's role in these sorts of transfers. For Connecticut, the state where earnings were highest,

real per capita disposable income was 15% lower than personal income. By way of contrast, in Mississippi, where earnings were lowest, the difference was 7.4%.

An alternative way to evaluate the redistributive role of government is to observe that Connecticut's real per capita personal income was 1.84 times Mississippi's in 2004, whereas Connecticut's real per capita disposable income was only 1.69 times Mississippi's. In other words, disposable income varies less across states than personal income.

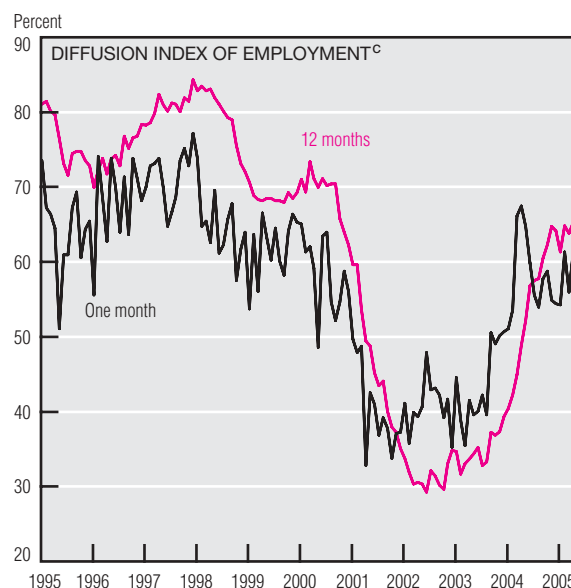
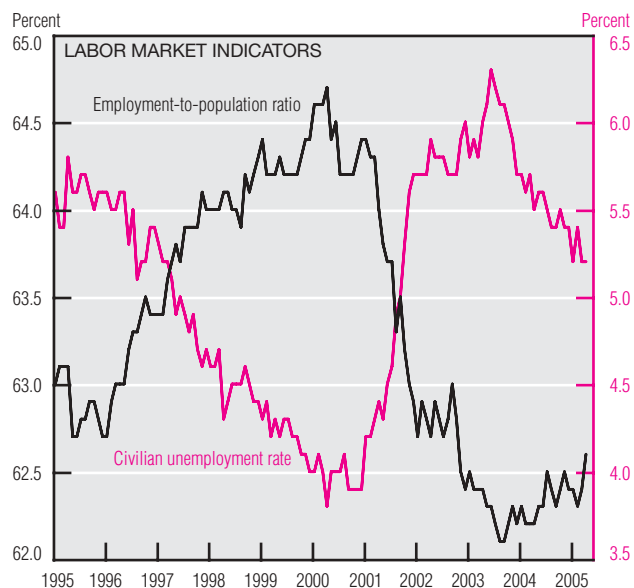
Labor Markets

Change, thousands of workers



Labor Market Conditions

	Average monthly change (thousands of employees, NAICS)				
	2001	2002	2003	2004	Apr. 2005
Payroll employment	-148	-45	8	183	274
Goods producing	-124	-76	-42	29	45
Construction	-1	-7	10	23	47
Manufacturing	-123	-67	-51	3	-6
Durable goods	-88	-48	-32	9	2
Nondurable goods	-35	-19	-19	-6	-8
Service providing	-25	30	50	154	229
Retail trade	-24	-10	-5	13	24
Financial activities ^a	8	6	7	12	17
PBS ^b	-63	-17	22	45	36
Temporary help svcs.	-37	2	12	15	11
Education & health svcs.	50	40	30	33	35
Leisure and hospitality	-1	12	18	22	58
Government	46	21	-4	12	18
	Average for period (percent)				
Civilian unemployment rate	4.8	5.8	6.0	5.5	5.2



NOTE: All data are seasonally adjusted.

a. Financial activities include the finance, insurance, and real estate sector and the rental and leasing sector.

b. Professional and business services include professional, scientific, and technical services, management of companies and enterprises, administrative and support, and waste management and remediation services.

c. Percent of total nonfarm industries with increased employment over one month (or 12 months) plus half of those with unchanged employment.

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

Total nonfarm payroll employment increased by 274,000 in April, well above the consensus estimate of 175,000 and the first quarter's monthly average of 190,000. Furthermore, February and March increases were revised up a net 93,000 jobs.

Much of April's gains took place in service-providing industries, whose 229,000 increase was almost double March's. Strong gains came from retail trade (24,000), professional and business services (36,000), education and health services (35,000), and leisure and hospitality (58,000).

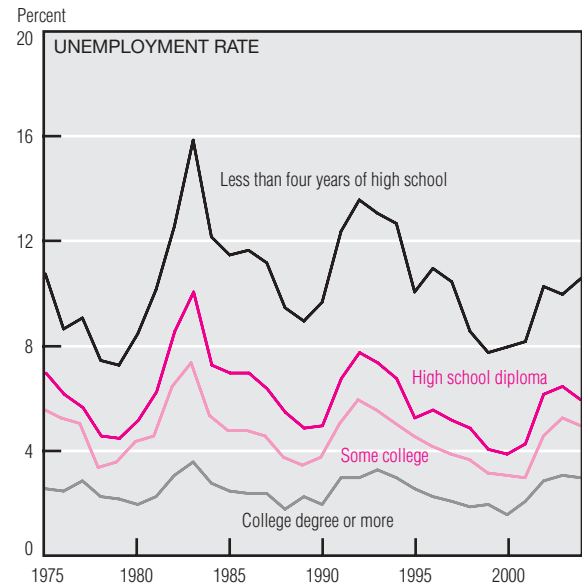
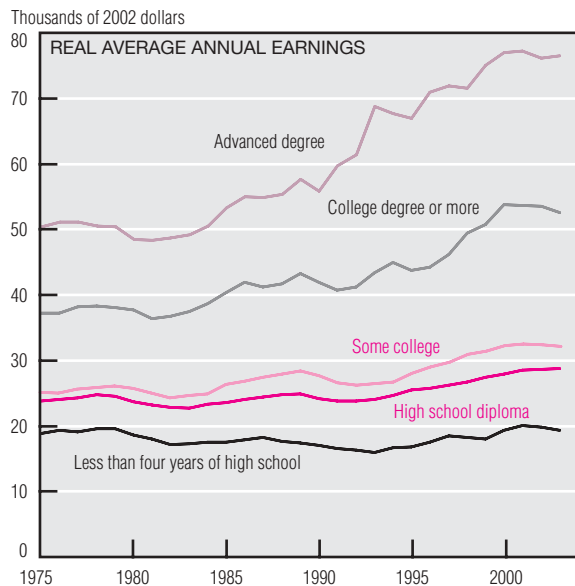
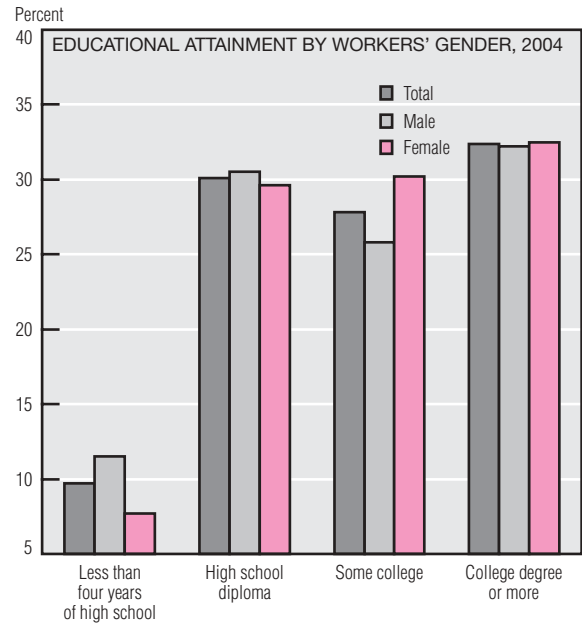
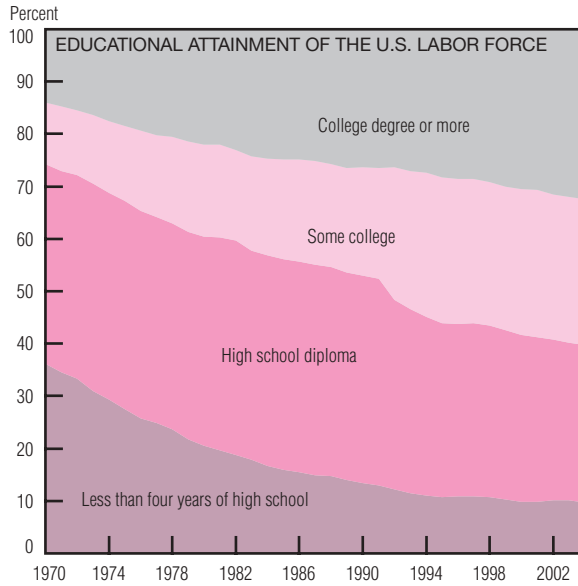
In the goods-producing sector, construction payrolls grew by 47,000. The manufacturing sector, which lost 6,000 jobs, is now close to its January employment level.

The strengthening of the labor market in April was confirmed in the household report. The unemployment rate was unchanged at 5.2%, tying its lowest level since September 2001. However, the proportion of long-term unemployed—those out of work for 27 weeks or more—remained at 21.2% of the unemployed. The employment-to-population ratio

increased 0.2 percentage point to 62.6%; the participation rate (66.0%) also rose 0.2 percentage point, after holding steady at 65.8% for three months.

The diffusion index of employment—an indicator of the recovery's strength—measures the share of industries where employment growth is positive. Employment rose in 61% of industries in April, compared to 56% in March. Over the past 12 months, employment expanded in 65% of industries.

Workforce Education and Income



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

American workers are becoming more educated. Over the past 34 years, the share of workers with at least a college degree more than doubled (from 14.1% in 1970 to 32.4% in 2004). Meanwhile, the share who did not graduate from high school plunged from 36.1% to 9.7%. In 2004, female workers' educational attainment surpassed males': About 63% had a college degree or at least some college education compared to 58% of males.

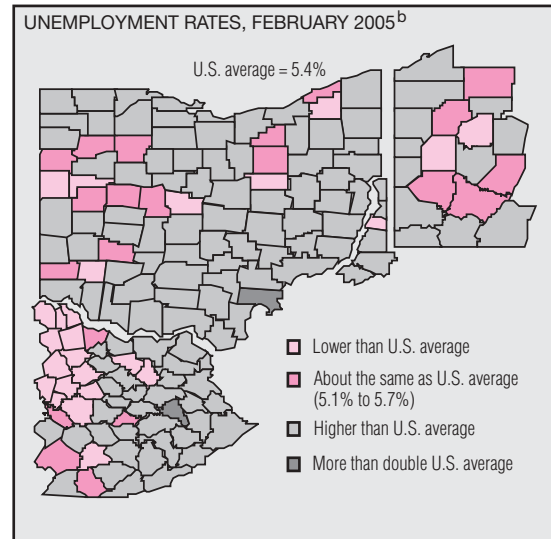
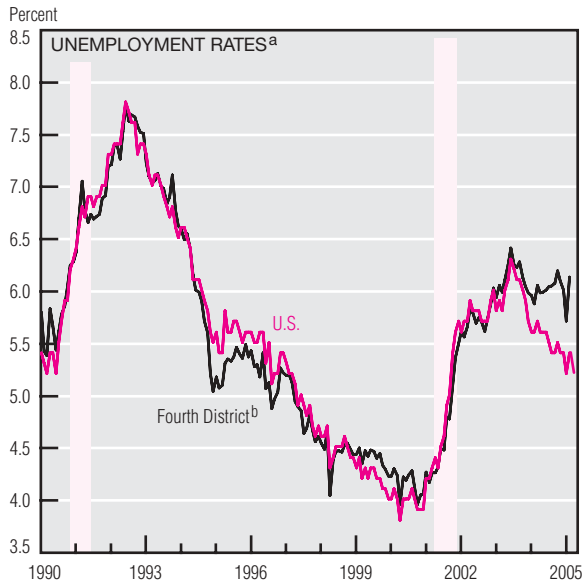
Real (inflation-adjusted) average annual earnings suggest that more

schooling and degrees lead to higher income. Since 1975, real average annual earnings for high school dropouts and those with only a high school diploma have changed very little. Over the same period, real earnings increased about 41% for college graduates and 52% for advanced degree holders. The result is a wider disparity in the earnings of high school versus college graduates, including those with advanced degrees. By 2003, workers with only a college degree earned nearly three

times more—and workers with advanced degrees four times more—than high school dropouts. The earnings premium for college and postgraduate degrees has leveled off over the past couple of years.

While better-educated workers have substantially higher real average annual earnings, they are also more likely to be employed: Those who have not completed high school are about four times likelier to be jobless than those with a college degree or more.

Fourth District Employment



Payroll Employment by MSA

	12-month percent change, March 2005							
	Cleveland	Columbus	Cincinnati	Dayton	Toledo	Pittsburgh	Lexington	U.S.
Total nonfarm	0.0	0.5	0.5	0.1	0.0	0.2	1.2	1.6
Goods-producing	2.4	-0.3	3.8	-4.1	-2.1	-2.5	1.5	1.4
Manufacturing	2.1	-1.6	3.7	-4.8	-4.2	-1.5	1.2	0.2
Natural resources, mining, and construction	3.5	2.4	4.0	n/a	5.6	-4.4	2.5	3.9
Service-providing	-0.5	0.6	-0.2	1.1	0.5	0.6	1.2	1.7
Trade, transportation, and utilities	-2.1	-0.3	-1.8	-0.9	1.1	-0.4	0.5	1.1
Information	-0.5	0.0	3.8	-0.9	2.2	-2.9	-2.2	-0.3
Financial activities	0.1	0.3	-1.7	-3.7	-1.5	-1.3	-1.8	2.0
Professional and business services	1.8	0.5	0.9	0.8	1.2	3.3	7.9	3.7
Education and health services	1.0	1.7	0.2	0.8	0.0	1.8	-0.3	2.2
Leisure and hospitality	0.7	2.5	0.2	8.3	0.0	2.1	4.7	1.9
Other services	-1.4	0.3	-0.5	4.2	3.9	0.3	3.0	0.5
Government	-2.7	0.3	0.5	0.8	-0.6	-1.5	-2.5	0.8

a. Shaded bars indicate recessions.

b. Seasonally adjusted using the Census Bureau's X-11 procedure.

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

In February, the Fourth District's unemployment rate rose 0.4 percentage point (pp) to 6.1%, double the U.S. increase of 0.2 pp from 5.2% to 5.4%. (March data show the U.S. unemployment rate falling back to 5.2%.) As a result, the gap in unemployment rates between the District and the U.S. widened in February. It began to widen at the end of 2003, grew widest near the end of 2004 and, after narrowing slightly, grew again to 0.7 pp in February, the highest level since at least 1990.

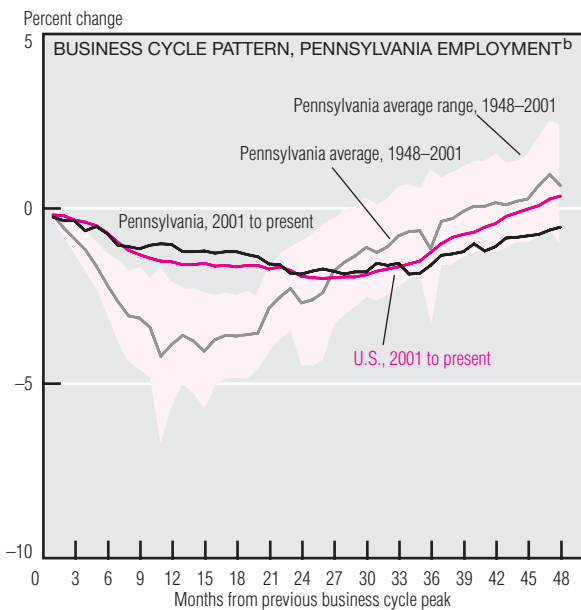
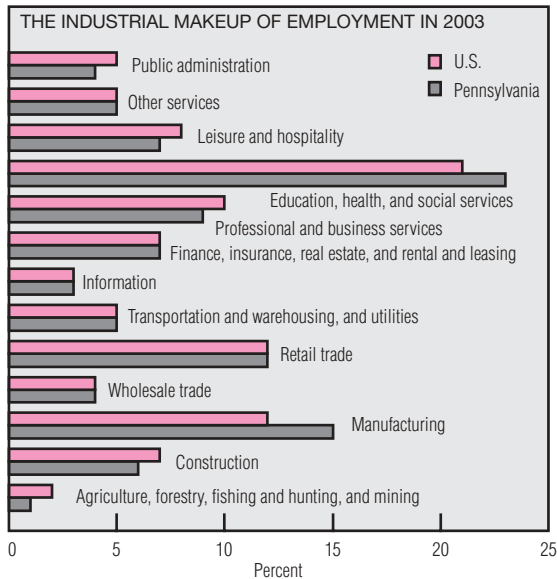
Differences between the District and U.S. are also clear in county

unemployment rates, particularly since new methods for estimating regional unemployment were implemented in January. In February, unemployment rates exceeded the U.S. average in about three-quarters of District counties, including those associated with almost every major population center in Ohio. However, unemployment rates in the counties where Pittsburgh, Wheeling, and Lexington are located were at or below the U.S. average.

Although payroll employment in many of the District's metropolitan areas rose during the 12-month period

ending in March, these gains generally did not keep pace with the nation's. Growth in the Lexington area was balanced between goods-producing and service-providing sectors during this period. By contrast, losses in goods-producing sectors in the Dayton, Toledo, and Pittsburgh areas were offset by growth in service-providing sectors, and large employment gains in Cleveland and Cincinnati goods-producing sectors offset weaker performance in service sectors.

Pennsylvania Employment



Industrial sector	Pennsylvania	U.S.
Education and health services	2.1	2.7
Leisure and hospitality	1.4	1.3
Other services	1.2	1.2
Professional and business services	1.2	0.0
Government	0.7	0.9
Construction	-0.1	1.0
Trade, transportation, and utilities	-0.2	-0.5
Financial activities	-0.5	1.2
Natural resources and mining	-1.4	0.4
Manufacturing	-5.1	-4.1
Information	-5.5	-4.2

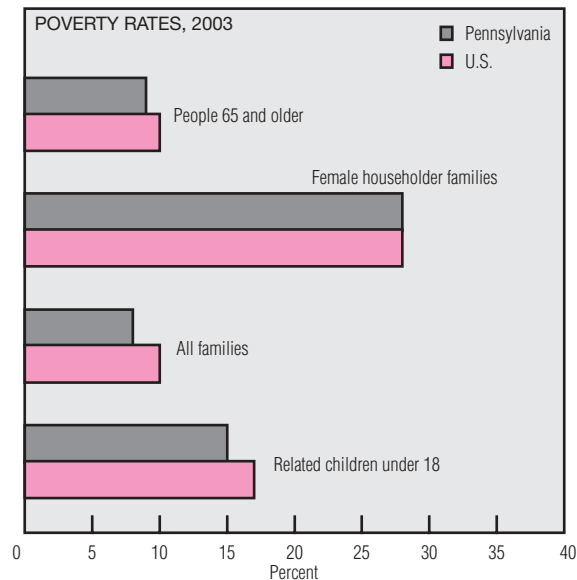
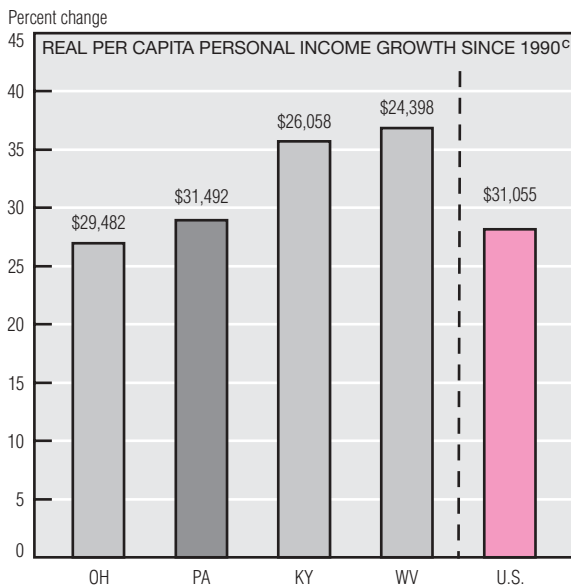
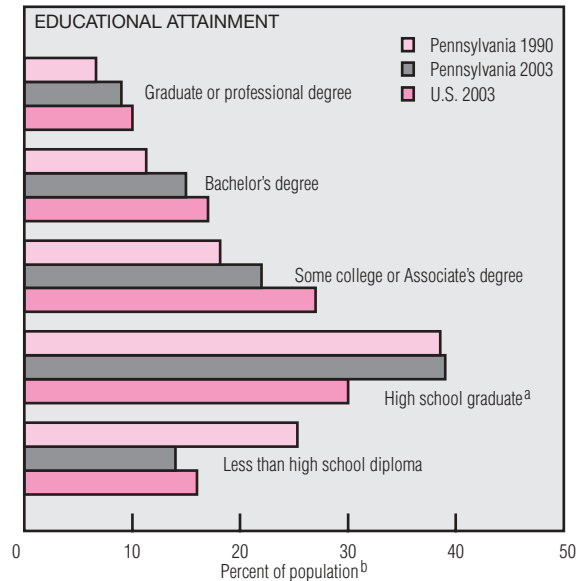
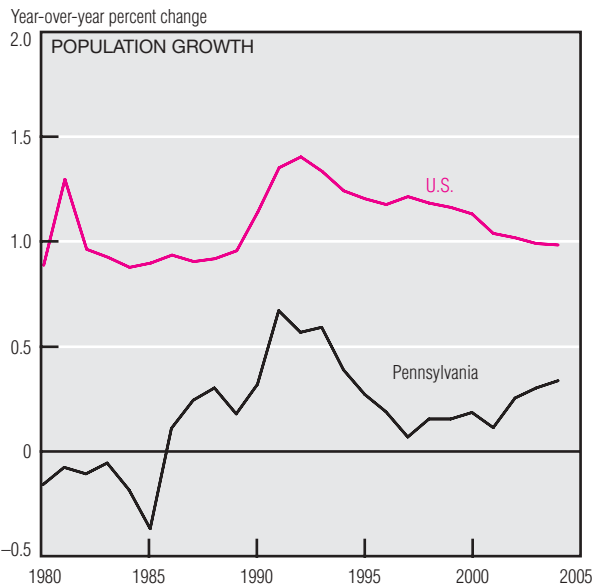
In 2003, Pennsylvania's industrial structure resembled the nation's in many ways but, like many Midwestern states, the share of its workforce in the manufacturing sector was slightly above the U.S. average (15% versus 12%). The subsectors employing the largest shares of Pennsylvania's manufacturing workers were fabricated metals (12.7%), food (10.5%), and chemicals (7.7%). The primary metals subsector, which includes steel production, employed about 6% of the state's manufacturing workers. Aside from manufacturing, Pennsylvania's concentration of

workers in education, health care, and social services was also substantially higher than the nation's. Given the general likeness, however, it is not surprising that Pennsylvania and the U.S. have had similar unemployment rates for the last 15 years. Similarity has also been evident in the current business cycle: For almost three years after March 2001, the most recent peak in economic activity, Pennsylvania and the U.S. lost employment at roughly the same rate. But since then, the U.S. has posted slightly greater gains than Pennsylvania: Whereas the U.S. regained its

prerecession employment levels in January, Pennsylvania has yet to do so. Nevertheless, unlike the U.S. and other Fourth District states, Pennsylvania's employment changes have stayed within the range of its historical experience throughout the cycle. Since the pre-recession peak, Pennsylvania's employment gains have been concentrated in service-providing sectors. However, employment in the information sector—a service-providing sector that includes conventional and internet publishing and broadcasting, as well as motion picture and sound recording—has decreased

(continued on next page)

Pennsylvania Employment (cont.)



NOTE: Educational attainment data for 2003 are from the American Community Survey; data for 1990 are from Census 2000.

a. The "high school graduate" category includes people with a G.E.D. and similar equivalents.

b. Aged 25 and older.

c. The number above each bar is the real per capita income for 2004:IVQ, expressed in chained 2000 dollars.

SOURCES: U.S. Department of Commerce, Bureau of the Census and Bureau of Economic Analysis.

sharply since March 2001 (-5.5%, compared to -5.1% in manufacturing).

Pennsylvania's rate of population growth has lagged the nation's for roughly the last 25 years. U.S. annual growth since 1980 has averaged just over 1%, while Pennsylvania's (0.2%) has been one-fifth that rate. Moreover, recent Census Bureau projections suggest that the state's population will grow at about that rate for the next 25 years, while the U.S. growth rate will speed up slightly to 1.2% annually.

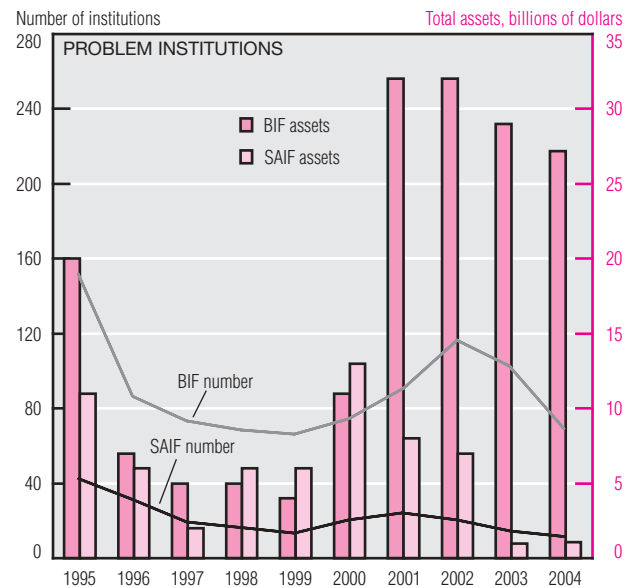
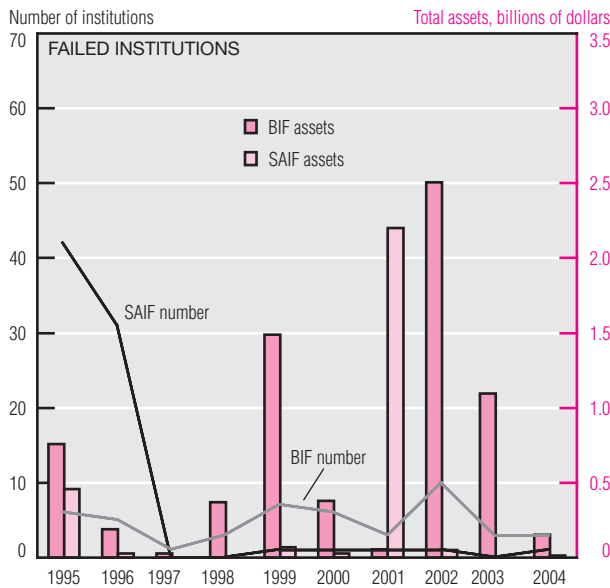
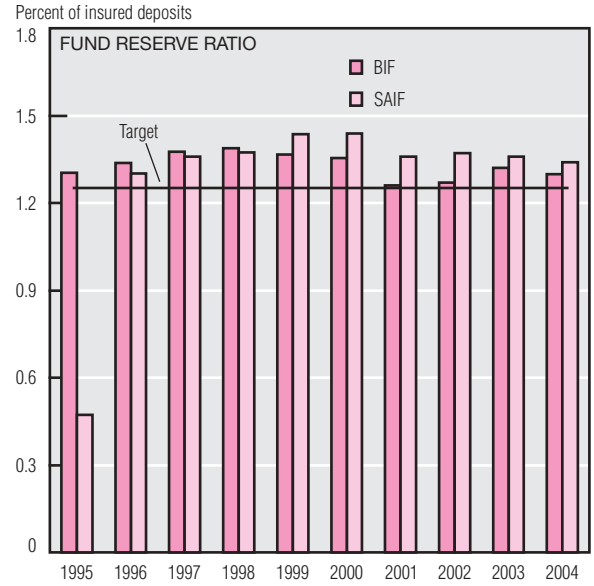
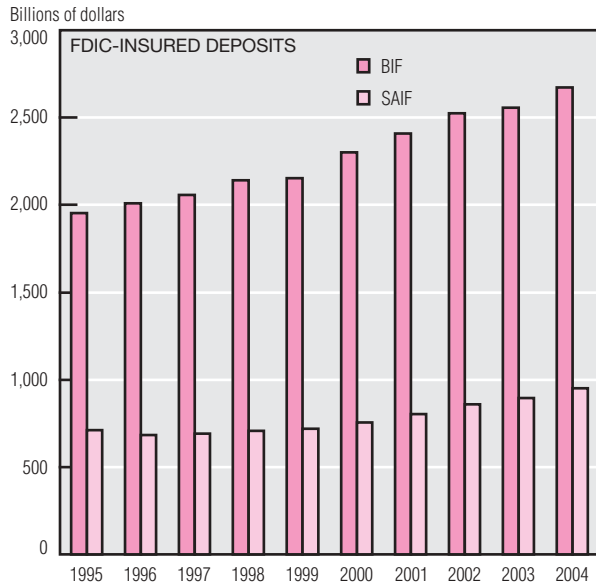
Economic growth can be divided into two components: population

growth (assuming a stable labor force participation rate) and productivity growth. But forecasts that Pennsylvania's population growth will be negligible don't mean that its economic growth will also be. Smaller contributions to economic growth from population changes can be mitigated by productivity increases. Productivity is partly a function of human capital levels, which can be approximated by educational attainment. Since 1990, the proportion of residents with post-secondary education has risen, a trend that bodes well for the state. However, the share of citizens

with more than a high school diploma continues to trail the U.S.

Although one might expect lower education levels to translate into lower average income, Pennsylvania is the only Fourth District state where inflation-adjusted income per capita exceeded the nation's. And while growth in per capita income since 1990 has been slower in Pennsylvania than in Kentucky or West Virginia, it has been faster than the U.S. average. The state's higher per capita income is also associated with poverty rates that are lower than national averages in some demographic categories.

Federal Deposit Insurance Funds



SOURCE: Federal Deposit Insurance Corporation, *Quarterly Banking Profile*, various issues.

FDIC-insured deposits grew in 2004: Those insured by the Bank Insurance Fund (BIF) grew at a 4.61% annualized rate and those insured by the Savings Association Insurance Fund (SAIF) at 6.12%. As of December 31, 2004, the FDIC insured about \$2.7 trillion of BIF members' deposits and almost \$1 trillion of SAIF members'. Robust growth in insured deposits outstripped growth in BIF and SAIF reserves. As a result, BIF reserves fell from 1.32% of insured deposits at the end of 2003 to 1.30% at the end of 2004. The SAIF ratio of reserves to

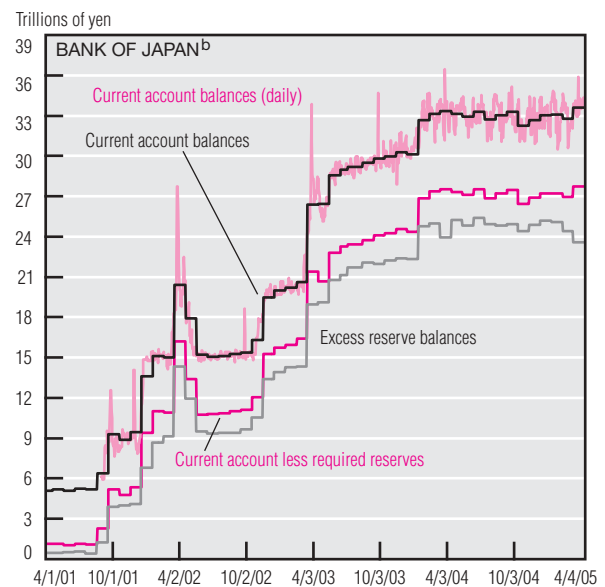
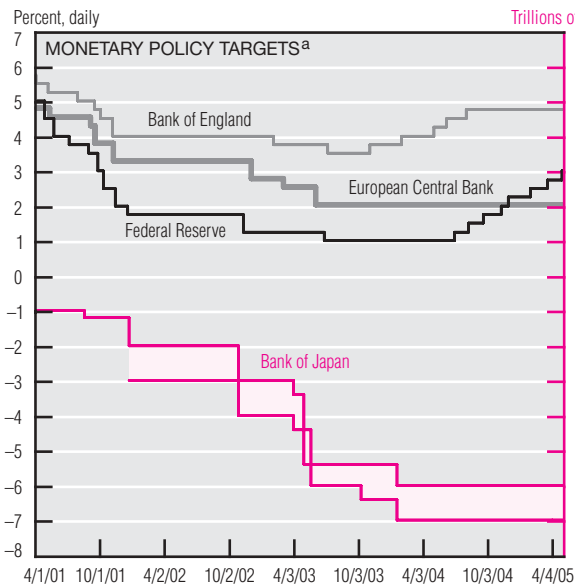
insured deposits also fell 2 basis points over this period. Both funds, however, continue to exceed the 1.25% target ratio of reserves to insured deposits set by Congress in the Financial Institutions Reform, Recovery, and Enforcement Act of 1989.

The two FDIC funds' solid position is consistent with the stability of the banking and thrift industries. Bank failures since 1995 have been miniscule in terms of numbers and total assets of failed institutions. The three BIF members that failed in 2004 were small institutions with total assets of \$151 million; the sole SAIF member

that failed in 2004 had assets of only \$15 million.

Problem institutions (those with substandard examination ratings) fell from 102 to 69 for the BIF and from 14 to 11 for the SAIF from the end of 2003 to the end of 2004. For both funds, the decrease in the number of problem institutions was accompanied by a decrease in problem institutions' assets. Moreover, both funds' continued low number of problem institutions and the low value of the institutions' assets suggest that their losses will remain low in the near future.

Foreign Central Banks



Examples of Central Bank Losses, 2004

Bank	Loss (billions of national currency)	Loss (U.S. dollars)	Loss (percent of 2003 year-end net worth)	Explanations
European Central Bank	1.6 (euro)	\$2.2 billion	2.5%	Revaluation of foreign-currency-denominated assets
Bank of Korea	150 (won)	\$146 million	1.9%	Interest payments on Monetary Stabilization Bonds

Past Examples of Central Bank Losses

Bank	Year	Loss (billions of national currency)	Loss (percent of prior year-end net worth)
Korea	1994	73.3 (won)	7%
Czech Republic	1996	8.7 (koruna)	32%
Hungary	1996	51.6 (forint)	108%
Brazil	1997	1.9 (real)	52%
Chile	1997	756.6 (peso)	570%
Thailand	1997	67.7 (baht)	147%

a. Federal Reserve: overnight interbank rate. Bank of Japan: a quantity of current account balances (since December 19, 2001, a range of quantity of current account balances). Bank of England and European Central Bank: 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; European Central Bank; Bank of England; Bank of Japan; Bank of Korea; CentralBankNet; and John Dalton and Claudia Dziobek, "Central Bank Losses and Experiences in Selected Countries," IMF Working Paper WP/05/72.

Among the four major central banks, only the Federal Reserve has changed a policy setting recently. It raised the target for the overnight federal funds rate another 25 basis points (bp) to 3.00%. This was expected: Each successive 25 bp increase since June 2004 has been preceded by a statement that "policy accommodation can be removed at a pace that is likely to be measured."

Central banking commonly is considered innately profitable. Typically, it involves the sale of non- or low-interest-bearing money to banks and the public in return for interest-

bearing loans and securities. For example, since 1914 the Federal Reserve has maintained modest capital growth by transferring about \$13 billion of earnings to surplus after paying statutory dividends of \$6.5 billion to member banks. The remaining \$549 billion of cumulative earnings were transferred to the U.S. Treasury.

Losses do occur, however. The European Central Bank (ECB) recently announced a €1.6 billion loss for 2004 after a €0.5 billion loss in 2003. The proximate cause of these losses was not profligate spending but prudent accounting. The ECB

holds a substantial amount of assets denominated in foreign currencies, principally U.S. dollars, which it revalues on its balance sheet when exchange rates alter. Euro appreciation resulted in unrealized revaluation losses of almost €2.1 billion in 2004, deducted from income. The Bank of Korea reported a loss of 150 billion won for 2004; the proximate cause apparently was not revaluation but the interest expense of issuing securities intended to sop up liquidity that was created in trying to prevent appreciation of the won.