

## *The Economy in Perspective*

*Color my world ...* The possibilities for monetary-policy head games expanded with the June 2 release of new labor market statistics indicating that private-sector payroll employment declined by 116,000 in May. Combining this news with other recent data on housing markets and retail sales, financial market analysts have already begun to anticipate less monetary policy restraint from the Federal Reserve this year than they expected just after the Federal Open Market Committee's May 16 meeting. If history offers any insight into market assessments, we should expect several twists and turns before the economy's trajectory and the ultimate stance of monetary policy become clearer.

Although current economic data are all we have to work with, they can present a misleading picture of underlying conditions. Data-generating agencies rely on various sampling techniques to learn about the larger whole, and these samples do not always produce reliable estimates. In addition, many key indicators are seasonally adjusted, but unusual weather patterns or holiday schedules (both of which occurred this year) can create false impressions. It often takes several quarters of data to bring fundamental patterns into focus, and sizable data revisions commonly occur one or more years after the initial release. Consequently, despite every effort to adjust officially reported statistics for these potentially distorting factors, history shows that analysts—and policymakers—have made incorrect inferences and decisions as a result of blurred vision.

Market analysts and policymakers are subject to another bias, which receives less attention than it deserves. Psychologists know that people tend to interpret information in keeping with mental frames of reference; these reference frames color what they see. The May labor force data provide a handy example. The Bureau of Labor Statistics reported a total increase of 231,000 jobs in May, not the previously described decline of 116,000 in the private sector. The headline-grabber, however, was that temporary Census workers swelled the employment ranks by 357,000 in May, and that after discounting them, private sector employment actually fell by 116,000 people.

If one's reference frame has the economy slowing down over the year (as the conventional wisdom predicts), one would naturally interpret the May labor numbers as corroborating evidence. Skeptics would be told to consider the hike in the nation's unemployment rate from 3.9% in April to 4.1% in May. If, however, one's

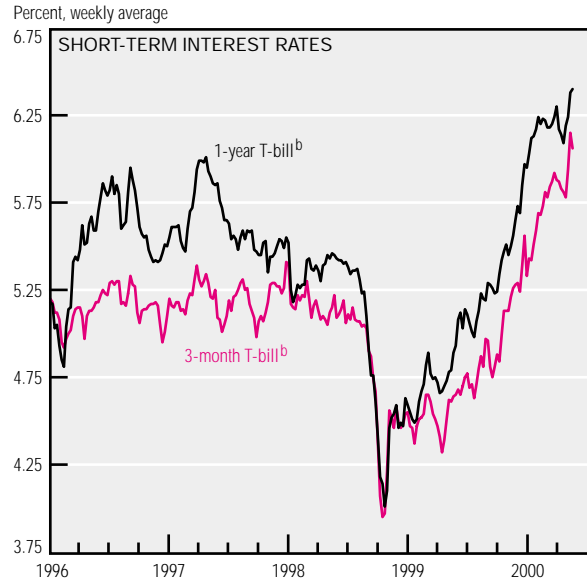
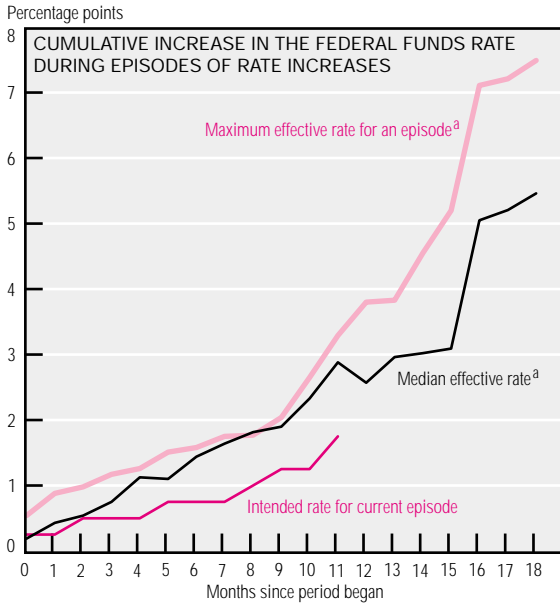
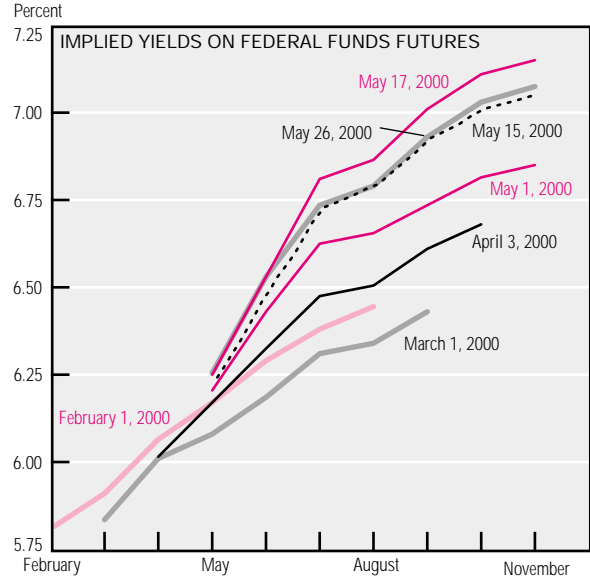
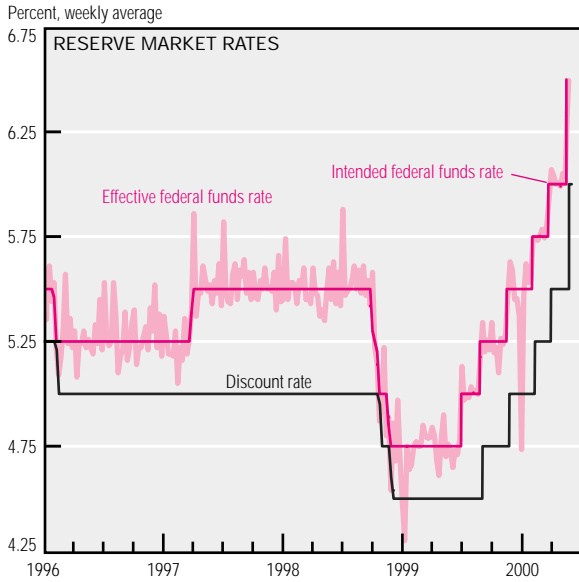
reference frame featured continued strong growth, the overall May figures could be used to support that view; after all, the total May increase exceeds the monthly averages of both the entire expansion and 1999. Doubtters would be instructed to remember that workers who have completed temporary Census jobs will become available for other work, thus easing some pressure from tight labor markets.

The power of preconceived reference frames should be neither doubted nor ignored. Market analysts, policymakers, and the general public are well aware that the conventional wisdom expected the U.S. economy's growth rate to slow markedly in each of the past four years, only to be proven wrong. In every year since 1995, the reference frame was articulated and incoming information initially was bent to validate that perspective. And, despite each year's large forecasting errors, the reference frame was simply renewed and incoming information was viewed again through that lens.

This year, of course, the situation is supposed to be different. The Federal Reserve has been increasing its intended federal funds rate target and discount rates steadily since last summer. In announcing 50-basis-point increases in these rates on May 16, the Fed stated that increases in demand have continued to exceed gains in potential supply. Financial market participants, reacting to previous rate increases as well as this explanation for the Fed's most recent actions, are once again envisioning a notable slowing in economic conditions. Observers are convinced they are finally right because they are certain the Fed will do whatever it takes to reduce the economy's manifest economic growth rate to one that is compatible with gains in potential supply.

It is hard to quarrel with those who contend that a determined Fed is capable of slowing the growth in aggregate demand. But, once again, it is useful to recall the power of preconceived notions. How much faith should be placed in the need to slow real economic growth in order to restrain inflationary pressures? If the public knows that the Fed is committed to resisting inflation increases, price-setting behavior will be disciplined accordingly. History shows that along with the pitfalls associated with reliably manipulating total demand, accurate real-time estimates of potential supply also can be quite elusive. Those who see the world through the output-gap prism must be careful to recognize the ways in which incoming light can be distorted.

# Monetary Policy



a. The median cumulative increase in the effective federal funds rate and the maximum cumulative increase during any given episode of rate increases were calculated for the period September 1954 to May 2000, excluding a period when the FOMC targeted reserves (October 1979 to December 1982). An episode of rate increases is defined as at least four consecutive months in which the average effective federal funds rate increased.

b. Constant maturity.

SOURCES: Board of Governors of the Federal Reserve System; and Chicago Board of Trade.

At its May 16 meeting, the Federal Open Market Committee (FOMC) voted to raise the federal funds target rate 50 basis points (bp) to 6.5%. The FOMC began the current round of increases in June 1999 and, until its most recent meeting, had raised the target rate by 25 bp increments in a remarkably steady manner. In fact, the Committee held to this pattern at five of the seven meetings previous to May; one could argue that only extraordinary circumstances, created by the century date change, prevented action at the December 1999 meeting. The Commit-

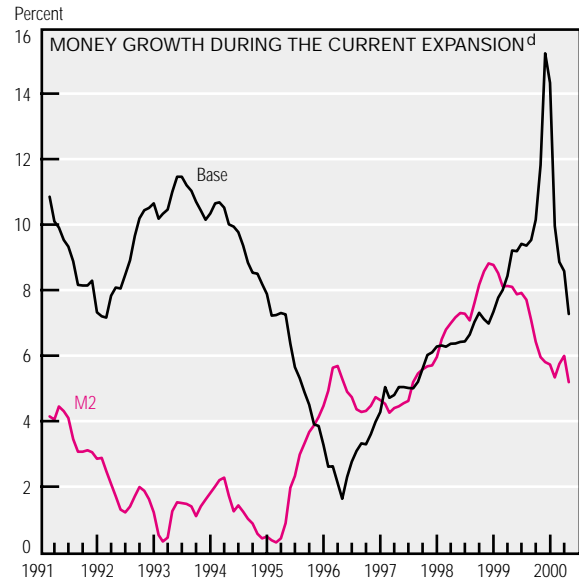
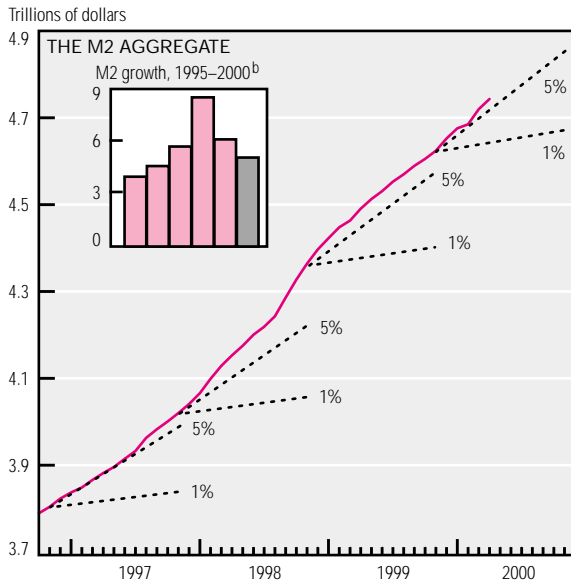
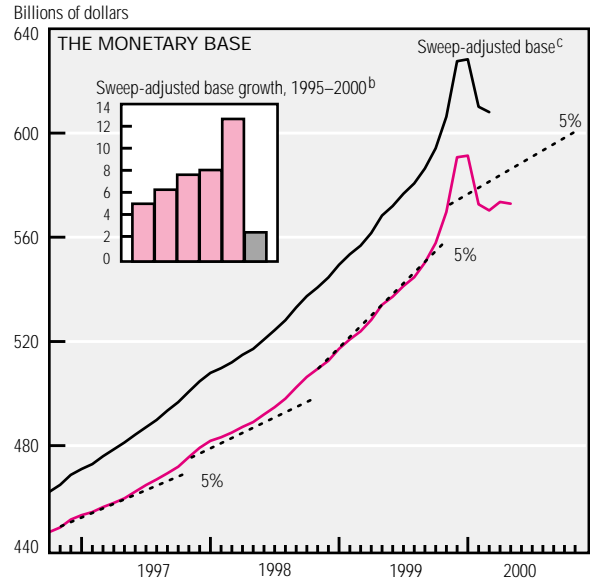
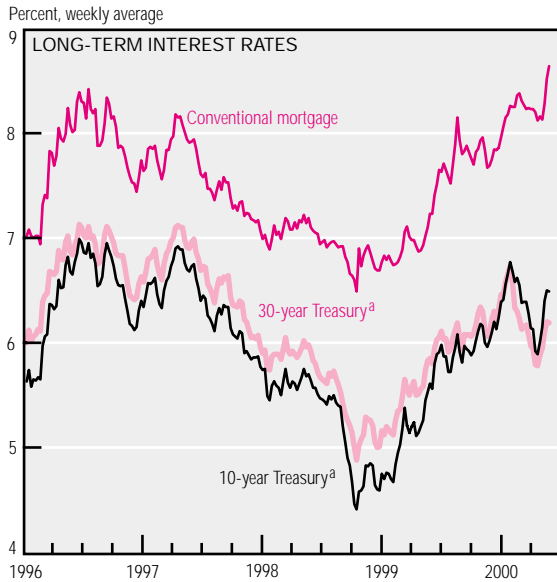
tee's press release cited potential inflationary imbalances fostered by continued growth in demand, which exceeded "even the rapid pace of productivity-driven gains in potential supply," as the reason for its more aggressive move of 50 bp.

Implied yields on fed funds futures, a widely used indicator of the expected policy path, reveal that market participants assigned a high probability to an increase of more than 25 bp. Expectations of future increases rose immediately after the announcement but have since returned to their pre-meeting levels.

On May 26, the November contract traded at 7.08%, 58 bp above the current target rate.

Although we may have become used to increases of 25 bp, considerably larger ones are not uncommon. Compared to other periods when the FOMC raised rates, the current episode is relatively mild. The monthly average for the effective federal funds rate shows that since the mid-1950s, the maximum cumulative increase (which occurred between March 1972 and September 1973), was nearly 7.5 percentage *(continued on next page)*

# Monetary Policy (cont.)



a. Constant maturity.  
 b. Growth rates are percentage rates calculated on a fourth-quarter over fourth-quarter basis. The 2000 growth rates for M2 and the monetary base are calculated on an estimated May over 1999:IVQ basis. The 1999 growth rate for the sweep-adjusted base is calculated on a March over 1999:IVQ basis.  
 c. The sweep-adjusted base contains an estimate of required reserves saved when balances are shifted from reservable to nonreservable accounts.  
 d. Year-over-year percent change.  
 NOTE: Data are seasonally adjusted. Last plots for M2 and the monetary base are estimated for May 2000. Last plot for sweep-adjusted base is March 2000. Dotted lines for M2 are FOMC-determined provisional ranges. All other dotted lines represent growth rates and are for reference only.  
 SOURCE: Board of Governors of the Federal Reserve System.

points. Moreover, the cumulative increase in the intended rate since June 1999 (1.75 percentage points) is more than a full percentage point lower than the median increase in the effective rate 11 months after the start of an episode of rate increases.

Both long- and short-term interest rates moved sharply upward after the FOMC's May announcement. The 3-month and 1-year Treasury bills reached 6.06% and 6.40%, up 73 bp and 45 bp on the year, respectively. The 10-year Treasury bond

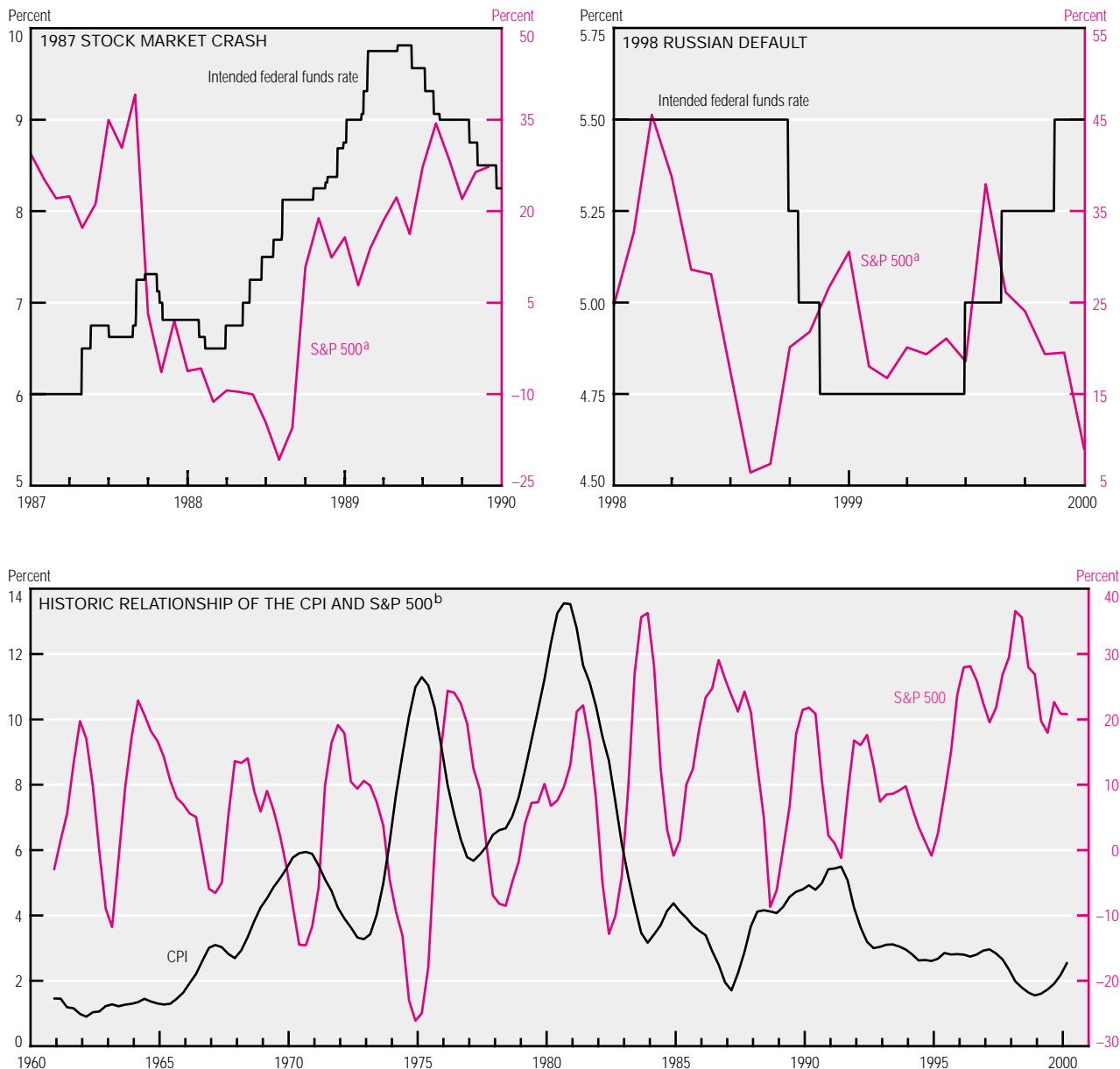
yield regained ground (up 8 bp on the year at 6.49%). Yields on the 30-year Treasury bond made some gains but remain depressed (down 27 bp on the year at 6.19%).

The monetary aggregates show signs of slowing in the face of higher interest rates. Annualized growth in the sweep-adjusted monetary base (2.37%) shows the most dramatic reversal; however, annualized M2 growth is also lower than in recent years. The growth of these monetary aggregates, fairly robust in the latter

years of the current expansion, now appears to be decelerating.

Ever since Federal Reserve Chairman Alan Greenspan uttered the now-famous phrase "irrational exuberance" in late 1996, there has been growing debate over whether the Fed should respond to asset prices. Many central bankers maintain that using interest rates to respond to stock markets—and possibly to manipulate them—is dangerous. Nonetheless, central banks  
*(continued on next page)*

## Monetary Policy (cont.)



a. Closing price at end of month, year-over-year percent change.

b. Four-quarter trailing average, year-over-year percent change.

SOURCES: U.S. Department of Labor, Bureau of Labor Statistics; Board of Governors of the Federal Reserve System; and *Wall Street Journal*.

almost certainly react to significant stock market moves, such as the 1987 crash. In that instance, the Federal Reserve lowered interest rates immediately, opening the spigot for more rapid money growth. To a lesser extent, the same action followed the Russian default crisis in 1998. These events, however, were immediate reactions to a potential financial crisis rather than a concerted response to the market.

Whether central banks systematically increase interest rates when stock markets rise over an extended

period is more germane to the current debate. Some fear that increased paper wealth will spill over into rapid consumer spending, thereby igniting inflation.

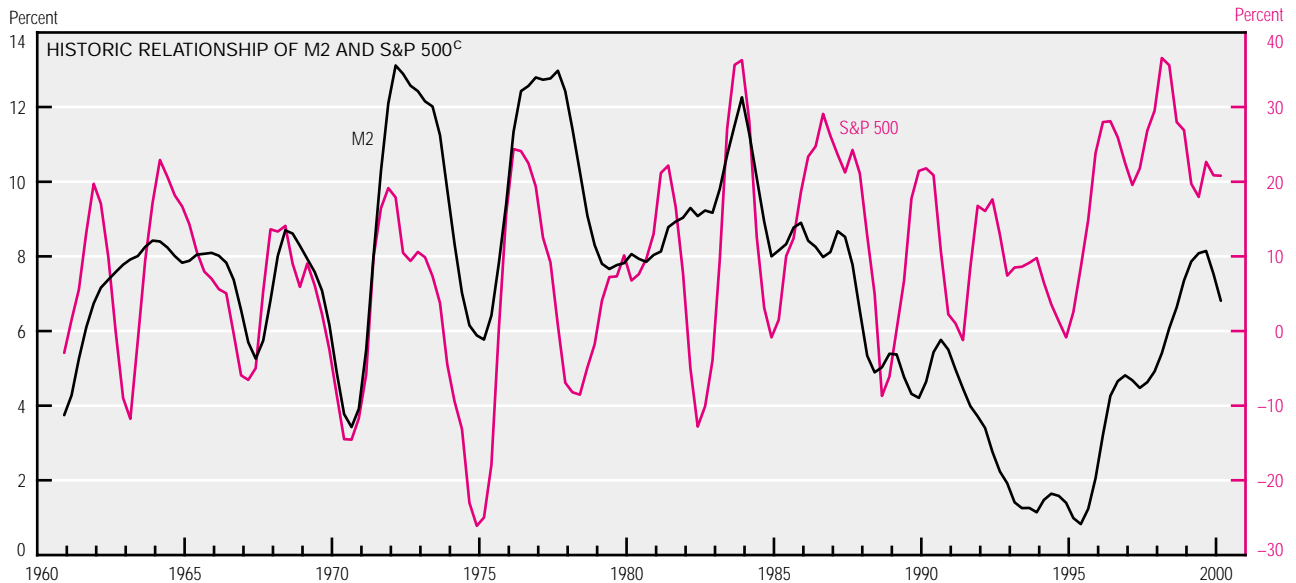
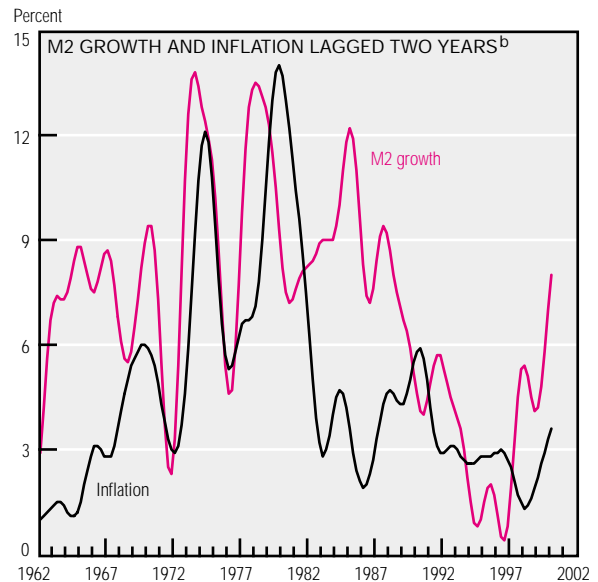
Evidence that the stock market causes inflation is weak at best. There is little discernible correlation between CPI inflation and the S&P 500 growth rate. The two tracked each other fairly closely in the 1970s and early 1980s, but this is the exception, not the rule. Given the twin recessions during the period, moreover, many argue that even this cor-

relation is spurious—a reaction to changes in underlying economic conditions, not in the stock market.

Cross-country evidence suggests that only in a minority of countries do stock markets contribute to inflation, after controlling for its usual causes. In only 25% of countries did lagged stock market growth over a one-year horizon help to explain inflation variability. In contrast, lagged inflation contributed to inflation variability in 100% of countries and lagged changes in money in  
(continued on next page)

# Monetary Policy (cont.)

	Percent of countries	
	One-year horizon	Two-year horizon
Change in CPI	100.0	83.3
Change in GDP	33.3	33.3
Change in money	58.3	58.3
Change in stock prices	25.0	33.3



- a. Table shows the percentage of country regressions for which the coefficient of at least one lag window of a variable appeared correctly signed and significant at least at the 10% level.
- b. Inflation and M2 growth are annualized percent changes in quarterly average CPI all items and M2, respectively. All data are filtered using a band-pass filter to remove frequencies of two years and higher.
- c. Four-quarter trailing average, year-over-year percent change.
- SOURCES: U.S. Department of Labor, Bureau of Labor Statistics; Board of Governors of the Federal Reserve System; Charles Goodhart and Boris Hofmann, "Do Asset Prices Help to Predict Consumer Price Inflation?" Financial Markets Group, London School of Economics; Lawrence Christiano and Terry Fitzgerald, "The Band Pass Filter," National Bureau of Economic Research, Working Paper no. 7257, July 1999; and *Wall Street Journal*.

58%. Lagged GDP growth is a better inflation predictor than stock market growth, although it was significant in only one-third of countries.

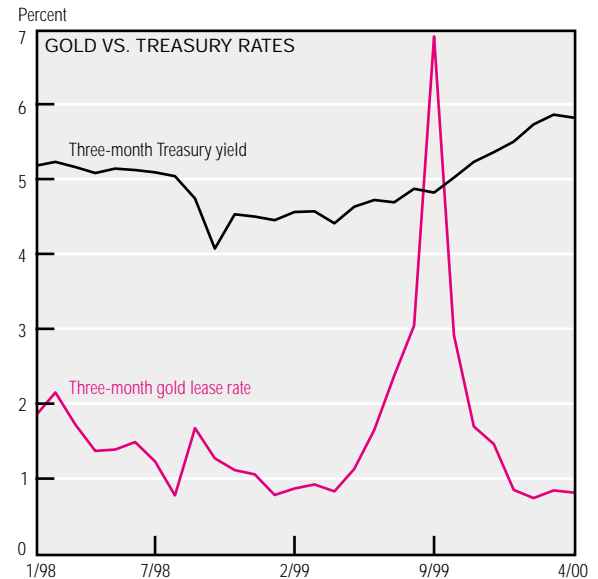
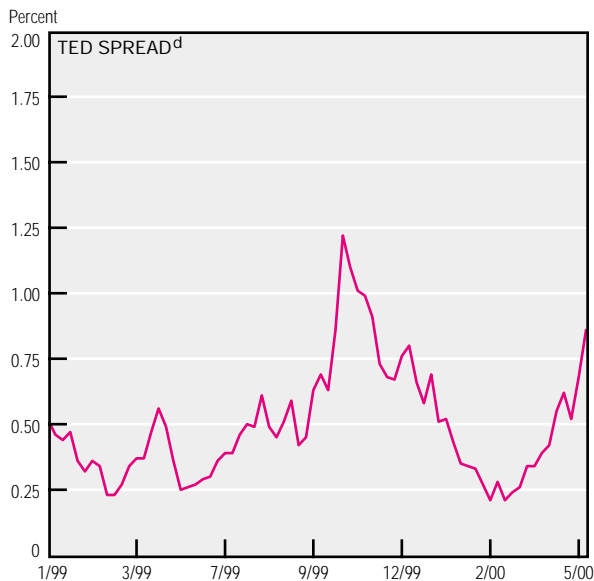
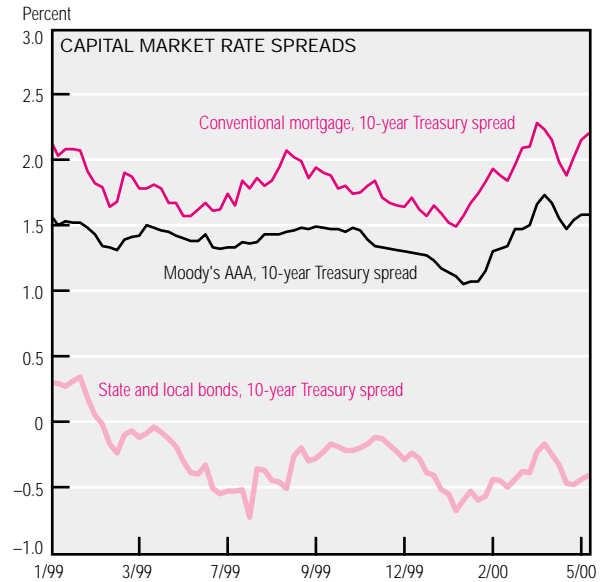
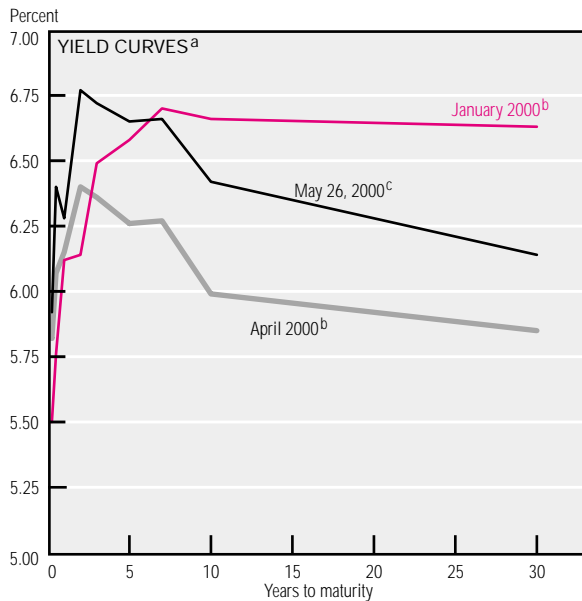
Monetary policy—as defined by changes in the fed funds rate—does not usually respond directly to the stock market. Money growth, as defined by M2, is highly correlated with the stock market, but even this relationship apparently broke down in the 1990s. The correlation does not reflect a concerted effort of the

central bank to increase M2 in response to the stock market, however. Stock market transactions are frequently conducted in M2 assets; thus, the demand for M2 generally increases with the stock market. This change is driven by the market, not by policy.

Increases in M2 over longer time horizons lead to increased inflation, explaining the weak correlation between CPI inflation and stock market growth. Because high money

growth over long periods inevitably leads to inflation, some argue that central banks should defuse market-driven money growth by increasing the fed funds rate. This argument has merit, but it has more to do with whether central banks should target M2 growth rather than the stock market. Evidence suggests that policymakers should be concerned with rapid and sustained M2 growth, not with transitory changes in money growth.

# Interest Rates



a. All yields are from constant-maturity series.

b. Monthly averages.

c. Averages for the week of May 26, 2000.

d. The spread between the three-month eurodollar deposit rate and the three-month Treasury-bill rate.

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

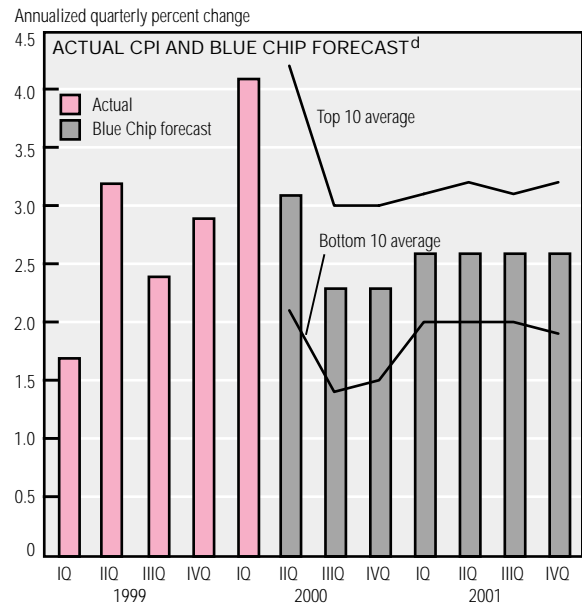
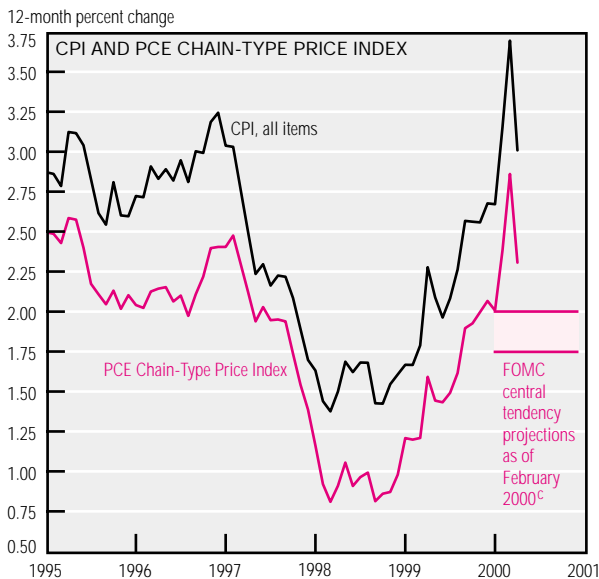
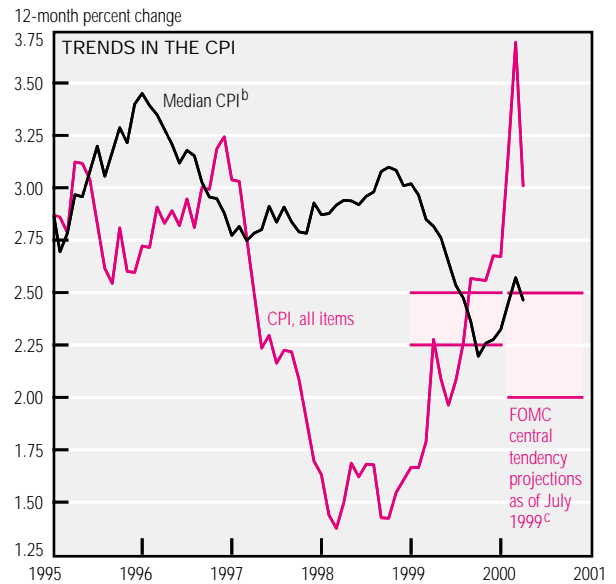
Over the past month, the yield curve shifted higher while retaining its humped shape, with short and long rates lower than medium-term rates. Since the beginning of the year, short rates have moved up as long rates moved down. While the Federal Open Market Committee's recent increase of 50 basis points (bp) in the target federal funds rate was reflected in a 10 bp increase in the three-month rate, it is harder to explain the 43 bp increase in the 10-year rate. Perhaps concern about inflation has also risen despite the FOMC's action.

The yield curve looks at bonds that differ by maturity, but much of the information in the fixed-income market comes from bonds that differ by other characteristics. Among long-term bonds, spreads over Treasuries have generally increased, most likely because greater economic uncertainty has made them riskier, raising the premium demanded by investors for bearing risk. This is perhaps most apparent in the Treasury-to-eurodollar (TED) spread, which, because it compares dollar assets of similar maturities, is almost purely a risk spread.

Interest is not invariably paid in money. In the gold market, lending 100 ounces for a year means you will receive 102 ounces back, if the gold lease rate is 2%. Central banks around the world are big gold lenders, and their actions strongly influence the lease rate. The turnaround in September 1999 followed from the Washington Agreement, in which 15 nations' central banks resolved uncertainty about their practices, agreeing not to expand leasing and to avoid future gold sales other than those already announced.

# Inflation and Prices

	Percent change, last:				1999 avg.
	1 mo. <sup>a</sup>	3 mo. <sup>a</sup>	12 mo.	5 yr. <sup>a</sup>	
<b>Consumer prices</b>					
All items	0.0	5.1	3.0	2.4	2.7
Less food and energy	2.0	3.2	2.2	2.4	1.9
Median <sup>b</sup>	1.9	3.0	2.5	2.9	2.3
<b>Producer prices</b>					
Finished goods	-3.4	7.0	3.9	1.5	2.9
Less food and energy	1.6	2.5	1.3	1.2	0.8



a. Annualized.

b. Calculated by the Federal Reserve Bank of Cleveland.

c. Upper and lower bounds for inflation path as implied by the central tendency growth ranges issued by the FOMC and nonvoting Reserve Bank presidents.

d. Blue Chip Panel of economists.

SOURCES: U.S. Department of Labor, Bureau of Labor Statistics; U.S. Department of Commerce, Bureau of Economic Analysis; Federal Reserve Bank of Cleveland; and *Blue Chip Economic Indicators*, May 10, 2000.

Following the largest monthly increase in nearly a decade, the Consumer Price Index (CPI) was unchanged in April. Energy prices, whose sharp increases have pushed the index higher over the past few months, reversed course and dropped 1.9% (20.8% annualized) in April. This was the first decline posted by the retail energy price index since last June.

The reversal in the energy index was not the sole cause of the decelerating price trend, however; prices of apparel and transportation goods

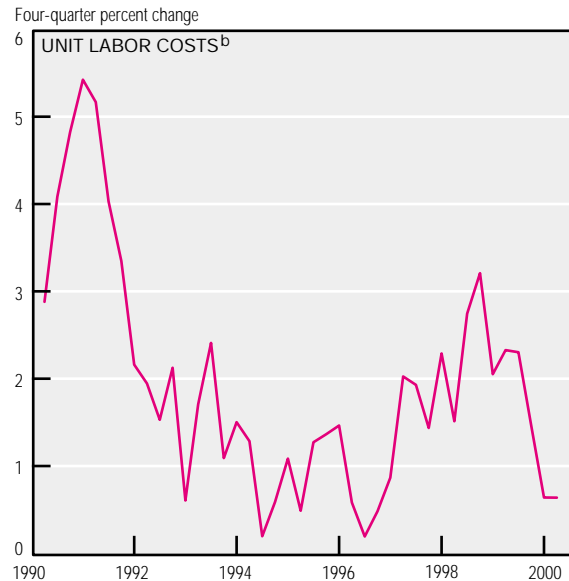
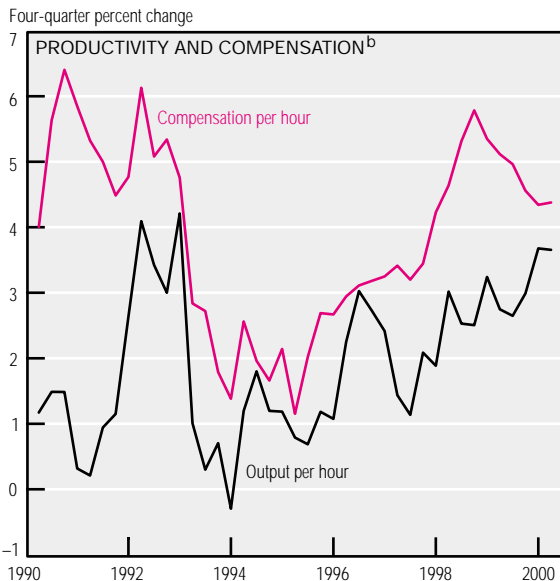
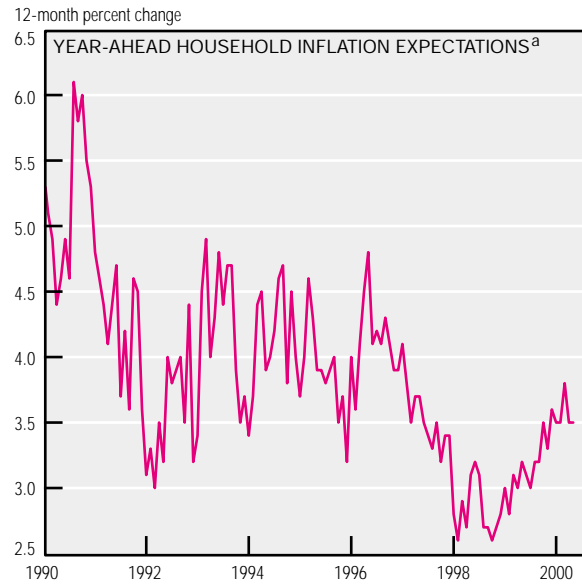
and services also fell during the month. In addition, the indexes for medical care, housing, and recreation rose less sharply in April than in March. The broad-based deceleration in the retail price data was shown by the median CPI, a measure of core inflation: After increases of 0.3% for each of the first three months of the year, the index rose just 0.2% (nearly 2% annualized) in April. Likewise, an alternative measure of core inflation, the CPI excluding food and energy, rose 0.2% (2.0% annualized) during the month,

after posting a gain of 5.8% (annualized) between December and March.

Professional forecasters seem to have anticipated the slower pace of price increases. The consensus CPI forecast for the second quarter of 2000 is considerably lower than the CPI's rate of increase for the first quarter of 2000. Consensus forecasts for the latter half of 2000 through the end of 2001 suggest that the CPI's rate of increase will level out between 2.3% and 2.6%.

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## Inflation and Prices (cont.)



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

b. Nonfarm business sector.

SOURCES: U.S. Department of Labor, Bureau of Labor Statistics; and University of Michigan.

Analysts and others trying to get a read on approaching inflation often appeal to labor market conditions, particularly the growth rate of wages. Some believe that upward wage pressure presages future price increases. If they are right, the recent acceleration in labor costs as measured by the Employment Cost Index (ECI) should be viewed with concern. Between 1999:1Q and 2000:1Q, the ECI jumped 4.3%, the largest four-quarter increase in almost a decade; however, the index began a generally upward trend around 1996.

The higher-wages-beget-higher-inflation scenario seems to be confirmed by the gradual rise in households' year-ahead inflation expectations. After hitting a recent low around 2¾% in late 1998, household inflation projections have slowly risen to a current reading of about 3½%.

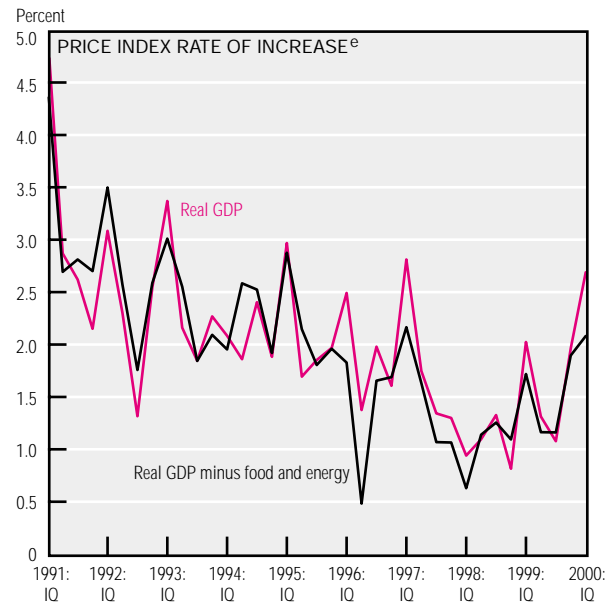
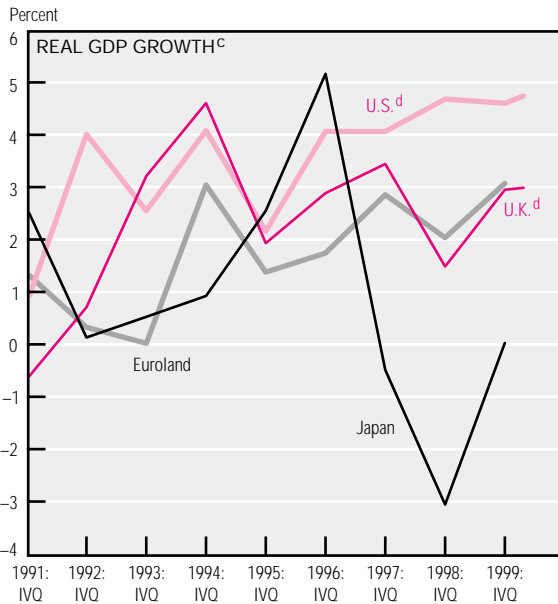
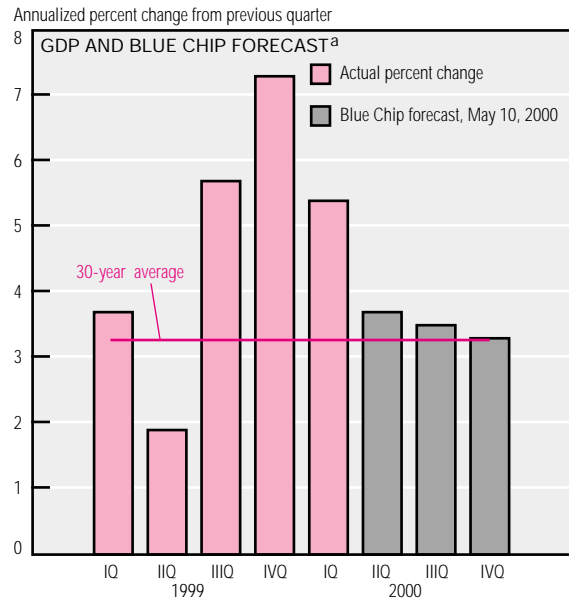
Not all economists agree that wage behavior foretells future inflation trends; indeed, the empirical evidence linking the two is the subject of considerable controversy. More-

over, the recent rise in the ECI contrasts with other measures of recent wage growth. For example, the four-quarter growth rate of compensation per hour peaked in late 1998, and has since fallen almost 1½ percentage points. When we adjust these compensation gains for labor productivity growth (an inflation gauge called "unit labor costs"), labor market data suggest that inflationary pressures have actually moderated in the past year or so, returning to their lows of the 1994-97 period.



# Economic Activity

	Change, billions of 1996 \$	Percent change, last:	
		Quarter	Four quarters
Real GDP	119.5	5.4	5.0
Consumer spending	111.4	7.5	5.8
Durables	43.9	22.4	12.9
Nondurables	24.7	5.6	5.0
Services	47.1	5.6	4.9
Business fixed investment	74.7	19.8	8.8
Equipment	61.3	26.7	14.1
Structures	11.8	20.6	2.3
Residential investment	4.8	5.2	2.1
Government spending	-4.8	-1.2	3.4
National defense	-22.2	-22.3	-0.4
Net exports	-28.8	—	—
Exports	-14.4	5.5	7.7
Imports	43.2	12.7	12.7
Change in private inventories	-36.2	—	—



a. Chain-weighted data in billions of 1996 dollars.

b. Components of real GDP need not add to totals because current dollar values are deflated at the most detailed level for which all required data are available.

c. Fourth-quarter over fourth-quarter percent change.

d. Last observation is the annualized quarterly percent change for 2000:IQ.

e. Chain-Type Price Index, annualized quarterly percent change.

NOTE: All data are seasonally adjusted.

SOURCES: U.S. Department of Commerce, Bureau of Economic Analysis; and *Blue Chip Economic Indicators*, May 10, 2000.

The 2000:IQ preliminary GDP estimate confirmed the 5.4% growth rate of the advance estimate as well as the broad contours of the continuing economic expansion. Consumer spending, especially on durable goods, continued to grow at a very brisk rate. Business fixed investment spending was particularly strong, reversing a slowdown of several quarters in equipment spending and outright declines in expenditures on structures. Revi-

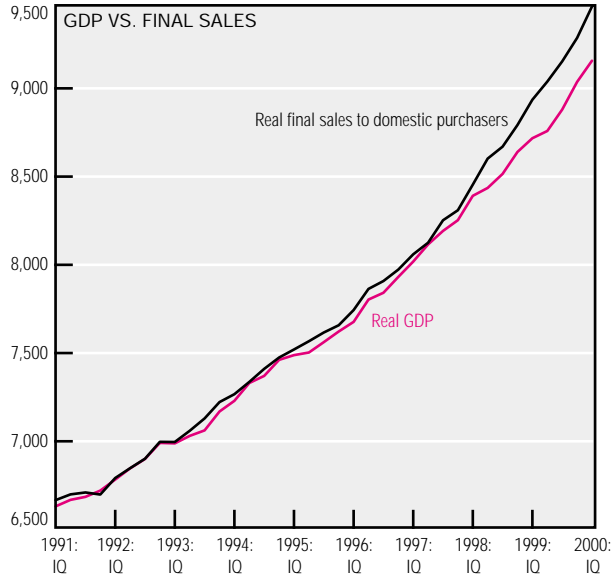
sions to advance-estimate components were offsetting and not substantial. Business fixed investment spending was even stronger than initially estimated, while exports seem to have increased rather than decreased, though only slightly more than the increase in the estimate of imports. The Blue Chip forecast of GDP growth for the remainder of 2000 maintains that growth will taper off to the 30-year average of just over 3%.

The developed nations experienced strong growth in 1999. In the U.S., growth continued above 4.5%; in Western Europe, it picked up to about 3%; and in Japan, economic decline may have ceased, although there is some uncertainty about the reliability of the available estimate. This represents a joint performance better than any since 1996.

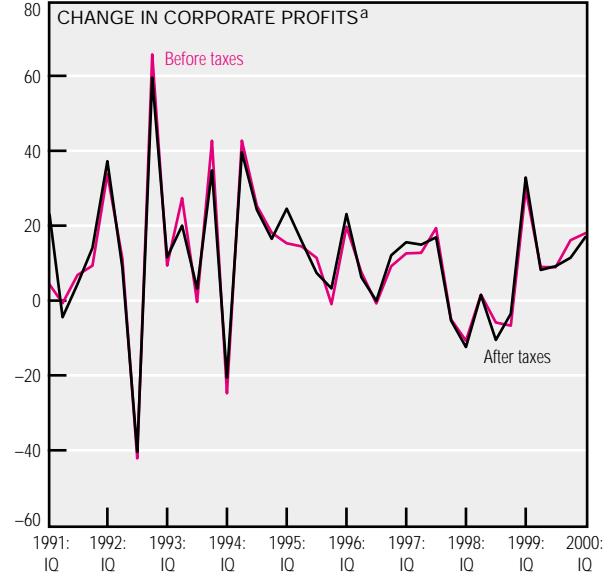
In the U.S., the GDP price index advanced sharply in both of the last  
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## Economic Activity (cont.)

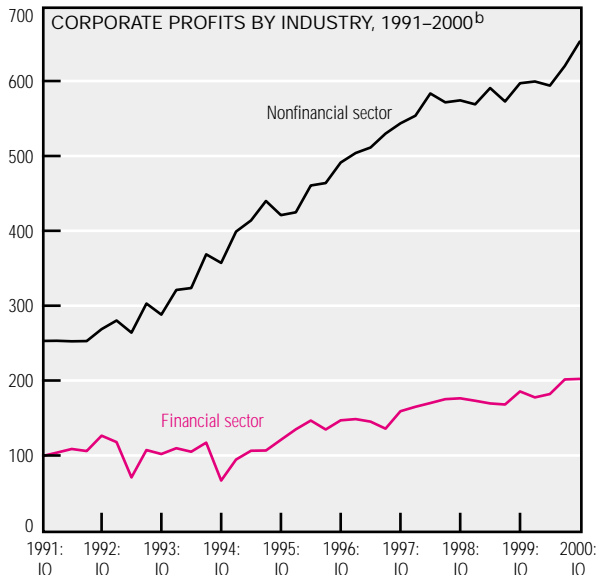
Billions of chained 1996 dollars



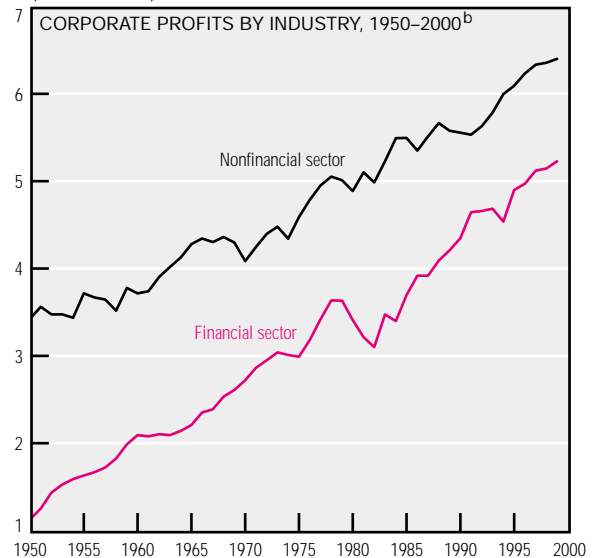
Percent



Billions of dollars



ln (billions of dollars)



a. Annualized quarterly percent change.

b. Before-tax profits of domestic industries, with inventory valuation and capital-consumption adjustments.

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

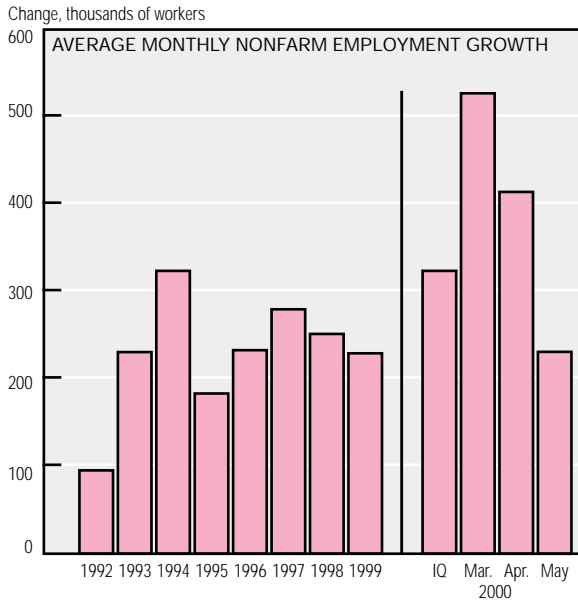
two quarters, more than doubling from little more than a 1% annual rate of increase to over 2.5%. Food and energy have added to the index's growth for most of the last five years, but their impact was especially large in 2000:1Q. Even so, as GDP growth has picked up around the world, so too has the rate of increase of the adjusted GDP price index in the U.S. Of course, domestic purchasers have increased spending more quickly than domes-

tic production has grown; the widening difference can be attributed mostly to net exports, with imports sold to domestic purchasers rising more rapidly than exports sold to the rest of the world.

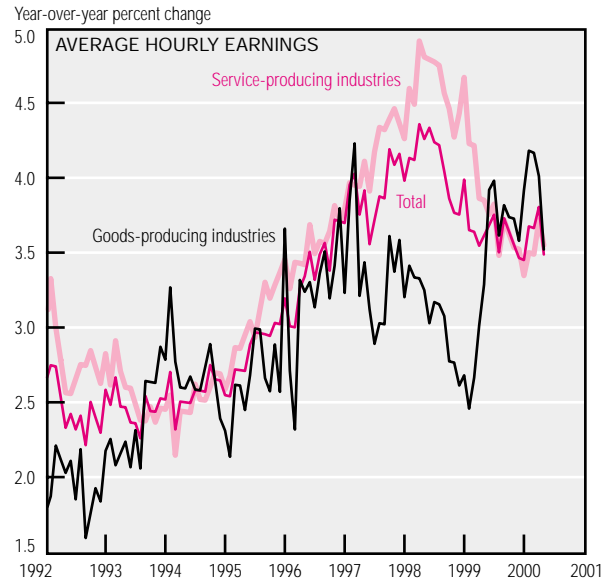
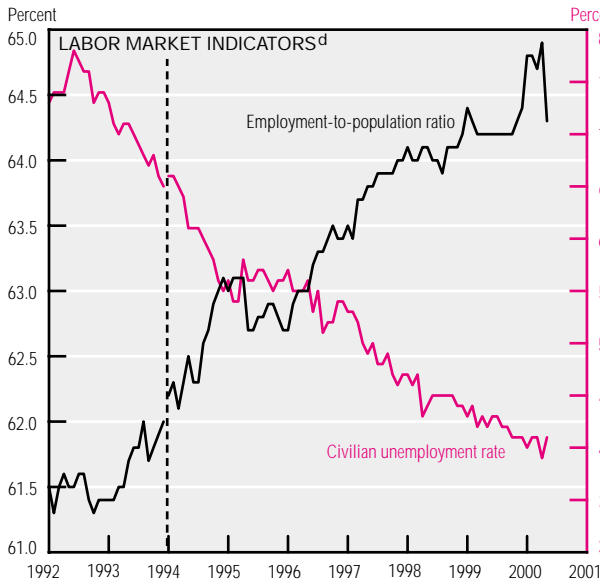
Corporate profits (without inventory and capital-consumption adjustments) declined significantly between 1997:IIIQ and 1999:1Q. For the past year, however, profits have grown rapidly, an occurrence unrelated to tax considerations. Domestic

nonfinancial corporations' profits (with inventory and capital-consumption adjustments) have increased sharply over the past two quarters after more than two years of little change. Profit growth in the financial sector has not been as strong, either recently or over the current expansion. Taking an even longer-term view, however, the case is reversed, with the financial sector outperforming the nonfinancial sector.

# Labor Markets



	Average monthly change (thousands of employees)				
	1997	1998	1999	YTD <sup>a</sup>	May 2000
Payroll employment	280	251	229	323	231
Goods-producing	48	22	4	22	-47
Mining	1	-3	-3	2	-1
Construction	21	37	25	22	-29
Manufacturing	25	-12	-18	-2	-17
Durable goods	27	-2	-6	3	0
Nondurable goods	-2	-11	-12	-5	-17
Service-producing	232	229	225	301	278
TPU <sup>b</sup>	16	20	16	10	-11
Retail trade	24	30	36	40	-67
FIRE <sup>c</sup>	21	22	10	-1	-4
Services	141	120	124	103	17
Government	17	28	28	141	347
Average for period (percent)					
Civilian unemployment	4.9	4.5	4.2	4.0	4.1



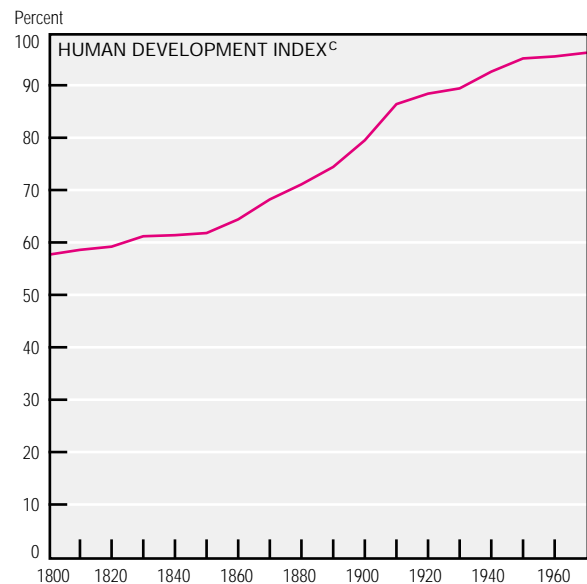
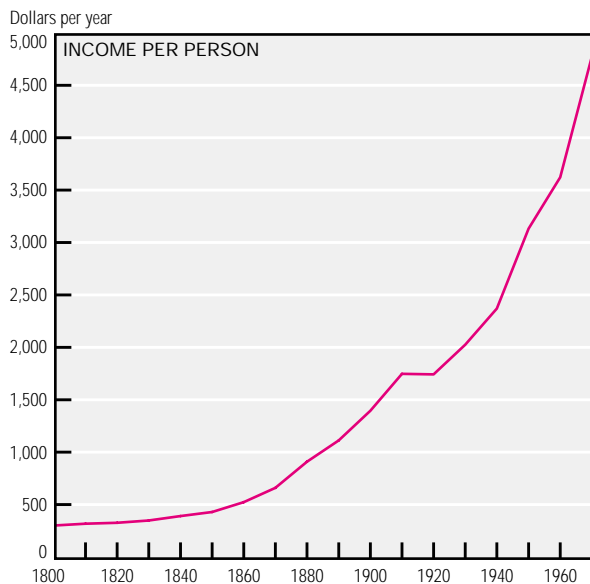
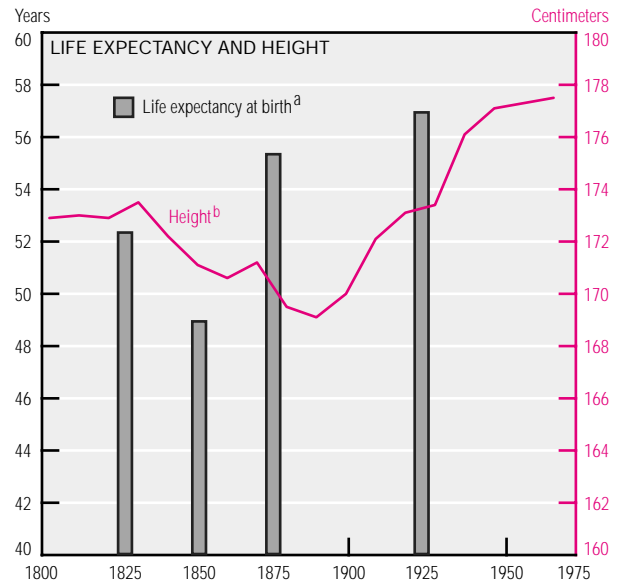
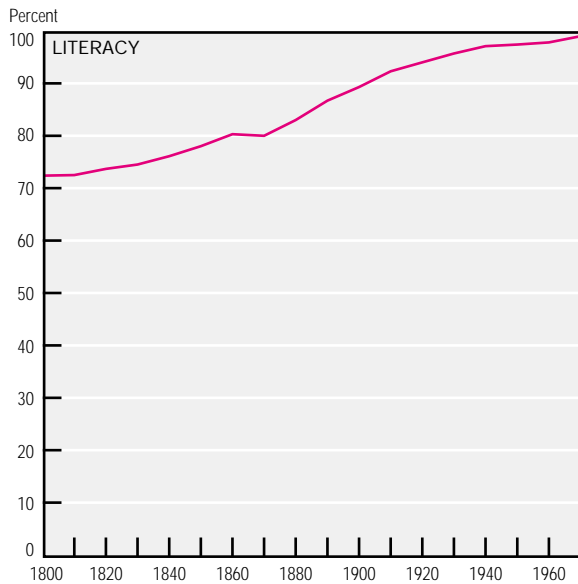
a. Year to date.  
 b. Transportation and public utilities.  
 c. Finance, insurance, and real estate.  
 d. Vertical line indicates break in data series due to survey redesign.  
 NOTE: All data are seasonally adjusted.  
 SOURCE: U.S. Department of Labor, Bureau of Labor Statistics.

Payroll employment growth slowed unexpectedly in May. After two successive monthly increases, each exceeding 400,000 jobs (revised estimates), the net employment gain last month was only 231,000 jobs. Although this tops the averages for both the current expansion (212,000) and the previous 30-year period (167,000), nearly all of May's employment gains resulted from the hiring of temporary census takers (357,000 workers). In fact, private-sector payroll employment actually declined 116,000 workers during the month. For the year to date, monthly

employment growth has averaged 323,000 workers, compared with 229,000 for 1999. However, the impact of Census Bureau hiring is evident in these estimates too, as average private nonfarm employment growth is slightly lower in 2000 than in 1999—182,000 versus 202,000. Outside the government sector, employment fell in almost every major employment category, the exceptions being service industry employers and durable-goods manufacturers. The net gain for the service industry was 17,000 workers in May; however, this is much lower than the

average monthly gain of 103,000 jobs for the year to date. Durable-goods manufacturers made no net additions to their payrolls in May. The unemployment rate, after falling to 3.9% in April, returned to a reading above 4% in May. As in February and March, it again stands at 4.1%. The employment-to-population ratio also retreated from its record high in April, falling to 64.3% for the month. Average hourly earnings increased 1 cent in May and now stand 3.5% above the levels of a year ago.

# Human Welfare and Economic Growth



a. The data series for average life expectancy is incomplete.

b. Average height of U.S. military recruits.

c. The Human Development Index includes per capita income, average height, and literacy rates, weighted equally.

SOURCES: Dora L. Costa and Richard H. Steckel, "Long-Term Trends in Health, Welfare, and Economic Growth in the United States," in Richard H. Steckel and Roderick Floud, eds., *Health and Welfare during Industrialization* (Chicago: University of Chicago Press, 1997), pp. 47–89; and Robert W. Fogel, "Nutrition and the Decline in Mortality since 1700: Some Preliminary Findings," in Stanley L. Engerman and Robert E. Gallman, eds., *Long-Term Factors in American Economic Growth, Studies in Income and Wealth Series*, vol. 51 (Chicago: University of Chicago Press, 1986), pp. 439–527.

Health, literacy, and economic growth are intimately connected. A healthier, more literate population leads to more rapid productivity growth and improved living standards. At the same time, greater income growth enables people to purchase the goods and services necessary to improve education and health—more schooling, better nutrition, shelter, sanitation, medical care, and so on.

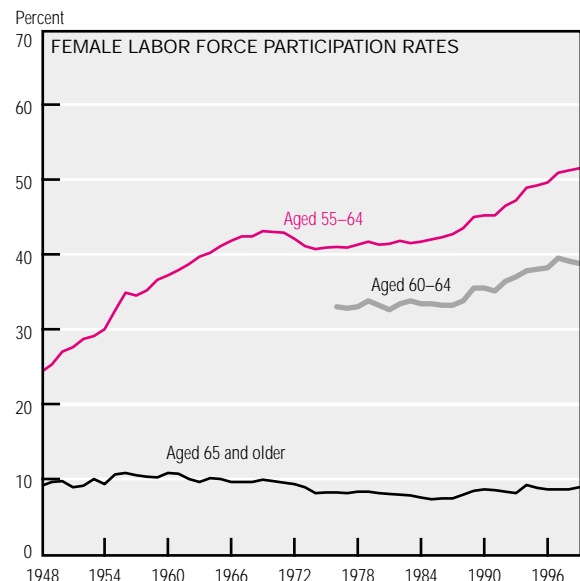
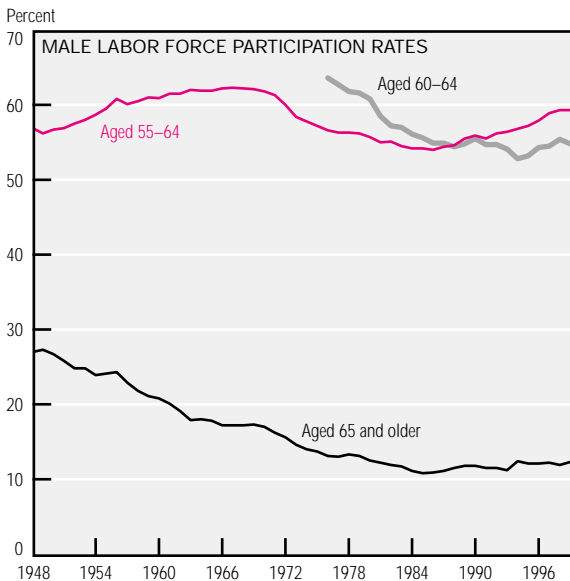
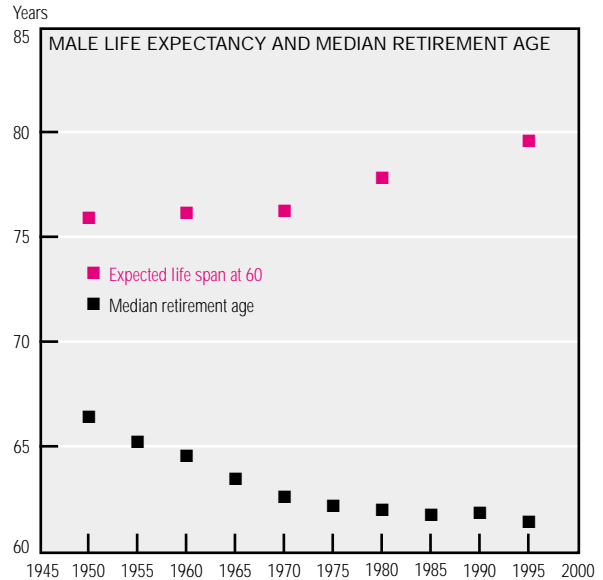
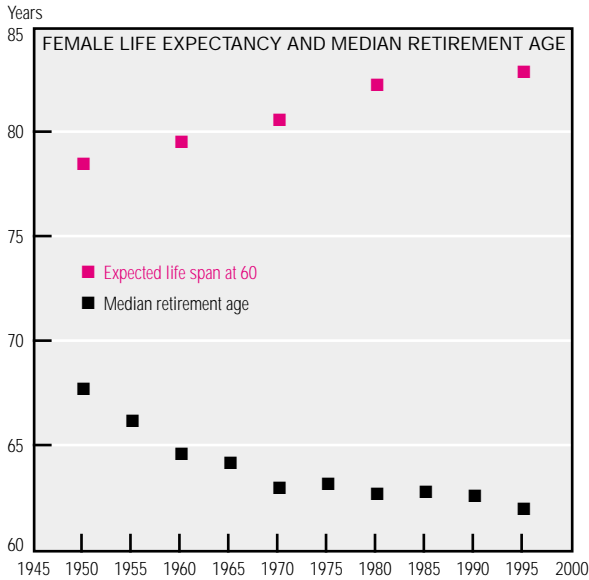
The U.S. literacy rate rose steadily from just over 72% in 1800 to almost 100% by the late twentieth century.

Progress in improving the population's health has been less steady, as evidenced by the long-term trend in life expectancy. Crowding in the nation's urban centers at the onset of the industrial age lowered standards of hygiene, worsened fetal and infant nutrition, and exposed a denser population to epidemic diseases. These conditions led to a significant decline in life expectancy at birth from the early through the mid-nineteenth century. No consistent time series on life expectancy is available, but mortality rates are

strongly correlated with stature. The average height of U.S. military recruits suggests that there was a downturn in life expectancy during the mid-nineteenth century.

The U.S. Human Development Index, which places equal weight on per capita income, average height, and literacy, suggests that growth in human welfare was most rapid during the late nineteenth century and the first decade of the twentieth. During the rest of the century, growth in the index was much slower, although still positive.

# Life Expectancy and Retirement



SOURCES: U.S. Department of Labor, Bureau of Labor Statistics; U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics, *Vital Statistics of the United States*, 1995; and Murray Gendell and Jacob S. Siegel, "Trends in Retirement Age by Sex, 1950-2005," *Monthly Labor Review*, vol. 115, no. 7 (July 1992), pp. 22-29.

Life expectancy in a given year is the average age a group of newborns would reach if subject to the age-specific death rates prevailing that year. Except for a brief drop caused by the influenza epidemic of 1918, this average trended upward throughout the twentieth century. When Social Security was created in 1935, the average life span was 61.7 years. Sixty years later, it stood at 75.8 years—a gain of 14 years. The number of additional years of life expected at age 60 has also increased. People whose sixtieth birthday fell in 1939-41 lived

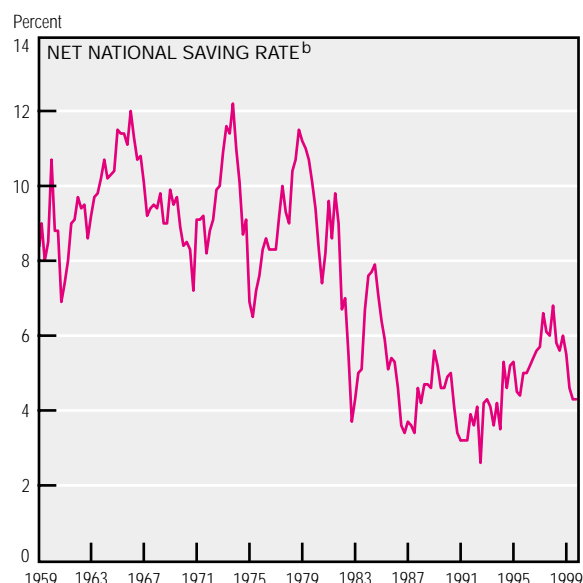
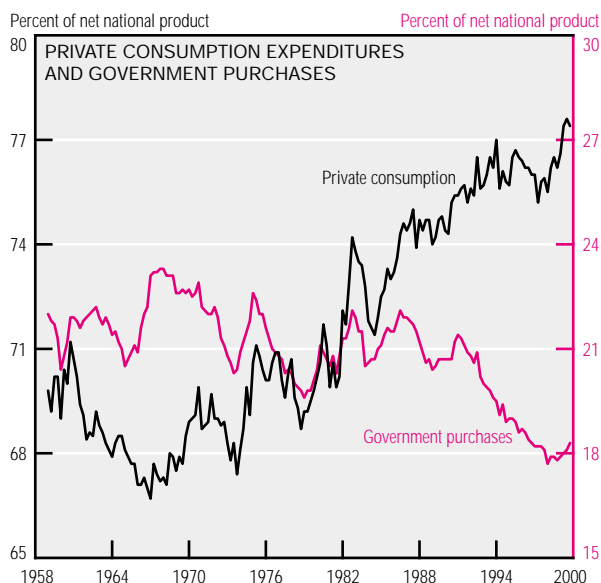
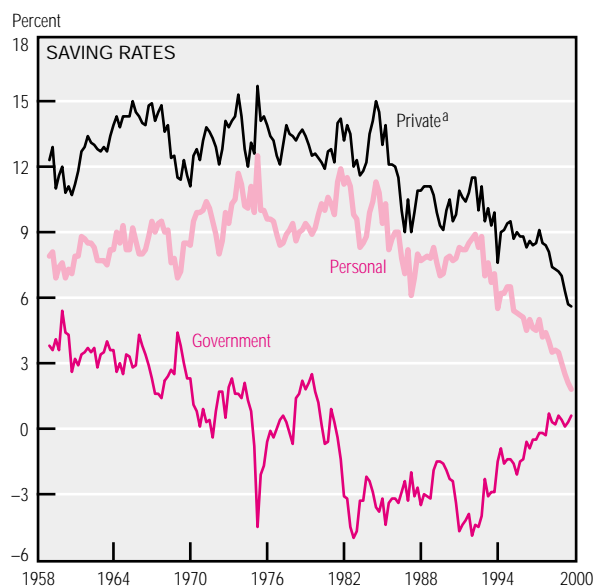
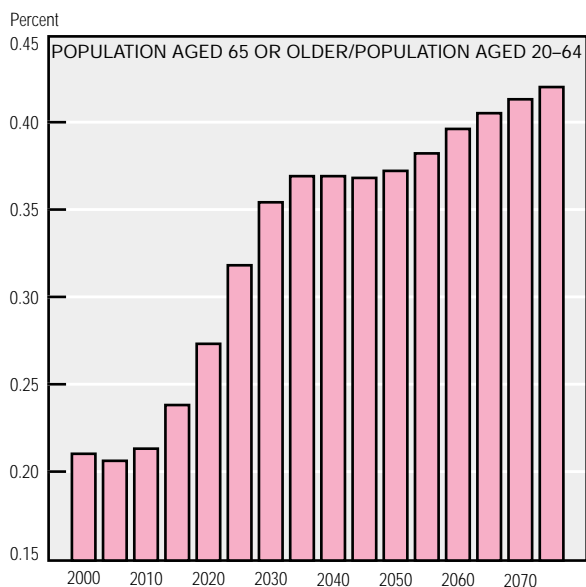
another 15.9 years, on average. But those who turned 60 in 1995 could look forward to another 21.1 years—a gain of 6.2 years.

"Retirement" is a twentieth-century phenomenon, resulting from Social Security's retirement earnings test (RET). Until recently, RET heavily taxed the Social Security benefits of people over 65 who earned more than a small amount; it still applies to those aged 62 to 64. In addition to the effects of RET, many defined-benefit private pension plans reduce the pensions of those who work past the plans' early-retirement age. Such

disincentives may have lowered older workers' labor force participation rates in the 1960s, 70s, and 80s.

However, growth in defined-contribution pension plans—which do not incorporate penalties for later retirement—along with the introduction of retirement saving incentives during the 1980s—may have reversed this trend. The new upward direction of labor force participation rates may be strengthened by the recent elimination of RET for those 65 and older. The *median* retirement age, however, continued to trend downward during the 1990s as well.

# Personal, Private, and Government Saving Rates



a. The private saving rate is the sum of the personal and business rates.

b. The net national saving rate is defined as one minus the fraction of private consumption plus government purchases in the net national product.

SOURCES: U.S. Department of Commerce, Bureau of Economic Analysis; and Social Security Administration.

Longer life spans and earlier expected retirement imply that Americans will spend a larger fraction of their lifetime without income-producing work. As a result, more resources will be needed to maintain their living standards during retirement. Thus, either people must save more during the working stage of life or more resources must be transferred from workers to retirees through Social Security. The need to increase transfers will intensify as baby boomers age and retirees' share of the population rises.

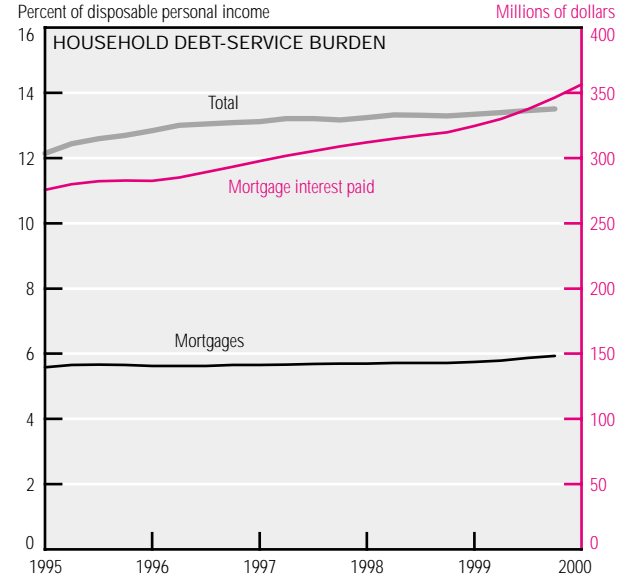
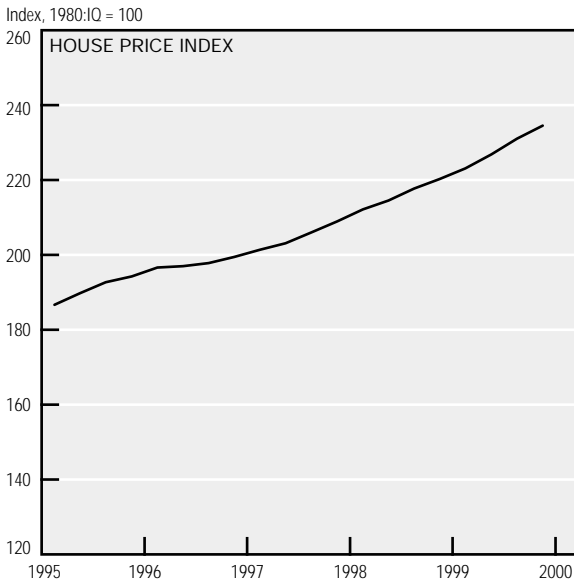
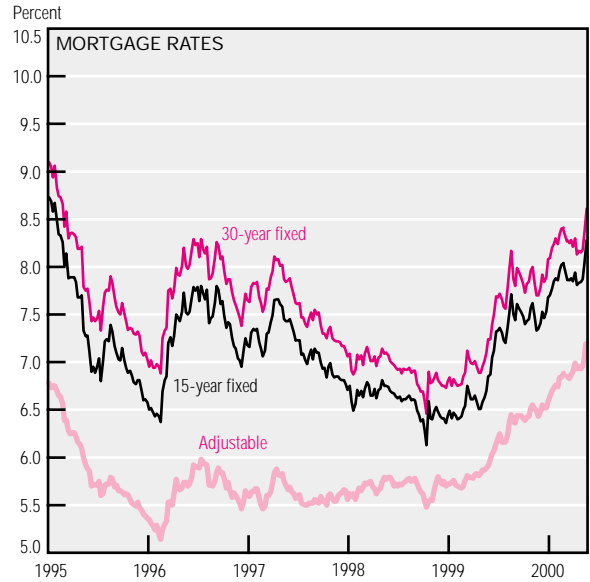
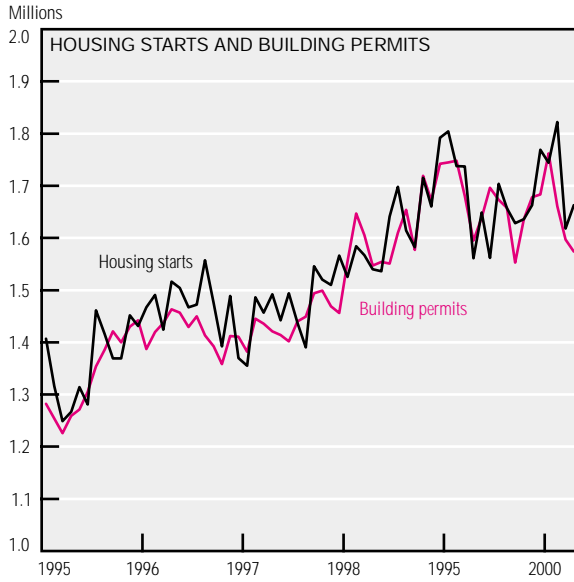
Although trends in life ex-

pectancy, retirement behavior, and population aging all point to a need for greater saving, U.S. personal and private saving have trended downward from the mid-1970s on, and the decline accelerated in the 1990s. In contrast, surging revenue due to strong economic growth and a slower increase in federal discretionary expenditures have eliminated federal budget deficits. Large budget surpluses are now projected for the coming years if economic growth remains strong.

Total saving equals output not consumed, so breaking down the

share of output consumed into its private and public components mirrors patterns of private and government saving. Although the increase in government saving exceeded the decrease in private saving during the 1990s, that decade still had the lowest 10-year average for the net national saving rate recorded in the postwar period—4.7%. If projected government surpluses are, in fact, realized and are used to pay off federal debt, they would lighten the tax burdens that future workers will carry in order to support retired baby boomers.

# Housing Conditions



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

Total housing starts rebounded moderately in April, increasing 2.8% to 1.66 million units annually. Most of the rebound came from starts of multifamily housing; single-family starts increased only slightly. Multifamily starts have become more volatile this year compared to the same period a year ago: In April they rose 14%, following on the heels of a 40% decline in March. Overall, housing starts have

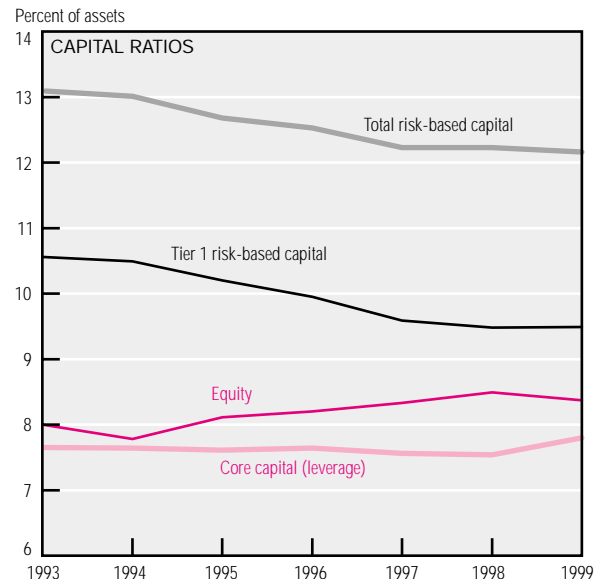
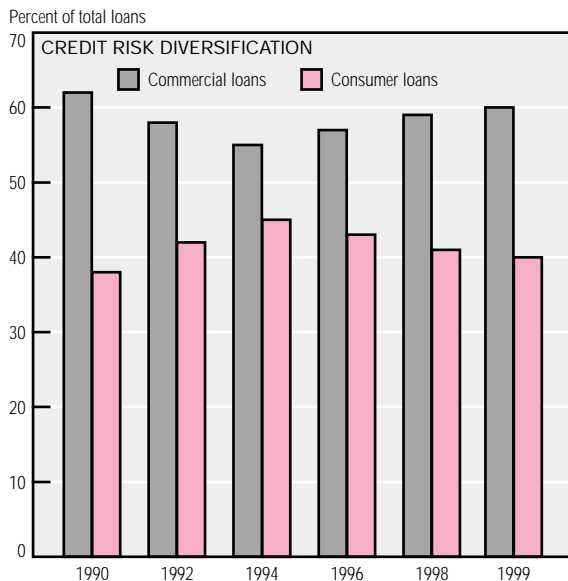
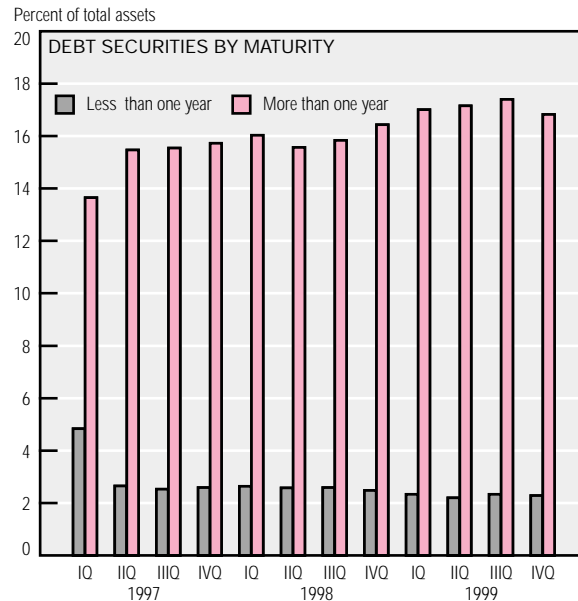
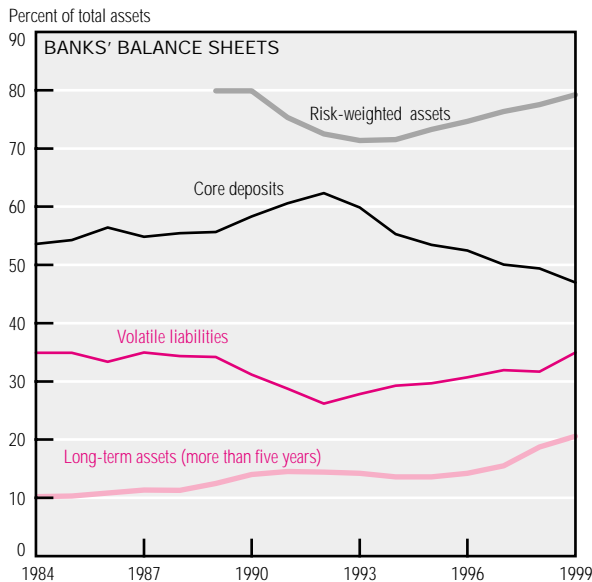
softened since January, when the annual rate stood at 1.74 million units. Total building permits fell slightly in April to 1.57 million units annually, a small decline from the previous month but a more significant 10.7% decline since the beginning of the year.

Despite upward-trending fixed- and variable-rate home mortgage interest rates and increases in the average price of new homes since the

beginning of 2000, new home sales continue to rise, with a 4.5% increase in March.

The relative share of mortgage payments out of total household debt service in 1999:IVQ was 44%. Although total household mortgage interest payments increased significantly in the last half of the 1990s, this percentage remained roughly constant.

# Banking Conditions



SOURCE: Federal Deposit Insurance Corporation, *Quarterly Banking Profile*, 1999:IVQ.

Despite record commercial bank profits in 1999:IVQ, some indicators suggest increased risk exposure. Banks continue to move toward volatile liabilities, which reprice or mature in less than a year, and away from core deposits, which tend to have greater interest rate stability. These factors indicate increased exposure to interest rate risk. Banks' holdings of long-term assets continue to rise, implying that earnings from asset holdings are less sensitive to interest rate changes. Overall, such changes in the composition of banks' balance sheets

increase their vulnerability to rising interest rates. Of course, banks can hedge these risks by using off-balance-sheet derivatives, but large spreads on interest rate swaps during 1999 may have discouraged them from using these instruments.

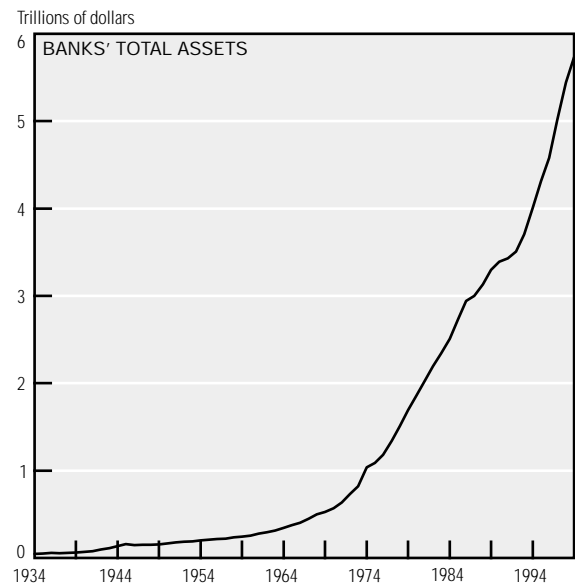
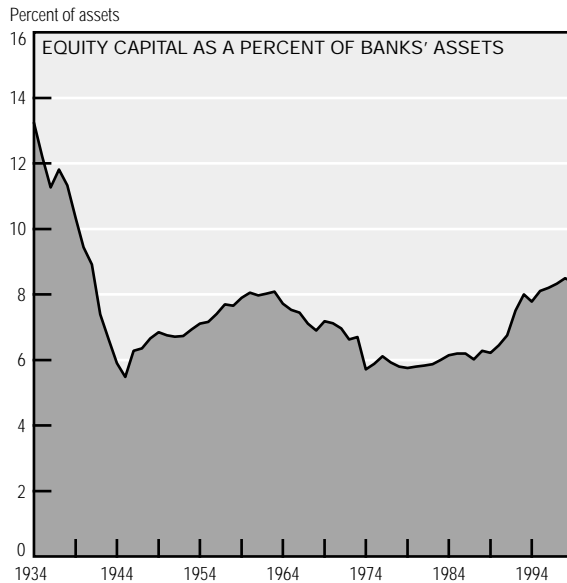
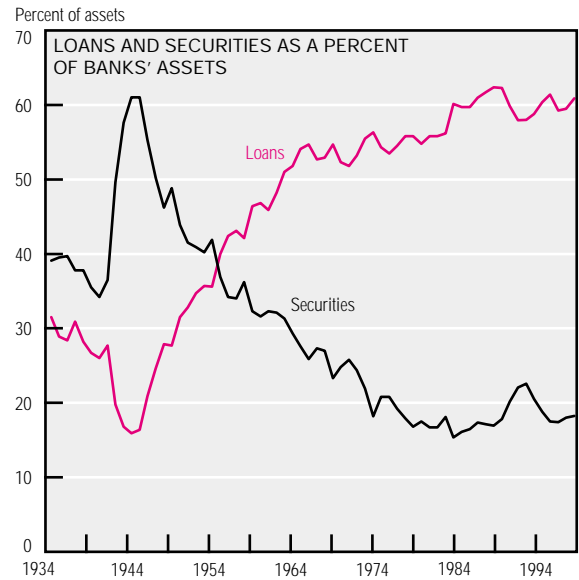
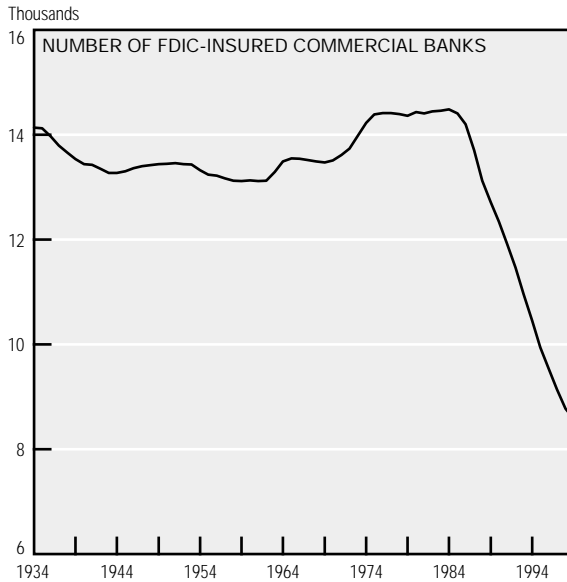
Although rates of noncurrent loans to individuals do not indicate a significant decline in the quality of those holdings, some concern may arise regarding changes in asset composition. The latter part of the 1990s witnessed rapid growth in commercial and industrial loans made by commercial banks. Concur-

rently, consumer loans decreased as a share of total bank loans. This shift may be cause for concern due to increasing charge-off rates and noncurrent loan rates for commercial and industrial loans during 1999. Some studies demonstrate a positive correlation between rapid loan growth and future loss and failure rates.

Adequate levels of bank capital provide a cushion against potential losses. In 1999, the core bank capital-asset ratio increased to 7.8%. However, the ratio for risk-based capital declined slightly in 1999.



## Long-Term Trends in Banking Conditions



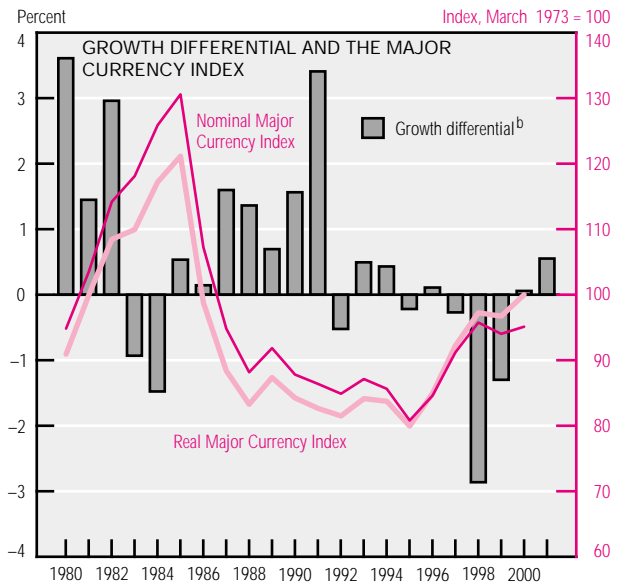
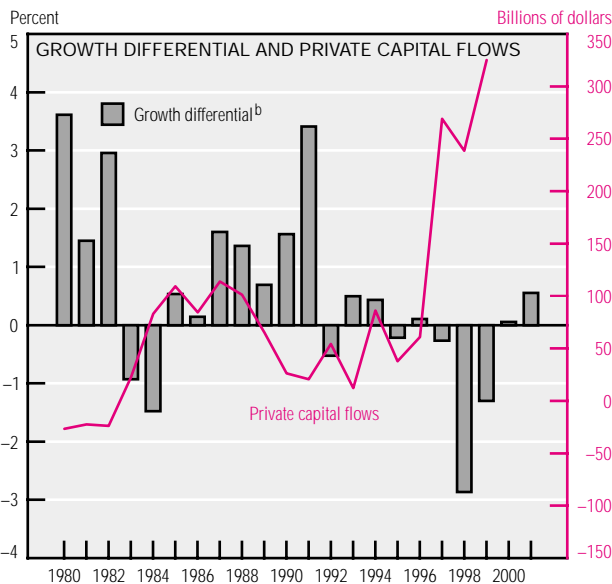
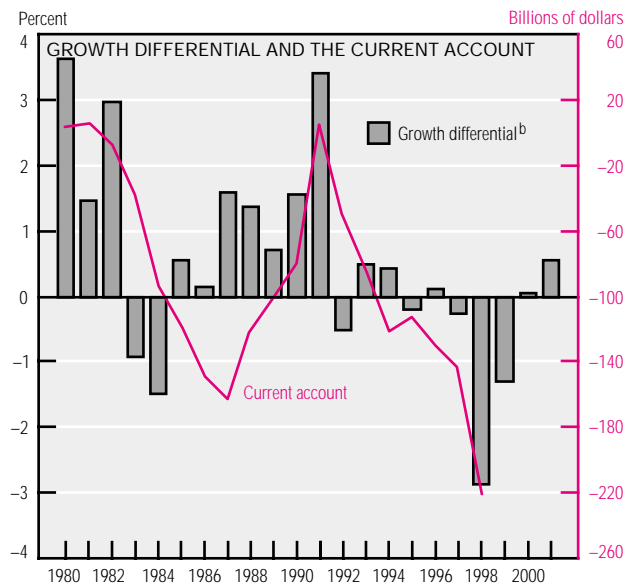
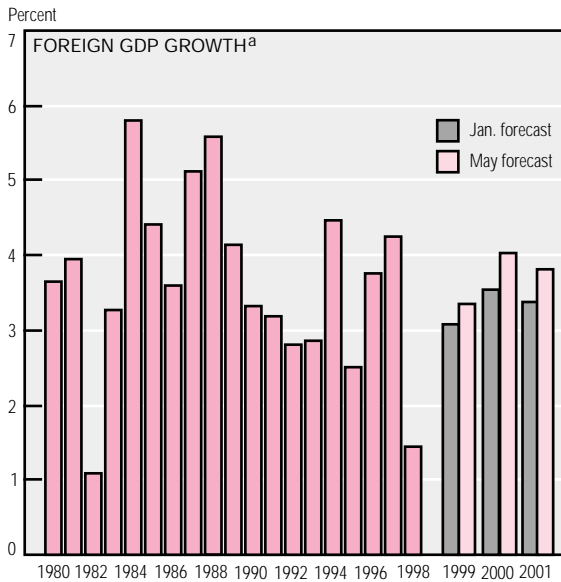
NOTE: Figures for 1934–77 exclude amounts held in foreign offices.  
SOURCE: Federal Deposit Insurance Corporation, *Quarterly Banking Profile*, 1999:IVQ.

During the severe economic downturn of the early 1930s, more than one-third of U.S. banks ceased operations. After federal deposit insurance began in 1934, the number of insured commercial banks remained fairly stable for about 50 years and then began to fall dramatically in the mid-1980s. This decline is commonly attributed to relaxation of bank branching restrictions. In the past two years, however, the trend toward consolidation has slowed.

The structure of commercial banks' balance sheets has changed significantly over time. In the mid-1940s, securities holdings accounted for more than 60% of total bank assets. Today, this percentage is less than 20%. Loans have replaced securities as the primary component of bank assets.

During the late 1970s and early 1980s, the ratio of banks' equity capital to total assets declined to levels that had not been observed

since the mid-1940s. Increased failures of commercial banks and savings and loans during the early 1980s prompted increases in minimum capital-asset ratios required by law and the adoption of risk-based capital requirements. During the 1990s, banks' capital-asset ratios increased fairly steadily. By the end of 1999, the ratio of equity capital to assets stood at 8.4% for commercial banks.



a. Foreign GDP growth is the trade-weighted average growth rate for the top 15 U.S. trading partners in 1992–97: Canada, Japan, Mexico, Germany, U.K., China, Taiwan, Korea, France, Singapore, Italy, Hong Kong, Malaysia, the Netherlands, and Brazil.

b. The GDP differential equals the difference between foreign and U.S. GDP growth.

SOURCES: U.S. Department of Commerce, Bureau of the Census and Bureau of Economic Analysis; Board of Governors of the Federal Reserve System; Organisation for Economic Co-operation and Development, *Economic Outlook*; International Monetary Fund, *International Financial Statistics*; DRI/McGraw-Hill; *Blue Chip Economic Indicators*; and *The Economist*, May 6–12, 2000.

Over the past three years, financial turmoil in Asia, Russia, and Brazil encouraged foreign investors to shift large amounts of funds into the U.S., prompting a broad-based appreciation of the dollar. Now that financial calm has returned to emerging markets and foreign economic growth is quickening, some analysts maintain that the dollar will inevitably reverse direction. They contend that faster foreign economic growth will bring rising returns on investments abroad relative

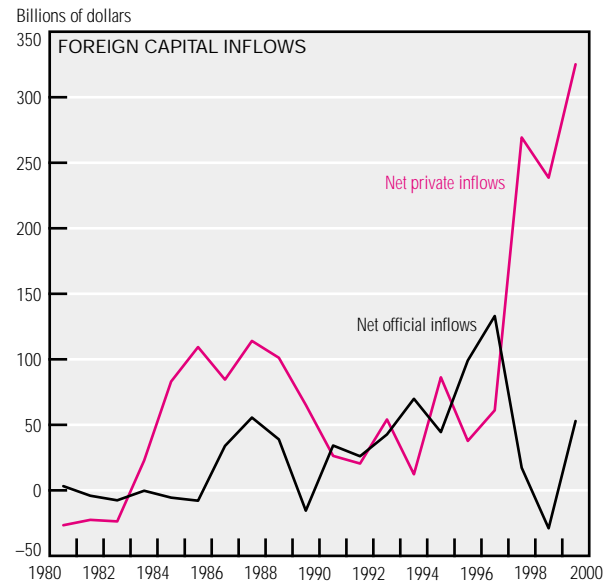
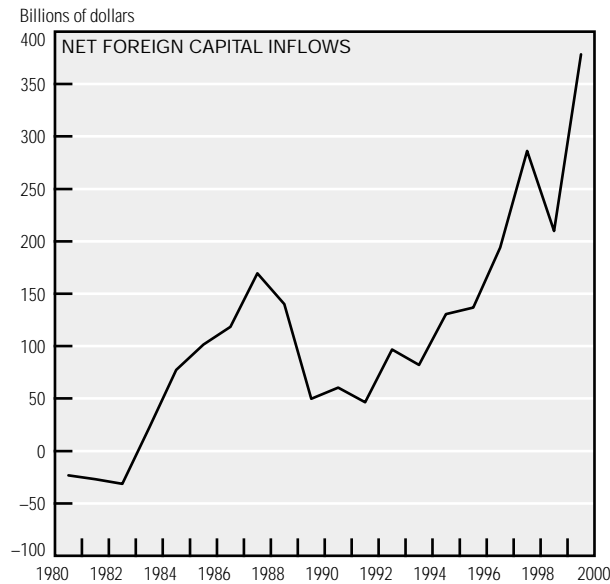
to those in the U.S. and an unavoidable diversification out of dollar-denominated assets.

It is true that U.S. capital flows are correlated with the growth differential in a manner that is generally consistent with this story. When foreign economic growth surpasses economic growth in the U.S., net inflows of foreign capital to this country slow.

In contrast to the story, however, dollar exchange-rate movements are not related to the growth differ-

ential in a systematic way. As growth abroad accelerates, foreign demand for our export goods increases, and the current-account deficit tends to narrow. All else held constant, this should encourage a dollar appreciation. Consequently, the exchange-rate pattern that emerges as foreign economic activity expands will depend on whether the associated net capital movements dominate the net trade pattern. Any outcome is possible.

# Savings, Investment, and Foreign Capital



	Percent of nominal GDP		Change in percent
	1992	1999	
Gross savings	15.9	18.7	2.7
Gross private savings	18.4	14.7	-3.7
Gross government savings	-2.5	3.9	6.4
Gross domestic investment	17.2	20.7	3.5
Gross private domestic investment	13.7	17.5	3.8
Gross government investment	3.5	3.2	-0.3
Net foreign investment	0.6	3.4	2.8
Statistical discrepancy	0.7	-1.4	-2.0

	Percent of nominal GDP		Change in percent
	1992	1998 <sup>a</sup>	
Gross domestic investment	17.3	20.6	3.3
Capital consumption	12.5	12.2	-0.3
Net domestic investment	4.8	8.4	3.6
Residential	1.8	2.6	0.9
Nonresidential Structures	2.8	5.0	2.2
Equipment and software	1.8	2.2	0.4
Change in inventories	0.2	0.8	0.6

a. Latest available data.

SOURCES: U.S. Department of Commerce, Bureau of the Census and Bureau of Economic Analysis; and Michael R. Pakko, "The U.S. Trade Deficit and the 'New Economy,'" Federal Reserve Bank of St. Louis, *Review*, vol. 81, no. 5 (September 1999), pp. 11-20.

Proponents of the "new economy" laud our recent strong economic performance as evidence of a sustainable increase in the underlying growth potential of the U.S. Whether these gains ultimately prove permanent or transitory remains uncertain, but it is certain that substantial inflows of private foreign capital have encouraged them. Capital inflows are the necessary counterpart to our current-account deficit.

The U.S. has witnessed an up-

surge in gross domestic private investment over the current expansion; as a share of GDP, it has risen from 13.7% to 17.5%. The entire increase has gone toward acquiring new capital goods; it does not represent higher costs of maintaining the existing capital stock. Moreover, half the increase in investment appears as the acquisition of equipment and software. Advocates of the "new economy" typically recognize investments in computers

and other information-processing equipment as its foundation.

A country with a current-account deficit is necessarily investing more than it is saving. Inflows of foreign capital equal the difference. Changes in domestic savings, domestic investment, or foreign capital flows initiate adjustments in interest rates and exchange rates that maintain this equilibrium. From such a perspective, the U.S. current-account deficit is not the economic bane that many portray it to be.