

The Economy in Perspective

Once upon a time ... there lived a grasshopper named Lucky and an ant named Ernest. Like his ancestors, Lucky loved to live in the moment and rarely thought about tomorrow. Ernest, following his ancestral traditions, kept his nose to the grindstone and his eye on the future. Despite their differences, the two were the best of friends.

By day, Lucky was a manufacturer's rep for a pet-food company; on weekends, he played acoustic fiddle around town with a band called the Manic Mantises. The pay was lousy, but the bug juice was on the house. Ernest had worked for years as a mechanical engineer for an ant-colony design firm. In his spare time, he gardened and read books on human psychology.

The two friends met one evening at the Night Crawler, a local hangout. After gossiping a while about the ladybugs and lounge lizards on the scene, they settled into more serious conversation. "Lucky," Ernest said, "I'm worried about you. How long can you go on like this, jumping from one job to the next? I used to be afraid that you wouldn't get through the winter, but now I'm even more worried that you aren't storing up any food for your old age. When you drove up to the Crawler in that new Alpha Rodeo Spyder tonight, I knew you'd really gone buggy!"

Lucky grinned. "Ernie," he said affectionately, "You are such a pest! First off, I got a great deal on those wheels from Arachnid Motors: nothing down and only one saltine a month for 84 months. Besides, I can afford it—my investments have been doing great. My Manic Mantis buddies put me onto this start-up company that invented a new food-recognition system. You put these drops in your eyes and you can actually see the food through walls and stuff. It's awesome! I gave the termites who invented it two grams of wood shavings so they could spend all their time perfecting the drops. They'll sell the drops for one saltine per dram, and I get a share of everything they rake in. And then there's a research team of carpenter ants who think they've discovered a way to neutralize Raid; I gave them three grams of peanut butter for a share of all the saltines they get. Pretty soon I'll be in clover and I can quit my day job! But hey, Ernie, you should know about all these new inventions, being an engineer yourself."

"I already know more than I want to. You should see what's going on at my shop. We are prototyping a new colony design that provides more space and better security and can be built

by fewer ants in less time than the conventional model. What's more, we think the technology will transfer to beehives. Queen bees are shipping us honey like you wouldn't believe, just for an opportunity to invest! The first colony won't go live for years, if ever. These ladies could be stung deep, but when there's a big buzz for the next new thing, they won't listen to reason. I'm telling you, Lucky, I'm in the eye of this swarm and I don't like what I see."

Lucky looked bug-eyed at his friend and replied, "Get with the program, Ernesto, it's a no-lose proposition! You can have your cake and eat it too. Just buy everything on credit, which is a snap to get because you have all these saltines coming to you down the road. You can enjoy life today and tomorrow! All the herbivores are doing it."

As sure as larvae become pupae, Ernest knew what would become of Lucky. "All I can tell you, my friend, is don't count your crackers."

Months passed. One night, Ernest sat nursing a tall cool one at the Crawler when Lucky sauntered in, a ladybug on each arm and a fat rye-grass cigar in his mandible. "Wheatgrass shakes all around!" he called to the bartender. Seeing his old friend, Lucky hopped over and sat down.

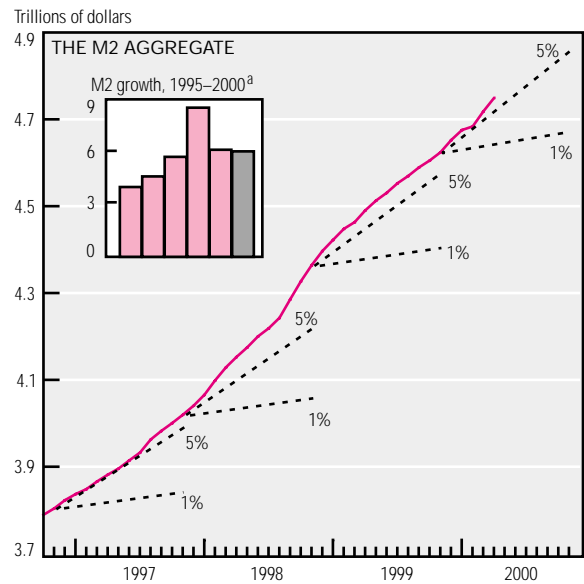
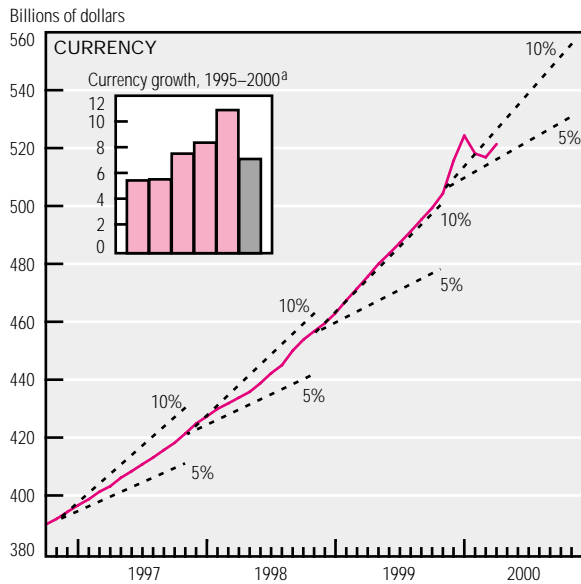
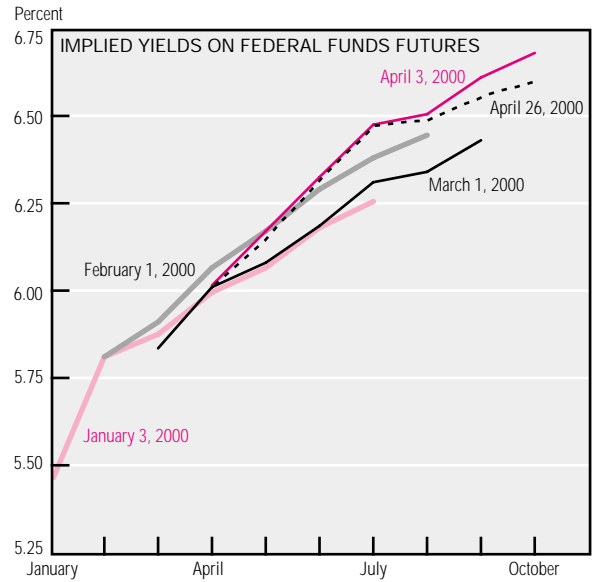
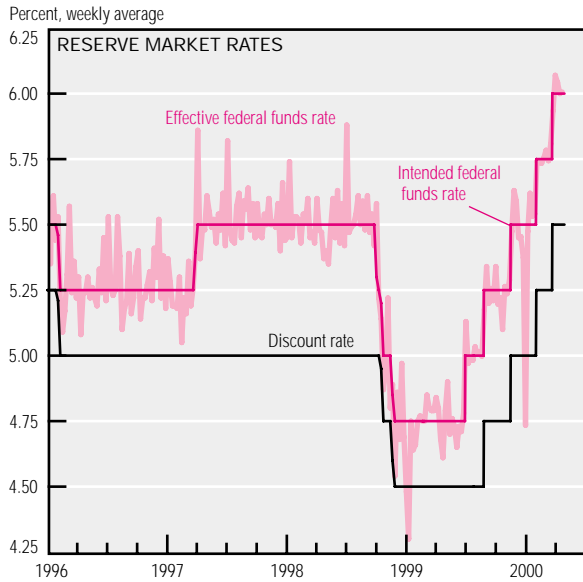
"You look like a million saltines!" exclaimed Ernest. "I guess that new eye-drop system really panned out. Or was it the Raid neutralizer?"

"Ernie, all those schemes went bust. But my investments were structured as limited partnerships and, after court-supervised reorganization, I landed on my hind legs every time. Then I hit on another business plan. I knew this Internet thing was going to be huge for bugs, and there had to be a way to cash in big time. Then it came to me! Investors want to be sure that advertisers will bankroll the sites, and advertisers want the sites to attract lots of eyes. So I developed sites for compound eyes—you know how insects can see multiple images simultaneously. And I'm working on an infrared site for the honeybees. I got financing from a group of locusts who'll wait another 17 years for a payback! What a stroke of genius, borrowing from that swarm! Needless to say, I expect the saltines will soon start pouring in."

Morals: Never consume tomorrow what you can consume today.

A fool and her honey are soon parted.
If at first you don't succeed,
reorganize, borrow, and try again.

Monetary Policy



a. Growth rates are percentage rates calculated on a fourth-quarter over fourth-quarter basis. The 2000 growth rates for currency and M2 are calculated on an estimated April over 1999:IVQ basis.
NOTE: Data are seasonally adjusted. Last plots for currency and M2 are estimated for April 2000. Dotted lines for M2 are FOMC-determined provisional ranges. All other lines represent growth in levels and are for reference only.
SOURCES: Board of Governors of the Federal Reserve System; and Chicago Board of Trade.

The intended federal funds rate has been at 6.0% since the March 21 meeting of the Federal Open Market Committee (FOMC). Similarly, the discount rates at which banks can borrow balances from the Federal Reserve Banks' discount windows all remain at 5.5%. The next FOMC meeting will be held May 16.

Implied yields on federal funds futures reveal that market participants continue to price in an increase of at least 25 basis points (bp) at the May meeting. Although the implied yield curve drifted downward in mid-April, the subse-

quent increase suggests that market participants now consider it more likely that increases in the intended rate will occur later in the year. Surprisingly, yields on fed funds futures did not seem to react to the April 14 announcement of stronger-than-expected increases in the consumer price index (CPI).

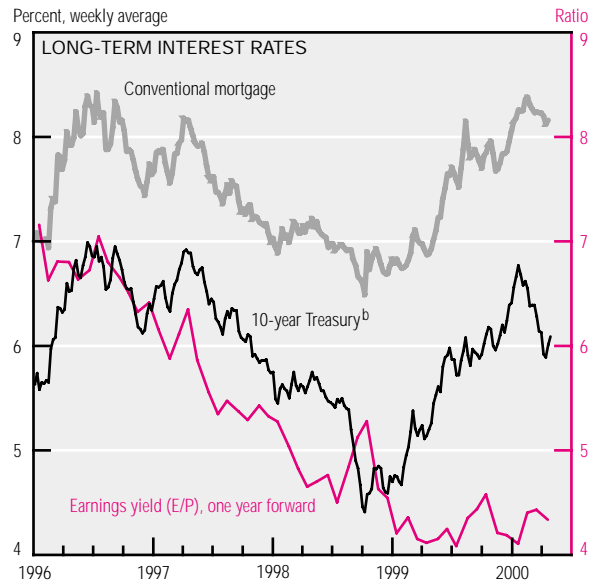
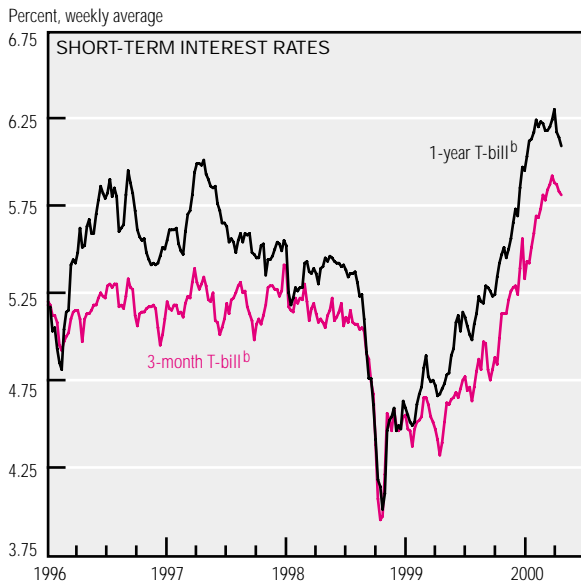
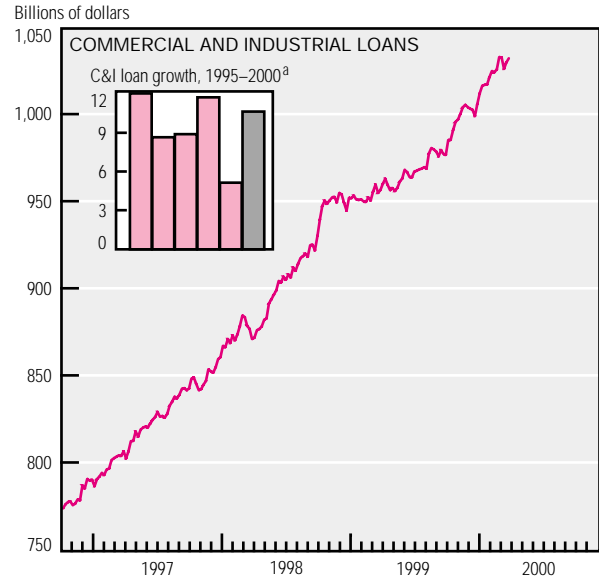
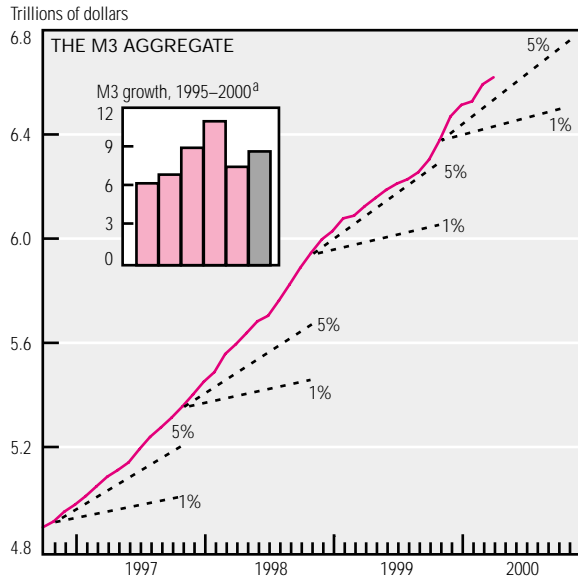
Surging currency growth, driven by liquidity preparations for Y2K, received considerable attention at the end of last year. After the century date change came and went without a hitch, currency levels fell as liquidity drained out of the system. The

use of fourth-quarter averages to calculate growth rates obscures the full extent of the acceleration and subsequent drop in these rates. It may be more revealing to consider instead the growth rate for December 1999 over December 1998 (12.2%) and the annualized rate for April 2000 over December 1999 (2.7%).

Growth rates of the broader monetary aggregates (M2 and M3) appear to have accelerated recently. However, interpreting monetary aggregates in April is always fraught with difficulty, but especially so

(continued on next page)

Monetary Policy (cont.)



a. Growth rates are percentage rates calculated on a fourth-quarter over fourth-quarter basis. The 2000 growth rate for M3 is calculated on an estimated April over 1999:IVQ basis. The 2000 growth rate for C&I loans is calculated on a March over 1999:IVQ basis.
 b. Constant maturity.
 NOTE: Data are seasonally adjusted. Last plot for M3 is estimated for April 2000. Last plot for C&I loans is March 1999. Dotted lines for M3 are FOMC-determined provisional ranges.
 SOURCES: Board of Governors of the Federal Reserve System; and I/B/E/S International Inc.

following high year-end capital gains. Such gains typically result in large April tax payments, causing M2 to swell above seasonal levels. These increases are reversed as payments are processed and credited to the U.S. Treasury account (not included in the monetary aggregates). Because the M2 increase is transitory, it is not seen as inflationary.

Strong M3 growth, coupled with steady growth in the narrower monetary aggregates, can often be explained by heavy demand for commercial and industrial (C&I) loans. Banks often finance these loans by

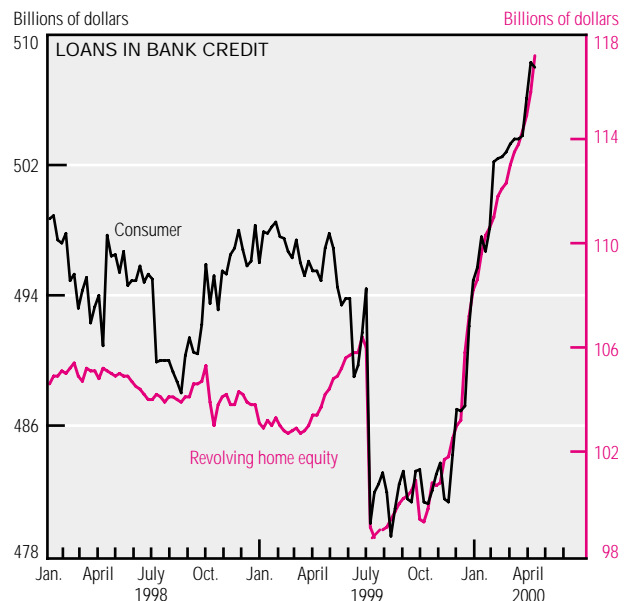
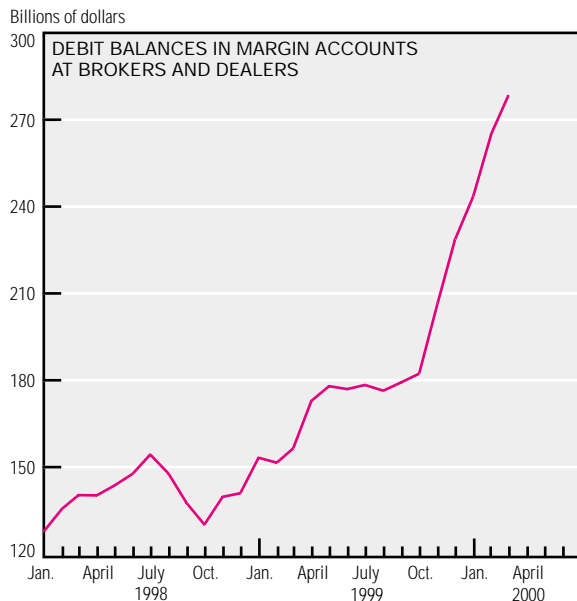
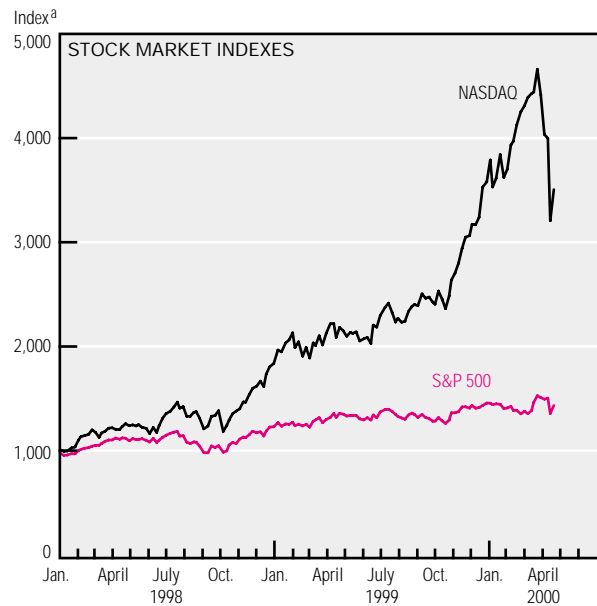
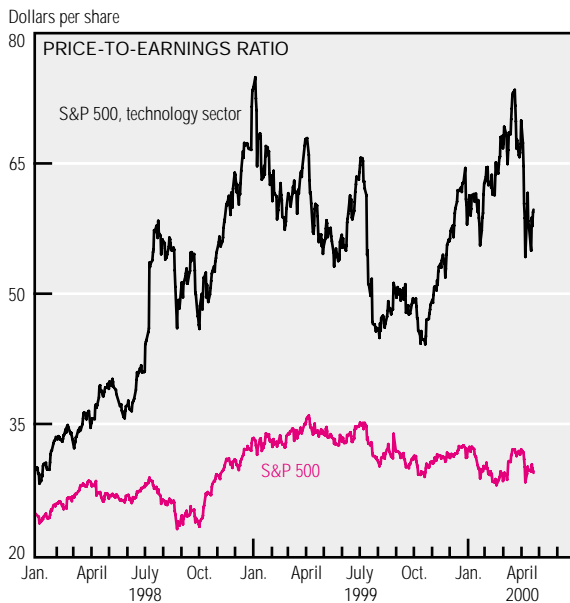
issuing large-dollar-value certificates of deposit, which are counted in M3 but not in M2. Year-to-date M3 growth is estimated at 8.8% for April (compared to 7.4% in 1999). Through March, year-to-date growth in C&I loans had reached 10.4% (4.9% in 1999).

One often-overlooked consequence of higher productivity is a higher real interest rate. As productivity increases, more investment projects become profitable and greater investment demand puts upward pressure on interest rates. This view provides an alternative to the

commonly told story that the FOMC is using the interest rate as a “brake” to slow an overheating economy. Instead, market rates rise naturally and the FOMC must increase the intended federal funds rate in response. Since summer 1998, the FOMC has raised the intended rate 125 bp. During the same period, 3-month and 1-year T-bills have risen 123 bp and 150 bp, respectively.

Long-term interest rates show a similar pattern, although the well-publicized budget issues surrounding both the issuance and buy-back
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Monetary Policy (cont.)



a. The S&P 500 Index was developed with a base level of 10 for the 1941–43 base period. The NASDAQ is indexed to 250 on February 1, 1985.
SOURCES: Bloomberg Financial Information Services; and New York Stock Exchange.

of long-term government debt have recently affected yields—most notably on the 30-year Treasury.

Over the past two years, the stock market has produced stellar returns, primarily through price appreciation. These gains came on top of a market value that had already raised concerns about irrational exuberance. Unlike the earlier advance, this one lacked breadth. Indeed, in 1999 the majority of stocks declined in value.

This phenomenon is often characterized as a bifurcation between old and new-economy stocks. New-economy stocks are comprised

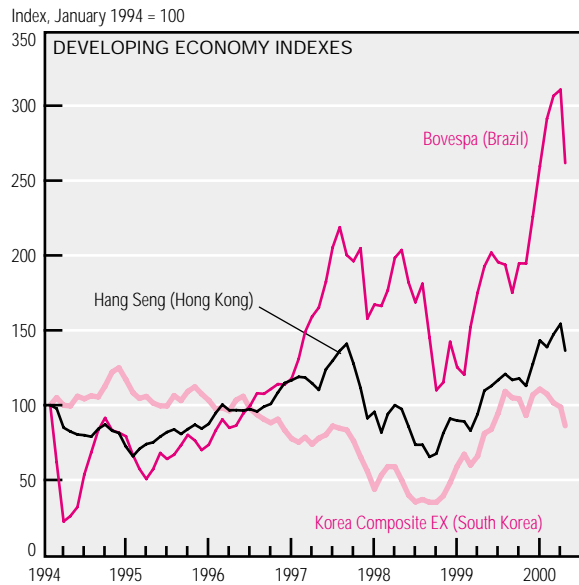
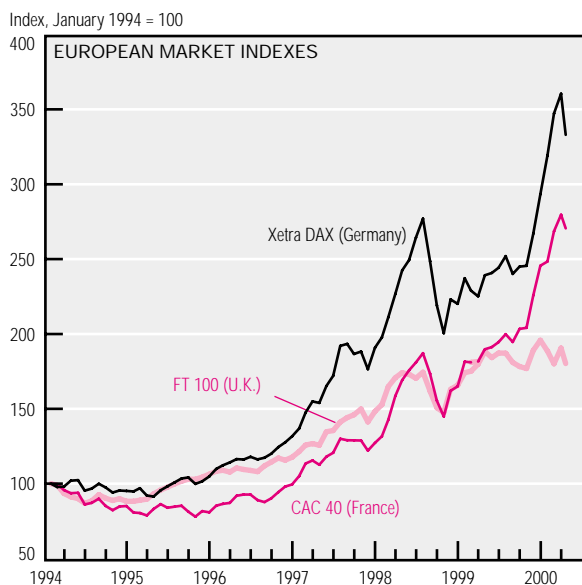
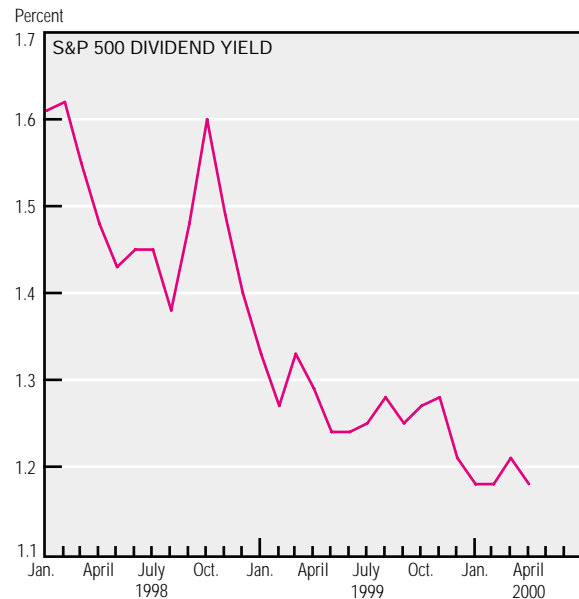
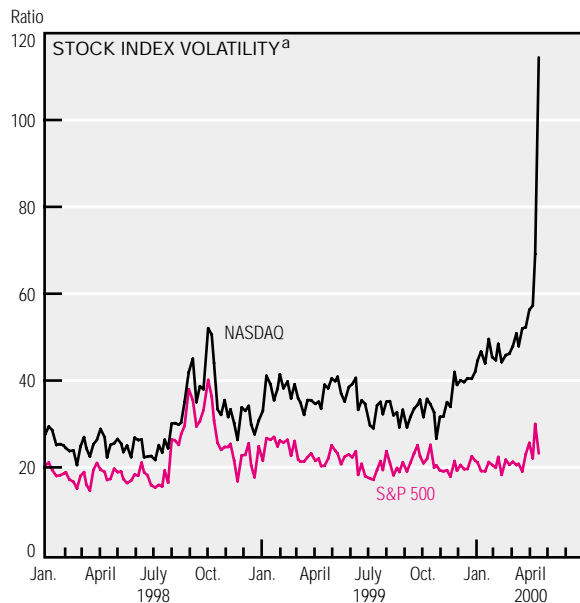
largely of companies whose values reflect the promise that cutting-edge technology holds for future profits. Their price-to-earnings ratios tend to be high because their prices factor in higher earnings growth in outlying years. Moreover, new-economy firms typically pay small or no current dividends because internal investment opportunities are so good.

This so-called bifurcation is evident in the difference between the levels of the NASDAQ and S&P 500 indexes. The NASDAQ reflects the phenomenon more clearly because it has a higher concentration of new-

economy stocks than does the more broadly based S&P 500.

Concerns about a speculative bubble were fueled last fall when the NASDAQ accelerated sharply, particularly because this last spurt coincided with a sharp increase in margin-account borrowing. Margin accounts allow investors to leverage—that is, to finance an investment by borrowing at an interest rate that is lower than the yield anticipated from that investment. Some analysts point to the surges in consumer and home equity loans
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Monetary Policy (cont.)



a. The S&P 500 Index was developed with a base level of 10 for the 1941–43 base period. The NASDAQ is indexed to 250 on February 1, 1985. Implied volatility is a measure of the market's current prediction of a security's volatility, derived from a weighted average of the current volatilities of at-the-money options. (Volatility is the extent to which a price fluctuates over a period of time.)

SOURCES: Standard & Poor's Corporation; *Wall Street Journal*; and *Financial Times*.

posted late last year as sources of additional leverage.

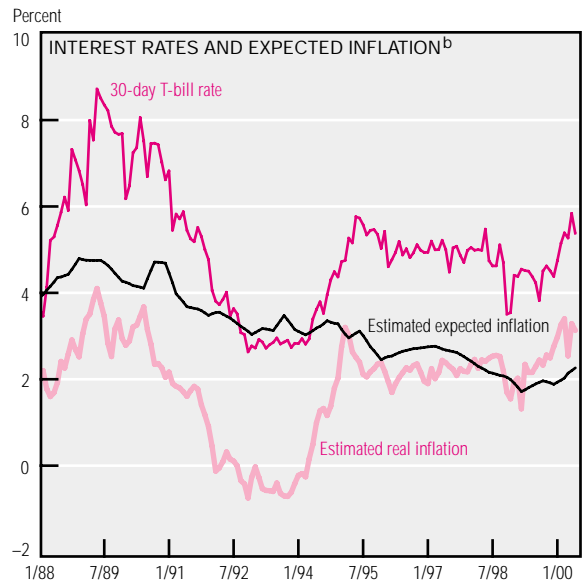
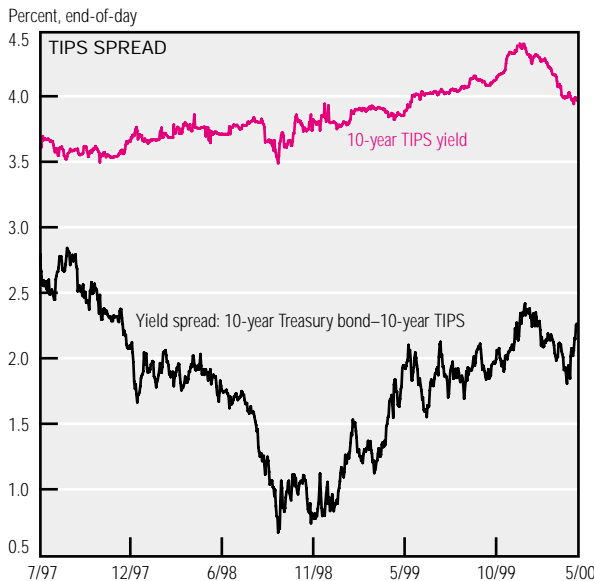
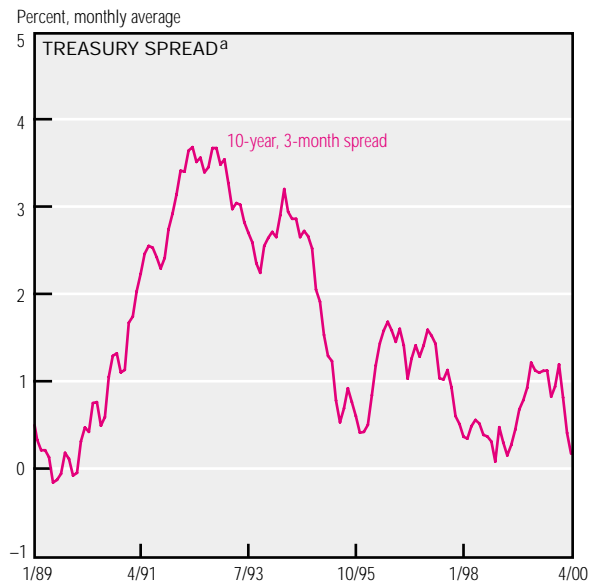
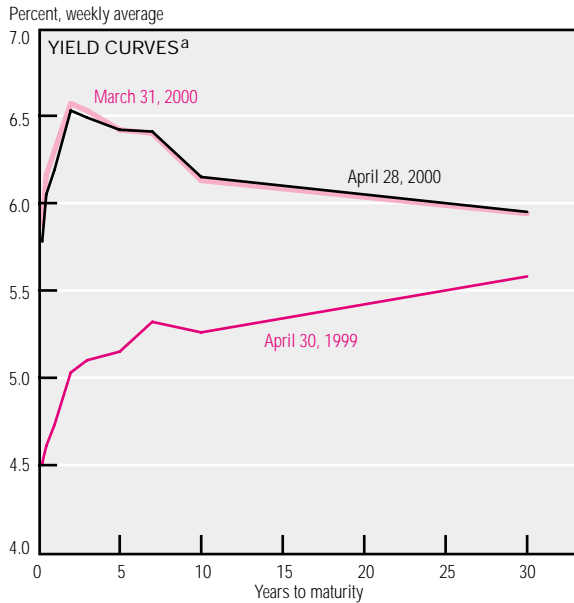
Although margin accounts create a potential for speculative excesses, the data do not provide definitive evidence that these accounts are, in fact, producing such effects. Nonetheless, many analysts argue that recent precipitous declines in the NASDAQ represent an unwinding of former excesses. On the other hand, the declines may reflect changing economic fundamentals, such as expected earnings in outlying years, which are not observable.

These sharp declines could also portend a permanently higher level of volatility. Formal approaches to stock valuation, based on economic fundamentals, reveal that stock market volatility increases when the dividend-to-price ratio declines. The intuition behind this result is straightforward: Stock returns take two forms, dividend payments and price appreciation, of which the former component is the less volatile. Thus, the greater the dividend (relative to total return), the more stable the return—and hence the value—

of the stock. The decline in the aggregate dividend-to-price ratio is consistent with rising volatility.

Although equity values around the world have generally appreciated in the past few years, stock price increases have been temperate. To some extent, the European indexes reflect the greater vulnerability of their economies to the Russian default late in the summer of 1998. Similarly, developing-economy indexes are making up losses that resulted from the Asian crises of 1997.

Interest Rates



a. All yields are from constant-maturity series.

b. The estimated expected inflation rate and the estimated real rate are calculated using the Pennacchi model of inflation estimation and the median forecast for the GDP implicit price deflator from the *Survey of Professional Forecasters*. Monthly data.

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

Do interest rates tell us if inflation—or expected inflation—has increased? One approach is to look at the slope of the yield curve, noting that higher expected inflation will increase long-term interest rates. There has not been much movement in either short- or long-term rates since last month, though both have moved higher since last year, short rates more so. This is confirmed by the 10-year, 3-month spread, now down to 37 basis points from 75 bp at the same time

last year. While consistent with a story about inflation fears increasing long rates, leading to a Federal Reserve response that increases short rates, the term spread is an unreliable predictor of future inflation, confounding as it does a variety of real factors.

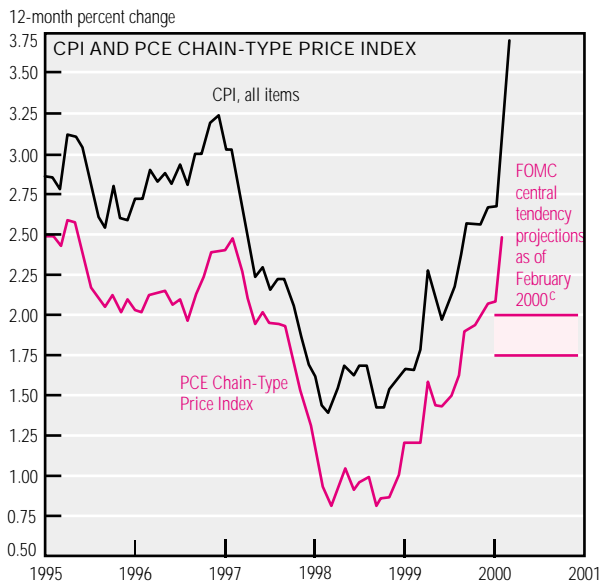
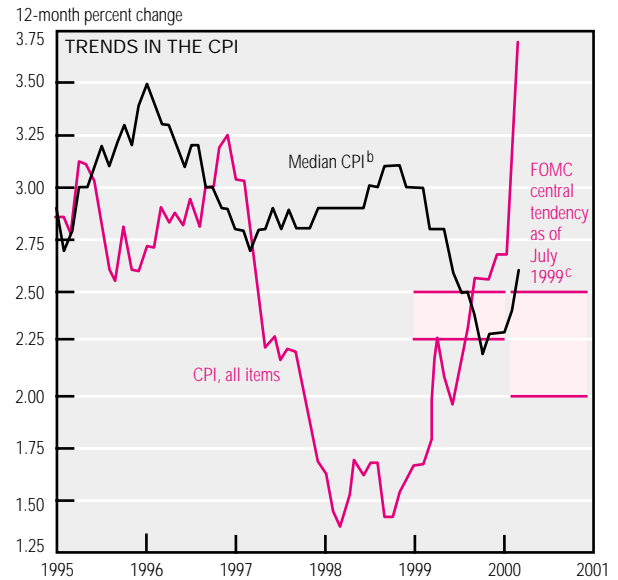
A different spread gives a more direct view of inflationary expectations. Since much of the difference between nominal and real interest rates is expected inflation, the spread between the yields on nominal Treasury bonds and the yields

on Treasury inflation-protection securities (TIPS) measures the market's inflation expectation. That spread has been rising recently, from 1.85% on April 14 to 2.26% on April 28.

Lastly, a more sophisticated, if somewhat stylized, measure comes from combining market rates with survey forecasts of inflation to produce estimates of expected inflation and real interest rates, though for a much shorter maturity (30 days) than the TIPS yield. This number has also moved up.

Inflation and Prices

	Percent change, last:				1999 avg.
	1 mo. ^a	3 mo. ^a	12 mo.	5 yr. ^a	
Consumer prices					
All items	8.8	5.8	3.7	2.5	2.7
Less food and energy	5.5	3.2	2.4	2.4	1.9
Median ^b	3.4	3.4	2.6	2.9	2.3
Producer prices					
Finished goods	12.1	8.2	4.6	1.6	3.0
Less food and energy	1.6	1.1	1.2	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.
SOURCES: U.S. Department of Labor, Bureau of Labor Statistics; U.S. Department of Commerce, Bureau of Economic Analysis; and Federal Reserve Bank of Cleveland.

Selected Chain-Type Price Indexes from the National Income and Product Accounts

	1999	2000:1Q ^a
Gross domestic product	1.4	2.7
Personal consumption expenditures	1.6	3.2
Durable goods	-2.6	-2.0
Nondurable goods	2.3	5.4
Services	2.1	3.2
Private fixed investment	0.0	0.8
Nonresidential	-1.3	0.0
Residential	3.9	3.1
Exports of goods and services	-0.4	1.8
Imports of goods and services	0.4	5.6
Government consumption expenditures and gross investment	2.7	5.8

The Consumer Price Index (CPI) rose 0.7% in March (8.8% annualized), its largest monthly increase since August 1990. The increase was led by rising energy prices, which, according to the Department of Labor, accounted for more than half the monthly change in the measure. This statistic is certainly striking, but the breadth of price increases outside the energy sector may be even more noteworthy.

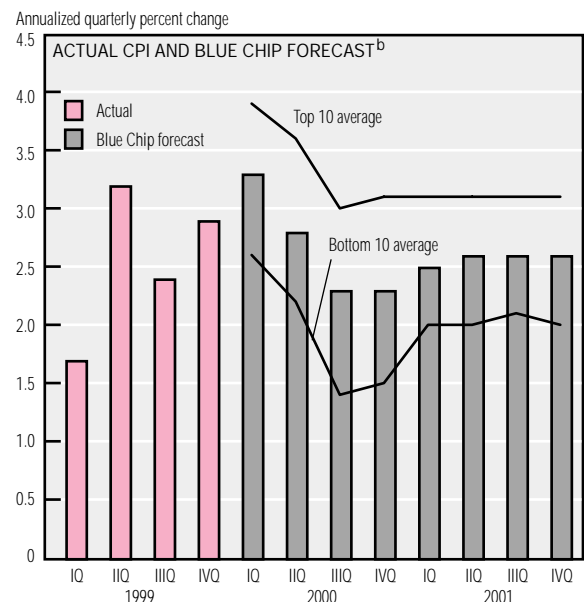
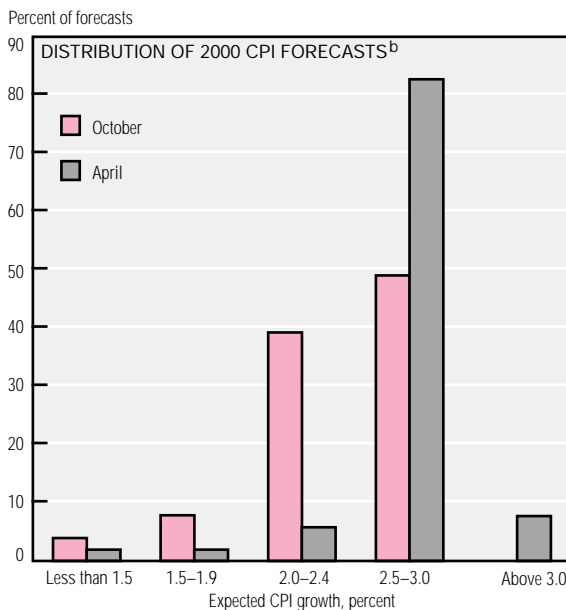
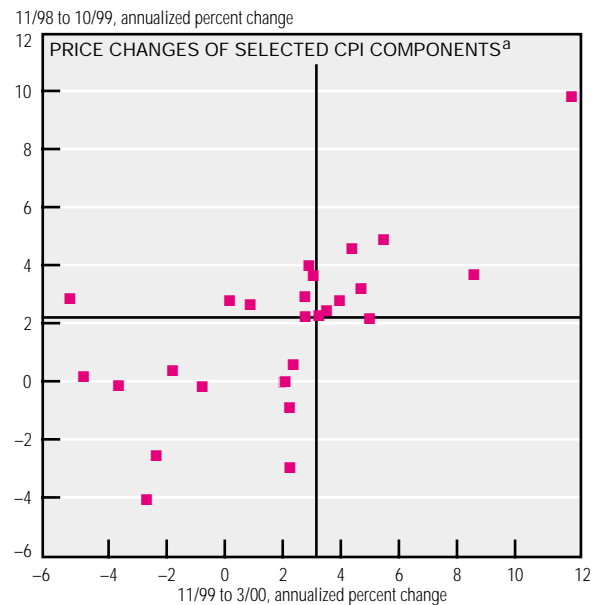
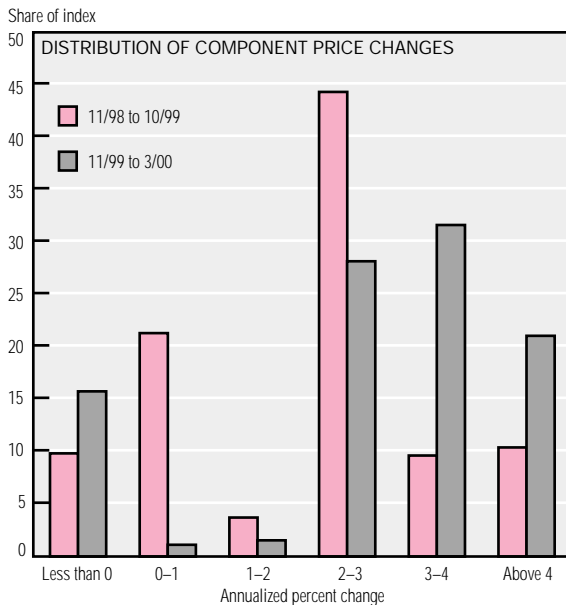
Although the CPI posted a sizable increase (0.5%) in February, the CPI

excluding food and energy rose a comparatively modest 0.2%. Many interpreted those price data as an indication that significant price pressures were still largely confined to the energy sector. However, this month's CPI excluding food and energy suggests otherwise: The measure's 0.4% increase is its largest monthly rise in more than seven years. The median CPI, another measure of core inflation, rose 0.3% in March, equal to its increases in each of the two previous months.

While the influence of rising energy prices probably affected some non-energy items (public transportation costs, for example, rose 2.7% in March), energy's impact on other items seems less obvious. Indeed, substantial increases in the indexes for medical care (0.5%), lodging away from home (3.2%), and education (0.4%) suggest that factors other than rising energy prices are behind greater price growth.

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Inflation and Prices (cont.)



a. Quadrants are defined by the median price changes in the two periods.

b. Blue Chip panel of economists.

SOURCES: U.S. Department of Labor, Bureau of Labor Statistics; and *Blue Chip Economic Indicators*, October 10, 1999 and April 10, 2000.

Since last fall, the distribution of price changes has shown a greater proportion above 4% (annualized). This reflects, in part, the sharp rise in energy prices between November 1999 and March 2000. However, a closer look at the distribution shows that the range in which most price changes are taking place is shifting. From November 1998 to October 1999, the greatest share of prices rose at annualized rates between 2% and 3%, while from November 1999 to March 2000, the greatest share rose at annualized rates of 3% to 4%.

This upward shift in the price-change distribution does not appear to show that a few components that previously restrained inflation are now fueling it. In the scatter diagram, this would be shown by activity in the lower-right quadrant. Most items, however, are found in the upper-right and lower-left quadrants, indicating that nearly all components remained on the same side of the distribution in both periods. This suggests that the overall distribution—rather than only a few components—has shifted higher. As a re-

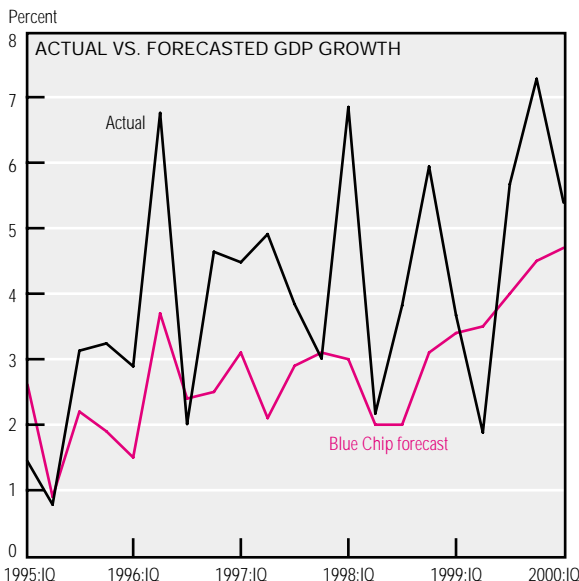
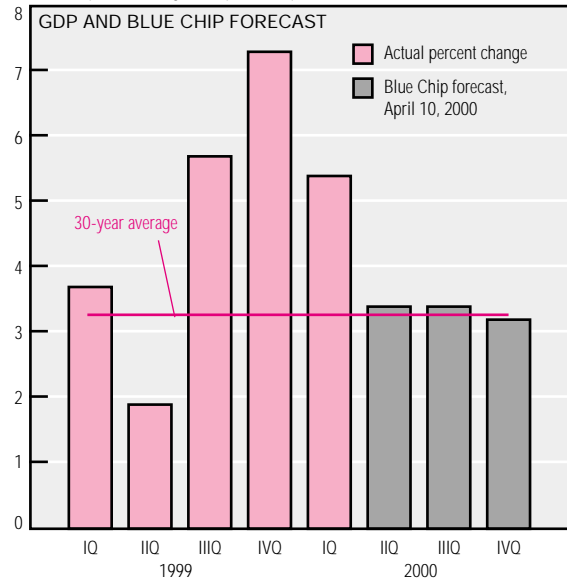
sult, recent increases in the CPI are not likely to be transitory.

A greater proportion of economists' recent inflation forecasts for 2000 indicate CPI growth above 2½%. This probably reflects the spike in energy prices over the last few months. However, longer-term forecasts suggest that even after these effects have worn off, the inflation trend will remain higher than in the recent past (around 2½% for 2001, which is 1% more than in 1998).

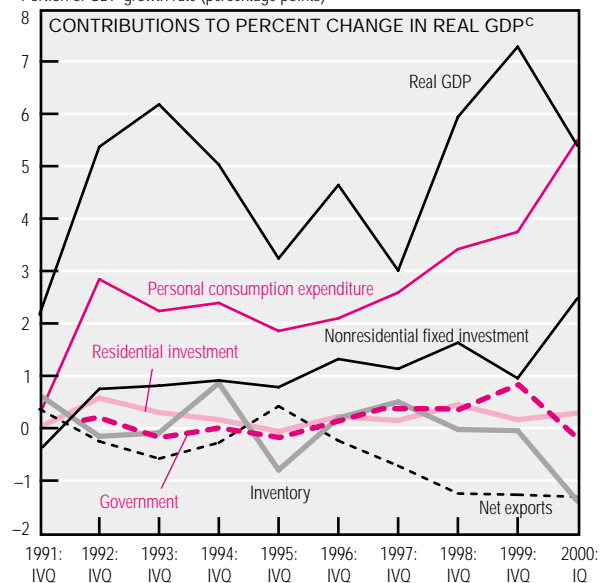
Economic Activity

Real GDP and Its Components, 2000:IQ ^{a,b} (Advance estimate)	Change, billions of 1996 \$	Percent change, last:	
		Quarter	Four quarters
Real GDP	119.4	5.4	5.0
Consumer spending	122.3	8.3	6.0
Durables	51.4	26.6	13.9
Nondurables	30.4	6.9	5.3
Services	45.9	5.4	4.8
Business fixed investment	61.4	21.3	-16.2
Equipment	55.0	23.7	13.4
Structures	7.8	13.3	0.7
Residential investment	6.1	6.6	2.5
Government spending	-4.4	-1.1	3.4
National defense	-23.2	-23.3	-0.6
Net exports	-33.0	—	—
Exports	-0.5	-0.2	6.3
Imports	32.5	9.5	11.8
Change in private inventories	-35.6	—	—

Annualized percent change from previous quarter



Portion of GDP growth rate (percentage points)



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. Data are annual for 1991-99; data for 2000 are quarterly.

NOTE: All data are seasonally adjusted.

SOURCES: U.S. Department of Commerce, Bureau of Economic Analysis; and *Blue Chip Economic Indicators*, various issues.

Gross domestic product increased at a 5.4% annual rate in 2000:IQ, according to the advance estimate released in late April. This is higher than the 3.7% average growth rate of the current expansion, which began in 1991:IIQ; the 4.5% average growth rate of the past four years; and the 4.7% early-April Blue Chip forecast. The forecast for the remainder of 2000 shows growth returning to its 30-year average value. This prediction can be taken with a grain of salt, however, for the actual advance estimate has exceeded the forecast in all but five of the past 21 quarters, by an average of 1.2 per-

centage points (30%). For several years, forecasters seemed skeptical that this burst of high productivity growth would continue, but rising growth-rate forecasts have brought the average error down from -1.3 to -0.8 percentage points.

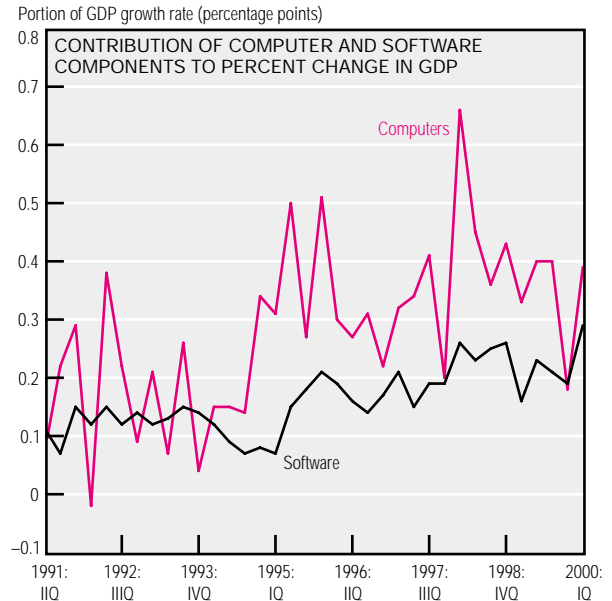
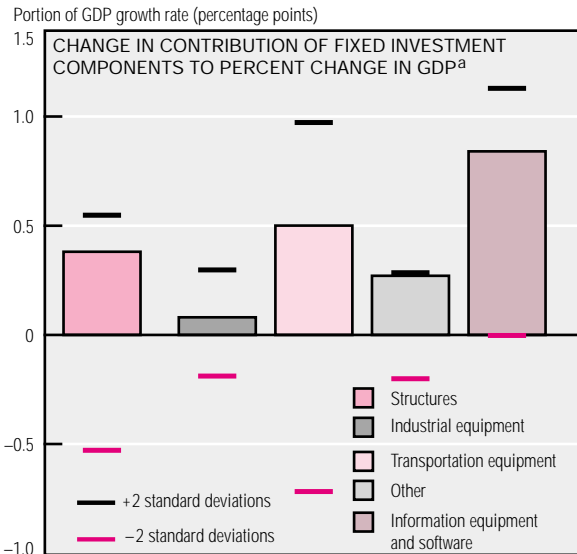
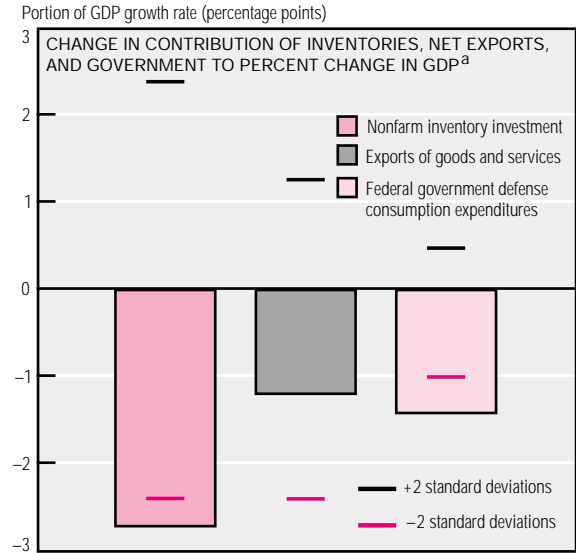
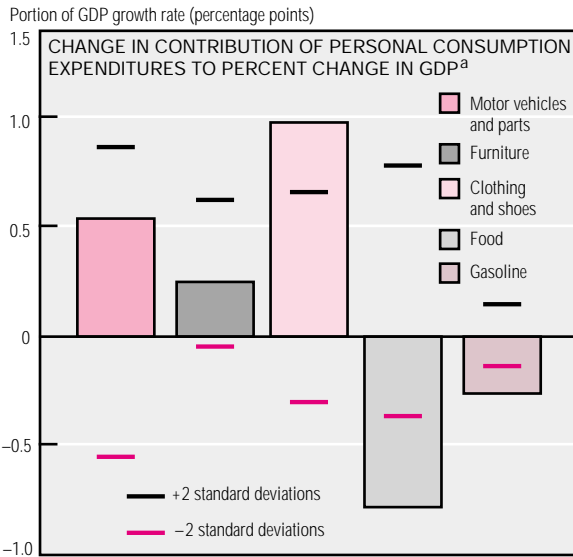
The pattern of sectoral contributions to GDP growth in the first quarter changed only slightly from the experience of recent years. Personal consumption and nonresidential fixed investment spending continued to be the largest contributors to GDP growth, but both showed further increases in the most recent quarter. Government spending and inventory

investment, on the other hand, accounted for noticeably smaller portions of GDP growth in 2000:IQ, while the contributions of residential investment and net exports were essentially unchanged.

Major components of changes in sectoral contributions to GDP growth provide few clues to the durability of rapid GDP growth on the demand side. Without anecdotal evidence, there still may be a statistical basis for expecting components—and GDP growth—to regress to the average of prior values during

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Economic Activity (cont.)



a. Difference between 2000:IQ and 1999:IVQ contribution rates.
 NOTE: All data are seasonally adjusted.
 SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis.

the current expansion. This might be expected, for example, if dominant changes in demand were more than two standard deviations from the mean, a range that would include 67% of past observations.

Spending on clothing and shoes showed an unusually large increase, contributing a full percentage point to GDP growth. This was offset, however, by unusually large decreases in expenditures on food and on gasoline, fuel oil, and other energy goods. Similar calculations for

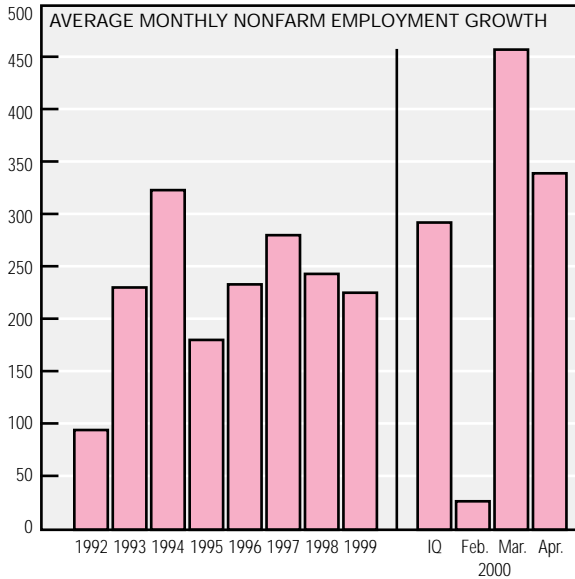
farm inventories, and federal government spending suggest the latter two were unusually low. However, none of the dominant components of the strong increase in nonresidential fixed investment was outside its normal range.

The total contribution of spending on computer and peripheral equipment and on software has not increased over the past two years, an indication of computers' and computer chips' growing intergration with other aspects of personal and commercial activities. Other investment in information-processing

equipment and software (that is, other than computers and software) has been a source of substantial increase in this category's contribution to GDP growth in recent years and in 2000:IQ. The "other" category includes communications equipment, instruments such as medical equipment, industrial process controls, and scientific instruments, photocopy and related equipment, optical-based equipment, and office equipment excluding computers, such as typewriters and mail-handling equipment.

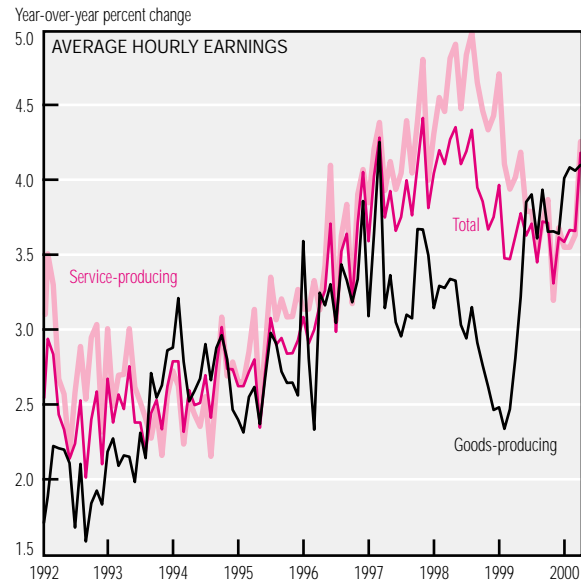
Labor Markets

Change, thousands of workers



Labor Market Conditions

	Average monthly change (thousands of employees)				
	1997	1998	1999	YTD ^a	April 2000
Payroll employment	281	244	226	305	340
Goods-producing	48	8	-6	37	-40
Mining	2	-3	-3	3	4
Construction	21	30	18	32	-55
Manufacturing	25	-19	-21	3	11
Durable goods	27	-9	-10	7	10
Nondurable goods	-2	-10	-11	-4	1
Service-producing	233	235	232	268	380
TPU ^b	16	18	18	10	23
Retail trade	24	32	37	47	119
FIRE ^c	20	26	12	3	7
Services	141	119	121	111	121
Government	17	27	29	83	107
	Average for period (percent)				
Civilian unemployment	4.9	4.5	4.3	4.0	3.9



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.

Employment showed strong growth in April (340,000 workers), following March's upwardly revised gain of 458,000. About one-fourth of this increase reflects the hiring of temporary census takers (190,000 in the past two months). Another measure of labor market strength, the employment-to-population ratio, rose 0.2% to a record high of 64.9%. The unemployment rate fell to 3.9%, its lowest point since January 1970.

The goods-producing sector showed a net loss of 40,000 jobs in April. Construction employment alone posted a net loss of 55,000

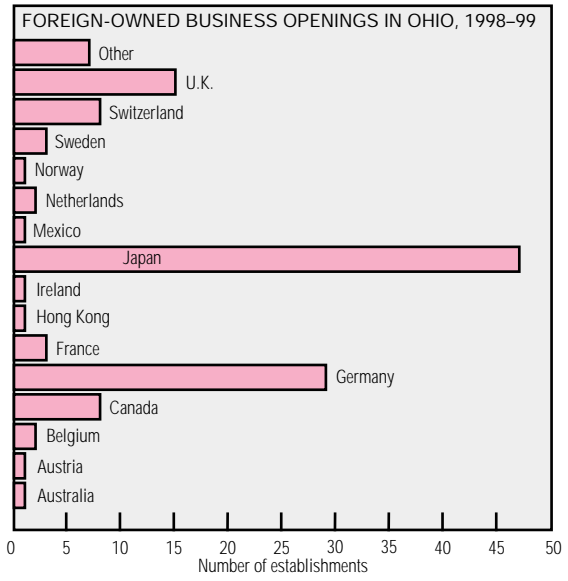
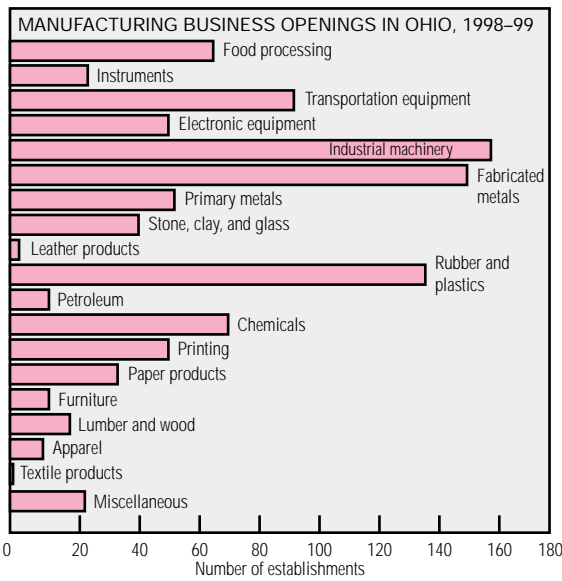
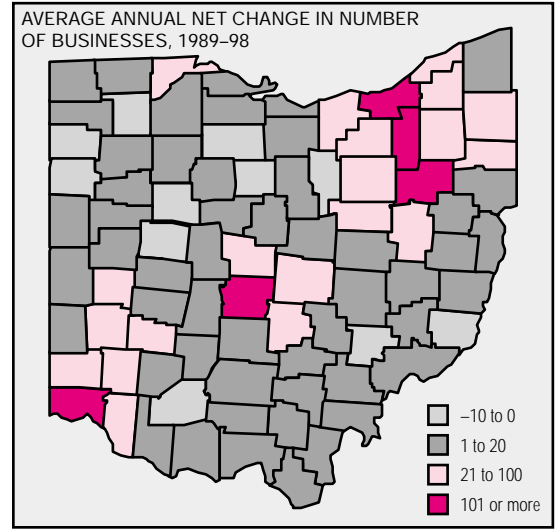
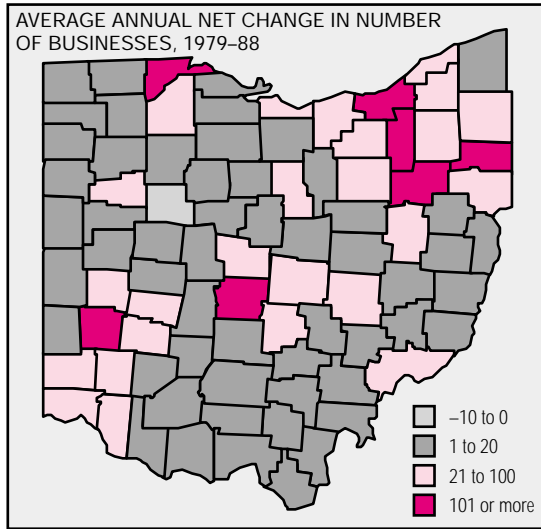
workers last month, following an increase of 91,000 employees in March. The five weeks intervening between the February and March survey periods may have contributed to the significant gain in March and the sharp decline in April. Steady (though small) gains in durable-goods employment have given manufacturing a net gain of 16,000 employees since November. This follows a 20-month period in which manufacturing employment declined by more than 500,000 jobs.

The largest job gains for April occurred in retail trade and business

services, as the service-producing sector posted a net increase of 380,000 jobs. The government also showed solid employment gains due to the temporary addition of census workers and a large increase in local education employment.

Growth in average hourly earnings of nonsupervisory workers has trended upward throughout much of the current expansion. In late 1998, however, earnings growth slowed, especially for goods-producing workers, and only recently has it begun creeping back up toward peak 1997 levels.

Ohio Business Openings and Closings



SOURCES: Ohio Bureau of Workers' Compensation, *Risk Master File*; and Ohio Department of Development.

New businesses in Ohio opened at an average of 27,000 annually between 1988 and 1998. Since 1994, however, the number of starts has fallen every year; 1998 had the lowest number since 1992. Business closings over the same period averaged about 24,500, with 1997 and 1998 showing the highest numbers.

Ohio counties' average annual net gains (business openings minus closings) show several patterns. Over the past 20 years, the greatest

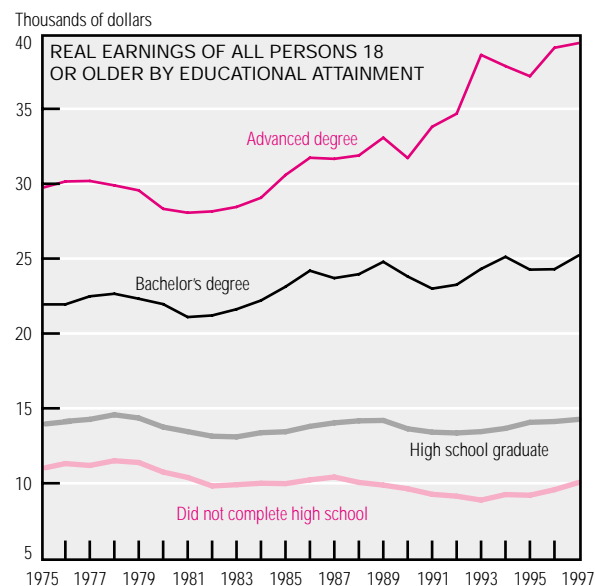
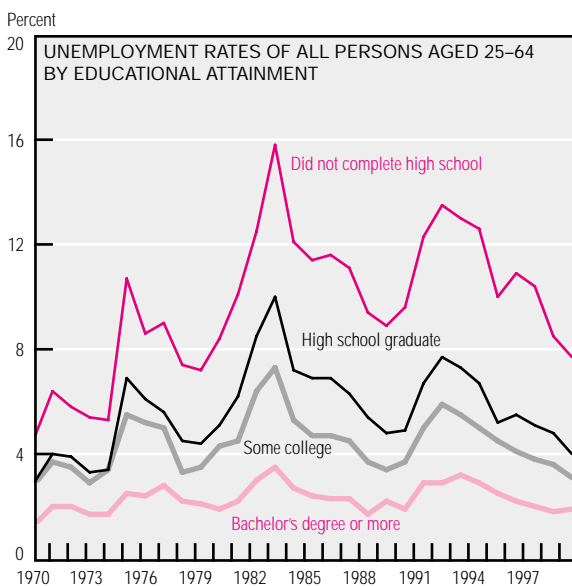
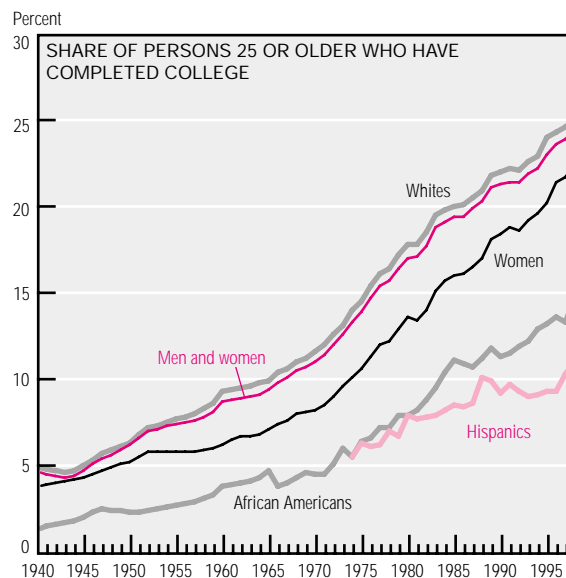
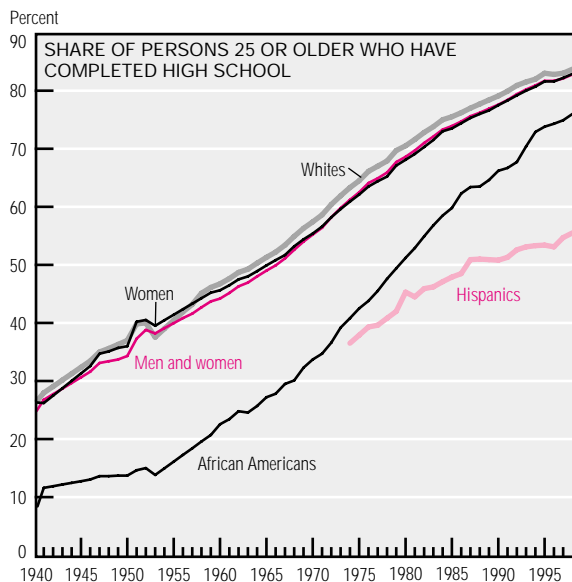
gains have occurred in the Cleveland, Columbus, and Cincinnati metropolitan areas. In the first half of the sample, 1979-88, only one county posted more closings than openings. In the second half, 1989-98, closings outnumbered openings in 11 counties, most of them concentrated in northwest Ohio.

For the past two years, openings of new manufacturing establishments or expansions of existing ones numbered slightly more than

1,000. Of that total, more than one-third can be attributed to three industries—industrial machinery, fabricated metals, and rubber and plastics—all large contributors to automobile manufacturing.

Furthermore, many foreign countries have invested in these new or expanded firms in Ohio. The two investors with the largest number of sites are Japan and Germany, both major auto producers.

Education and Earnings in the U.S.



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

Americans have made remarkable gains in educational attainment over the last half-century. In 1940, only a quarter of the population aged 25-64 had graduated from high school; by 1998, over 80% had. Even more remarkable has been the proportional increase in the share of the population that attained a college or graduate degree—five times greater in 1998 than in 1940.

Such attainment successes, however, have not been shared equally. While less than 10% of African

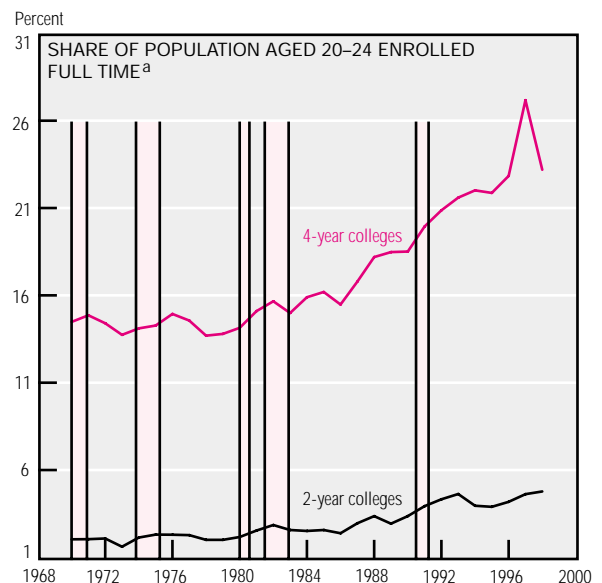
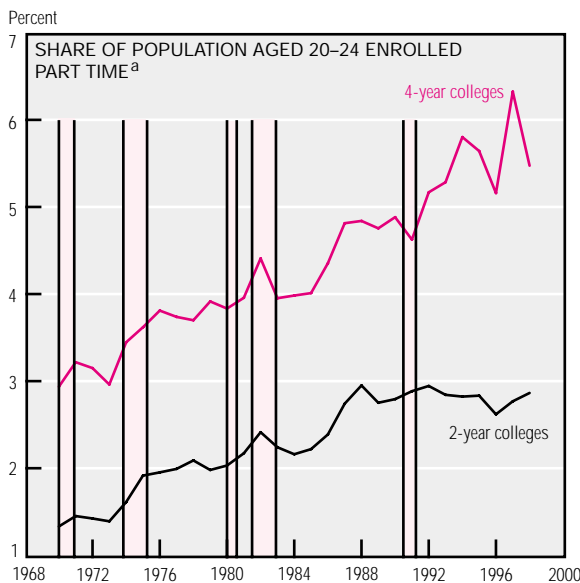
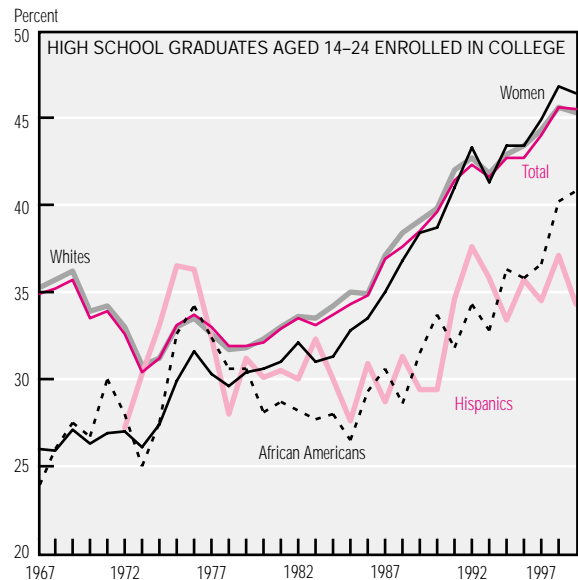
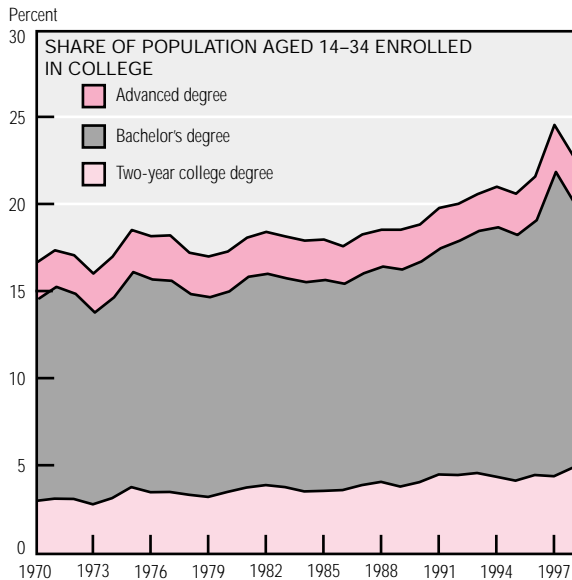
Americans completed high school in 1940, roughly three-quarters graduated some 50 years later. Hispanics also raised their educational attainment, but at a substantially slower pace than African Americans. In 1972, the share graduating from high school was about the same for both groups; by 1998, however, only slightly more than 50% of Hispanics had a high school diploma, compared to 75% of African Americans.

Moreover, it is evident that education affects both employment and

income. In 1999, workers without high school diplomas were four times more likely to be unemployed than those with at least a bachelor's degree—and twice as likely to be unemployed as those with a high school education. The cyclical variation in unemployment rates also differs significantly by education group. The employment status of individuals with at least a college degree is far less volatile than that of workers with less schooling.

(continued on next page)

Education and Earnings in the U.S. (cont.)



a. Shaded areas indicate recessions.

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

Although real (inflation-adjusted) earnings of nearly all groups declined in the late 1970s and early 1980s, earnings of those with advanced degrees have risen markedly since. Earnings of individuals with a bachelor's degree have risen more modestly. But real earnings of workers with less than a high school diploma declined until 1993 and still remain slightly below their 1974 levels.

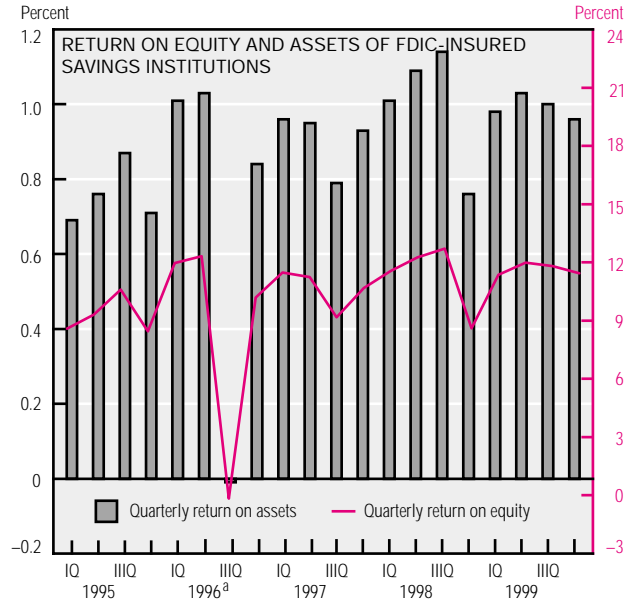
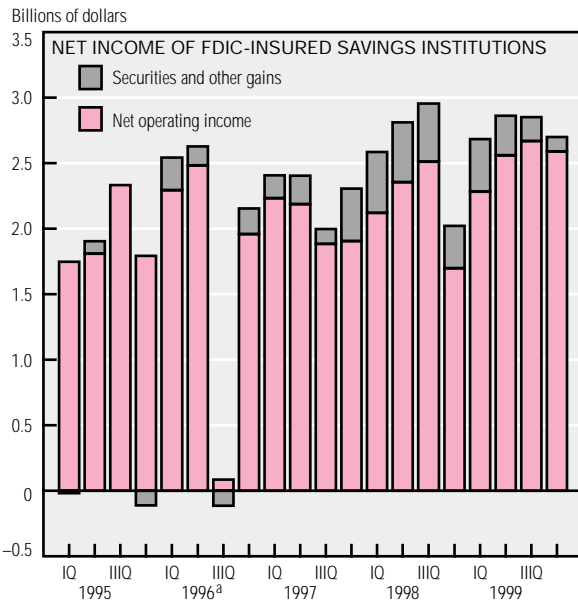
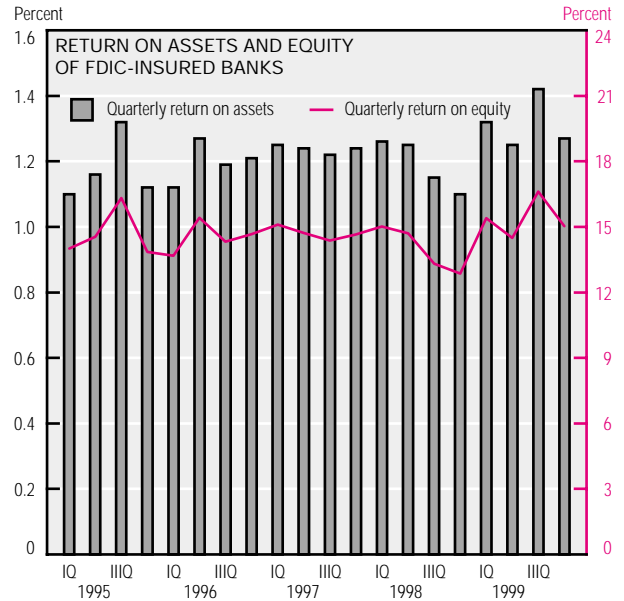
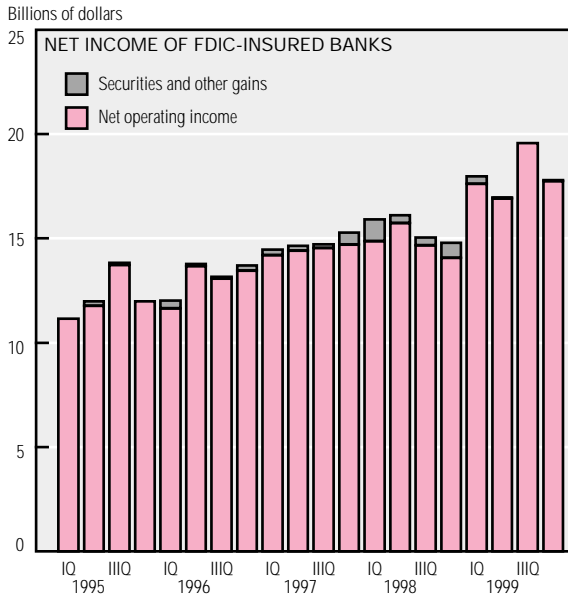
The share of the population aged

14-34 that was enrolled in four-year colleges and graduate schools held fairly constant between the mid-1970s and the late 1980s. After 1985, enrollment rates began to climb, reaching 25% in 1997. College enrollment rates of those holding a high school diploma show variation among ethnic groups. While whites, African Americans, and Hispanics had roughly similar proportions enrolled in the mid-1970s to mid-1980s (with virtually no growth during that

period), they diverged afterward. Whites' enrollment rates rose substantially, while those of African Americans and Hispanics continued unchanged until 1990.

In addition, the share attending two- and four-year colleges part time doubled over a span of 30 years. The same pattern does not hold for full-time students, whose shares remained fairly constant until the mid-1980s before rising to their current levels.

Banking Conditions



a. The sharp decline in 1996 was driven, in part, by a special insurance assessment on the deposits of savings institutions.
 SOURCE: Federal Deposit Insurance Corporation, *Quarterly Banking Profile*, 1999:IVQ.

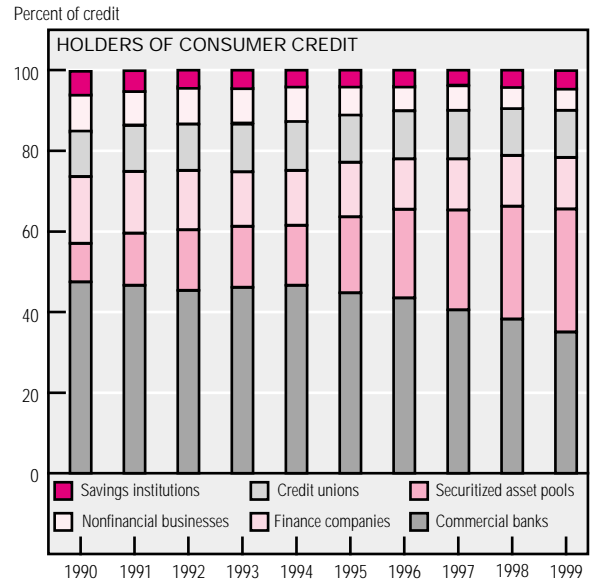
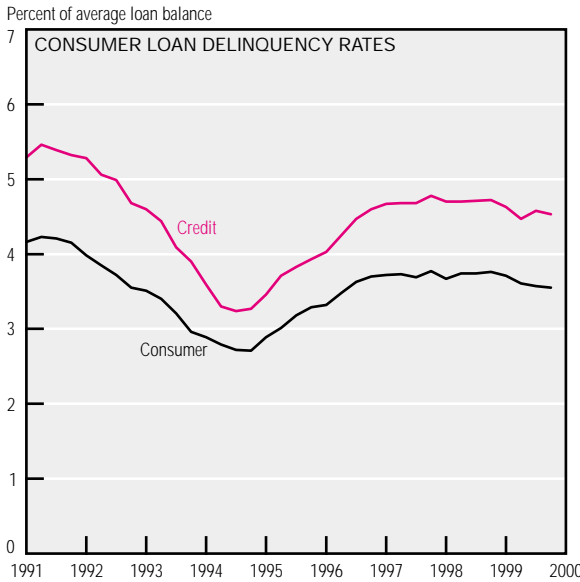
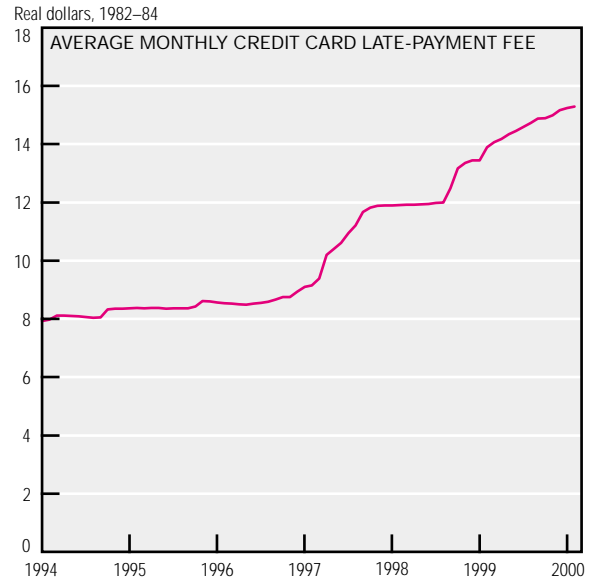
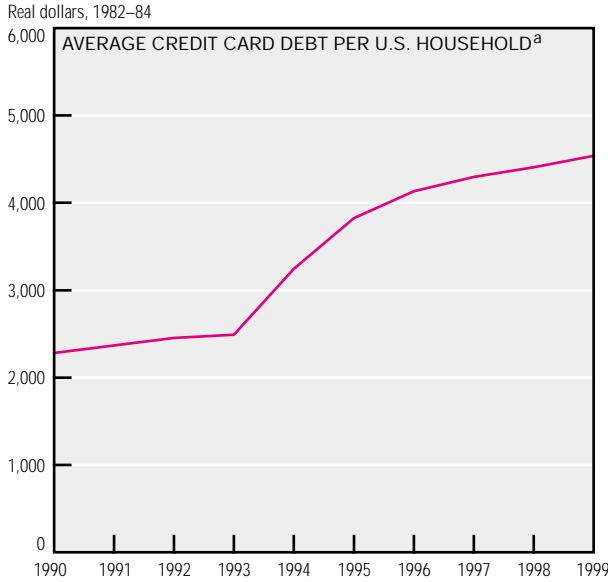
FDIC-insured commercial banks reported record profits of \$71.7 billion for 1999 along with an unprecedented 1.3% rate of return on assets. An important factor in commercial banks' strong profitability was a reduction in noninterest expenses relative to a year earlier. Although noninterest expenses rose in 1999:IVQ relative to 1999:IIIQ, they

were nonetheless lower than in the previous year. Noninterest income continues to play an increasingly important role, accounting for 44.1% of net operating revenues.

Generally increasing interest rates during 1999:IVQ had a stronger effect on banks' interest costs than on their asset yields, causing the industry's interest margin to decline four basis points.

FDIC-insured savings institutions also reported record profit levels of \$10.9 billion for 1999. Their rate of return on assets for the year was 1.0%, slightly lower than 1998. Savings institutions continue to show improved asset quality, with decreases in provisions for loan losses and net charge-offs on loans.

Household Financial Conditions



a. Average of households with at least one credit card.
 SOURCES: Board of Governors of the Federal Reserve System; and CardWeb, Inc., *CardWeb News Release*, March 21, 2000.

The increased number of bankruptcy filings in recent years is often attributed to rising levels of consumer indebtedness. Since 1990, average credit card balances per household (adjusted for inflation) have more than doubled. Delinquency rates for consumer loans rose markedly in the mid-1990s but have remained stable in recent years.

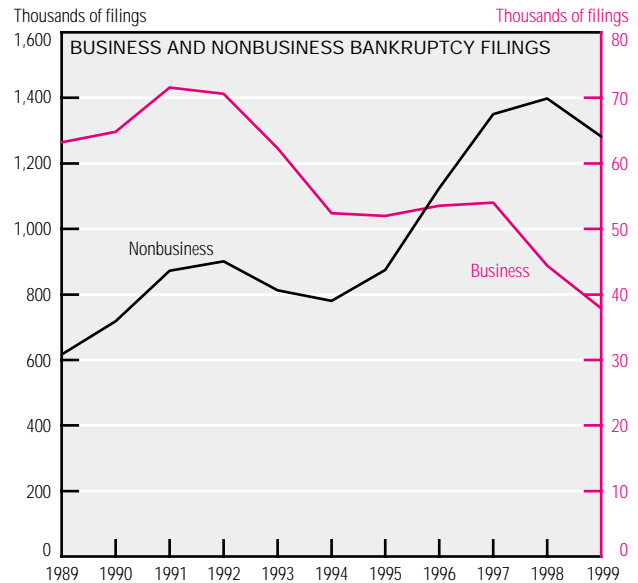
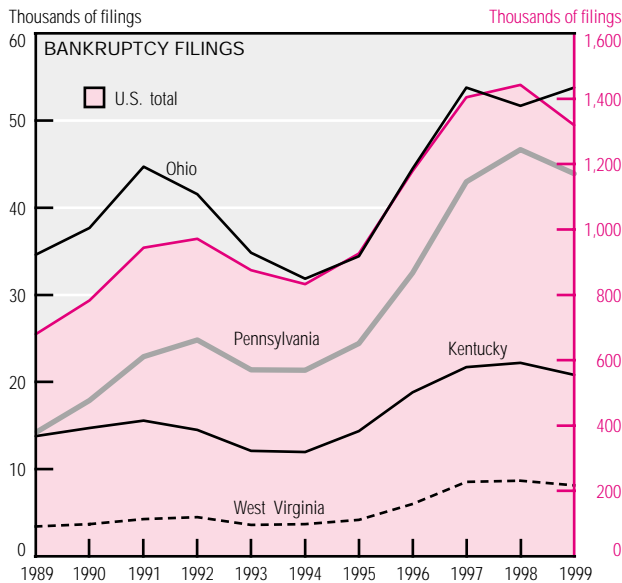
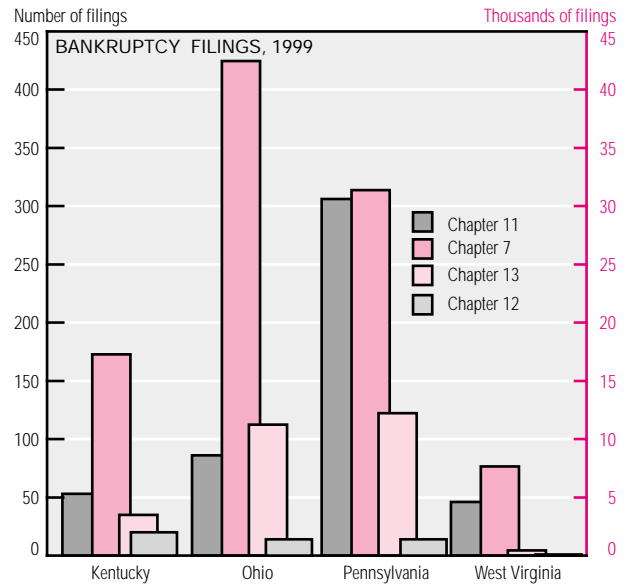
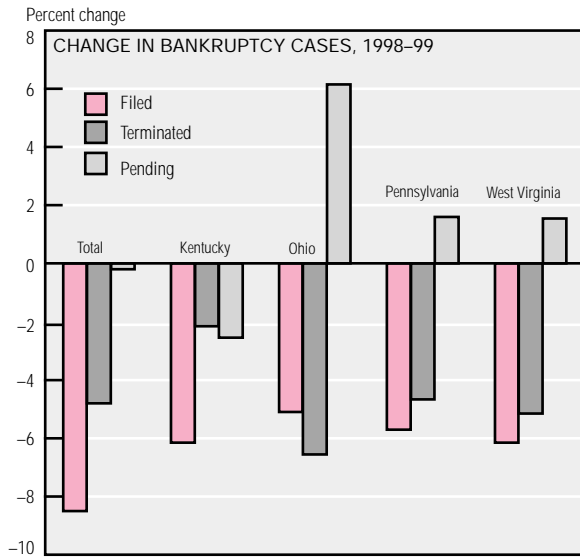
Holders of consumer debt have changed considerably over time. A decade ago, commercial banks held nearly 50% of all consumer credit. This proportion declined steadily throughout the 1990s, so that today banks hold only 35%. Savings institutions have also become less important as sources of consumer credit. Throughout the 1990s, pools of securitized assets absorbed an in-

creasing proportion of outstanding consumer credit.

The Bankruptcy Reform Act of 1994 increased the value of assets protected from seizure by creditors. This may have contributed to the upward trend in bankruptcy filings by individuals since its passage. Last year, however, their number declined, both across the U.S. and

(continued on next page)

Household Financial Conditions (cont.)



SOURCE: Administrative Office of the U.S. Courts.

within Fourth District states. In 1999, national consumer filings dropped more than 8% from their record levels of the previous year. Bankruptcy filings by businesses continue to follow the downward trend initiated in the early 1990s.

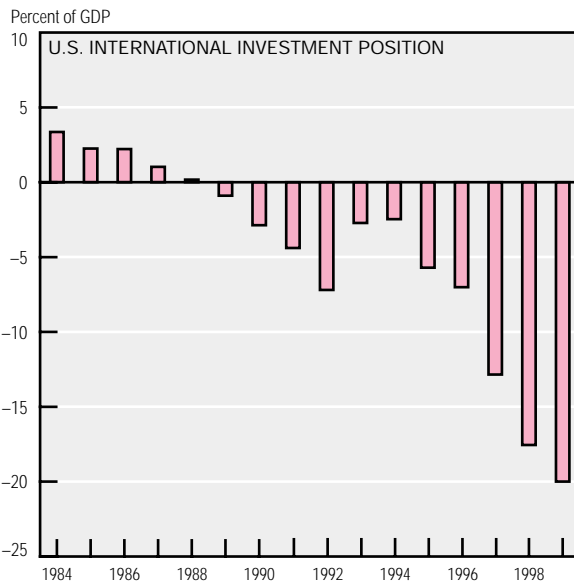
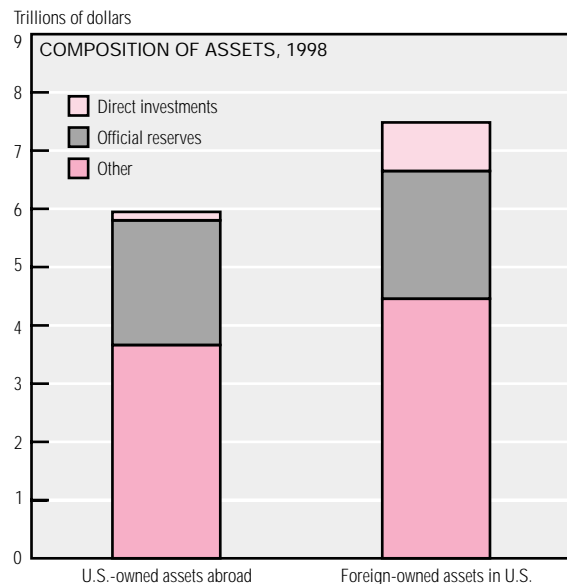
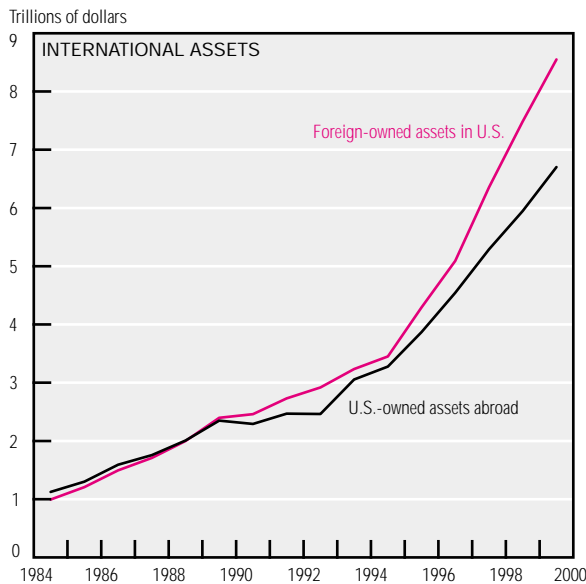
Congress is now considering some changes in the bankruptcy laws. Legislators, alarmed by the increase in bankruptcy filings in recent years, proposed a law to reduce the number of filings by

restricting the use of Chapter 7 provisions. On February 2, the Senate overwhelmingly passed a reform bill that would allow judges of bankruptcy cases to force Chapter 13 filing by debtors who can afford to pay \$15,000 or 25% of unsecured credit over five years. Creditors could also ask judges to require debtors to file for Chapter 13 reorganization instead of Chapter 7. The House passed a similar, but stricter, version in May 1999.

Under Chapter 13, debtors repay

creditors in full or in part through installment payments. With Chapter 7, certain debtor assets are liquidated, creditors are paid from the proceeds, and the remaining debt is at least partially erased. Some assets are exempt from liquidation, and certain debts cannot be erased. Filers currently choose the heading under which they will file, and more than 72% of them opt for Chapter 7. The proposed changes would limit their degree of choice.

The U.S. International Investment Position



Factors Affecting the U.S. International Investment Position (Percent of GDP)

	1985-99	1985-96	1997-99
Total change ^a	-23.3	-10.4	-13.0
Change attributable to:			
Trade and transfers	-33.9	-26.4	-7.5
Statistical discrepancy	-3.0	-1.0	-2.0
Net return	13.6	17.0	-3.4
Return on U.S.-owned assets	40.9	30.6	10.3
Payments on foreign-owned assets	-27.3	-13.6	-13.7

a. Total change is the sum of trade and transfers, statistical discrepancy, and net return on assets.

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

The U.S. is the world's largest debtor country, with net obligations exceeding \$1.8 billion. Since 1989, the market value of foreign-owned assets in this country has exceeded the market value of U.S.-owned assets abroad. Not all foreign-owned assets in the U.S. are debt instruments. Almost 30% represent foreign direct investments in this country. These are equity shares in U.S. enterprises that confer decision-making authority on foreigners. Another 11% of our liabilities are the

official dollar reserves of foreign governments.

Nevertheless, all foreign investors, private or governmental, require a return on their investments. Economists often assess the burden of a country's net international investment position by comparing it to GDP. U.S. international indebtedness currently stands at approximately 20% of GDP, a high but not unprecedented rate.

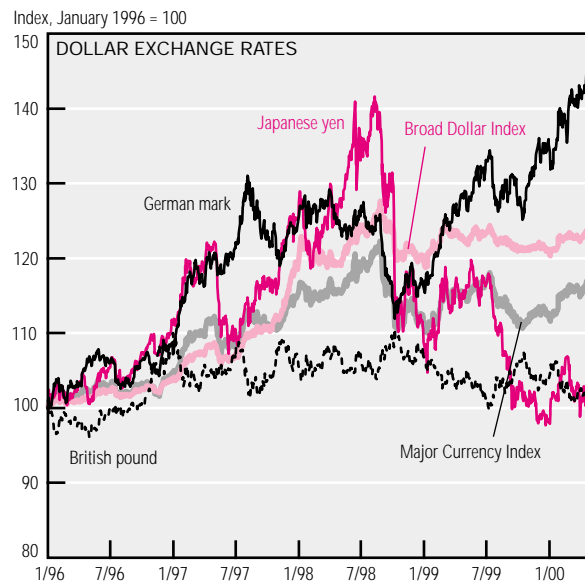
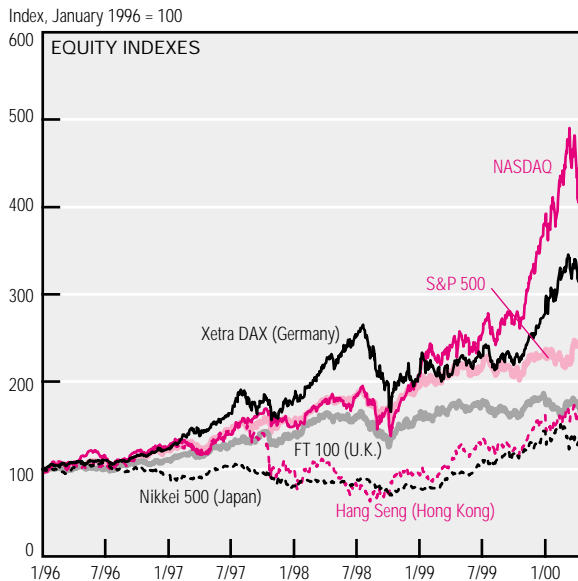
Persistently large trade deficits account for the expanded U.S. debt burden. Traditionally, a rate of

return that is higher on U.S.-owned assets abroad than on foreign-owned assets in the U.S. has mitigated the trade deficit's impact on our debt burden. Since 1993, however, this situation has reversed, and the net cost of servicing foreign-owned assets in this country is now adding more than 3 percentage points annually to the debt burden. All else equal, the U.S. needs a trade surplus equivalent to 2% of GDP to prevent a further increase in its debt-to-GDP ratio.

International Market Volatility

Equity-Index Volatility Measures ^a					
	1996	1997	1998	1999	2000
Nikkei 500	0.57	0.98	0.88	0.92	1.72
FT 100	0.48	0.74	1.01	0.89	0.74
Xetra DAX	0.55	1.16	1.45	1.10	1.42
Hang Seng	0.76	1.53	1.99	1.31	1.79
S&P 500	0.57	0.87	0.94	0.92	1.25
NASDAQ	0.74	0.90	1.24	1.42	2.52

Exchange-Rate Volatility Measures ^a					
	1996	1997	1998	1999	2000
German mark	0.30	0.48	0.42	0.42	0.50
British pound	0.27	0.41	0.34	0.33	0.34
Euro	—	—	—	0.42	0.50
Yen	0.35	0.52	0.83	0.63	0.56
Broad Index	0.10	0.19	0.28	0.18	0.15
Major Currency Index	0.16	0.27	0.34	0.28	0.24



a. Volatility is measured as the average absolute interday percent change.

SOURCES: Board of Governors of the Federal Reserve System; DRI/McGraw-Hill; *Wall Street Journal*; and *Financial Times*.

The day-to-day volatility of U.S. equity markets has increased markedly this year. The average absolute percentage change in the NASDAQ has risen almost 80% so far this year compared with 1999. Moreover, the day-to-day volatilities of both the S&P 500 and the NASDAQ are higher than in any of the past four years. Market volatility is generally associated with uncertainty, which in this case may reflect apprehension about the valuation

of high-tech stocks and concerns about future U.S. monetary policy.

With the exception of London's FT 100, the day-to-day volatility of foreign equity markets has also risen this year. The Japanese Nikkei Index showed the most pronounced increase. Recent volatility in the German (Xetra DAX) and Hong Kong (Hang Seng) indexes—although higher than in 1999—remains below that recorded in 1998.

Equity-market volatility is not reflected in the dollar's foreign exchange rates. The Broad and Major Currency indexes seem calm. The day-to-day volatility of the German mark (and euro) exchange rate has increased this year relative to last year, which may be a sign of uncertainty about the prospect for monetary policy in Europe. Apart from this, the average volatility of foreign exchange markets is not atypical.