

The Economy in Perspective

Once upon a time ... there was a land filled with hard-working, creative people. Most often, economic conditions were good, but even in the best of times some companies went out of business and people changed jobs. These comings and goings might disrupt lives and cause hardship, but the people recognized that the great majority were well served by their economic system. When inefficient businesses failed, more productive ones took their places and provided new jobs. Living standards rose from generation to generation.

But their were hard times, too. During the 1970s, economic activity contracted twice, unemployment escalated, and inflation soared. Political thinking at the time favored using monetary and fiscal policies to vigorously stimulate business activity and create jobs. Prevailing economic doctrine underestimated the negative consequences of higher inflation. So, when the actions of an oil-producing cartel sent energy prices skyrocketing, the nation's leaders initially feared that the cost of aggressively combating inflation might exceed the benefit. But accelerating inflation proved so destructive that by decade's end the public was clamoring for a change in economic strategy.

In the 1980s, the nation acclimated itself to lower inflation. The government lowered several key tax rates, reduced regulations affecting many industries, and dropped trade barriers. The economy expanded without interruption for most of the decade, while inflation declined and became more stable. Economic conditions improved on average, but regional and industrial circumstances still differed widely.

As the 1980s progressed, people saw that the previous decade's inflation had distorted the economy in more complex, profound ways than they had realized. Not surprisingly, many companies were struggling because when inflation collapsed, they could no longer survive merely by raising their prices. Financial institutions were burdened with nonperforming loans made to energy and real estate development companies at a time when it seemed that energy and property prices would rise forever. Manufacturing firms still had trouble competing with foreign-based rivals. Productivity growth remained rather sluggish. Nevertheless, as the decade evolved,

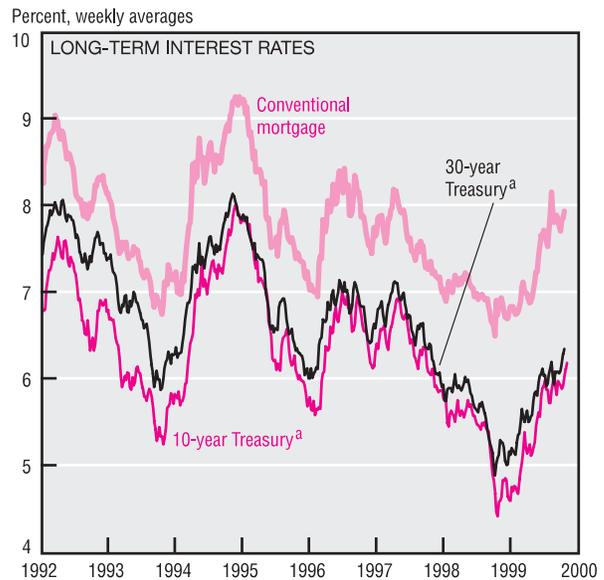
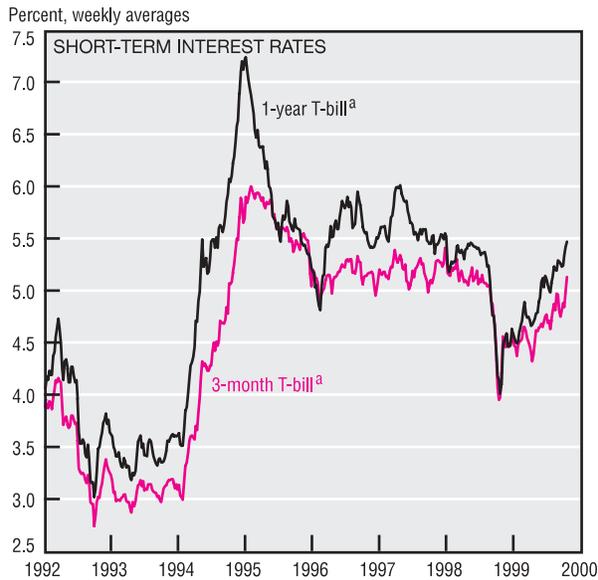
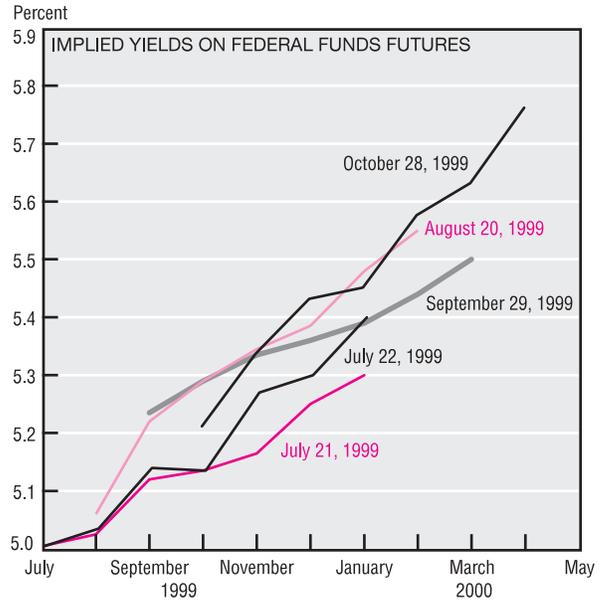
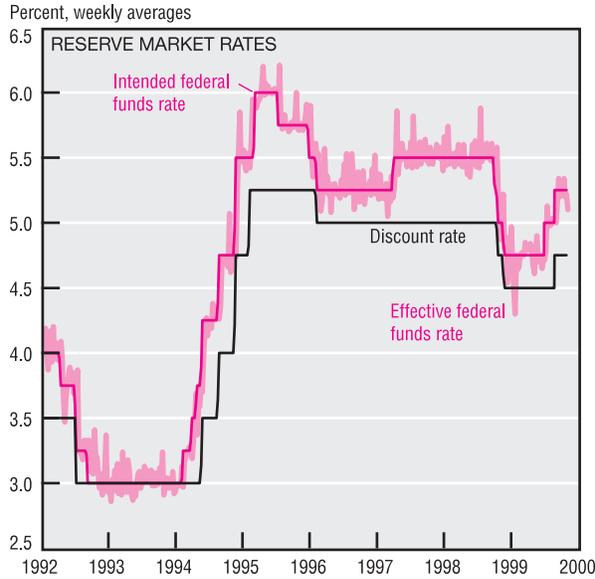
economic conditions gradually strengthened. When inflation threatened to accelerate more than moderately, the nation's monetary authorities acted swiftly and surely to keep it in check. No longer did they discount the consequences of high or accelerating inflation.

The 1990s proved to be a remarkably favorable decade for this land. Previously devastated industries had already closed old plants and taken steps to become more productive. The financial system regained solid footing and once again could channel funds to growing businesses and families. Inflation remained low, and people expected it to continue so. Promising new technologies, ever-growing world markets, and favorable financing conditions triggered an investment boom. When production expanded and people became wealthier, consumer spending boomed as well. As the decade advanced, the nation's productivity growth trend began to accelerate. Times were undeniably good.

Curiously, the threat of accelerating inflation rarely materialized during this long and vigorous expansion. When it did, the nation's monetary authorities provided a measured response to anticipated inflation. They were willing to adjust their policy instruments continuously to economic circumstances rather than taking strong actions, after excessive delay, in the face of imminent danger. As a result, the people never expected inflation to get out of hand, and interest rate movements (which are strongly affected by inflation expectations) fluctuated in a correspondingly narrower range. The county's unemployment and inflation rates simultaneously trended down throughout the decade, falling to lows not seen for nearly 30 years.

A new decade draws near. Interested citizens, second-guessing the monetary authorities, consider the same policy options debated a generation ago: Should monetary conditions be tightened or left alone? But experience has left no illusions about economic growth and inflation. Growth comes from innovation, competition, and productivity; inflation gets in their way. In this enlightened land, even if today's monetary policy vote is cast for the status quo, it is cast by a knowing hand.

Monetary Policy



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

After raising the intended federal funds rate target 25 basis points in each of its two previous meetings, the Federal Open Market Committee (FOMC) left the rate unchanged at its October meeting. Nonetheless, many financial market participants expect the federal funds rate to increase further, exceeding the current 5.25% rate in the months ahead.

The yield on federal funds futures provides a measure of what market

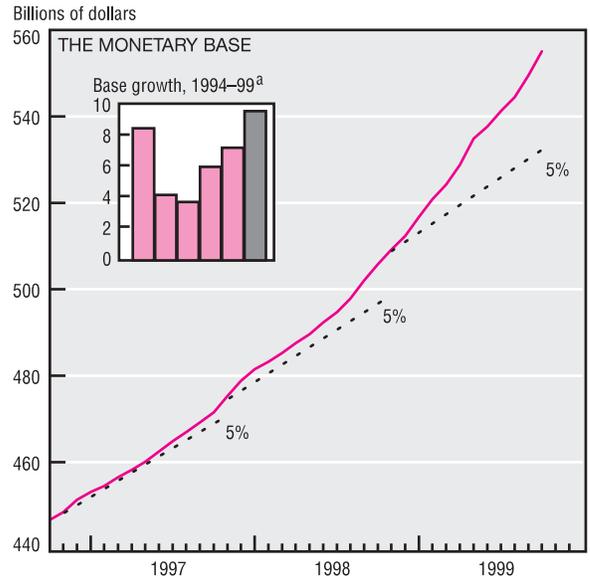
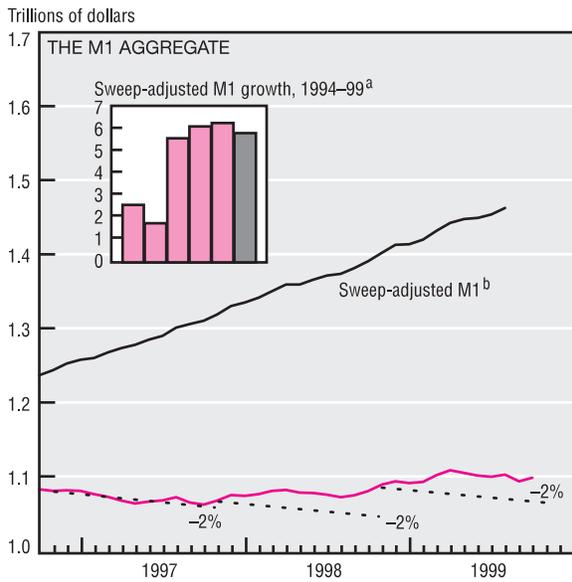
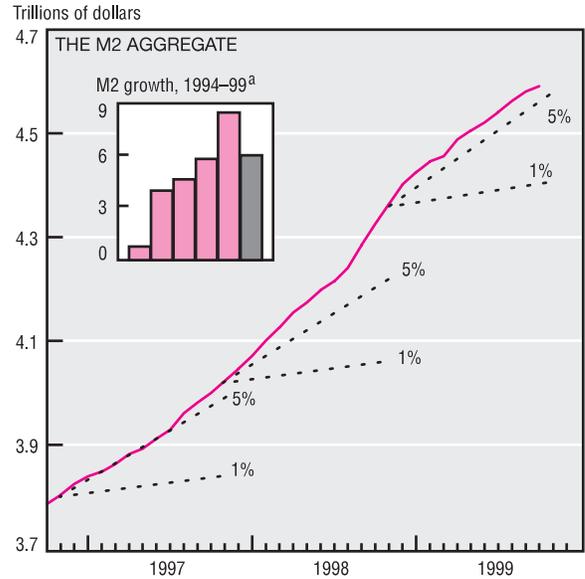
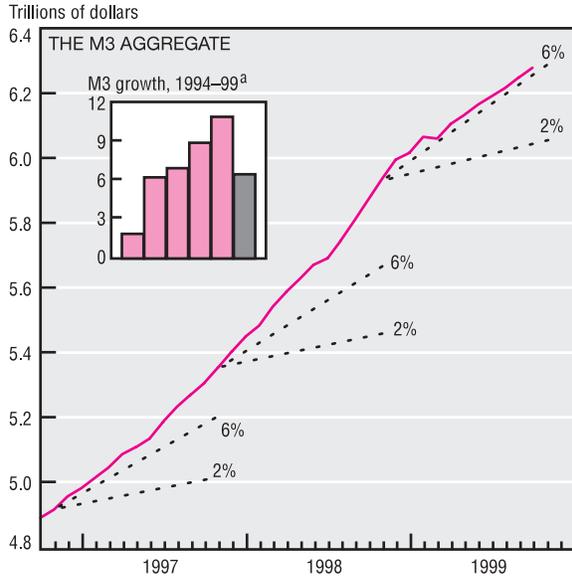
participants believe the average federal funds rate will be in the coming months. As of October 28, these futures were trading at 5.43% for December 1999 and 5.78% for April 2000. The April yield reflects an expected increase of roughly 50 basis points (bp). Market observers point to the U.S. economy's continued strength, as well as signs of accelerating inflation in September's Producer Price Index (13.4%) and

Consumer Price Index (5.1%), as contributing to expectations of further rate increases.

Interest rates, which have been rising throughout the year, continued to climb in October. The 3-month Treasury bill rate reached 5.13% for the week ending October 22, up 25 bp from four weeks earlier and up 55 bp from the beginning of the year. Similarly, the 1-year

(continued on next page)

Monetary Policy (cont.)



a. Growth rates are percentage rates calculated on a fourth-quarter over fourth-quarter basis. The 1999 growth rates for M2, M3, and the monetary base are calculated on a September over 1998:IVQ basis. The 1999 growth rate for sweep-adjusted M1 is calculated on an August over 1998:IVQ basis.
 b. Sweep-adjusted M1 includes an estimate of balances temporarily moved from M1 to non-M1 accounts.
 NOTE: Data are seasonally adjusted. Last plots for M1, M2, M3, and the monetary base are September 1999. Last plot for sweep-adjusted M1 is August 1999. Dotted lines for M2 and M3 are FOMC-determined provisional ranges. All other dotted lines represent growth in levels and are for reference only.
 SOURCE: Board of Governors of the Federal Reserve System.

Treasury-bill rate rose to 5.47%, up 24 bp from a month earlier and 88 bp from the beginning of the year.

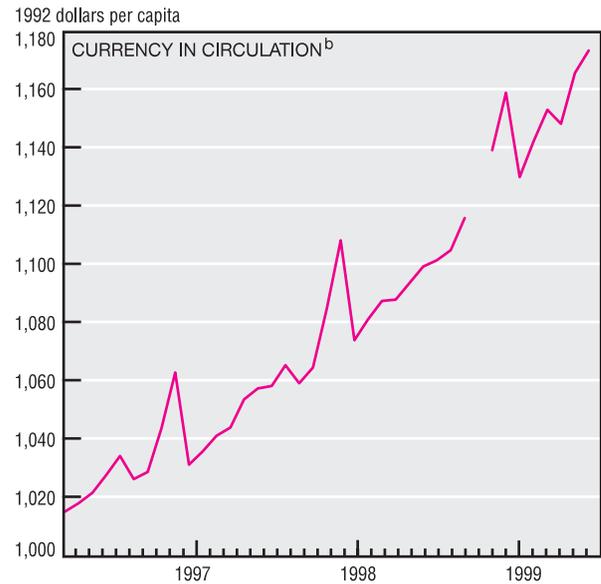
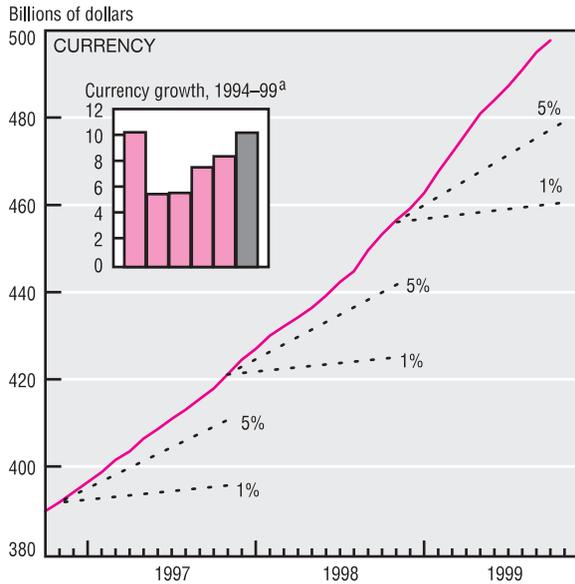
Long-term rates have also continued to rise. The 10-year and 30-year Treasury constant-maturity rates now stand at 6.18% and 6.34%, up 30 and 28 bp from four weeks earlier and 148 and 122 bp from the beginning of the year. Constant-maturity rates of longer than one year all have increased by more than 100 bp since last December.

In light of the sizeable increase in market interest rates this year, the 50 bp increase in the federal funds rate over the summer may seem relatively modest. Although any increase in the intended federal funds rate is often thought to represent a "tightening" of monetary policy, such simple analysis ignores the complexities inherent in conducting monetary policy in a dynamic economy where factors are constantly changing for reasons unrelated to Federal Reserve policy.

Turning to money, the monetary aggregates continue to increase robustly, at least relative to the provisional ranges provided by the FOMC for the broader aggregates. While growth in M3 and M2 is slower this year than last, both measures remain above their provisional ranges. Growth in sweep-adjusted M1 and the monetary base also continues at a vigorous pace.

(continued on next page)

Monetary Policy (cont.)



Bills in Circulation, September 1999

Denomination	Total	Percent of value of all bills	Percent of number of bills
\$1	\$6,581,059,983	1.4	36.3
\$2	\$1,142,057,766	0.2	3.1
\$5	\$7,540,869,430	1.6	8.3
\$10	\$13,421,048,600	2.9	7.4
\$20	\$84,376,713,040	18.4	23.2
\$50	\$47,388,748,450	10.3	5.2
\$100	\$298,359,410,900	65.0	16.4
\$500	\$144,307,000	0.1	0.1
\$1,000	\$167,307,000	0.1	0.1
\$5,000	\$1,755,000	0.1	0.1
\$10,000	\$3,450,000	0.1	0.1
Total currency	\$459,126,498,260	100	100

a. Growth rates are percentage rates calculated on a fourth-quarter over fourth-quarter basis. The 1999 growth rates for currency are calculated on a September over 1998:IVQ basis.

b. Break in line indicates missing data.

NOTE: Currency data are seasonally adjusted. Last plot for currency is September 1999. Dotted lines for currency represent growth in levels and are for reference only. Currency refers to notes outside the U.S. Treasury, Federal Reserve Banks, and the vaults of depository institutions.

SOURCES: Board of Governors of the Federal Reserve System; and U.S. Department of the Treasury, Financial Management Service.

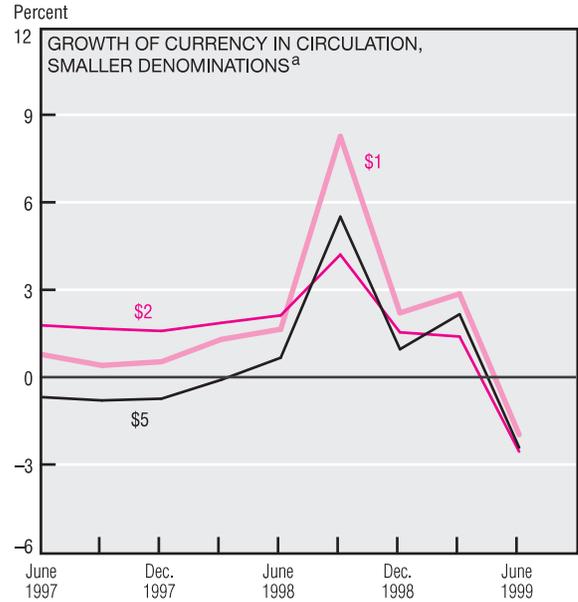
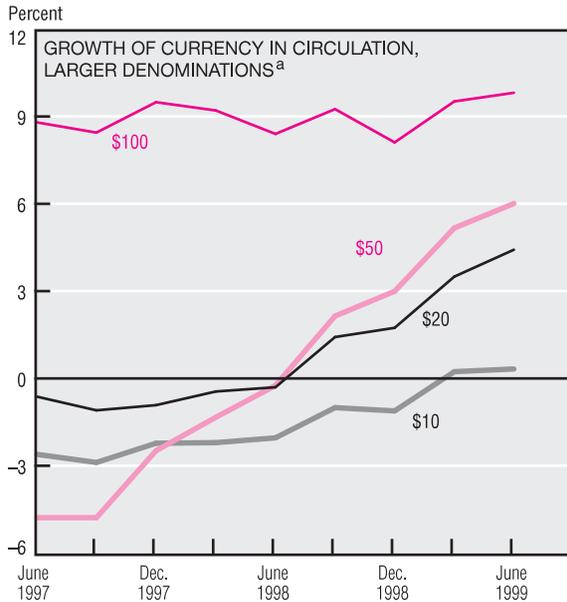
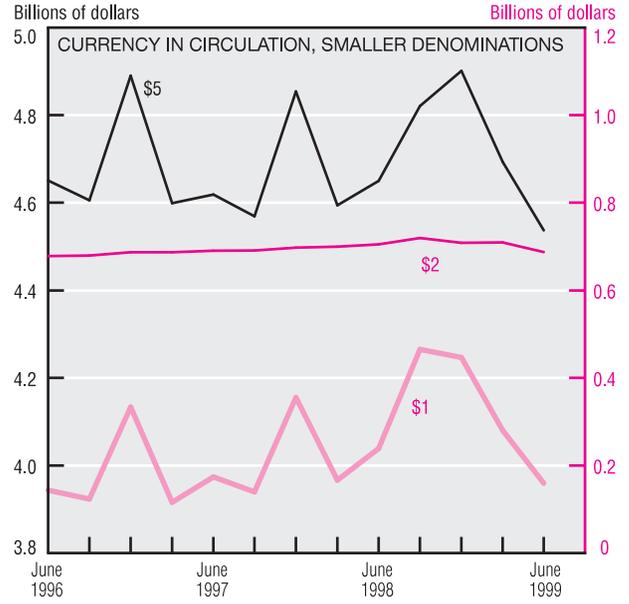
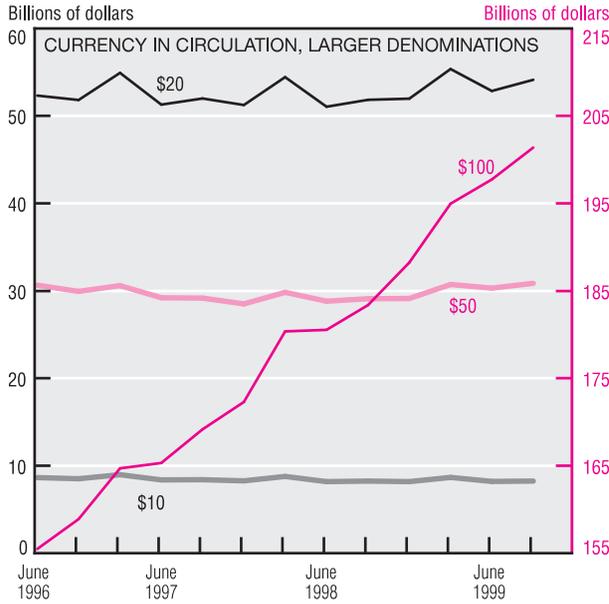
Not surprisingly, growth in the monetary base is driven by growth in currency, which makes up almost 90% of the base. Moreover, currency holdings have a distinct seasonal pattern reflecting the year-end holiday shopping season. Banks' customers make currency withdrawals and banks replenish their currency inventories by making currency withdrawals from their accounts at the

Federal Reserve Banks. The Reserve Banks, in turn, maintain sufficient inventories of both previously circulated and new, uncirculated currency to meet all demands. Whether there will be much additional demand this year created by Y2K concerns is not clear, but the Reserve Banks have taken extraordinary precautions to be able to supply almost any conceivable demands.

We would expect part of normal currency growth to result from inflation and population growth. Beyond that, however, it is curious to note that real currency per capita has been increasing substantially. Average real cash holdings per capita now exceed \$1,160 per person.

But how can this number be so large, particularly in light of survey
(continued on next page)

Monetary Policy



a. Growth rates are percentage changes from four previous quarters.
SOURCE: U.S. Department of the Treasury, Financial Management Service.

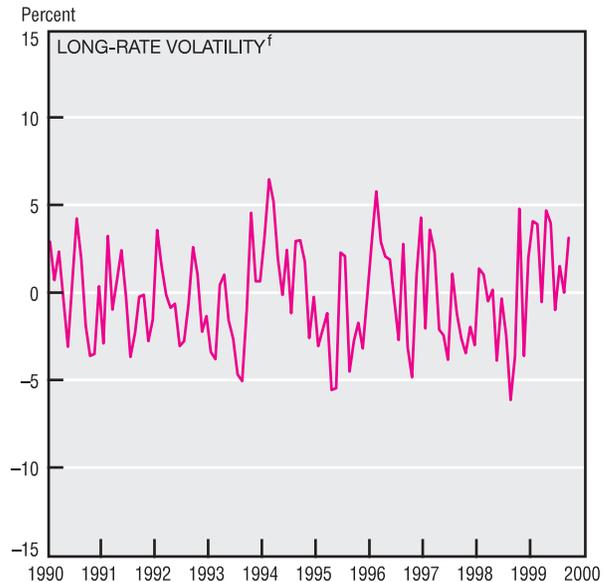
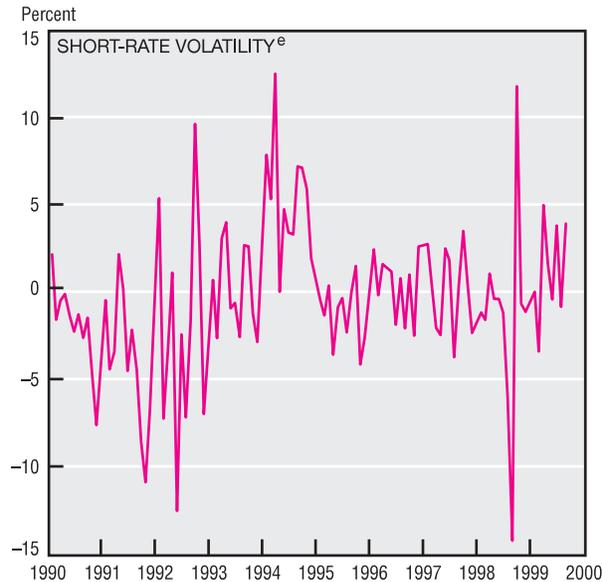
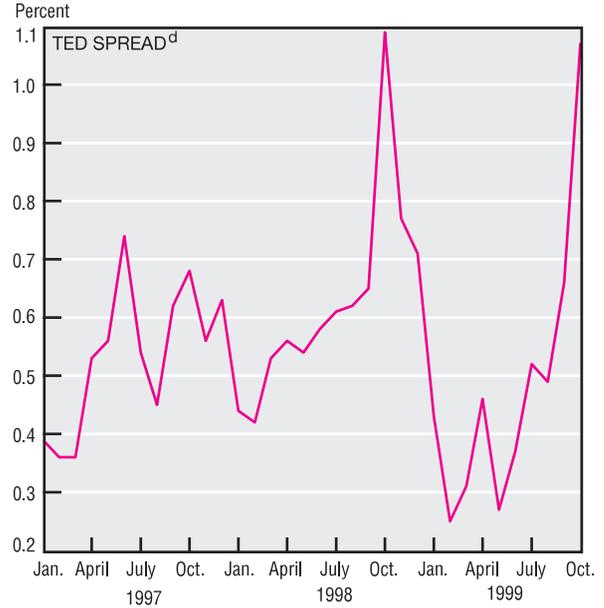
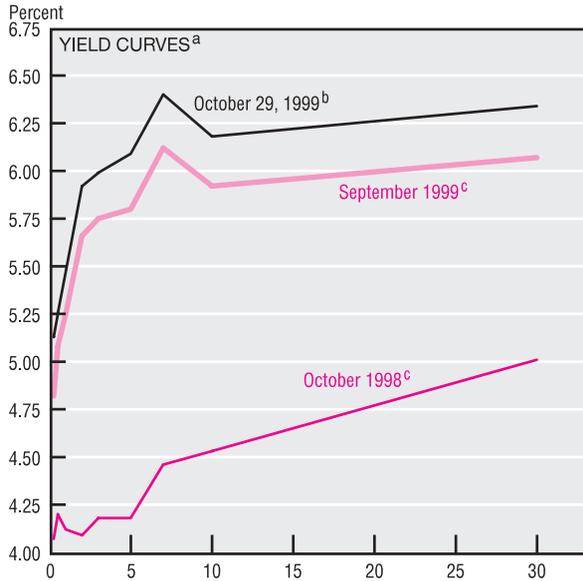
data indicating that the average American holds roughly \$100 in cash? Part of the explanation is that many foreign countries use the dollar as a store of value and a medium of exchange. An estimated one-half to two-thirds of the total currency stock is held abroad, where demand for U.S. currency is growing faster than domestic demand. This heavy foreign demand is important in analyzing currency growth.

How do total currency holdings break down into bills of different denominations, and which denominations contribute most to overall currency growth? Almost two-thirds of the value of currency outstanding is in \$100 dollar bills. Furthermore, there are twice as many \$100 bills outstanding as there are \$5 or \$10 bills. Again, this fact reflects foreign demand, which comes mainly in the form of demand for large-denomination bills, and the fact that

no denomination higher than \$100 has been printed since 1946.

So it is not surprising that growth in \$100 bills is driving growth in total currency outstanding. However, while growth in \$100 bills has been consistently strong over the past three years, growth in \$50, \$20, and \$10 bills has been increasing. Growth in \$5, \$2, and \$1 bills spiked in the third quarter of 1998, but has fallen off again in 1999.

Interest Rates



a. All yields are from constant-maturity series.
b. Average for the week of October 29, 1999.
c. Monthly averages.

d. Spread between the 3-month eurodollar deposit rate and the 3-month Treasury-bill rate.

e. Month-to-month percentage change in the monthly average 3-month Treasury-bill rate in the secondary market.

f. Month-to-month percentage change in the monthly average 30-year Treasury-bond rate.

SOURCE: Board of Governors of the Federal Reserve System, "Selected Interest Rates," *Federal Reserve Statistical Releases*, H.15.

Since last month, the yield curve has shifted upward and marginally decreased its upward tilt. The 3-month Treasury-bill rate moved up 31 basis points (bp), from 4.82% to 5.13%, while the 3-year, 3-month spread flattened from 93 to 85 bp, echoing the dip from 110 to 105 bp in the 10-year, 3-month spread. These spreads stand near their respective long-run averages of 80 and 125 bp. To the (admittedly somewhat limited) extent that such a shift expresses changes in market sentiments about inflation, it indicates a mild increase in concern, concen-

trated more on the short run. To the extent (also limited) that it reflects real factors, it indicates moderate real growth for the next year.

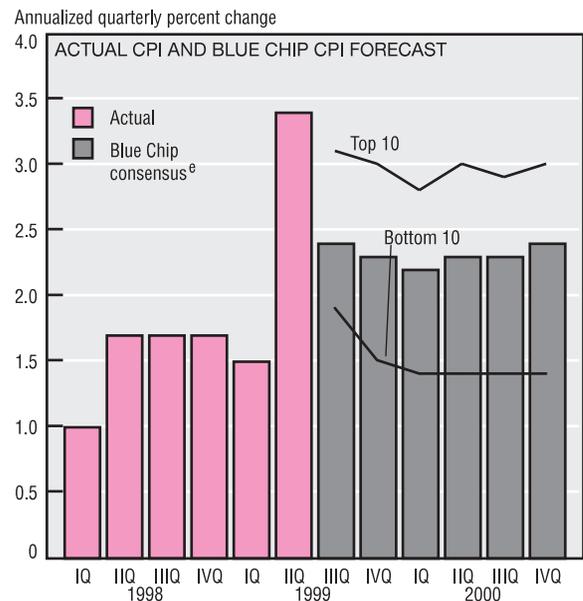
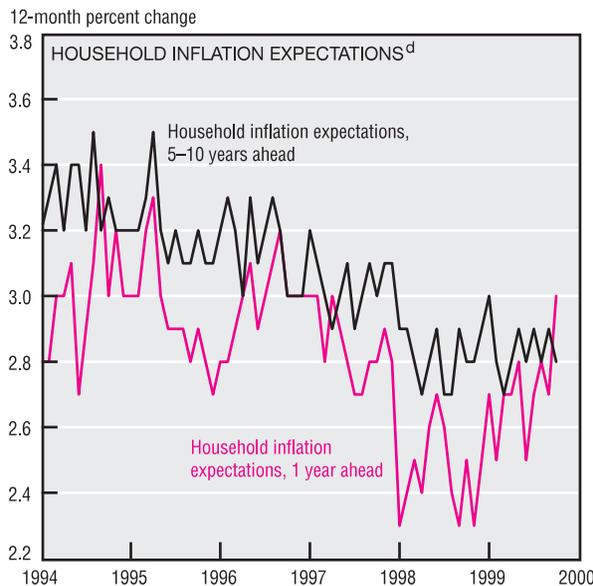
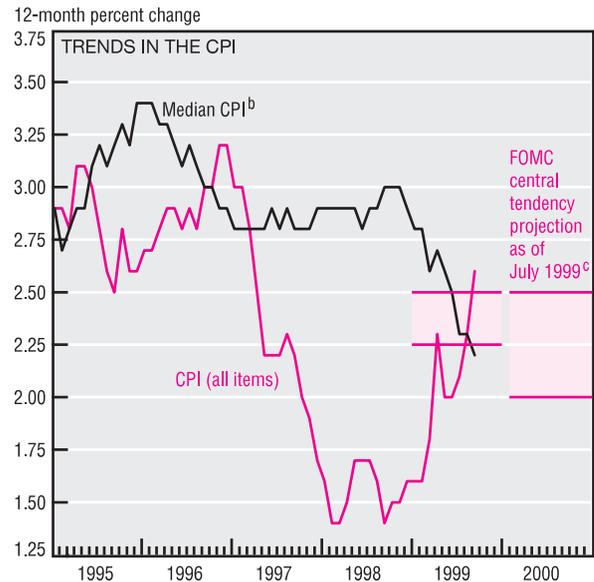
The Treasury-to-eurodollar (TED) spread has changed more dramatically, increasing 58 bp since August and 82 bp since February to its current level of 107 bp. So wide a spread has not been seen since October 1998, the peak of last year's flight to liquidity and quality. Last fall's wide spreads, however, had obvious proximate causes in the Russian default, hedge-fund problems, and worries about North

Korean missiles. This time, such obvious suspects are missing.

Looking not at interest rates themselves but at percentage changes can provide perspective on market volatility or turbulence. Since fall 1998, markets have been relatively, but not abnormally, stable. Long rates (yields on 30-year T-bonds) have generally fluctuated less than short rates (3-month T-bill yields), providing some evidence that long rates can be thought of as an average of short rates, smoothing their fluctuations over time.

Inflation and Prices

	Percent change, last:				1998 avg.
	1 mo. ^a	3 mo. ^a	12 mo.	5 yr. ^a	
September Price Statistics					
Consumer prices					
All items	5.1	4.2	2.6	2.4	1.6
Less food and energy	4.1	2.5	2.1	2.5	2.5
Median ^b	1.9	1.9	2.2	2.8	2.9
Producer prices					
Finished goods	13.4	7.5	3.1	1.4	-0.1
Less food and energy	9.5	2.8	1.7	1.3	2.5



a. Annualized.

b. Calculated by the Federal Reserve Bank of Cleveland.

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

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

e. Blue Chip panel of economists.

SOURCES: U.S. Department of Labor, Bureau of Labor Statistics; Federal Reserve Bank of Cleveland; University of Michigan; and *Blue Chip Economic Indicators*, October 10, 1999.

Following annualized increases of 3.7% in each of the previous two months, the Consumer Price Index (CPI) rose 5.1% (annualized) in September. As in July and August, energy prices continued to exert extreme pressure on the index. Energy costs in the CPI rose 1.7% (21.7% annualized) in September—virtually identical to the 21.6% annualized average over the past six months. The upward surge in energy prices is reportedly a reflection of OPEC members' stricter adherence to the organization's oil-production quotas.

Excluding food and energy, the CPI rose 4.1% (annualized) in September, the index's largest monthly increase since April. Apparel costs rose 1.2% (15.8% annualized) in September, having fallen the previous four months, and tobacco and smoking products rose 6.5% (111.9% annualized). Many observers have discounted the importance of these rather sizeable increases, attributing them to transitory factors. Accordingly, they argue that September's increase in the CPI less food and energy may not accurately represent the under-

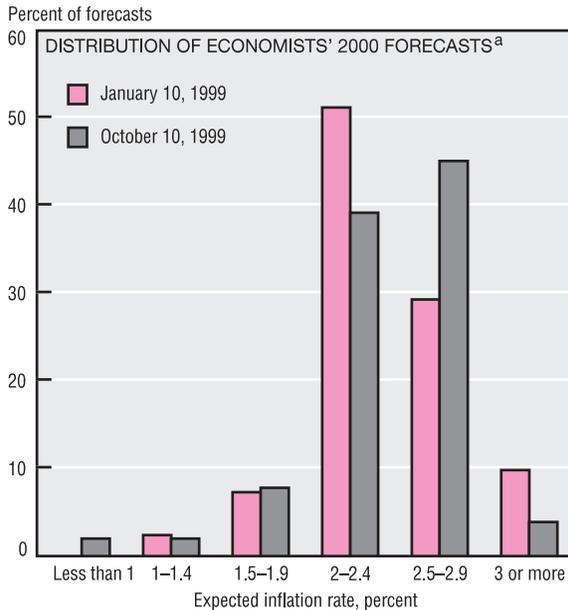
lying or core rate of inflation that the index is intended to gauge.

Indeed, another measure of core inflation, the median CPI, rose 1.9% (annualized) in September—far below the rates posted by the CPI as well as the CPI less food and energy. In fact, over the past 12 months, the median CPI has grown at a rate of 2.2%, almost ½ percentage point below the CPI's average growth rate over the period.

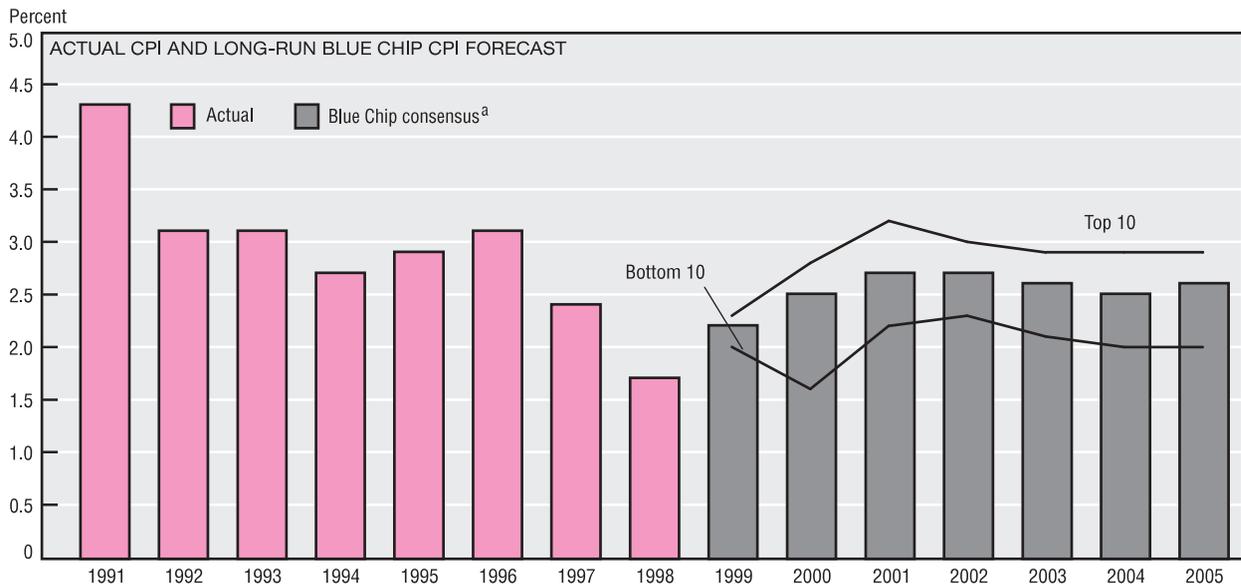
The step-up in retail prices has apparently taken its toll on households' expectations of inflation—at

(continued on next page)

Inflation and Prices (cont.)



	Percent change	
	Forecast for 2000	Expected increase from 1999
Japan	0.3	0.5
France	1.4	0.8
Germany	1.8	1.1
Canada	1.9	0.4
U.S.	2.4	0.3
U.K.	2.5	0.3



a. Blue Chip panel of economists.

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

least over the near term. From the end of 1998 to the present, expectations of inflation for the upcoming 12-month period, as measured by the University of Michigan's *Survey of Consumers*, have risen from about 2¼% to 3%. Inflation expectations for the next five- to ten-year period, however, have remained fairly stable this year at about 2¾%.

Economists' forecasts of inflation for the next year suggest a moderation from the price surge that occurred in 1999:IIQ, at least according to the consensus of forecasts. Still, the trend growth of consumer prices

over the remainder of this year and in 2000 is expected to be a bit (about ½ percentage point) higher than the inflation recorded in 1998.

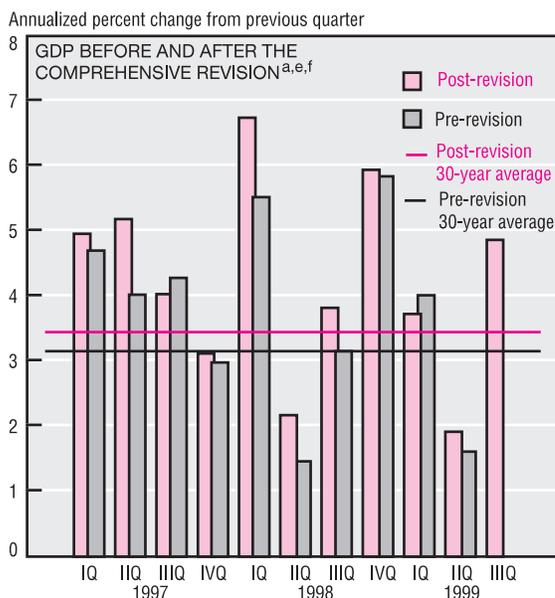
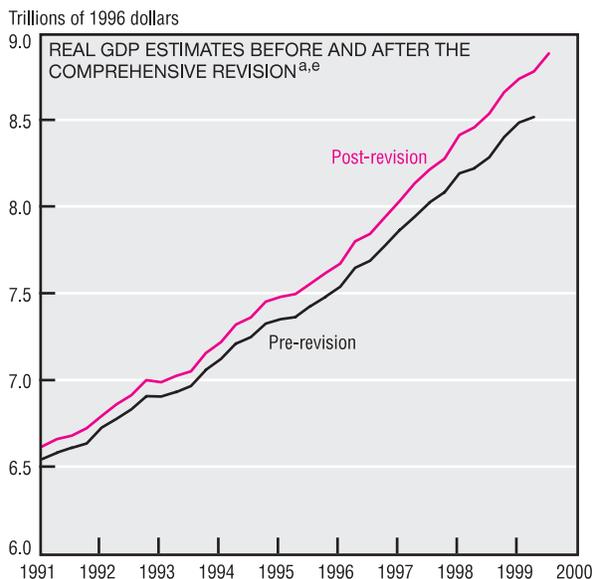
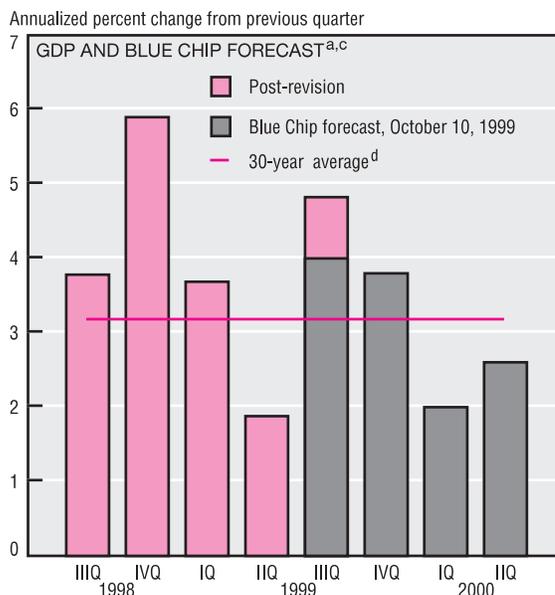
The inflation outlook for 2000 is somewhat more pessimistic now than it was last January. At that time, about 51% of the economists polled saw inflation in 2000 in the 2.0%–2.4% range, while about 30% were anticipating inflation in the 2.5%–2.9% range. In October, the proportion of forecasts showing next year's inflation in the lower of these two ranges had fallen to just under 40%, and the share showing inflation in

the higher range had risen to about 45%. In 2000, the rise in U.S. consumer prices is expected to be on the high side relative to other major economies.

Looking further ahead, economists expect the upward trend in retail prices to remain in the 2½%–2¾% range through the year 2005—not far from the long-run inflation expectation of households noted earlier. The inflation pessimists see inflation stabilizing just under the 3% level by mid-decade; the optimists expect the rate to level off at around 2%.

Economic Activity

Real GDP and Components, 1999:IIIQ ^{a,b} (Advance estimate)			
	Change, billions of 1992 \$	Percent change, last:	
		Quarter	Four quarters
Real GDP	104.0	4.8	4.1
Consumer spending	63.3	4.3	5.1
Durables	13.8	7.0	12.1
Nondurables	15.6	3.6	5.2
Services	34.5	4.1	3.8
Business fixed investment	42.5	14.9	11.2
Equipment	48.3	21.7	15.9
Structures	-3.2	-5.1	-2.7
Residential investment	-6.1	-6.3	5.2
Government spending	12.5	3.3	3.1
National defense	8.1	9.9	-0.1
Net exports	-24.0	—	—
Exports	30.5	12.4	6.4
Imports	54.5	17.2	13.7
Change in business inventories	14.1	—	—



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. Blue Chip forecasts probably do not fully incorporate the comprehensive revision to the National Income and Product Accounts.
 d. Calculated from the revised data in chained-weighted 1996 dollars.
 e. Pre-revision GDP data were converted to 1996 dollars by dividing post-revision data in current dollars by post-revision data in 1996 dollars to estimate a deflator, which was then applied to pre-revision data in current dollars.
 f. The new methodology is used exclusively starting in 1999:IIIQ.
 NOTE: All data are seasonally adjusted.
 SOURCES: U.S. Department of Commerce, Bureau of Economic Analysis; and *Blue Chip Economic Indicators*, October 10, 1999.

The advance third-quarter estimate of GDP growth is 4.8%, slightly higher than economists' expectations. Growth was broad based, with strong gains of 14.9% in business fixed investment and 12.4% in exports. The latter was more than offset, however, by imports' 17.2% advance, the strongest gain in two years. Personal consumption expenditures increased 4.3%.

The third-quarter estimates in-

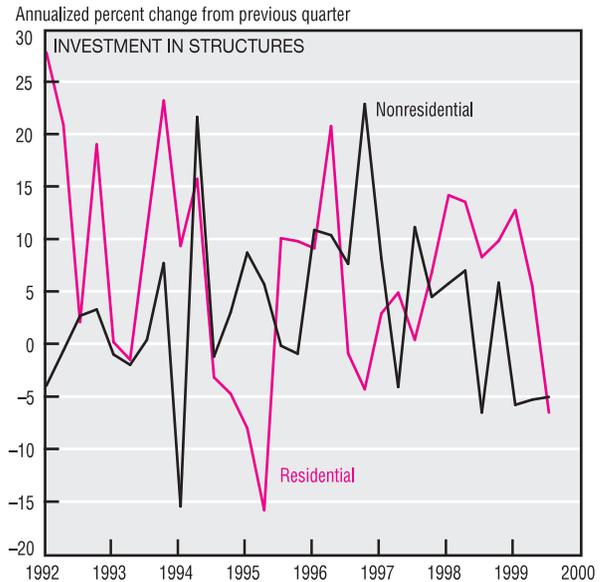
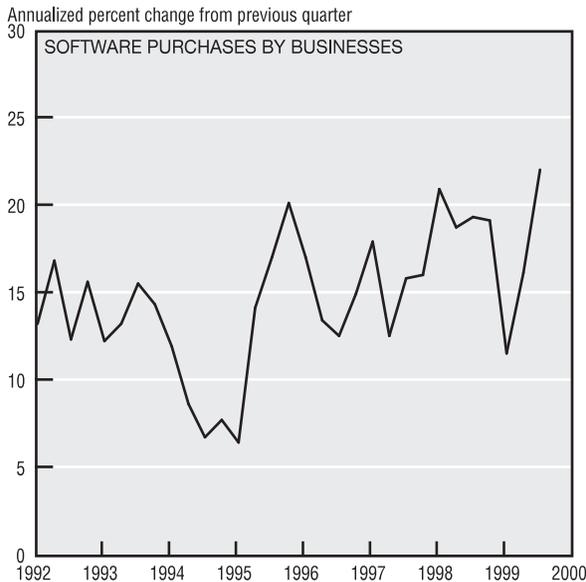
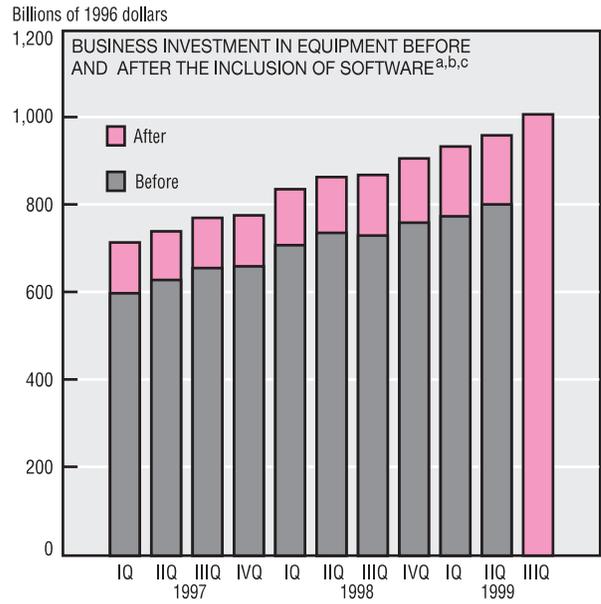
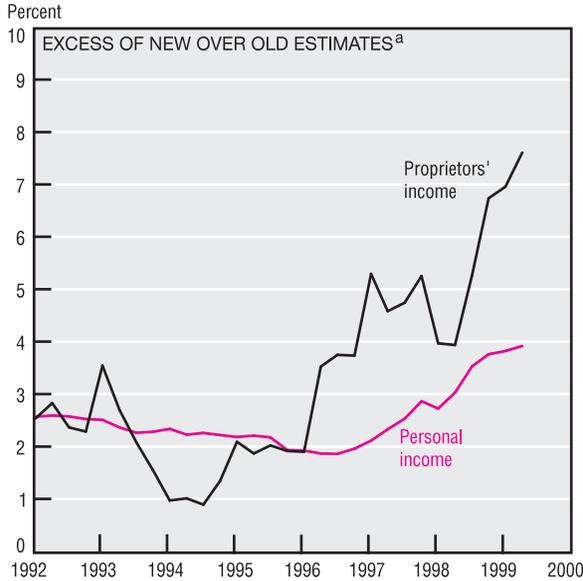
clude revisions to the methodology of the National Income and Product Accounts, as far back as 1959 in some cases and 1929 in others. The change most likely to have a significant impact on GDP estimates is the reclassification of business and government expenditures for computer software as fixed, depreciable capital investments rather than as intermediate inputs in calculating GDP.

For the most part, these revisions

raise output by increasing business investment. Second-quarter growth is raised to 1.9% (from 1.6%), although first-quarter growth is reduced to 3.7% (from 4.3%); 1998 growth now is 4.3% (up from 3.9%). All told, the revisions increase the average annual rate of GDP growth since the beginning of the current economic expansion in 1991 from 3.1% to 3.5%.

(continued on next page)

Economic Activity (cont.)



a. Pre-revision GDP data were converted to 1996 dollars by dividing post-revision data in current dollars by post-revision data in 1996 dollars to estimate a deflator, which was then applied to pre-revision data in current dollars.
 b. Chain-weighted data in billions of 1996 dollars.
 c. The new methodology is used exclusively starting in 1999:IIIQ.
 NOTE: All data are seasonally adjusted.
 SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis.

Business purchases of software now can be readily identified as one component of nonresidential investment. In 1999:IIIQ, software expenditures were \$147.7 billion, while expenditures on computers and peripheral equipment were \$106 billion (both at annual rates).

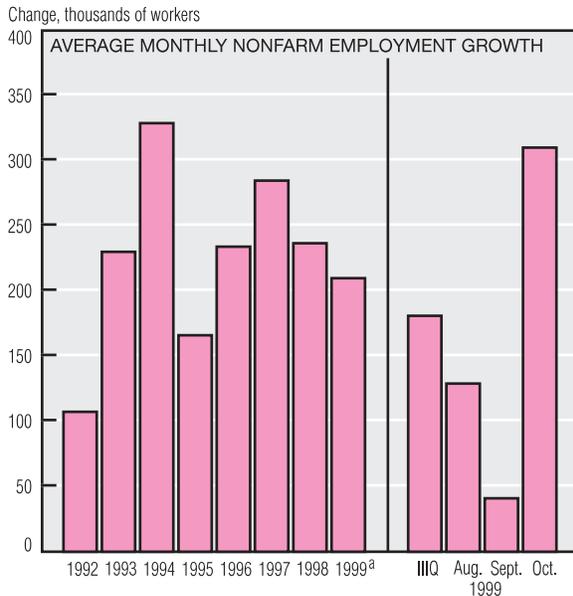
Business software expenditures have been growing at very strong rates, between 7% and 20% annually. Reclassification of this item as a component of investment would

raise corporate profits to the extent that the value of new software exceeds software depreciation, all else being equal. The comprehensive revision raises estimates of personal income and savings (see page 15), principally because software purchases are no longer treated as an expense, but as a depreciable investment. Partly for this reason, profits of financial corporations and proprietors' income are higher. For nonfinancial corporations, however,

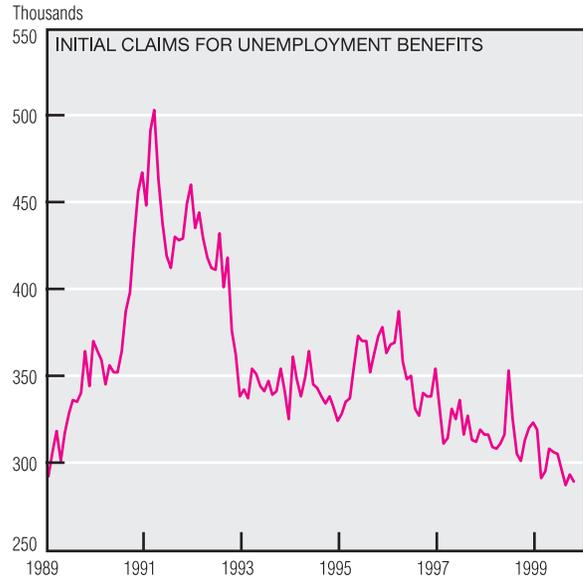
profit estimates are lower because other changes offset the positive contribution from the new treatment of software.

Revisions aside, these initial readings of 1999:IIIQ economic activity do show one weak area: Expenditures on nonresidential structures declined for the third consecutive quarter. In addition, expenditures on residential structures fell, after nearly three years of uninterrupted strong increases.

Labor Markets



	Average monthly change (thousands of employees)				
	1996	1997	1998	YTD ^a	Oct. 1999
Payroll employment	234	281	244	211	310
Goods-producing	32	48	8	-17	17
Mining	1	2	-3	-4	4
Construction	28	21	30	13	28
Manufacturing	3	25	-19	-26	-15
Durable goods	10	27	-9	-12	-9
Nondurable goods	-7	-2	-10	-14	-6
Service-producing	202	233	235	228	293
Retail trade	43	24	32	30	-30
FIRE ^b	14	20	26	12	18
Services	117	141	119	125	215
Health services	20	17	9	12	19
Government	11	17	27	29	53
	Average for period (percent)				
Civilian unemployment	5.4	4.9	4.5	4.3	4.1



a. Year to date.
 b. Finance, insurance, and real estate.
 c. Vertical line indicates break in data series due to survey redesign.
 NOTE: All data are seasonally adjusted.

SOURCES: U.S. Department of Labor, Bureau of Labor Statistics and Employment and Training Administration.

Labor markets surged in October, as job growth partially offset disruptions caused the previous month by Hurricane Floyd. U.S. payrolls rose 310,000 in October, after a September increase of only 41,000. For the year to date, payroll growth has averaged 211,000 jobs per month. October also saw labor markets tighten further, as the unemployment rate fell to a 30-year low of 4.1%. The unemployment rate has not exceeded 4.3% since March. Although the labor market was tight in October, wage growth was moderate; average hourly earnings rose just 1 cent to

\$13.37. Since last October, average hourly earnings have risen 3.6%. After slight September gains, the service-producing sector gained 210,000 widely dispersed new jobs. Of these, 45,000 were in help-supply companies, whose September counts had been depressed by Floyd. Significant employment increases also occurred in other service industries with weak September growth, notably health services (23,000), educational services (15,000), and engineering and management services (27,000). However, retail trade continued its three-month

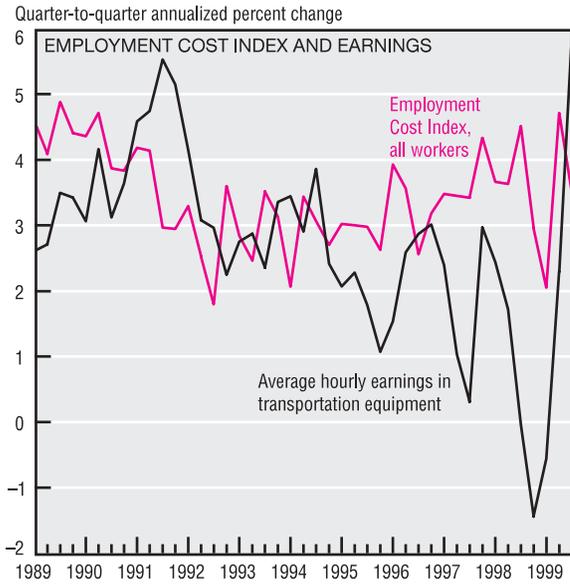
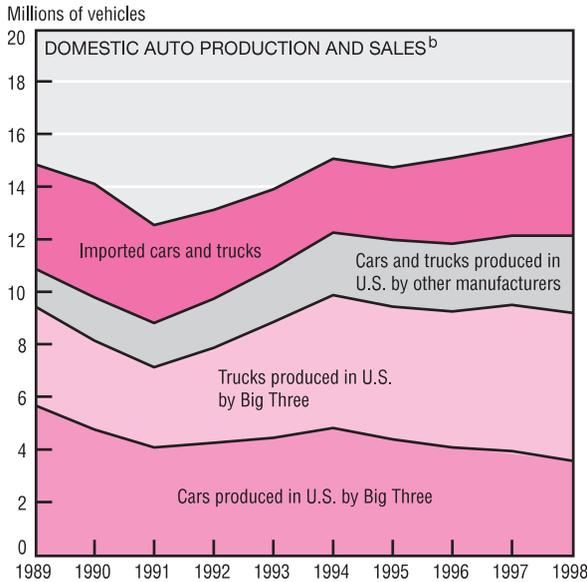
decline, losing 30,000 jobs in October. Construction and mining buoyed the goods-producing sector, which gained 17,000 jobs. Manufacturing lost 15,000 workers last month, continuing the same job-loss rate it has posted since July. The low unemployment rate for the economy as a whole has caused initial claims for unemployment benefits to fall throughout the current expansion. The employment-to-population ratio increased one-tenth of a point to 64.2%, close to its January peak of 64.5%.

(continued on next page)

Labor Markets (cont.)

Examples of Total Hourly Wage Increases for Auto Workers		
	Assemblers	Tool and die makers
Pre-agreement base	\$20.11	\$23.79
New agreement base	\$21.56	\$25.35
First-year COLA ^a plus one-time COLA	.35	.35
Wage at end of first year	\$21.91	\$25.70
Second-year wage increase	.65	.76
Second-year COLA	.47	.47
Wage at end of second year	\$23.03	\$26.93
Third-year wage increase	.67	.78
Third-year COLA	.49	.49
Wage at end of third year	\$24.19	\$28.20
Fourth-year wage increase	.69	.81
Fourth-year COLA	.51	.51
Wage at end of fourth year	\$25.39	\$29.52

Highlights of 1999 UAW–Big Three Agreements
\$1,350 lump-sum payment in first year of contract
3% wage increase in each year of four-year contract
Annual holiday bonus of up to \$600
Continuation of profit-sharing plan (\$7,400 average yield in 1998)
Increase in tuition assistance for children (from \$1,000 to \$1,250)
Substantial improvements in basic pension-plan benefits



a. Cost-of-living adjustment.
 b. Includes light and heavy trucks.
 NOTE: All data are seasonally adjusted.
 SOURCES: U.S. Department of Labor, Bureau of Labor Statistics; United Auto Workers' Union, *Highlights of 1999 UAW–Big Three Agreements*; and Ward's *Automotive Yearbook*, 1989–99 issues.

The United Auto Workers estimate that the typical automotive assembly-line worker in the U.S. will gain \$29,300 to \$29,900 over the next four years because of new labor settlements signed with DaimlerChrysler, Ford, and General Motors. The most notable gains are a baseline wage increase of 3% per year and cost-of-living adjustments of about 2.5% per year.

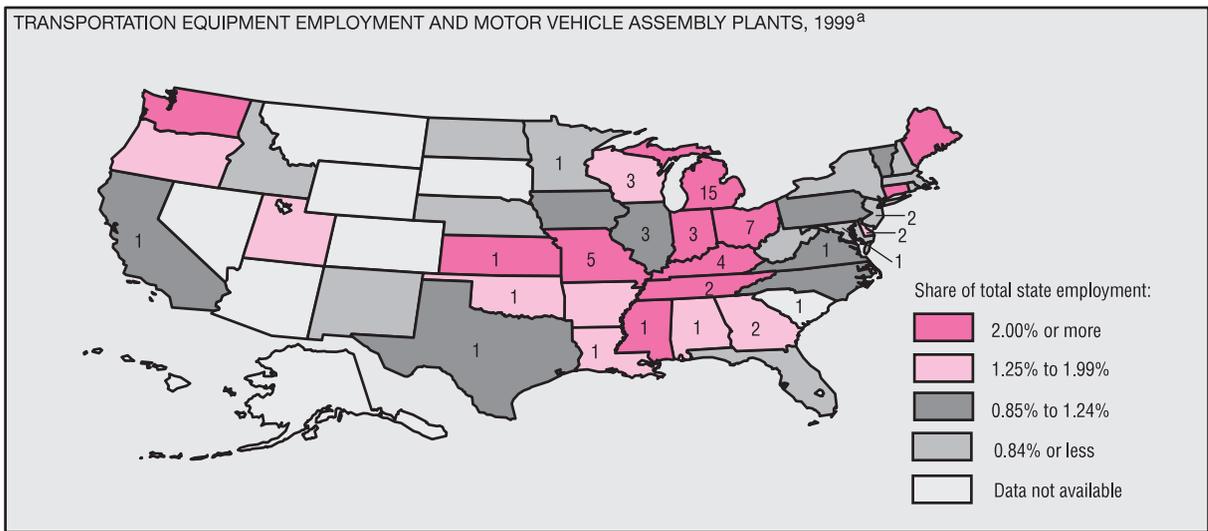
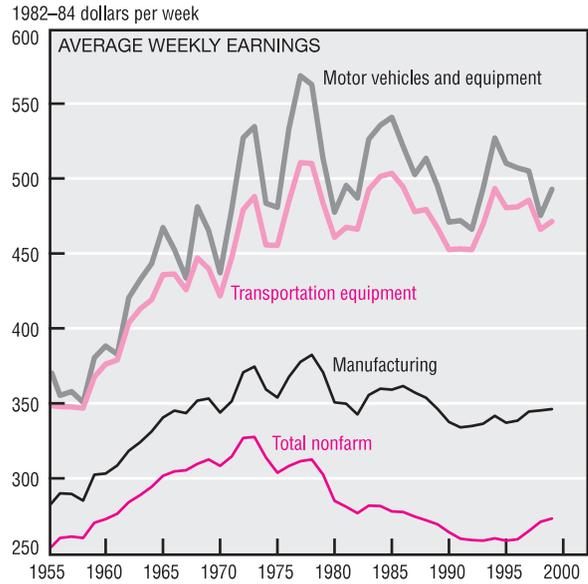
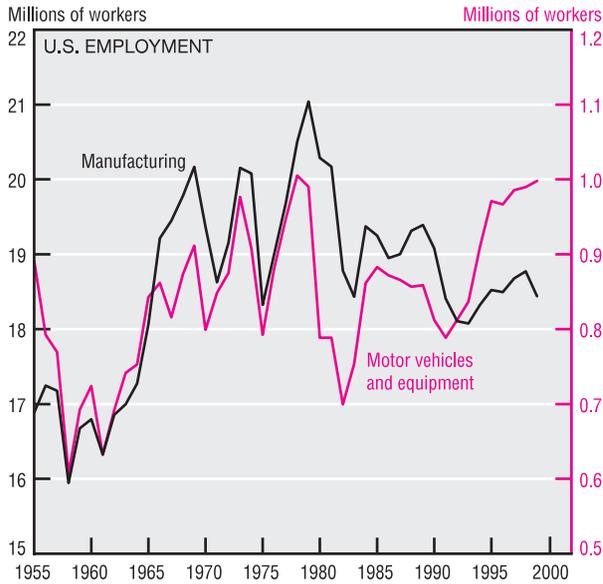
One of the most hard-fought issues in this round of bargaining arose from union concerns about eroding membership. Since the 1970s, UAW membership has fallen

from a peak of 1.5 million to about half that number. The recent settlement gave the union a guarantee that if unionized jobs drop below 80% of the minimum level specified for each company, the auto makers will replace each union job lost. Business journalists and stock market participants seem confident that this guarantee will leave management enough flexibility to adjust to changing conditions.

The UAW could negotiate large gains partly because industry profits have been so high. After combined 1991 losses of \$7.4 billion, the Big

Three netted profits exceeding \$11 billion in 1998. Over the same period, new-vehicle sales in the U.S. jumped from less than 13 million to almost 16 million; this year's sales figures are already almost 17 million. The Big Three's increased profitability also results from strong demand for trucks, including high-margin sport-utility vehicles. Furthermore, the memory of last year's strike, which cost GM \$2.5 billion in lost sales, is still fresh. Auto makers were willing to significantly increase wages, which have lagged those of the economy as a whole.

Regional Conditions



a. Numbers indicate automobile and light-truck final assembly plants in state.
 NOTE: 1999 annual data are the average of monthly data from January to September.
 SOURCES: U.S. Department of Labor, Bureau of Labor Statistics; and *Ward's Automotive Reports*, October 18, 1999.

Employment in the transportation equipment industry has declined substantially from its 1968 peak of 2.1 million workers. (In the Fourth District, transportation equipment is primarily automobile manufacturing, but local employment levels are not available for the narrower industry definition.) High pay and concentrated employment make auto manufacturing a key industry for several states. In two Fourth District states, Ohio and Kentucky, transportation equipment industries employ more than 2% of the workforce. Although employment levels in those indus-

tries have continued to decline nationwide, they have risen in both these states over the last 10 years.

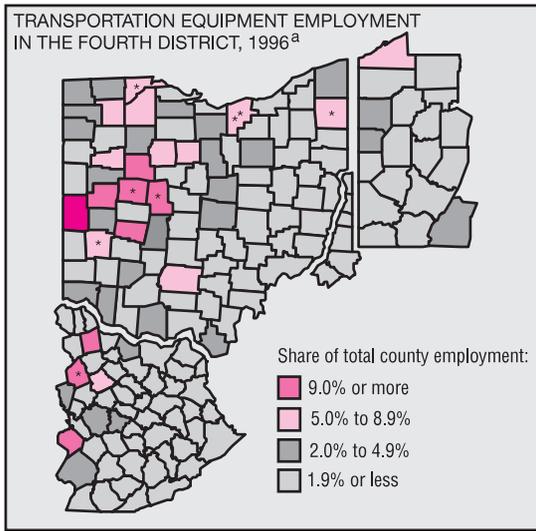
Older plants are clustered around the traditional manufacturing centers of Cleveland, Youngstown, Toledo, and Dayton. While employment in these older plants has declined, the latest round of United Auto Workers negotiations offered some assurances that the Big Three U.S. auto makers will continue to produce in Ohio. Ford committed itself to new investment and models for its Cleveland-area assembly and engine plants. DaimlerChrysler has already

begun building a new plant in Toledo to replace the aging Jeep facility there. All of the Big Three auto makers also made employment guarantees that may encourage redirecting older plants to produce new products, rather than closing them and building new plants elsewhere.

Fourth District states have also attracted new auto plants. These new facilities, including transplants (foreign-owned assembly plants), have tended to locate close to Interstate 75 for ready accessibility to the many parts suppliers who have

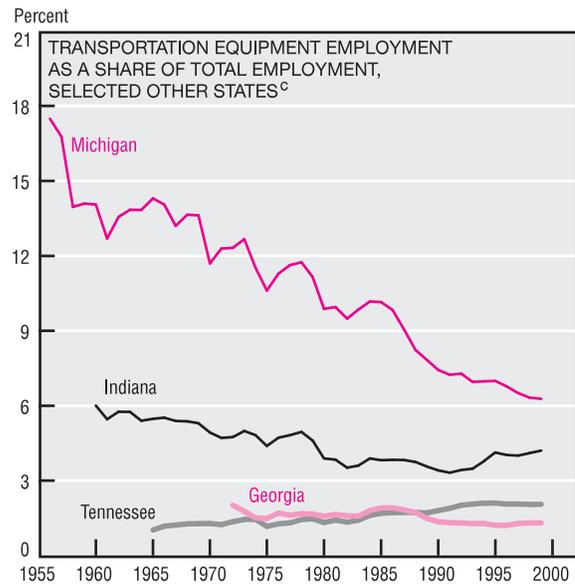
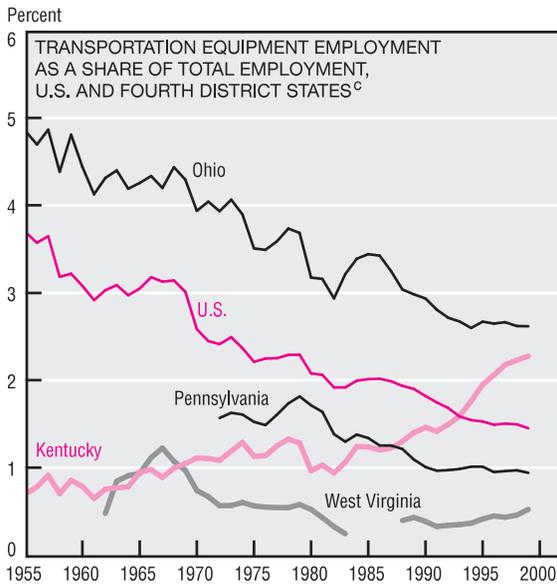
(continued on next page)

Regional Conditions (cont.)



Final Assembly Plants in the Fourth District^b

Company	Location	Product
GM	Lordstown, OH	Cavalier, Sunfire
	Moraine, OH	Blazer, Bravada, Jimmy
Ford	Avon Lake, OH	Villager, Econoline, Quest (Nissan)
	Lorain, OH	Club Wagon, Econoline
Chrysler	Toledo, OH	Jeep
Honda	East Liberty, OH	Acura CL, Civic
	Marysville, OH	Accord
Toyota	Georgetown, KY	Avalon, Camry, Sienna



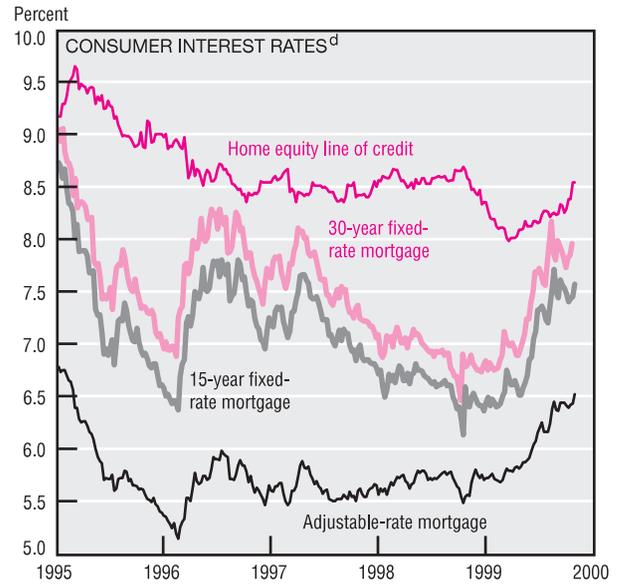
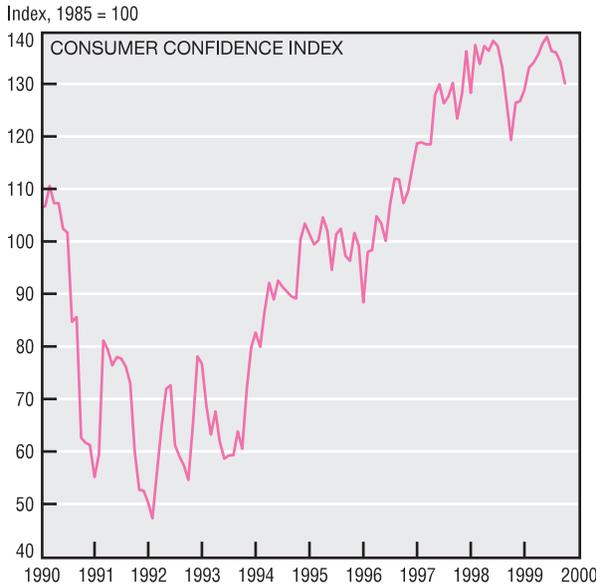
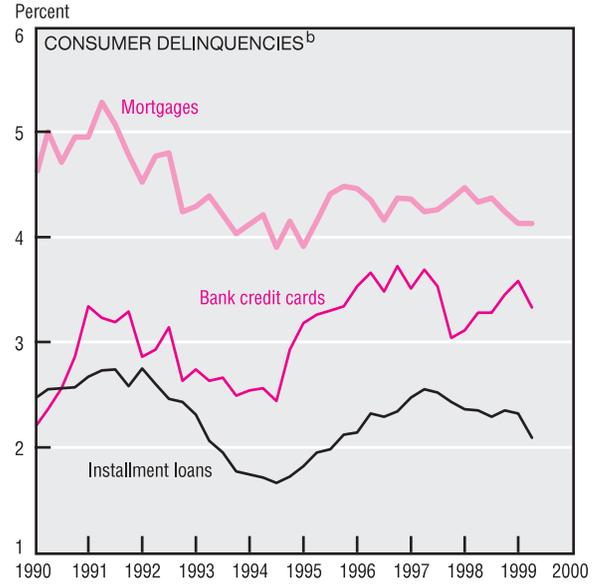
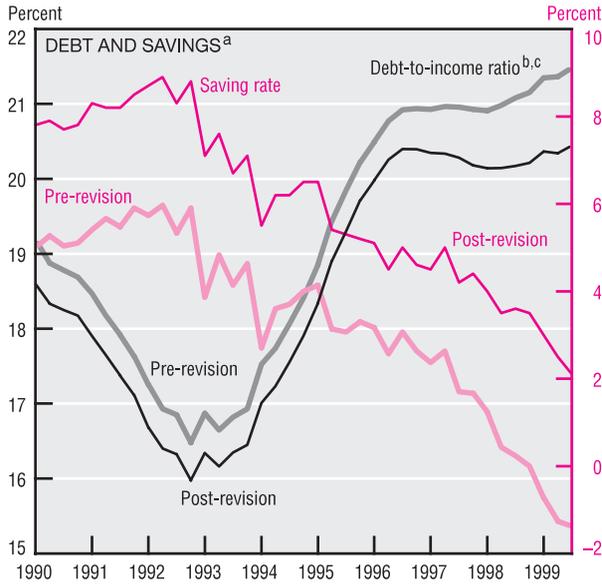
a. Asterisks indicate automobile and light-truck final assembly plant(s) in county. Ohio data are for 1996; data for other states are for 1995.
 b. Does not include medium or heavy trucks.
 c. Data shown are the most complete available.
 SOURCES: U.S. Department of Labor, Bureau of Labor Statistics; Ohio Bureau of Employment Services, Labor Market Information Division; and *Ward's Automotive Reports*, October 18, 1999.

located along this highway. Most recently, the Honda plants in Marysville and East Liberty, Ohio have grown substantially, encouraging many parts suppliers to open in their vicinity. These two plants have the combined capacity to produce more than 600,000 cars per year, including the Accord and the Civic, but they employ only about 8,300 workers directly. Honda employs another 3,200 workers at nearby engine and motorcycle plants. The rural counties where these plants are located, and a few adjacent counties where some Honda suppliers are

located, have a total of 17,621 transportation equipment workers, 16% of their total employment. Similarly, the Toyota plant in Georgetown, Kentucky was instrumental in the state's shift from a below-average employment share in transportation equipment to a share well above the national average. The plant employs just under 8,000 workers to produce 474,588 cars per year, including the Camry, Avalon, and Sienna. All told, 40,500 workers are employed in transportation equipment companies in Kentucky. Toyota also manufactures

engines in its Kentucky facility and has recently opened an engine plant in West Virginia to supply Georgetown as well as other Toyota plants in North America. Component suppliers provide the majority of jobs in the transportation equipment industry. Thus, auto makers' continued tendency to set up assembly plants near I-75, whether in Fourth District states or otherwise, should keep the District's employment in transportation equipment high by ensuring the health of the many component suppliers already located there.

Household Financial Conditions



- a. Quarterly data.
- b. Ratio of total consumer credit to disposable personal income.
- c. Seasonally adjusted.
- d. Weekly data.

SOURCES: U.S. Department of Commerce, Bureau of Economic Analysis; Board of Governors of the Federal Reserve System; Federal Deposit Insurance Corporation, *Quarterly Banking Profile*; American Bankers Association, *Consumer Credit Delinquency Bulletin*; American Bankruptcy Institute; and Mortgage

Recent GDP-account revisions caused an increase in the saving rate and a decline in the debt-to-income ratio (as analysts expected) relative to the pre-revision values. According to the revised figures, the ratio of consumer debt to disposable personal income reached 20.43% in 1999:IIIQ, its highest level this decade, thus continuing the upward trend that began in early 1998. Correspondingly, the pattern of negative saving rates, which

emerged a year ago, has disappeared since the revisions.

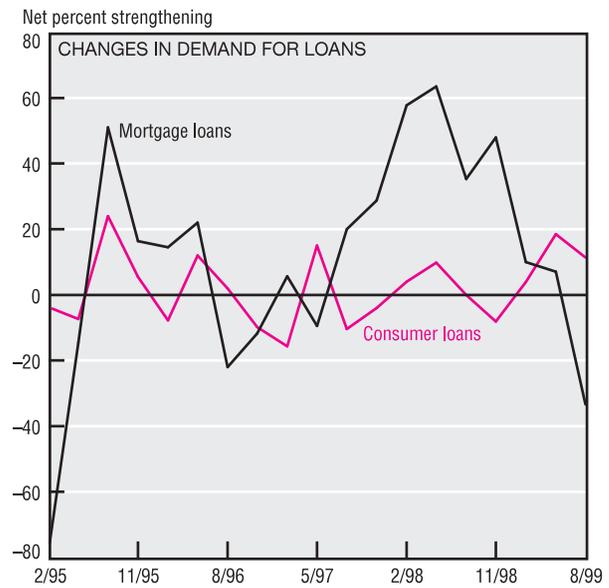
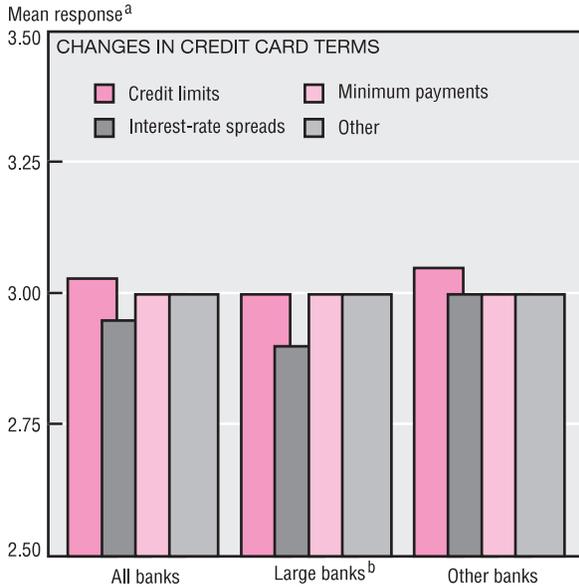
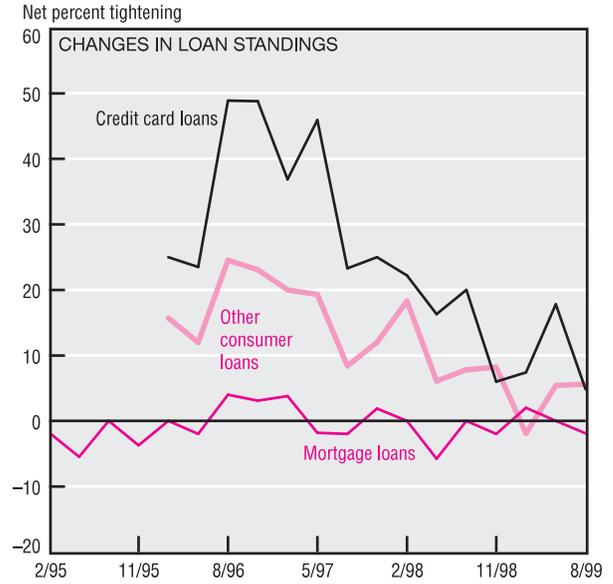
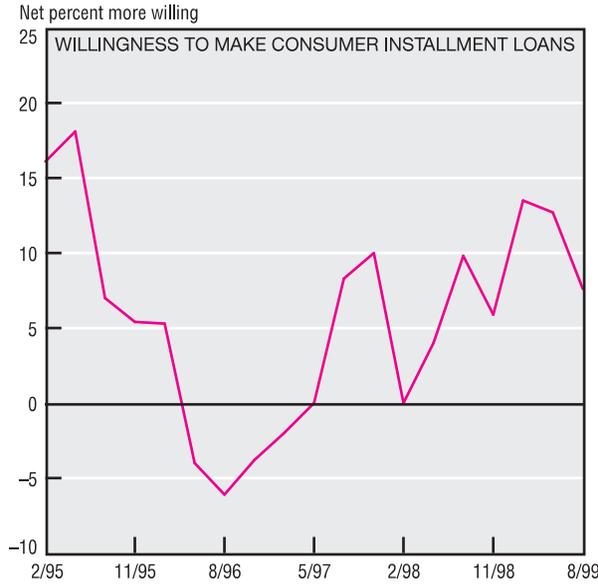
Despite such high consumer indebtedness levels and low saving levels, the pattern of consumer delinquencies on loan repayments does not appear to be worsening. Delinquency rates on mortgages, bank credit cards, and installment loans remained steady or declined in the first quarter of this year.

The Consumer Confidence Index fell for the fourth straight month.

After peaking at 139 in June, the index stands at 130.1 in October. The most recent survey indicates increasing consumer concern about future employment opportunities and the likelihood of worsening business conditions.

Lags in the data make it difficult to tell if the moderate interest rate increases of recent months will ameliorate consumer indebtedness levels. Given the recent figures on
(continued on next page)

Household Financial Conditions (cont.)



a. Mean response of banks where 1 = tightened considerably; 2 = tightened somewhat; 3 = remained basically unchanged; 4 = eased somewhat; and 5 = eased considerably.
 b. Total domestic assets of more than \$15 billion.
 SOURCE: Board of Governors of the Federal Reserve System, *Senior Loan Officer Opinion Survey on Bank Lending Practices*.

consumer confidence, we might expect consumers to become less willing to take on new debt.

The Federal Reserve's quarterly *Senior Loan Officer Opinion Survey*, updated in August, suggests that banks' lending practices toward households have not changed much since the May survey. The vast majority of loan officers expressed the

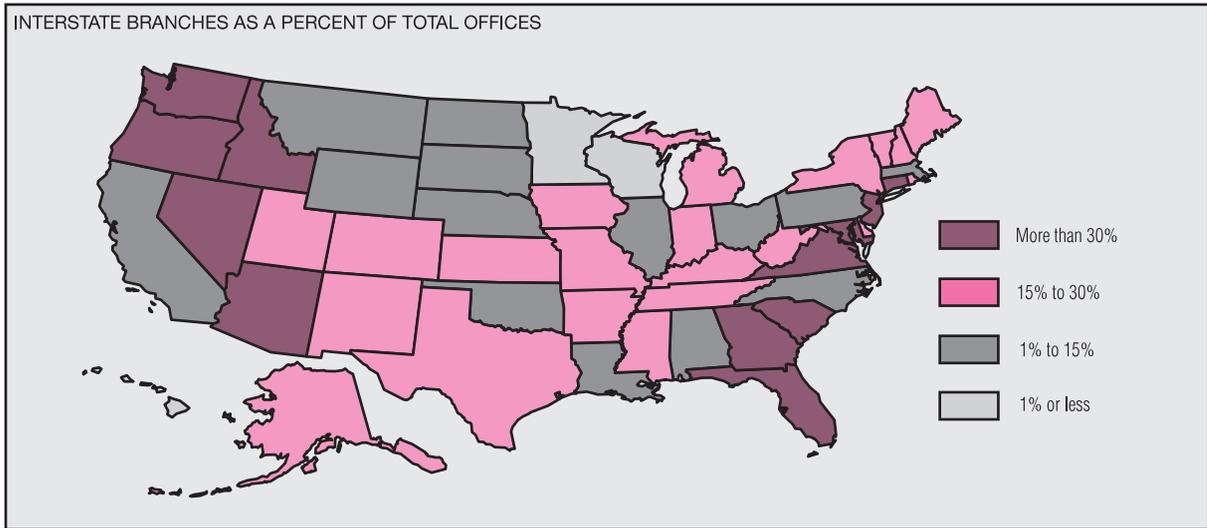
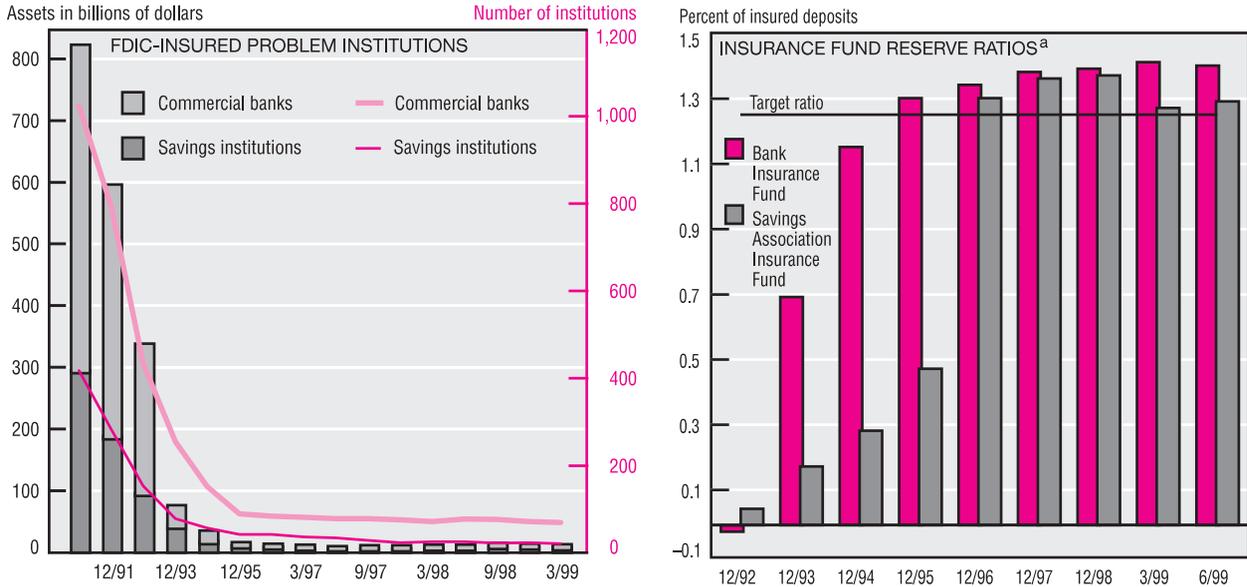
same degree of willingness to make consumer installment loans. Standards for credit card and mortgage loans show little change, while those for other consumer loans have tightened only slightly.

Credit card terms have scarcely changed. Minimum payment requirements have stayed the same, whereas interest-rate spreads at large banks have widened some-

what. At large banks, credit limits are unchanged; at other reporting banks, limits have eased slightly.

The demand for mortgage loans to purchase new homes plummeted, with nearly half of all loan officers reporting weaker demand. For other consumer loans, demand has strengthened slightly since the May survey.

Banking Conditions



a. Insurance fund balance as a percent of total insured deposits.
 SOURCE: Federal Deposit Insurance Corporation, *Quarterly Banking Profile*.

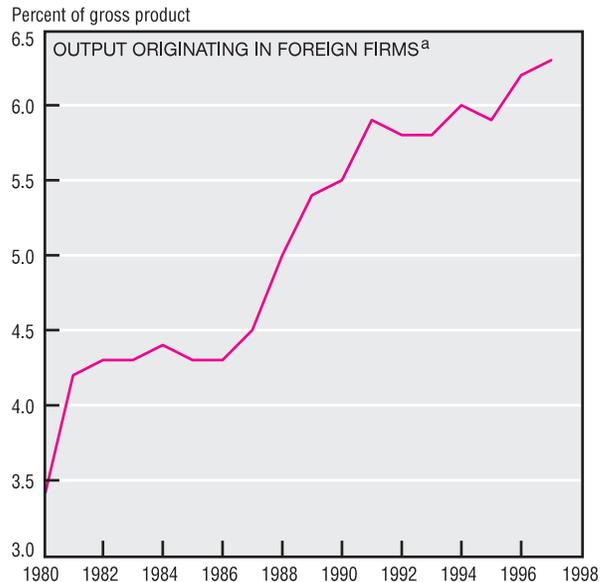
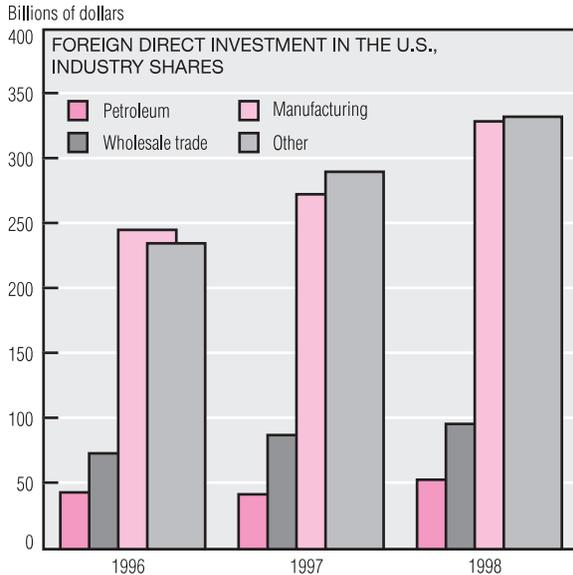
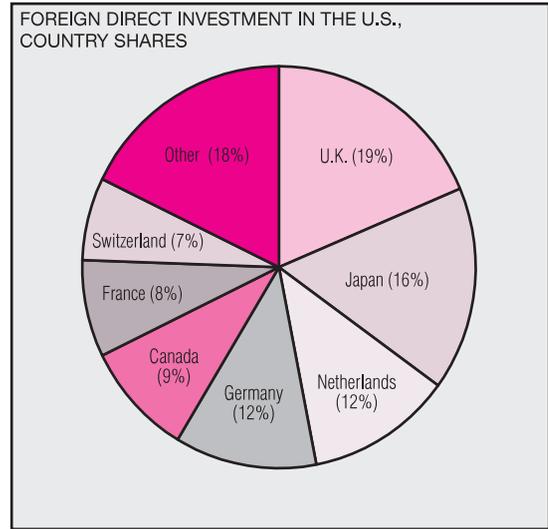
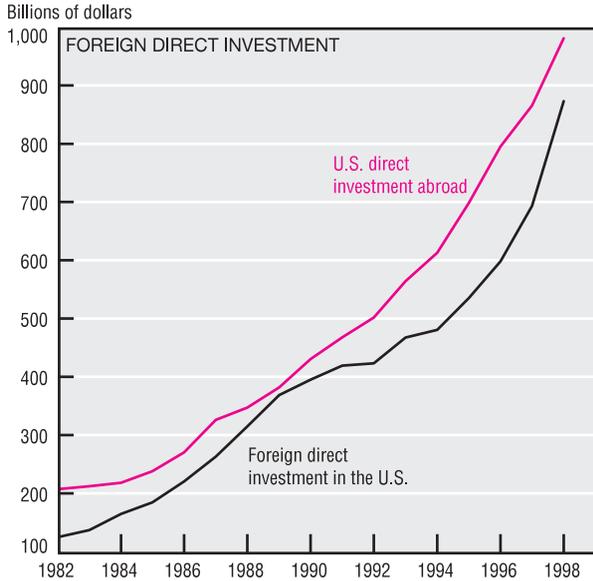
The number of FDIC-insured commercial banks continued to decline, dropping to 8,675 at the end of 1999:IIQ, a decrease of 309 since 1998:IIQ. Merger activity has remained fairly steady over the past year, with 217 mergers reported in the first half of 1999. New charters were up slightly from the corresponding reporting period last year. The Southeast region of the country showed the greatest growth in mergers and new charters.

Two banks had failed by midyear, but there have been no failures of

thrifts. As of June 1999, the number of FDIC-listed “problem” institutions had declined from the previous quarter to 14 savings institutions and 62 commercial banks. The insurance funds for commercial banks and savings institutions both exceed the levels targeted by the Financial Institutions Reform, Recovery, and Enforcement Act of 1989. The ratios of fund balances to insured deposits at the Bank Insurance Fund and the Savings Association Insurance Fund stood at 1.40% and 1.29%, respectively. The mandated ratio for both funds is 1.25%.

Interstate branching of banks continues to be uneven across states. The Southeast and West (with the exception of California) continue to have the greatest concentration of interstate branches as a percent of total offices. The share of interstate branches in Fourth District states is somewhat higher than it was a year ago. Ohio’s share reflects only a minor increase in interstate branches, whereas the shares in Pennsylvania, Kentucky, and West Virginia include more significant increases.

Foreign Direct Investment



a. Share of gross product attributable to U.S. affiliates of private foreign nonbank companies.
 SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business*, various issues.

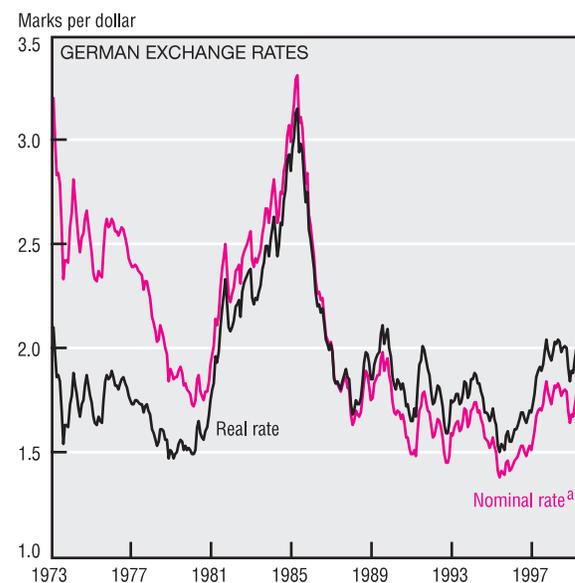
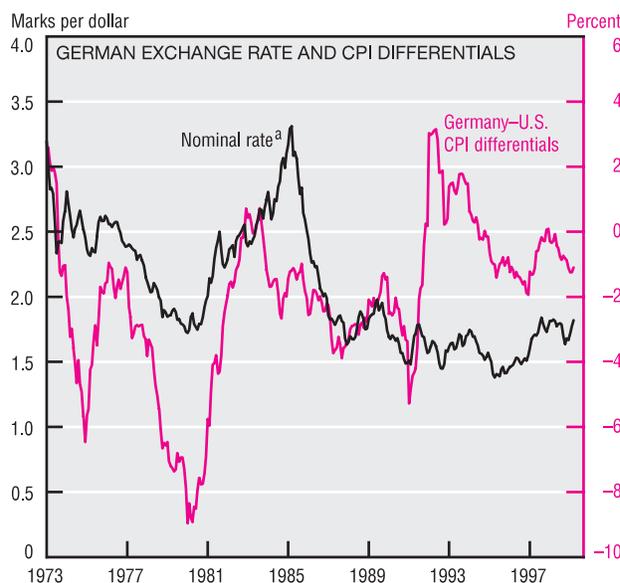
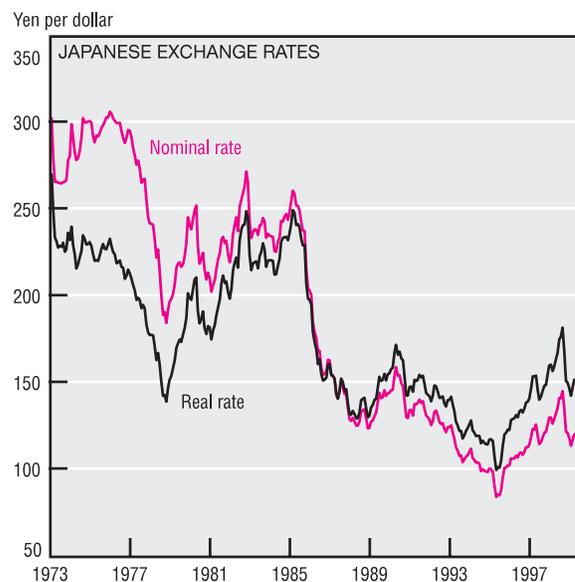
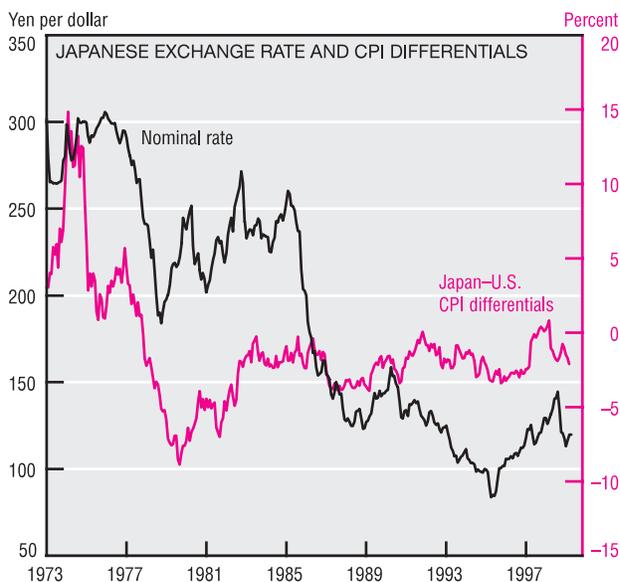
Foreign direct investment (FDI) is the cross-border holding of assets that represent a controlling ownership of shares in a foreign business entity. Multinational firms are the most common conduits for FDI, both into and out of the U.S. Like exporting, FDI enables multinationals to expand in global markets; unlike exporting, however, FDI may help them avoid trade barriers, reduce exchange risk, secure low-cost inputs, or tailor products more closely to local markets.

Attracted by the relatively strong pace of U.S. economic growth, the total value of FDI in the U.S. has risen at a rapid (16%) average annual rate since 1994, reaching \$873 billion in 1998. Over the same period, nominal GDP rose at a 6.0% rate. Clearly, FDI contributed to the investment boom that fueled this GDP growth.

The U.K. and Japan account for 35% of FDI in the U.S. The Netherlands, Germany, and Canada account for another third. Much of this investment is concentrated in

capital-intensive sectors such as manufacturing, which accounts for 40.5% of FDI in the U.S. Petroleum and wholesale trade together account for 18.4%, and the remainder is scattered through a wide range of industries. The share of gross product that is attributable to U.S. affiliates of foreign nonbank companies rose to 6.3% in 1998. These affiliates account for approximately 5% of total U.S. employment.

Real Exchange Rates



a. For 1999, the German mark/U.S. dollar rate is calculated from the U.S. dollar/euro rate and the German mark/euro peg.
SOURCE: International Monetary Fund, *International Financial Statistics*.

The exchange rates reported in newspapers' financial sections aren't real. Although they do show the recent price of one currency, say U.S. dollars, in terms of another, say Japanese yen, they are not adjusted for domestic and foreign price levels. Therefore, they reveal little about international competitiveness.

Three economic variables that directly determine the U.S. competitive position in relation to a particular trading partner are the exchange rate, the inflation rate at home, and

the inflation rate abroad. In time, exchange-rate movements offset inflation differentials. The dollar depreciates (or appreciates) against another currency when the U.S. inflation rate exceeds (or falls short of) the other country's inflation rate. If the offset were complete, competitiveness would be unaffected and the real exchange rate, which combines the influence of all three variables, would be unchanged. When movements in the nominal exchange rate do not counterbalance changes in the infla-

tion differential exactly, a real appreciation or depreciation occurs. Real appreciations weaken a nation's competitive position; real depreciations strengthen it.

Data for the U.S., Germany, and Japan reveal some correlation between exchange rates and inflation differentials, but the relationship is neither very tight nor closely offsetting. Slow price adjustments cause nominal and real exchange rates to move together.