

## The Economy in Perspective

*My dinner with André ...* “Happy New Year, boychik!” André boomed out as he hurtled across the room; moments later, his hug almost knocked the wind out of me. My friend was flying high, and why not? His e-mailed dinner invitation had hinted at plans for some new venture that would transcend even his most recent, improbable success. As finance minister in the land of Nedlaw from 1996 through 1998, André had pulled off the decade’s most amazing economic miracle. Then, in 1999, his pike quenelles took Europe by storm, and he was named “Man of the Year” simultaneously by *Foreign Affairs* and *Gourmet*. And then he simply walked away, telling the prime minister that he was leaving public life. Within weeks, the *Financial Times* ran a front-page story reporting that André had become the chairman of a new investment-cum-coffee-house, *Leverage@beverage*.

Now André sat across from me in his banquette at a swank Manhattan eatery, the e-picure, his eyes shuttling between me and the caviar blinis. “The concept is so beautifully simple, *mon ami*,” he said, dipping a bite of blini in sour cream. “Less is more. I’m financing e-commerce companies that will give away their merchandise. We’re talking free, gratis, pro bono.”

“But André,” I said, “Internet companies have been doing this for a couple of years already, and many of them aren’t earning any profits at all. Are you sure you know what you’re doing?”

André flagged down our server and quietly issued several commands. Then, returning his attention to me, he shifted his newly lean frame and smiled. “I’m painting on a much larger canvas. I’m thinking *way* out of the box. Those other guys are fighting over small potatoes.”

As if on cue, our server appeared with our filet mignon flambé. My friend attacked his meal as Genghis Khan might have sacked a village. After subduing the asparagus ragout, he resumed. “Most of Europe has forsaken individual currencies for the euro. Outside the Continent, some countries are already hard-wired to the U.S. dollar, and several others are considering dollarization. People are beginning to recognize that having their own currency unit is just another way of allowing government to pick their pockets. Hey, I was a finance minister, I should know.” He discreetly removed the handsome crystal salt and pepper shakers from the table and placed them in his briefcase.

André summoned our server and ordered dessert. Delirious with anticipation, he continued. “Dollarization is only a fad. In Nedlaw, people trade things directly with one another; they needn’t waste time finding money. Or they issue their own money. When you do that, you can call it whatever you want, like ‘gherkins.’ Private money is where it’s at.”

I was puzzled. “André,” I asked, “what does private money have to do with e-businesses that give away their merchandise?”

Patiently, he replied, “Let me connect the dots. When I was finance minister of Nedlaw, people always swore no government would be better than their government. They were bragging, of course, but they got me thinking. Our world is no longer nation-centric; it’s business-centric. Here, I thought, is an opportunity to deliver value to my customers, or, as we used to say in the old days, ‘here’s where I can make a buck.’ The twist is to forget about money and think instead about frequent-flier miles!”

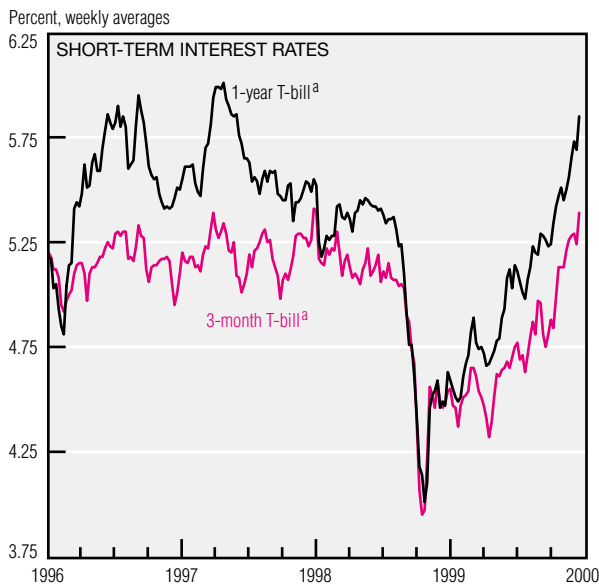
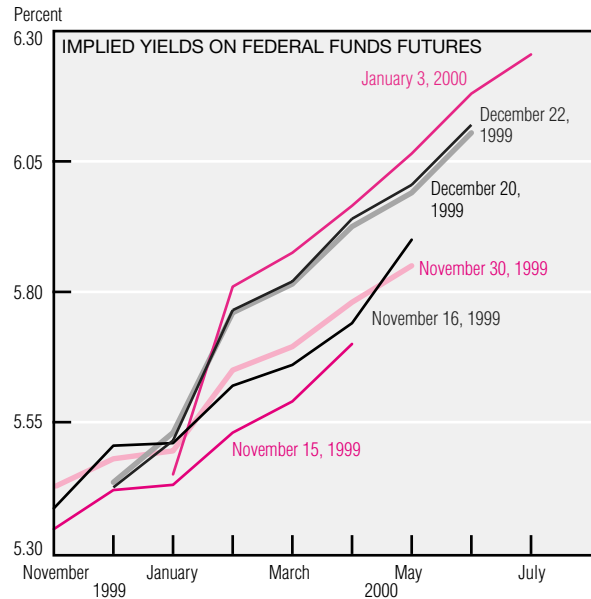
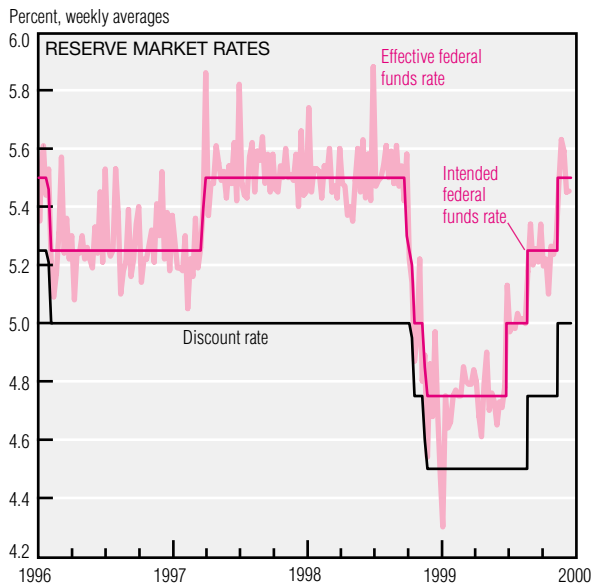
“I’m beginning to see the picture, André,” I said slowly, watching him subdue the last of the potato gratin. “You think global corporations and capital markets can provide the services people want, without traditional money and government. And you expect that people will be able to download and pay with Beanie Babies.”

Dessert arrived. “Yes,” André beamed, although I couldn’t tell if he was pleased with me or with the chocolate soufflé. “E-companies will provide the goods and services people want. We have entered a new era, in which the old economic and political norms mean nothing. Sovereignty is finished. History is kaput. Economies of scale and scope rule. Supply creates its own demand, and demand creates its own supply. Everything you need to know you learned in kindergarten.”

“But what if you are wrong about that, André? What you describe sounds amazingly like the United States in the early 1900s, when government was weak, banks issued their own currency, and robber barons called the shots. But those giants of industry became so greedy that the people demanded reform.”

“This time, *mon ami*, things will be different,” said André, wiping the chocolate from his lips. “As people say in my country, ‘Give a man a krona and he has a piece of paper. Give a man a gherkin, and he has lunch.’”

# Monetary Policy



a. Constant maturity.

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

The Federal Open Market Committee left the 5.5% intended federal funds rate unchanged at its December 21 meeting, citing the need for “a smooth transition into the Year 2000.” Although the FOMC adopted a symmetric directive, its press release expressed concern about persistent increases in demand that could eventually lead to inflationary imbalances, “even after taking account of the remarkable rise in productivity growth.” Because such imbalances could undermine the

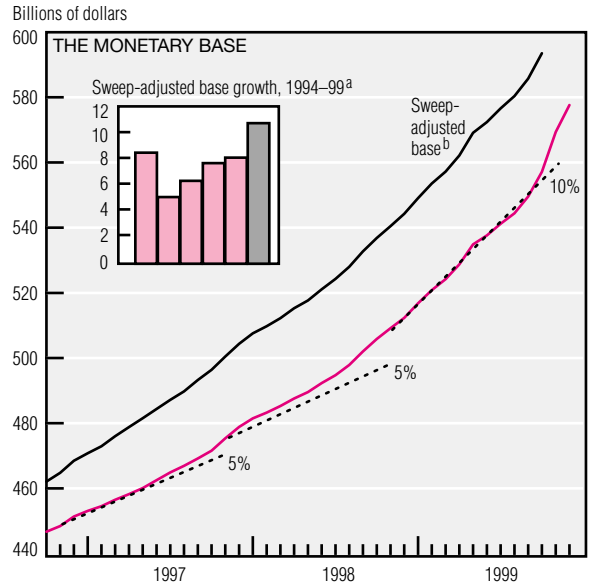
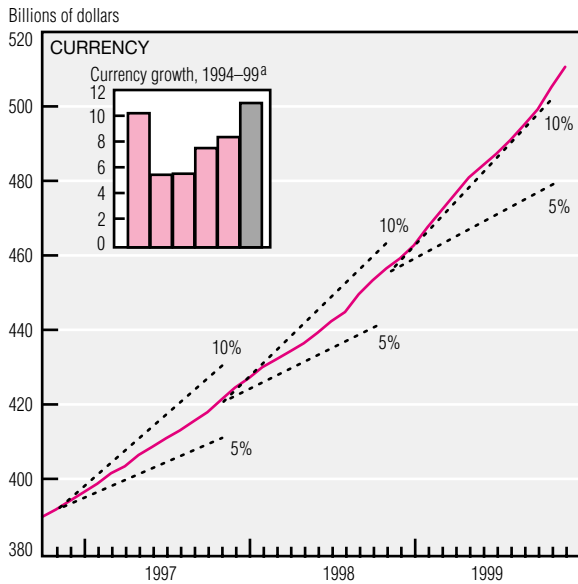
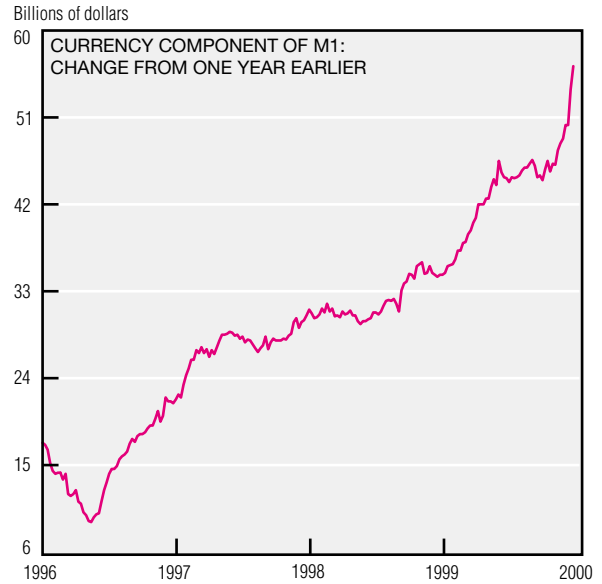
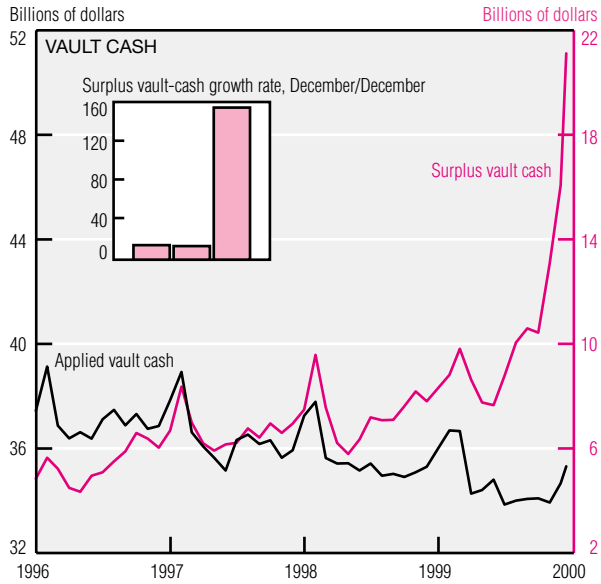
economy’s exemplary performance, the Committee noted that it “will assess additional information on the balance of supply and demand, and the possible need for adjustment in the stance of policy to contain inflationary pressures.”

Implied yields on federal funds futures contracts are a popular indicator of the expected future path of policy. By these measures, market participants clearly did not expect any change in the intended federal funds rate at the December meeting.

However, recent futures pricing reveals high odds for an increase of 25 basis points (bp) at the February 2000 meeting and at least one more 25-bp increase by June.

Short-term interest rates continue to exhibit a strong upward trend, reflecting the three 25-bp increases in the intended federal funds rate in 1999. These actions essentially retraced the three funds-rate reductions in the fall of 1998, taken to ensure adequate liquidity in that period  
(continued on next page)

# Monetary Policy (cont.)



a. Growth rates are percentage rates calculated on a four-quarter over fourth-quarter basis. The 1999 growth rates for currency and the monetary base are calculated on an estimated December over 1998:IVQ basis.  
 b. The sweep-adjusted base contains an estimate of balances temporarily moved from M1 to non-M1 accounts.  
 NOTE: Data are seasonally adjusted. Last plots for currency and the monetary base are estimated for November 1999. Last plot for the sweep-adjusted base is September 1999. Dotted lines represent growth rates and are for reference only. Plots for surplus and applied vault cash include data through December 15, 1999.  
 SOURCE: Board of Governors of the Federal Reserve System.

of financial stress. The 3-month Treasury-bill rate reached 5.39%, up 81 bp for 1999. Likewise, the 1-year Treasury climbed to 5.85%, up 126 bp (1.25%) for the year.

Currency held by the banking sector increased substantially during recent months in anticipation of heightened millennial demand. Surplus vault cash, that is, currency held in excess of reserve requirements, accounted for virtually all of the increase. Seasonal fluctuations associated with holiday shopping routinely raise applied vault cash

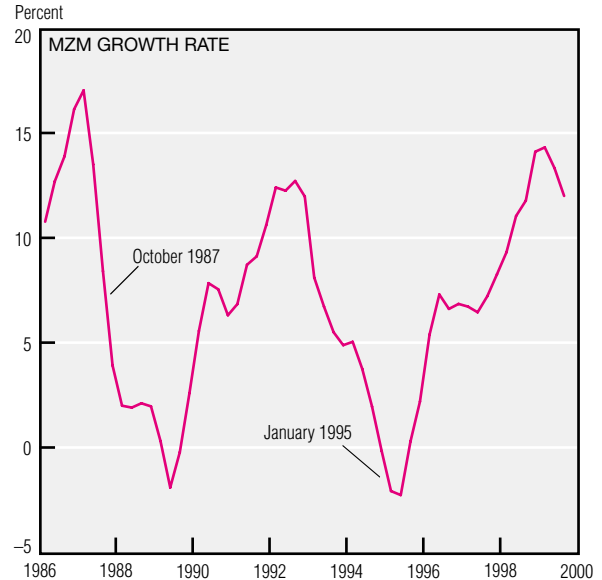
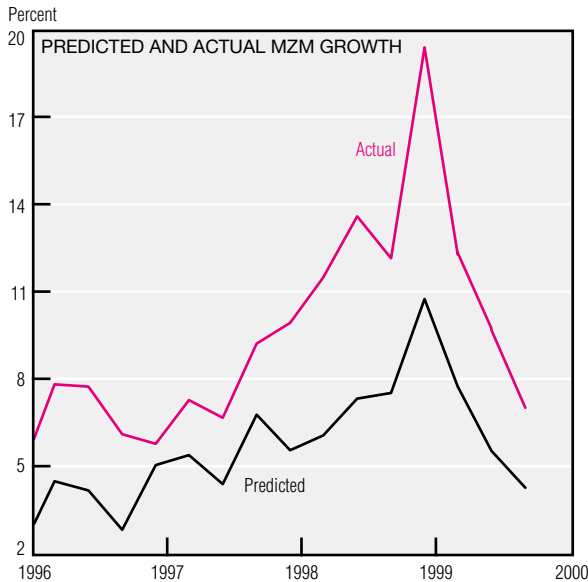
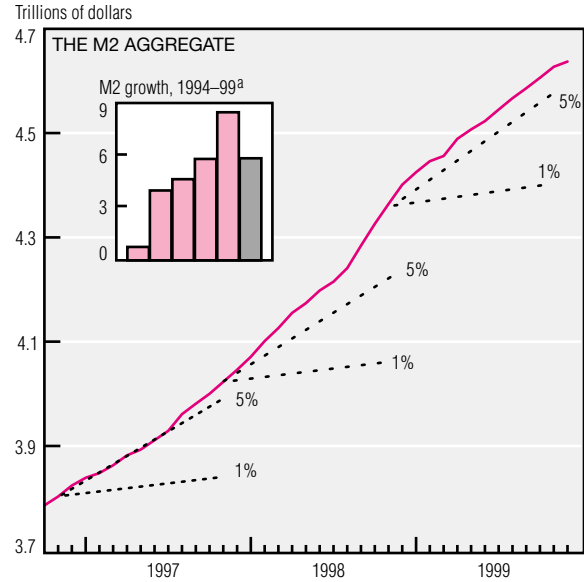
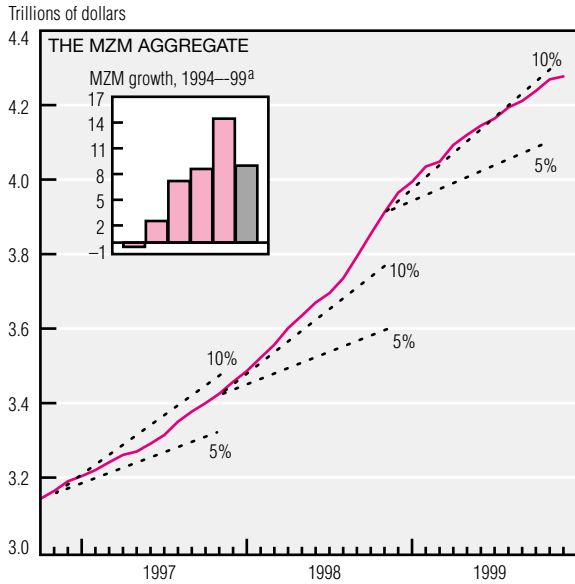
and increase surplus holdings by 30%–50%. On December 29, 1999, surplus vault cash was almost two-and-a-half times the average level of holdings recorded throughout much of the year. Although disruptions associated with the century date change were expected to be small, the Federal Reserve System, in conjunction with the U.S. Treasury, worked to ensure that currency would be on hand to meet any potential demand.

Not surprisingly, growth rates accelerated recently for the currency component of M1 (currency

held by the nonbank public) and the monetary base (currency plus total reserves). Currency and monetary base growth averaged around 10% through October. As of the second week in December, currency growth had increased to 11%, while monetary base growth had increased to 13%. The limited size of the increase in currency held by the nonbank public may have reflected confidence in the Federal Reserve's commitment and ability to supply liquidity.

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## Monetary Policy (cont.)



a. Growth rates are percentage rates calculated on a fourth-quarter over fourth-quarter basis. The 1999 growth rates for MZM and M2 are calculated on an estimated December over 1998:IVQ basis.

NOTE: Data are seasonally adjusted. Last plots for MZM and M2 are estimated for December 1999. Dotted lines for M2 are FOMC-determined provisional ranges. All other dotted lines represent growth in levels and are for reference only.

SOURCES: Board of Governors of the Federal Reserve System; and Federal Reserve Bank of Cleveland.

Because the public's Y2K concerns centered mainly on the potential for payment system interruptions, they were reflected primarily in increased currency holdings, with no apparent impact on the larger monetary aggregates. By contrast, in region-specific financial crises, like those surrounding the 1998 Russian default, investors worry mainly about potential capital loss associated with assets denominated in the region's currency. Fleeing capital typically seeks a temporary safe haven for funds. The Russian default, for example, sharply increased

demand for relatively safe securities such as U.S. Treasury instruments, money market mutual funds denominated in dollars, and, to a lesser extent, deposits at U.S. commercial banks.

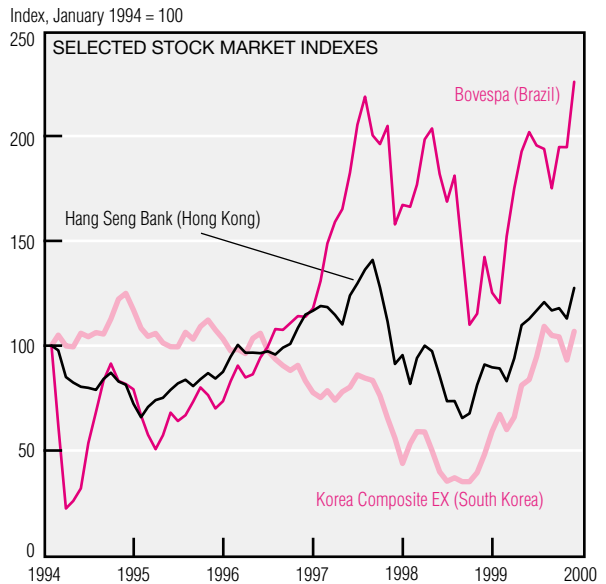
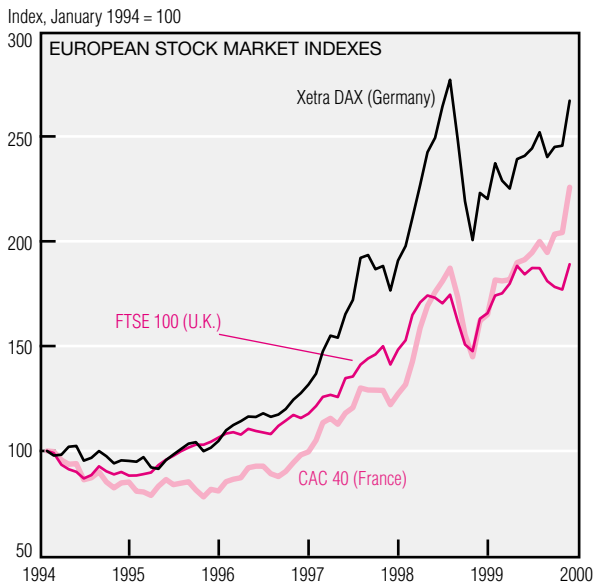
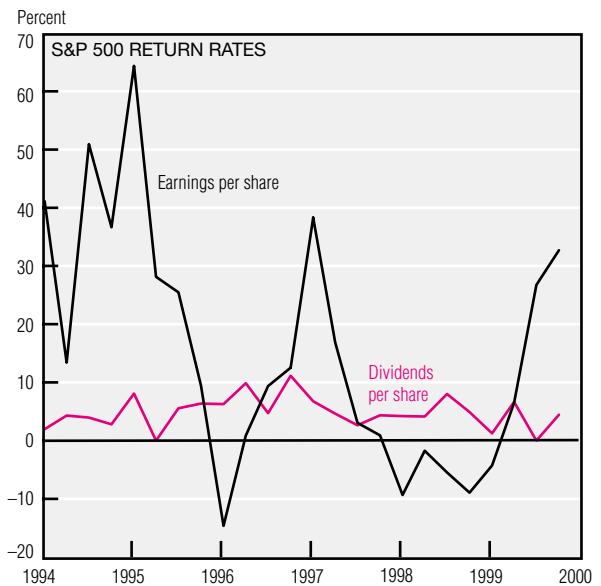
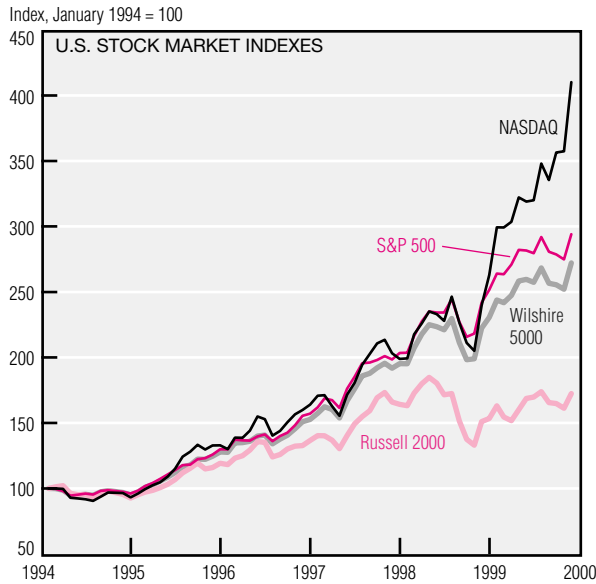
In late 1998, swelling U.S. demand for money funds and commercial bank deposits was mirrored in growth rates for MZM and M2, the monetary aggregate measures. MZM growth, especially, surged relative to the rate that might have been expected, given income and interest rates. Although MZM growth declined once conditions

stabilized, it remained above the level predicted by the standard model. Some market commentators believe that the retained liquidity may have been held as insurance in case of Y2K problems.

Historically, swings in liquidity's growth rate (as measured by MZM) have been substantial over periods of several years. Moreover, persistent sharp declines in MZM growth have been associated with stock market corrections. In light of the 1999 turnaround in MZM growth, the same commentators have begun

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## Monetary Policy (cont.)



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

suggesting that it is necessary to monitor liquidity measures.

Despite slower MZM growth, equity-market exuberance continued through year's end. Earnings growth for large firms remains strong. Earnings per share of S&P 500 companies, for instance, increased at double-digit rates through the first three quarters of 1999.

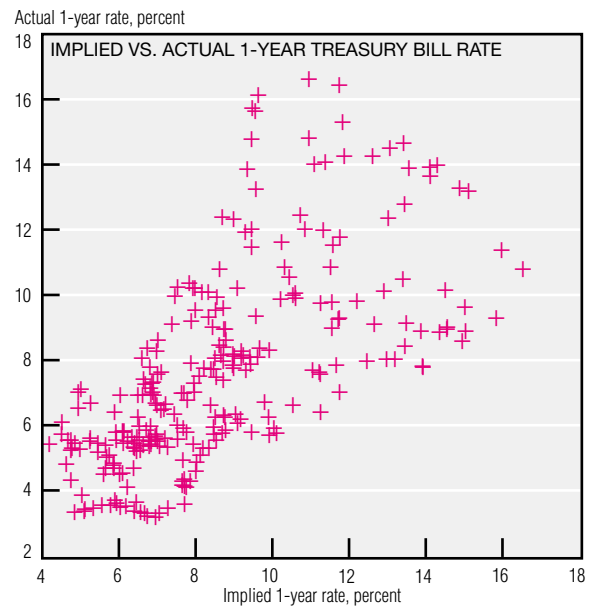
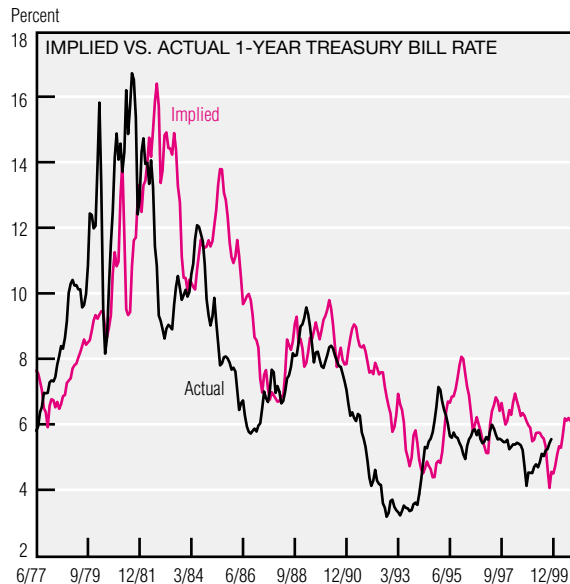
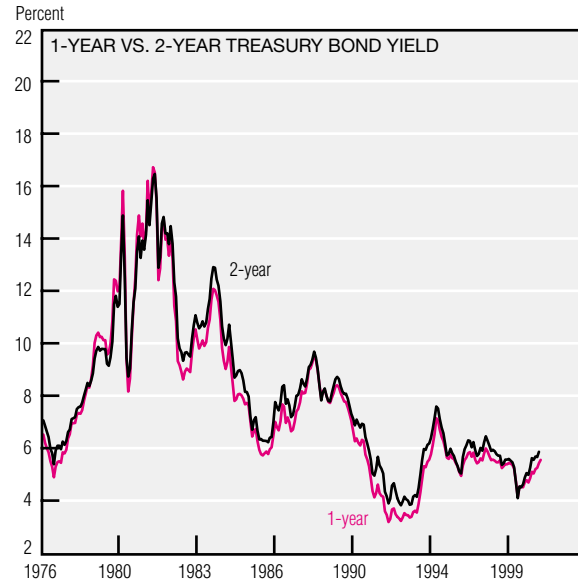
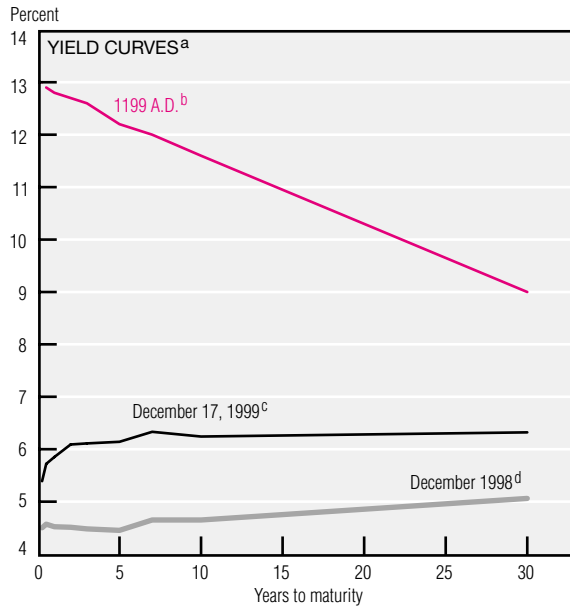
It is important to note, however, that not all boats have risen with the tide. Stock indexes were pushed to record levels largely by a boom in the so-called tech stocks, which are primarily traded on the NASDAQ exchange, whose composite increased

85.6% in 1999. Tech stocks reportedly accounted for 88% of the annual increase in the S&P 500. Indeed, prices for the majority of stocks traded on the New York Stock Exchange declined from their levels one year earlier. Although the Russell 2000 Index, comprised of firms with small market capitalization, increased in 1999, it did not recover to its prior peak of spring 1998.

The confidence exuded by U.S. equity markets in recent years spread to other parts of the world in 1999. European stock prices have surged in the last few months. Germany's DAX exchange, for example, in-

creased more than 30% on the year and stood above the peak it reached before the 1998 Russian default. Equity prices in Hong Kong and Korea increased substantially on the year, but remained near their peaks prior to the Asian crises. Brazil's Bovespa Index more than doubled this past year. Thus far, investor confidence has been reinforced by economic good news, especially about U.S. productivity. However, just as one cannot know if investors are irrationally exuberant, one cannot know if a sudden drop in investor confidence is just around the corner. Such events are evident only in retrospect.

# Interest Rates



a. All yields are from constant-maturity series.

b. Yearly averages for 1199 A.D., derived from 3-month and 30-year interest rates in the Netherlands.

c. Weekly averages for the week of December 17, 1999.

d. Monthly averages.

SOURCES: Board of Governors of the Federal Reserve System, "Selected Interest Rates," *Federal Reserve Statistical Releases*, H.15.; and Sidney Homer and Richard Sylla, *A History of Interest Rates*, 3d ed. New Brunswick, N.J.: Rutgers University Press, 1991.

Over the course of 1999, the yield curve moved higher and steepened, resuming its normal upward slope from a position of relative flatness at the end of 1998. The 3-month yield moved from 4.5% to 5.39%. The 3-year, 3-month spread increased from -2 basis points (bp) to 72 bp, and the 10-year, 3-month spread increased from 15 bp to 85 bp. The extent to which this indicates stronger real growth, higher inflation expectations, or increased uncertainty remains unclear.

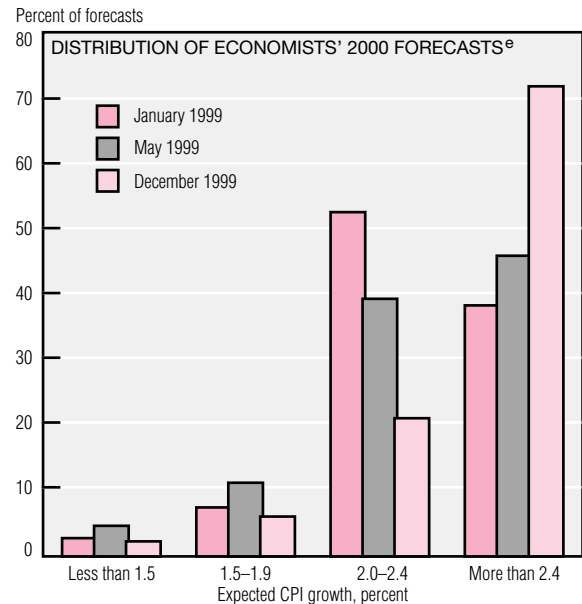
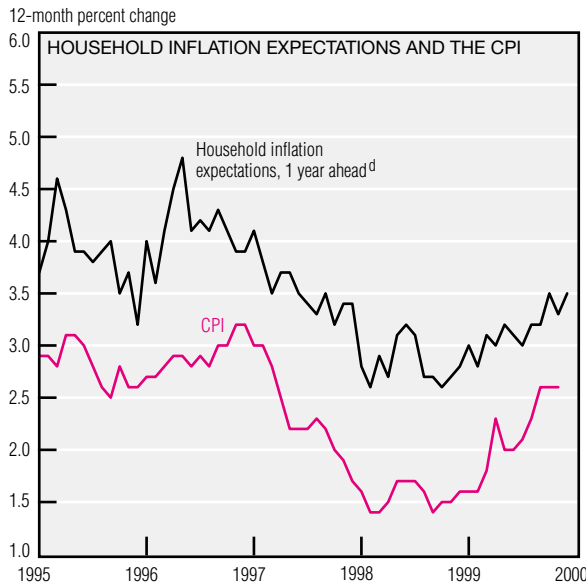
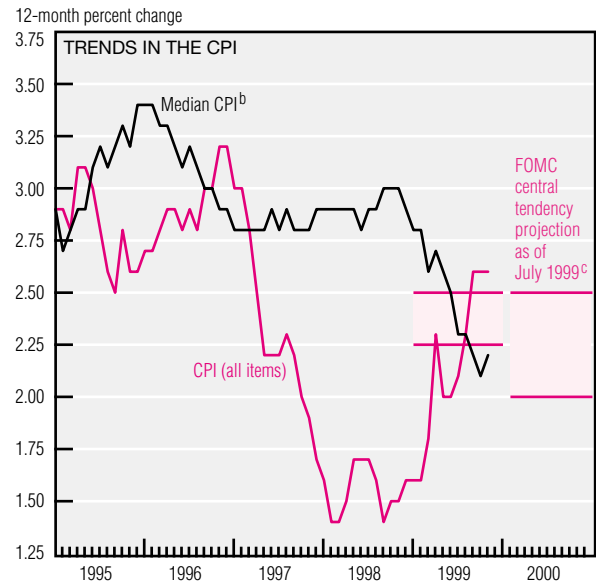
January 2000 seems a fitting time

to take a longer-term view of the yield curve as well. The earliest known yield curve of the millennium was recorded in twelfth-century Netherlands. Short-term commercial loans bore rates of 10%–16%, while longer-term loans, mainly annuities and mortgages, bore rates of 8%–10%. Amidst the hype about the Internet and the "new economy," consider that a commercial world without the computer, the light bulb, or even the printing press established interest rates not all that different from our own.

A common question about the term structure of interest rates is how well implied forward rates predict future interest rates. This question arises from the expectations hypothesis of the term structure, which posits that long-term rates are the average of expected future short-term rates. A look at 1- and 2-year Treasury-bond rates shows that the prediction is not very good. Indeed, long rates tend to be high when current short rates are already high, not when future short rates will be high.

# Inflation and Prices

	Percent change, last:				1998 avg.
	1 mo. <sup>a</sup>	3 mo. <sup>a</sup>	12 mo.	5 yr. <sup>a</sup>	
<b>November Price Statistics</b>					
<b>Consumer prices</b>					
All items	1.4	2.9	2.6	2.4	1.6
Less food and energy	2.7	3.0	2.2	2.5	2.5
Median <sup>b</sup>	4.0	2.6	2.2	2.8	2.9
<b>Producer prices</b>					
Finished goods	2.7	4.6	3.1	1.3	-0.1
Less food and energy	0	4.2	1.8	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. Mean 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*, January 10, May 10, and December 10, 1999.

The Consumer Price Index rose 0.1% (1.4% annualized) in November, following increases of 0.4% and 0.2% in September and October, respectively. Energy prices, which figured prominently in the CPI's increase throughout 1999, moderated substantially in the last two months. After an increase of nearly 2% in September, the CPI's energy index fell 0.1% in October and remained flat in November. Excluding food and energy, however, the November CPI was up 0.2% (2.7% annualized).

For the year to date, the CPI has

advanced at a rate of nearly 2.7%, approximately 1 percentage point higher than its 1998 increase of 1.6%. Alternatively, the CPI excluding food and energy is nearly  $\frac{1}{2}$  percentage point below its 2.5% advance in 1998, having risen at an annual rate of 2.0% so far in 1999. Indeed, while the CPI seems to have been buffeted by volatile energy prices over the past few years, the 12-month percent change in the CPI excluding food and energy has moved moderately lower over the same period. The median CPI, another measure of so-

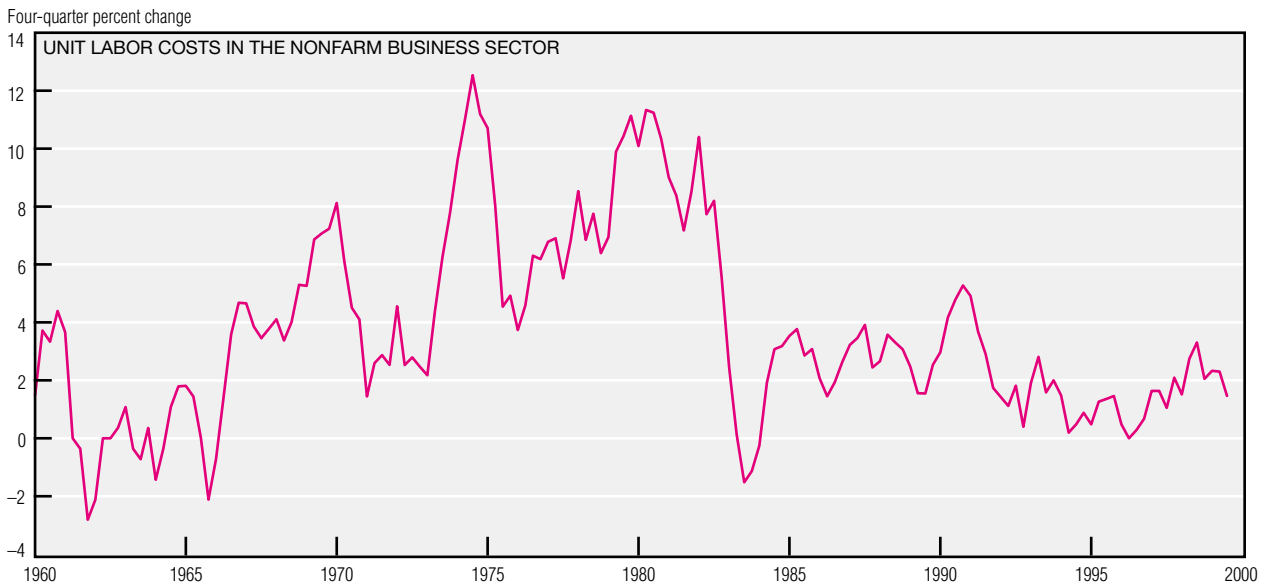
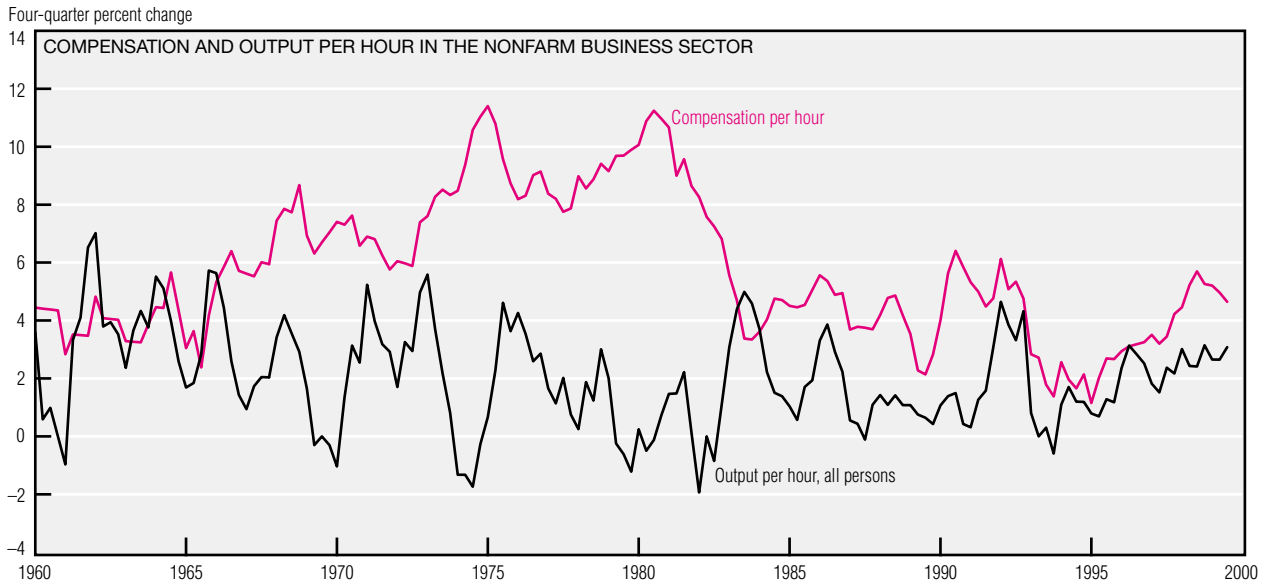
called core inflation, has also come down over this period. Both these downward moves are partly due to changes in CPI methodology.

As the CPI has trended upward in 1999, so too have households' expectations of future inflation. The University of Michigan's *Survey of Consumers* finds that U.S. households' mean expectation of the inflation rate one year hence is 3.5%. This is exactly  $\frac{1}{2}$  percentage point higher than the mean year-ahead household expectation in January 1999.

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## Inflation and Prices (cont.)



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

Economists' inflation forecasts for 2000 also turned less sanguine as 1999 wore on. Last January, roughly 50% of economists were predicting a 2%–2.4% rate of retail price inflation in 2000, while nearly 40% of them expected the rate would be more than 2.4%. At present, however, only 20% of economists expect an inflation rate of 2%–2.4% in 2000, while roughly 70% expect a rate of more than 2.4%.

Economists and policymakers have frequently assailed price statistics' ability to capture inflation accurately. These criticisms arise from a

combination of factors, notably the importance attached to particular items and the way certain prices are measured. As an alternative to more traditional inflation measures, some economists use growth in unit labor costs—the difference between compensation growth and productivity growth—which, under certain assumptions, reflects the change in the dollar cost of a unit of output. According to this measure, inflation has fluctuated around the 2% level since 1985.

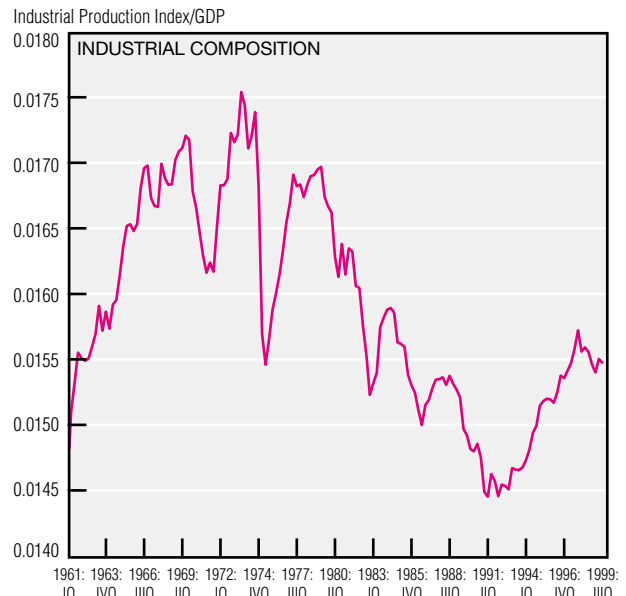
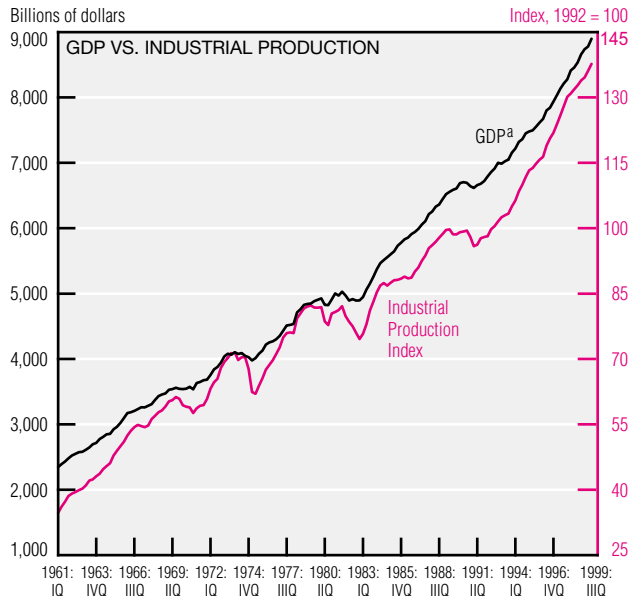
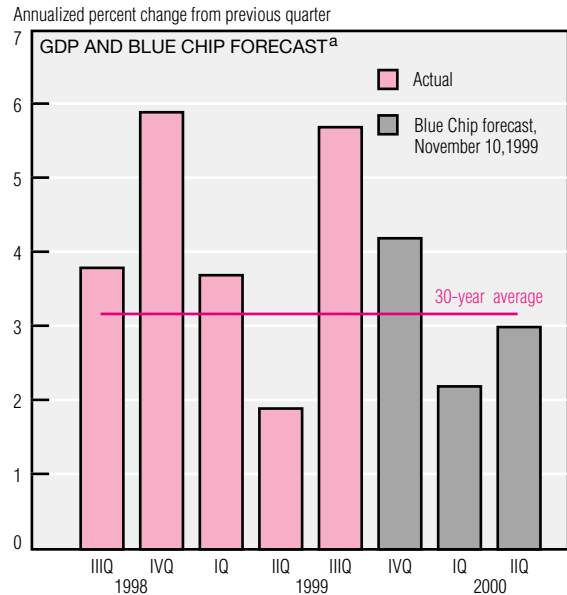
This inflation measure, too, must be viewed with caution. As some have noted, labor costs may be un-

derstated due to a drop in average worker quality over the expansion and because employers increasingly augment workers' pay with unmeasured compensation such as equity options. This suggests that the measure currently used understates unit labor costs. On the other hand, the measurement of unit labor costs also depends on the accuracy of measured labor productivity. Some researchers argue that labor productivity may be grossly understated and, as a result, that unit labor costs are tracking well below the growth rate indicated by the current measure.



# Economic Activity

Real GDP and Components, 1999:IIIQ <sup>a,b</sup> (Final estimate)	Change, billions of 1996 \$	Percent change, last:	
		Quarter	Four quarters
Real GDP	122.0	5.7	4.3
Consumer spending	71.5	4.9	5.3
Durables	15.1	7.7	12.3
Nondurables	15.6	3.6	5.2
Services	41.4	5.0	4.0
Business fixed investment	31.4	10.9	10.2
Equipment	35.7	15.7	14.5
Structures	-2.4	-3.8	-2.4
Residential investment	-3.7	-3.9	5.9
Government spending	17.0	4.6	3.4
National defense	9.1	11.2	0.2
Net exports	-19.2	—	—
Exports	28.4	11.5	6.2
Imports	47.6	14.9	13.2
Change in private inventories	24.0	—	—



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.

NOTE: All data are seasonally adjusted.

SOURCES: U.S. Department of Commerce, Bureau of Economic Analysis; Board of Governors of the Federal Reserve System, "Industrial Production and Capacity Utilization," *Federal Reserve Statistical Releases*, G.17; and *Blue Chip Economic Indicators*, December 10, 1999.

The final estimate of 1999:IIIQ growth in gross domestic product, released in December, was 5.7%. This was stronger than November's 5.5% preliminary estimate, which itself exceeded October's 4.8% advance estimate. The small (0.2 percentage point) upward revision reflected slightly higher estimates of inventory accumulation and personal consumption expenditures on services, offset by slightly lower estimates of private fixed investment in equipment and software. The overall shape of the U.S. economy's eight-year-long expansion remained

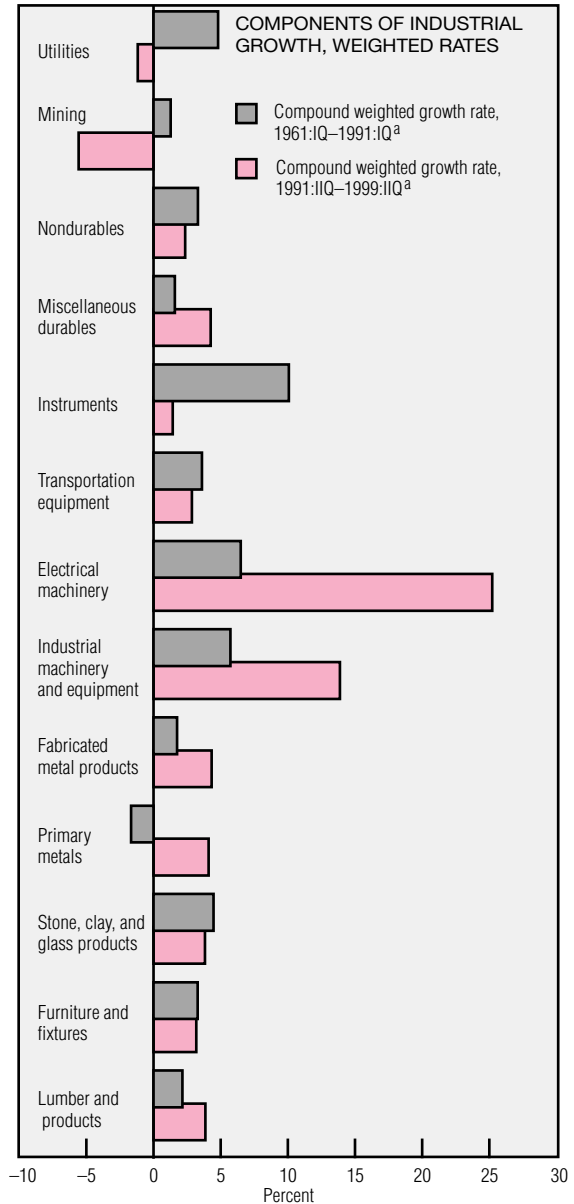
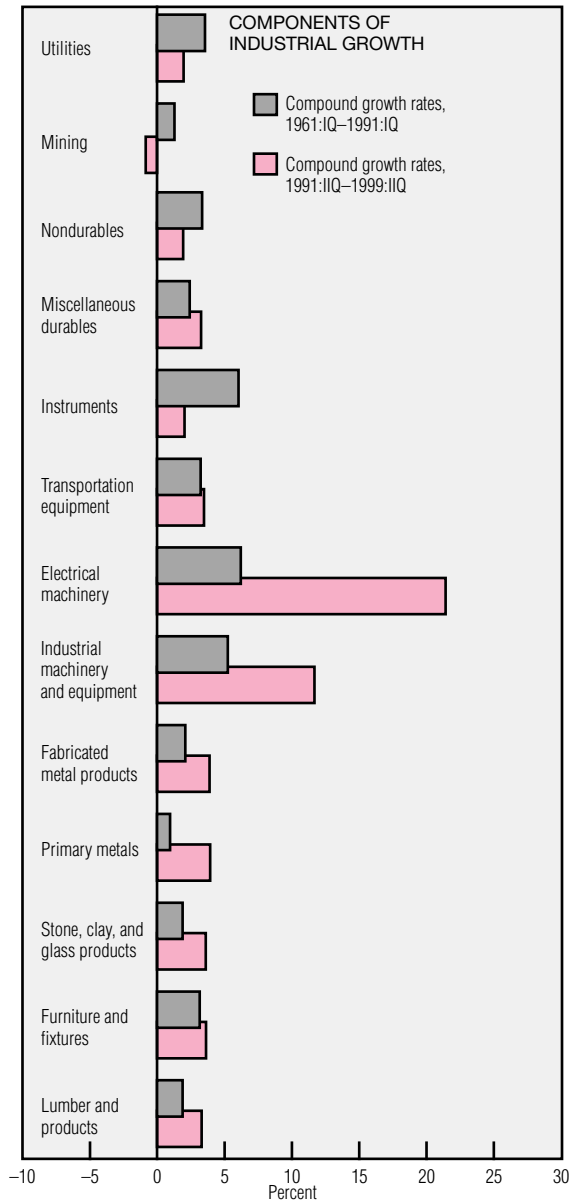
unchanged, as the mutually offsetting second-quarter slowdown and third-quarter speedup in inventory accumulation maintained the economy's above-average growth rate. Forecasters, however, predict slower growth in 2000.

The durability and strength of the current expansion has evoked voluminous comment, but most of it overlooks an interesting feature of this expansion: the changing industrial composition of the economy. Starting (arbitrarily) at the end of the 1960–61 short recession, the industrial sector (measured by the set of

industries included in the Federal Reserve Board's Industrial Production Index) grew slightly faster than the overall economy (measured by GDP). Despite traditional industries' movement from the north to the south and west and their reorientation around the quasiwartime demands of the Vietnam conflict, the composition of the economy's output continued to shift toward the highly productive industrial sector. Then, at about the time of the 1973–74 recession, a process of deindustrialization began. It was

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## Economic Activity (cont.)



a. Series that measure the output of an individual industry are weighted according to their share of the total value-added output of all industries.

NOTE: All data are seasonally adjusted.

SOURCE: Board of Governors of the Federal Reserve System, "Industrial Production and Capacity Utilization," *Federal Reserve Statistical Releases*, G.17.

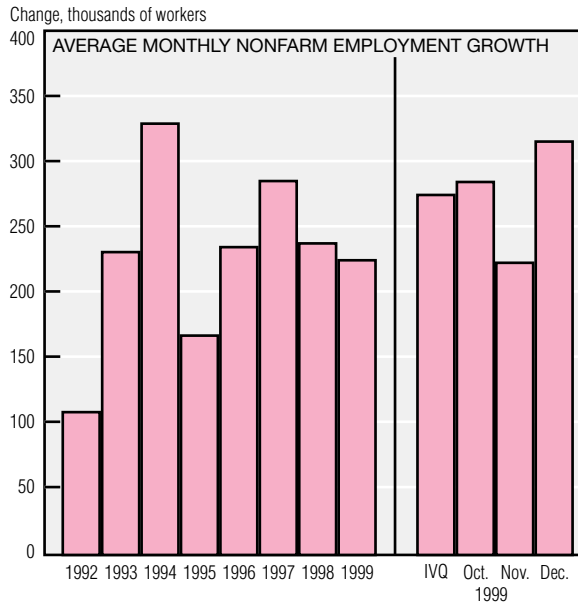
associated with the onset of an energy crisis, escalating inflation, and the movement of heavy industrial activities offshore to emerging nations. For almost 20 years, industrial growth lagged GDP growth. Consequently, the ratio of industrial output to GDP was about 17% lower at the beginning of the 1990s than it had been 30 years earlier, arousing fears about a service economy of "hamburger flippers."

The current long economic expansion has been one of reindustrialization. By 1999, the ratio of industrial output to GDP had climbed

back to its level of 40 years earlier. Of course, productivity gains mean that employment in a particular industry may increase far less than output or may even decline. Moreover, the industrial sectors that have blossomed during reindustrialization are not the same ones that consolidated during deindustrialization. This fact is somewhat obscured by the need to aggregate industries within traditional groupings to allow consistent comparisons over short intervals. Nonetheless, the computer and telecommunications revolution that caused the flowering of the informa-

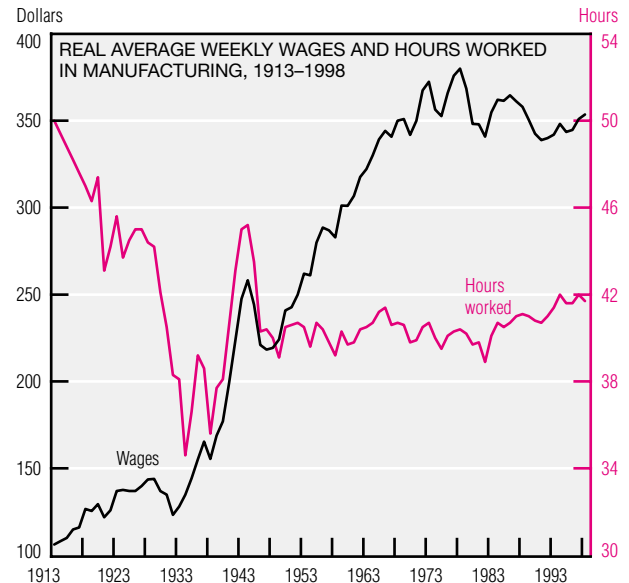
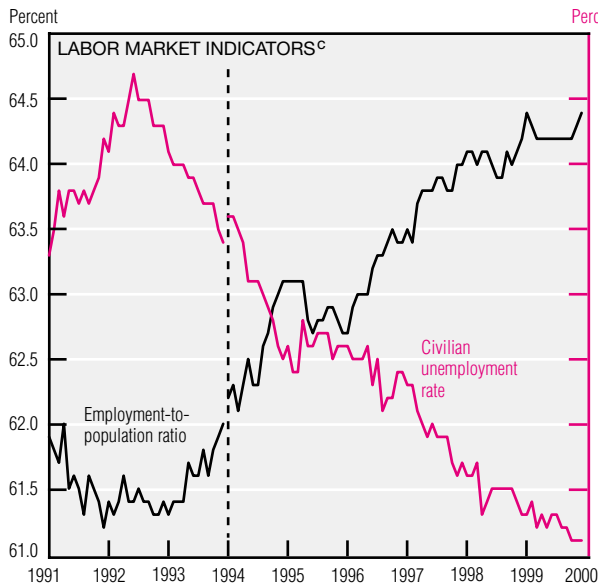
tion age can be identified in the composition and growth of industrial output. Most notably, the weight attached to the rapidly growing industrial machinery sector increased about  $2\frac{1}{2}$  percentage points over the past 40 years, but computer and office equipment now make up about  $2\frac{1}{4}$  percentage points of that weight. Similarly, electrical machinery's weight increased about  $2\frac{1}{2}$  percentage points, but semiconductors and related electronic components now account for about  $3\frac{1}{2}$  percentage points of that weight.

# Labor Markets



## Labor Market Conditions

	Average monthly change (thousands of employees)				
	1996	1997	1998	1999	Dec.
Payroll employment	234	281	244	224	315
Goods-producing	32	48	8	-6	17
Mining	1	2	-3	-3	2
Construction	28	21	30	18	16
Manufacturing	3	25	-19	-21	-1
Durable goods	10	27	-9	-10	1
Nondurable goods	-7	-2	-10	-11	-2
Service-producing	202	233	235	230	298
TPU <sup>a</sup>	8	16	18	17	32
FIRE <sup>b</sup>	14	20	26	12	12
Services	117	141	119	120	109
Engineering and mgmt. services	10	14	18	19	23
Government	11	17	27	29	64
	Average for period (percent)				
Civilian unemployment	5.4	4.9	4.5	4.3	4.1



a. Transportation and public utilities.  
 b. Finance, insurance, and real estate.  
 c. 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.

Labor markets surged in December as the economy continued to show steady job growth. U.S. payrolls rose 315,000 last month and increased at a monthly average of 274,000 jobs during the fourth quarter. For 1999, payroll growth averaged 224,000 jobs per month, slightly less than 1998's monthly average of 244,000. The employment-to-population ratio increased one-tenth of a percent to 64.4%, matching its January peak. The unemployment rate held its 30-year low of 4.1% last month; it has been 4.3% or lower since March. Decem-

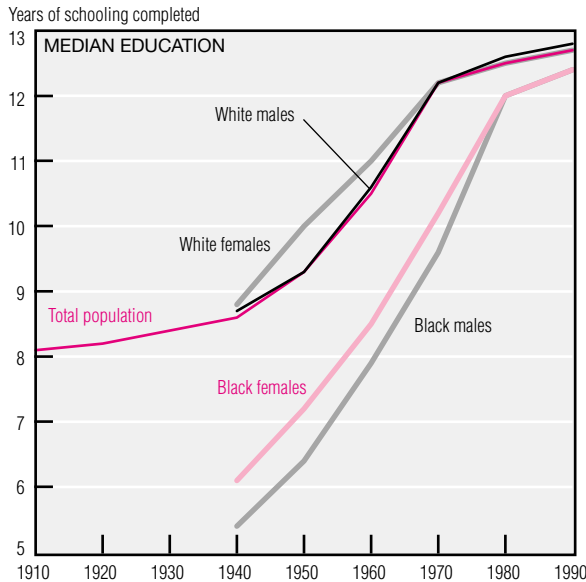
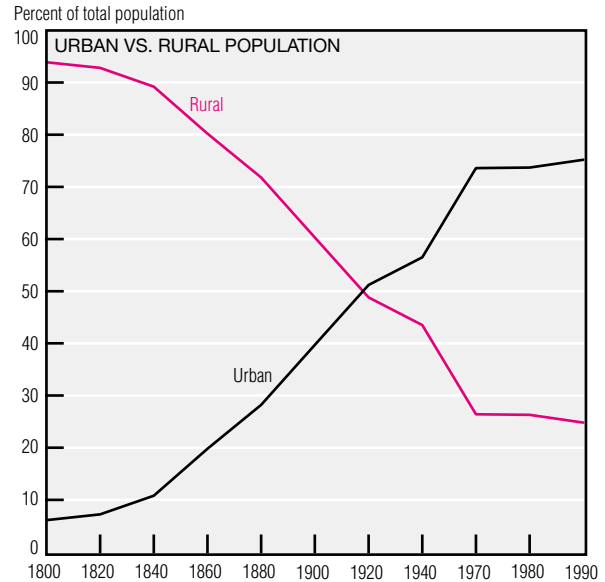
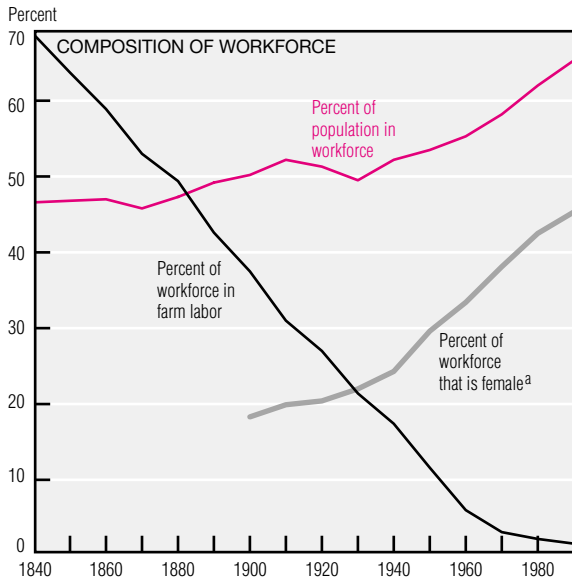
ber wage growth was strong, with average hourly earnings rising 6 cents to \$13.46. For the year, average hourly earnings climbed 3.7%.

All net job gains in 1999 (2.7 million) were in the service-producing sector. Average monthly job growth for the year in this sector was 230,000. December's growth was also concentrated in the service-producing sector, which added 298,000 jobs. December payrolls in the services subsector rose 109,000, slightly less than the average monthly increase of 120,000 in 1999. Increased holiday demand for passenger and package transportation

caused job gains of 32,000 in transportation and public utilities last month, nearly double 1999's average monthly increase of 17,000.

Despite its average monthly gain of 16,000 jobs over the last half of the year, the goods-producing sector lost an average of 6,000 jobs a month in 1999. The 17,000 jobs it added in December were concentrated primarily in construction. Manufacturing lost 248,000 jobs in 1999, mostly in the first six months. Employment in apparel and textiles continued to trend downward, with monthly average losses of 5,500 and 2,700 jobs, respectively.

# A Century of Economic Development



## Family Budgets and Home Ownership<sup>b</sup>

	1901	1995
<b>Budgets</b>		
Necessities	76.2	37.7
Food	46.4	14.0
Clothing	14.7	5.3
Shelter	15.1	18.4
Entertainment and reading	2.7	7.3
Transportation	—	24.7
<b>Home ownership</b>	19	56

a. Unpaid female workers in family-operated farms or businesses were counted only if they worked 15 or more hours per week.

b. Percent of total household expenditures for an average family, and percent of families that own their homes.

SOURCES: U.S. Department of Labor, Bureau of Labor Statistics and *Consumer Expenditure Survey*; and National Center for Education Statistics.

The last century has witnessed major changes in how and where Americans work and live—and in the characteristics of our workers. In 1900, the U.S. was an agrarian economy, where about 40% of all employment was in farm work. Just 100 years later, agriculture accounts for less than 2% of total employment, while the distribution and services sector accounts for about 50%. At the same time, the U.S. has become much more urbanized. In 1900, approximately 40% of Ameri-

cans lived in urban areas; today, the cities are home to more than 75% of the population.

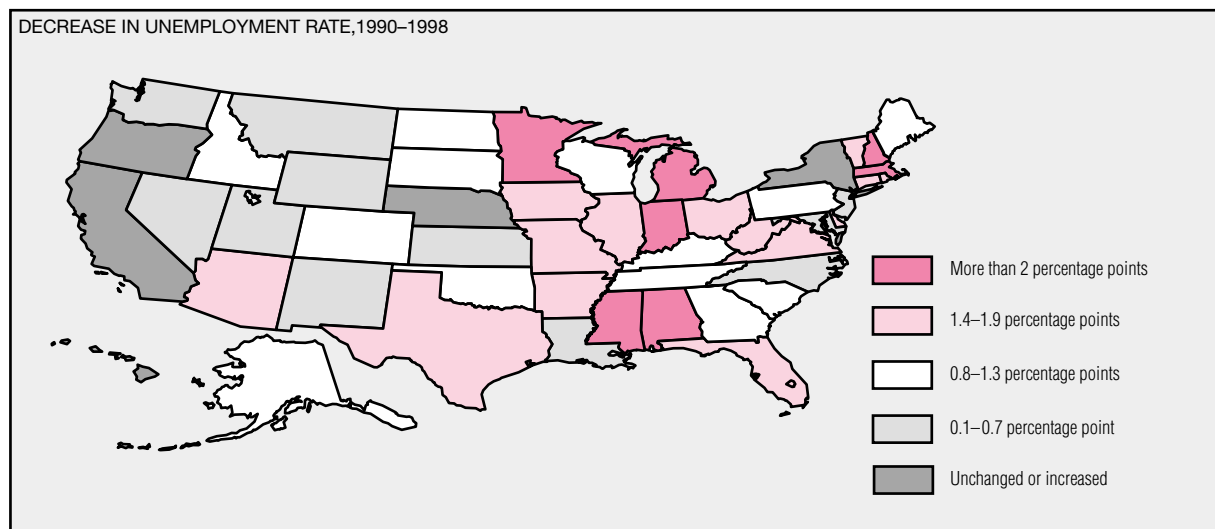
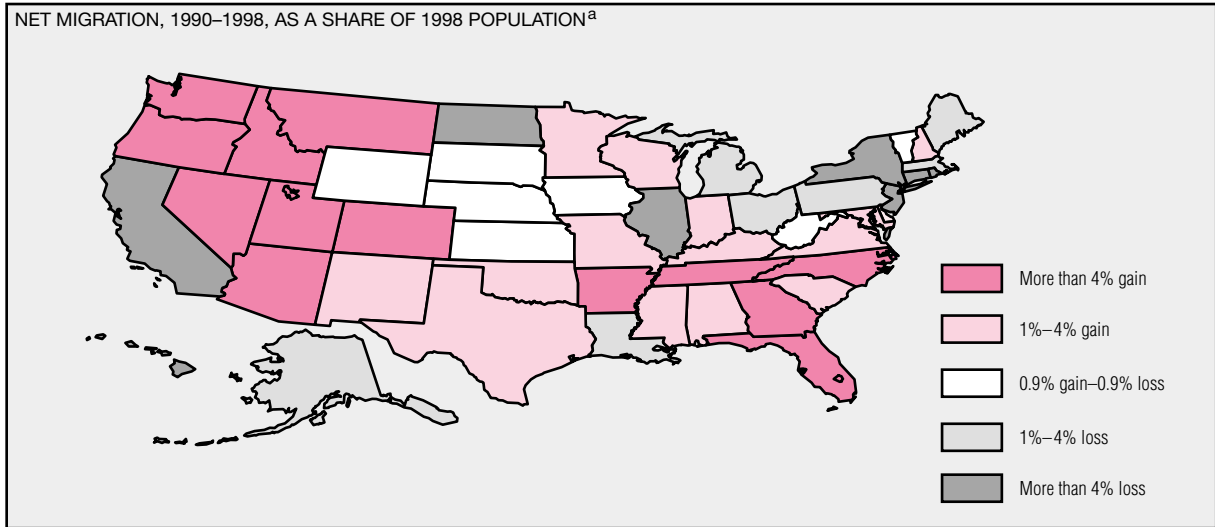
In 1900, the average employee in manufacturing worked more than 50 hours a week. Today, this worker averages just over 40 hours and earns nearly four times as much in real terms. A century ago, only about 20% of the labor force were female; today about 50% of all workers are women.

Educational attainment has risen steadily. In 1910, the median Ameri-

can had barely an eighth-grade education. Now, the median is 12 years of schooling.

By most measures, Americans' standard of living has risen as well. In 1901, more than three-fourths of the average family's budget was spent on the necessities of life: food, clothing, and shelter. By 1995, the budget share spent on those basics had fallen to just over one-third. And, in the course of the century, the percent of families that own their homes has tripled.

## Migration and Occupational Change



a. Net migration is calculated as in-migration minus out-migration.

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

Shifting economic conditions often lead to occupational and geographical mobility. As the share of total employment devoted to manufacturing in the U.S. has declined, so too has the share of the population living in areas where reliance on manufacturing is—or was—high. Reviewing the 1990s, we find that the states that experienced population loss as a result of out-migration were concentrated in the Northeast,

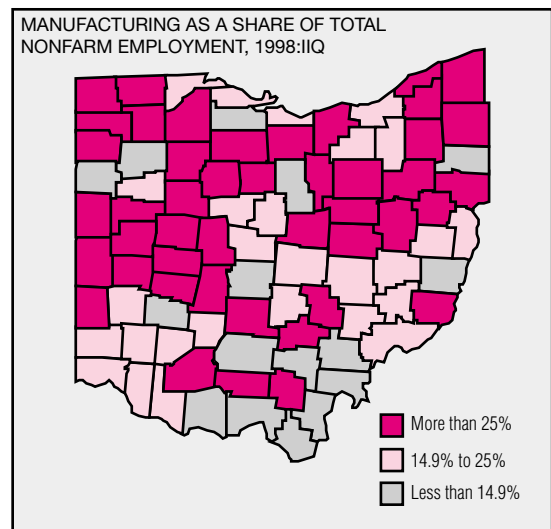
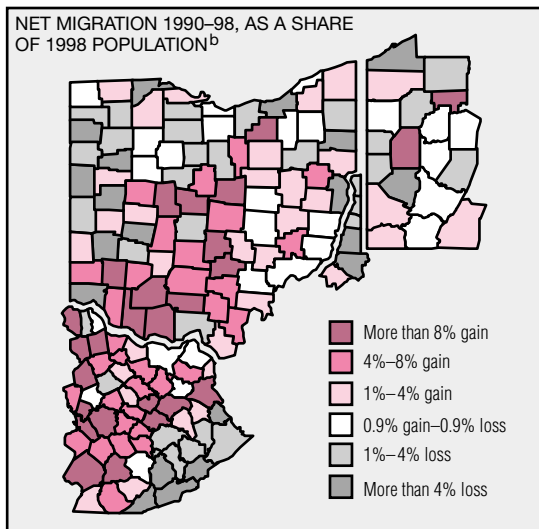
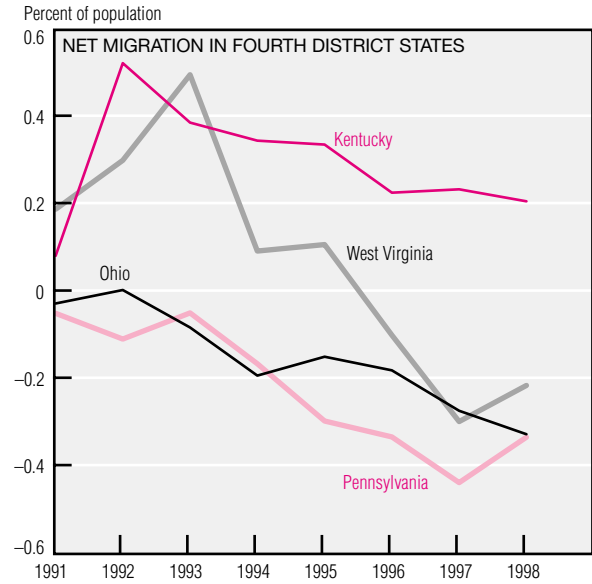
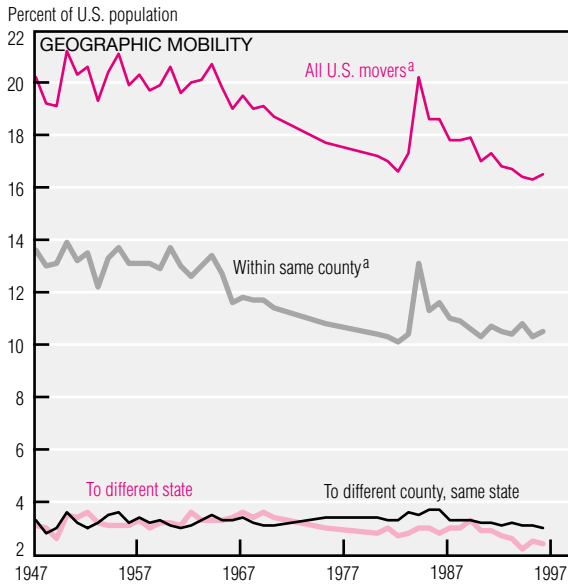
primarily in the traditional Rust Belt states. The West and Southeast regions posted the nation's largest population gains.

Such mobility generally has an ambiguous effect on local unemployment rates. As jobs and people leave one area for another, there are fewer jobs—but also fewer people looking for work—in a region experiencing out-migration. The reverse holds true in a region where jobs

and population are growing. Interestingly, the states that experienced out-migration were the ones with the largest drops in unemployment rates. In the western half of the country, Arizona and Texas are the only states whose unemployment rates fell more than 1.3%.

The past several decades have witnessed an overall drop in the share of people who move from one  
*(continued on next page)*

# Migration and Occupational Change (cont.)



a. Increase in 1985 results from changes in the Census Bureau's survey design and data collection.  
 b. Net migration is calculated as in-migration minus out-migration.  
 SOURCES: U.S. Department of Commerce, Bureau of the Census; and Ohio Bureau of Employment Services.

place to another. For the first 20 years after World War II, about 20% of the population relocated each year. In the late 1960s, however, this percentage began a downward trend; today, only about 16% of the population moves in a given year. The share of people moving from state to state has declined as well.

Over the 1990s, Kentucky was the only state in the Fourth District that experienced positive net migration every year. In the early part of the

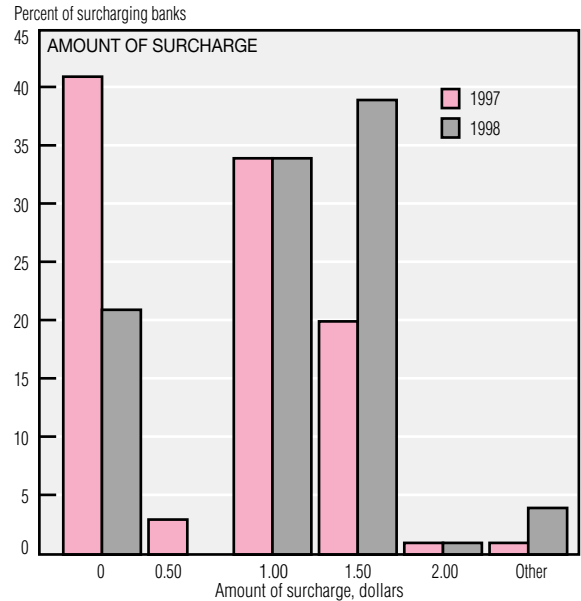
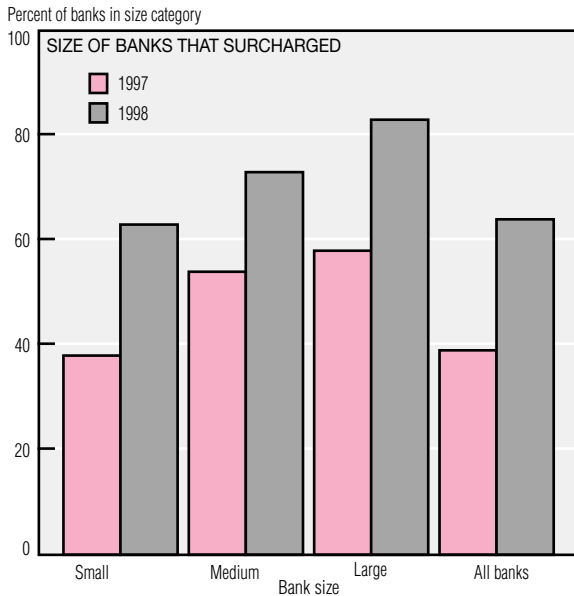
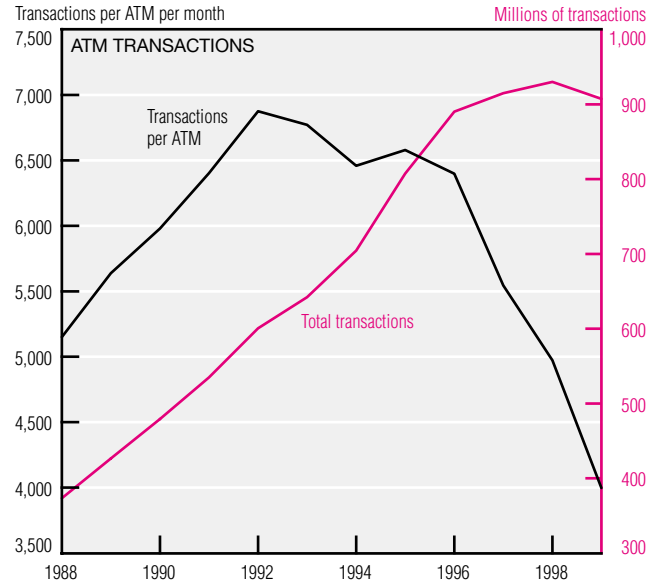
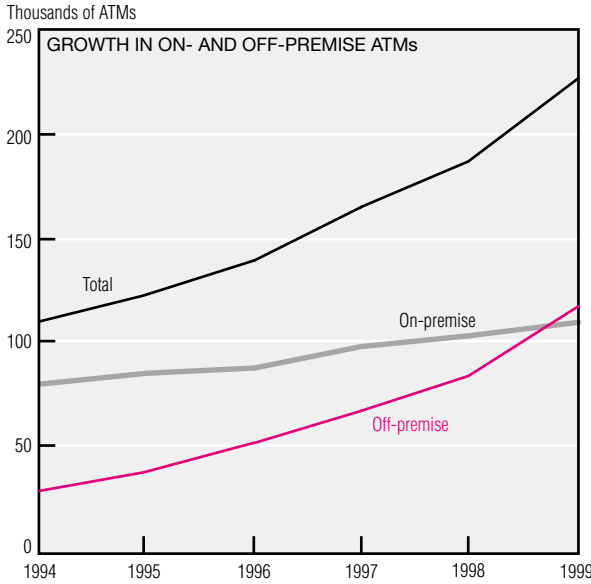
decade, Kentucky and West Virginia both had more people moving in than out, with net gains reaching a peak of about 0.5% in 1992 and 1993. After that time, however, West Virginia experienced the District's largest net migration loss.

Neither Ohio nor Pennsylvania saw a comparable population boom in the early 1990s. Those states' net migration rates hovered near zero until 1993, when more people began leaving than entering them;

after 1997, Pennsylvania's population drain accelerated.

Moreover, the largest net gains were concentrated in the southern part of the District, that is, in north-eastern Kentucky and southern Ohio. While the reasons are difficult to pinpoint, these areas seem less reliant on manufacturing jobs than the rest of the District; this is consistent with the national trend of employment loss in the manufacturing sector.

# ATM Use



SOURCES: Board of Governors of the Federal Reserve System, *Report to Congress: Fees and Services of Depository Institutions*, June 1999; and Bank Network News, *EFT Network Data Book*, August 11, 1999.

The number of ATMs has grown phenomenally over the last few years, mostly in off-premise machines. Off-premise growth was already rising sharply in 1996, but it received a further boost that year when threatened antitrust actions caused Cirrus and Plus, the two largest networks, to drop their bans on surcharges. (ATM surcharges are fees paid by users who are not customers of the bank that owns the machine.)

ATM sales rose on owners' expectations of profits from their new machines. Surcharges, however, proved far less enthralling to con-

sumers than to ATM owners, and the number of transactions leveled off abruptly. As a consequence, the number of transactions per machine has plummeted to about half of what it was when the practice of surcharging began. Now machines can be found in many more locations, improving customers' convenience, but the smaller number of transactions makes some of the machines difficult to operate profitably.

The structure of ATM fees received considerable attention recently when both San Francisco and Santa Monica voted to ban surcharges within their communities. These bans are on

hold until court challenges are resolved. Iowa is now the only state that prohibits banks from imposing surcharges; Connecticut's three-year-old ban was recently overturned by the state's Supreme Court.

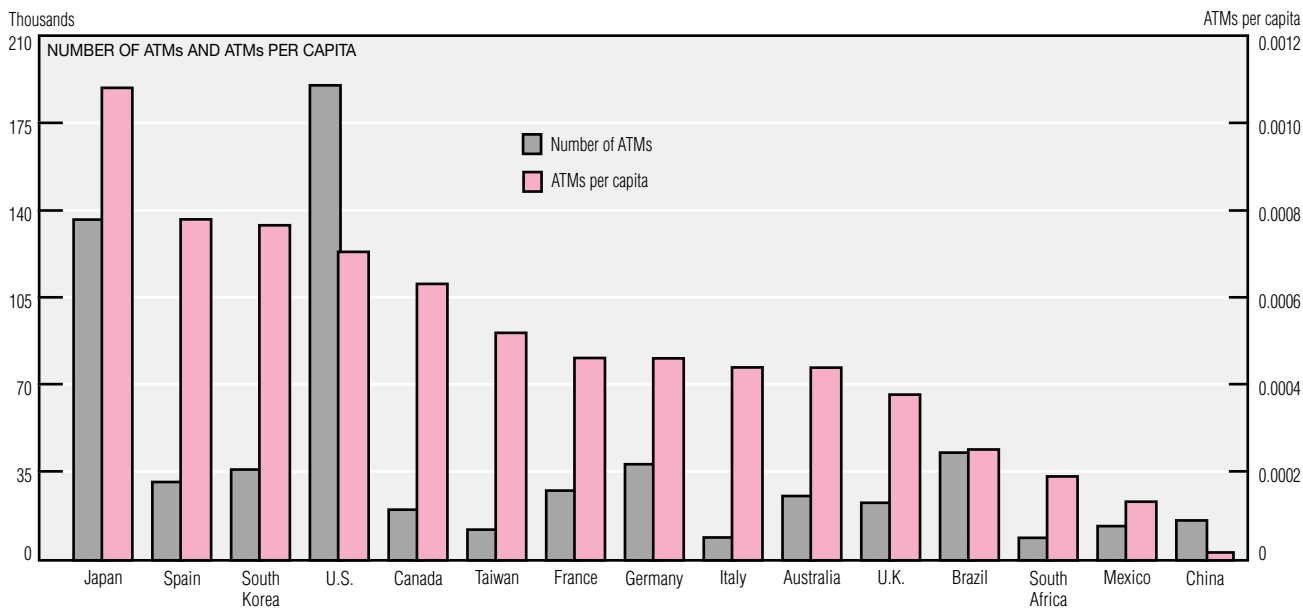
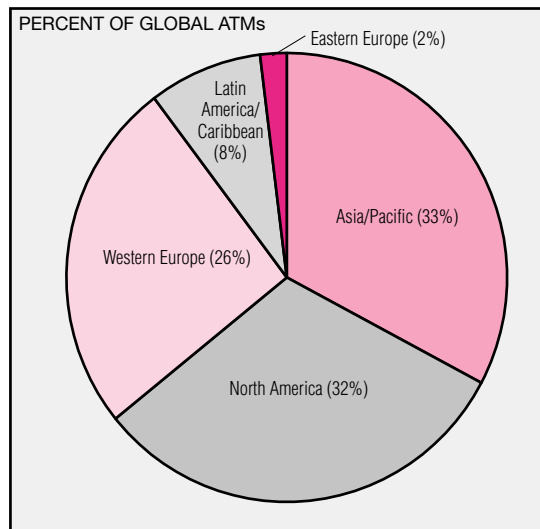
ATMs generate revenue for their owners from 1) the interchange fee paid by the network operator each time a customer uses the machine for a transaction, and 2) the surcharge on users who are not customers of the owner bank. Unfortunately for owners, consumers are such a wily bunch that only one of every seven transactions generates a

*(continued on next page)*



## ATM Use (cont.)

Annual Costs of Off-premise ATMs (dollars)		
	Cash dispensers	Deposit terminals
Service	3,800	16,300
Maintenance	3,200	3,100
Security	1,000	1,000
Utilities	1,200	1,500
Telecommunications	3,000	3,000
Rental	12,000	15,000
Other	5,490	6,500
<b>Operating expenses</b>	<b>30,140</b>	<b>46,400</b>
Depreciation	4,140	16,000
<b>Operating expenses plus depreciation</b>	<b>34,280</b>	<b>62,400</b>



surcharge. Consumers use many strategies to avoid or minimize surcharges: They seek out ATMs that don't impose these fees. They make purchases with credit cards rather than cash. They get cash back from merchants who accept ATM cards. When consumers absolutely must get cash from a surcharging machine, they withdraw more than they currently need, in order to cut down on ATM trips.

The banks imposing surcharges increased from less than 40% of all banks in 1997 to over 60% in 1998. Large banks are more likely to surcharge than are small ones—in fact,

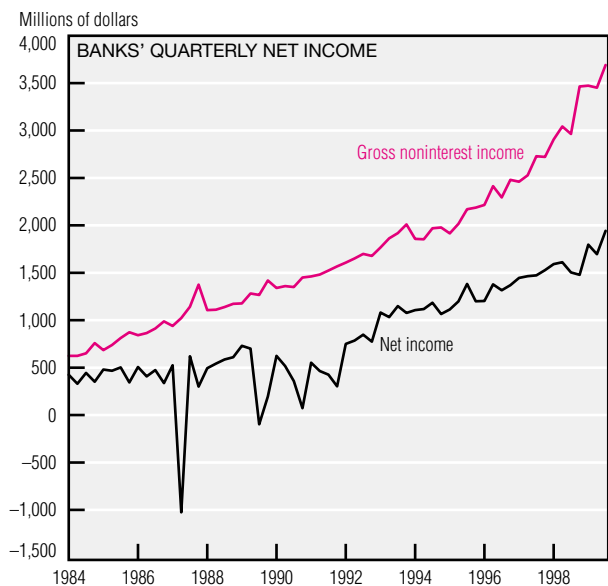
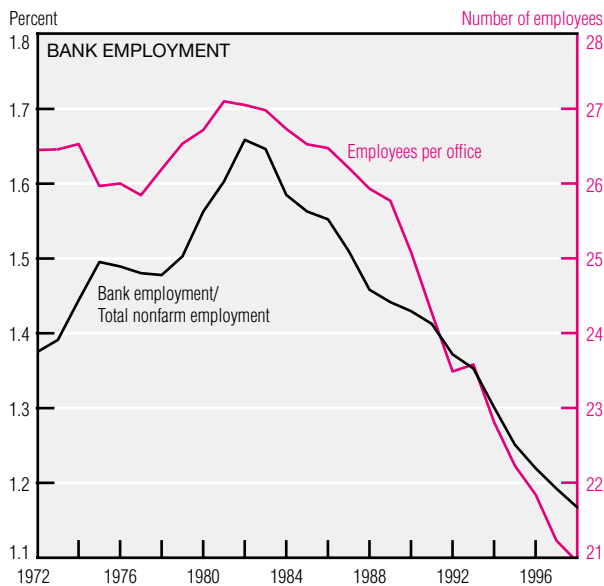
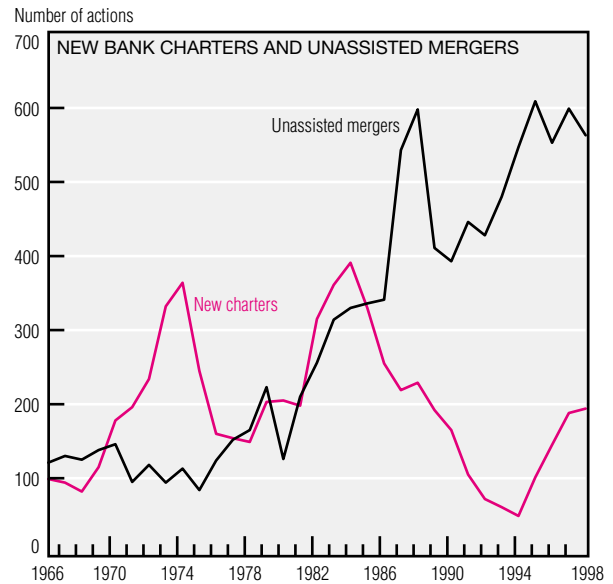
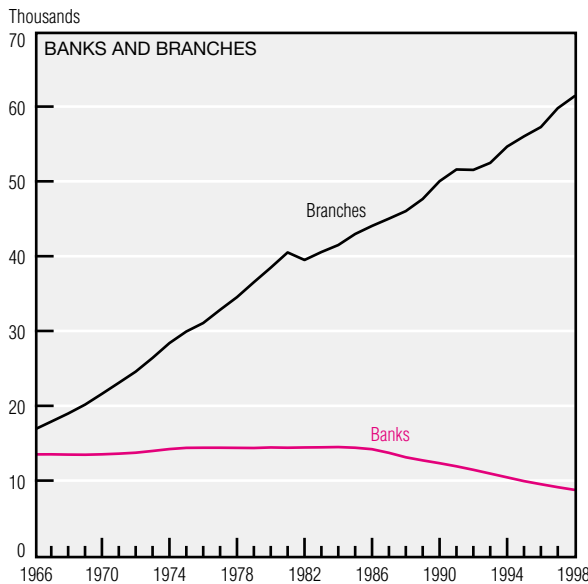
their critics claim that large banks impose these fees to induce noncustomers to transfer their accounts. In 1997–98, however, surcharging increased sharply among banks in all size categories, and the fee amount also changed significantly. In 1997, most banks did not surcharge; for those that did, the most common fee was \$1, followed by \$1.50. By 1998, most banks did surcharge, and the most common fee was \$1.50, followed by \$1.

An ATM's operating cost depends on the services provided. A machine with depository capability costs twice as much as a simple cash dispenser because of its higher initial cost—as

reflected by depreciation expenses—and more costly maintenance. Barring legal prohibitions, surcharge fees will persist, but their structure will be shaped by the interaction of customers' willingness to pay and competition among ATM owners and other payment instruments.

Omnipresent as ATMs are in the U.S., penetration is higher in some other countries. About one-third of all ATMs are located in North America, and slightly less than that in Europe. The U.S. has more ATMs than any other country but it trails Japan, South Korea, and Spain in the number per capita.

# Banking Legislation



SOURCES: U.S. Department of Labor, Bureau of Labor Statistics; and Federal Deposit Insurance Corporation, *Historical Banking Statistics and Quarterly Banking Profile*, December 1999.

The wall created by the Glass-Steagall Act to separate commercial banks from securities firms and insurance companies has eroded significantly over time. The recent passage of the Gramm-Leach-Bliley Act removes its last vestiges, leaving the financial services industry braced for another round of innovation.

The new act will allow banks, securities firms, and insurance companies to affiliate as financial holding companies. The Federal Reserve will be the primary regulator of financial holding companies with bank subsidiaries, but the appropriate state and federal agencies will be the functional regulators of these enti-

ties' financial activities. For example, the Securities and Exchange Commission will supervise underwriting, while state insurance commissioners will oversee insurance products.

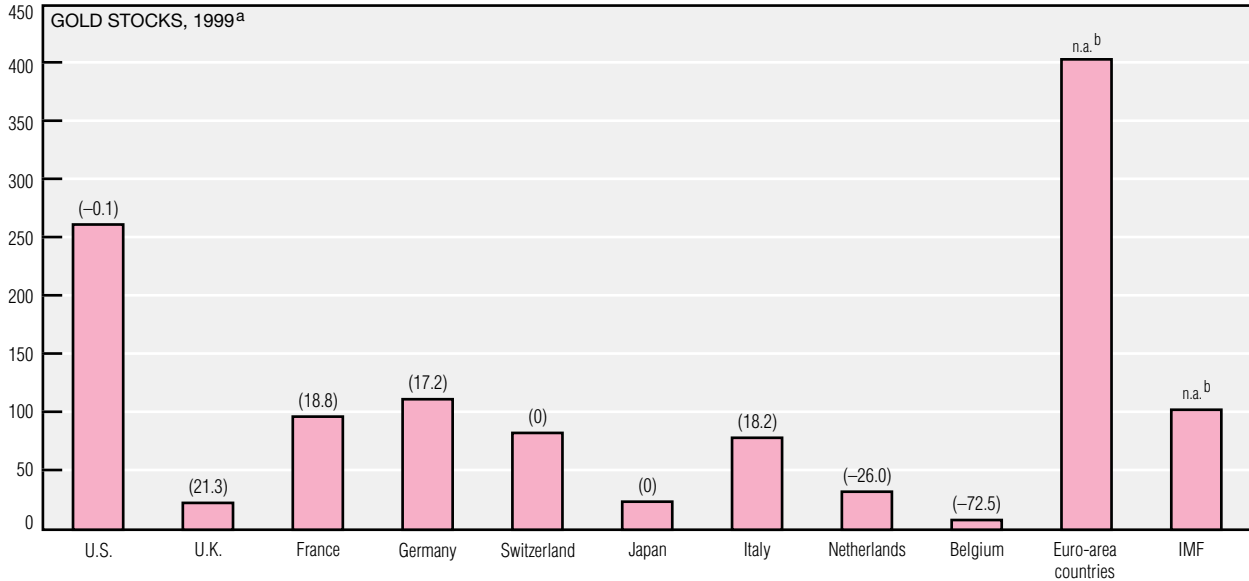
What long-term trends might help us see where the industry is heading? The number of banks has declined fairly steadily since 1984, but the number of branches has risen even more rapidly, despite the growth of alternative service channels such as ATMs and telephone banking. It is still too soon to gauge the impact of Internet banks and branches. While new bank charters show a strong cyclical component, unassisted mergers have generally boomed

since 1981 and are likely to remain high or even increase because of the new act.

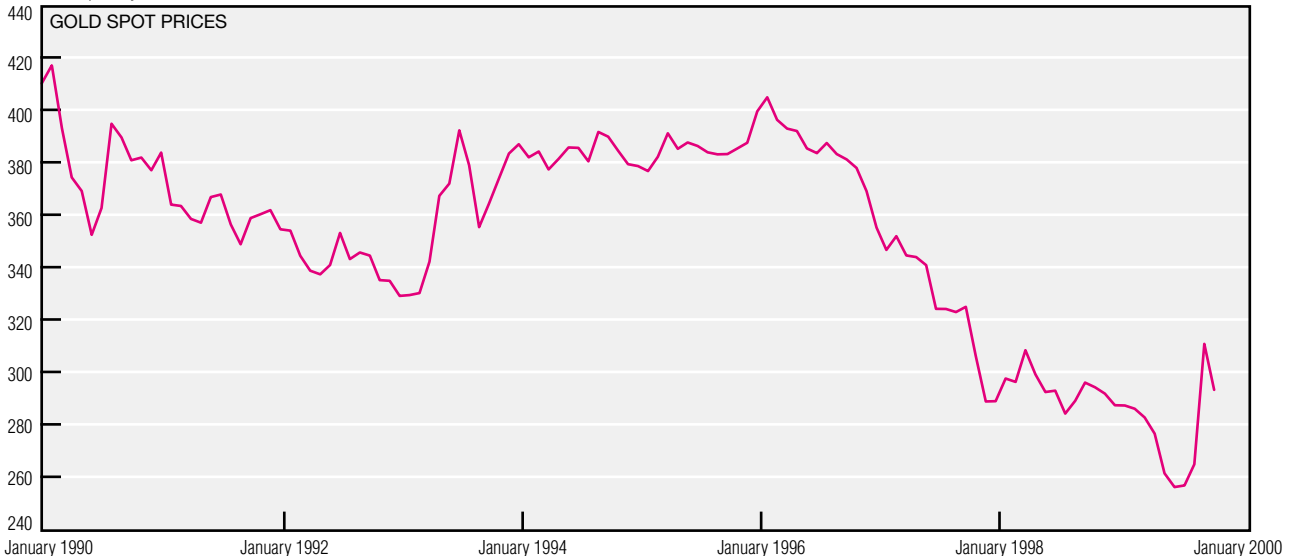
Banks have been transforming themselves in response to technological change and market pressures for some time. Two indirect measures of productivity gains have shown strong improvement. Banks' share of nonfarm employment has dropped sharply since 1982 as the number of employees per office has fallen. Banks' net income has reached record highs because its sources have shifted from interest intermediation to fee income, a more stable revenue stream.

# Gold Prices

Millions of troy ounces



U.S. dollars per troy ounce



a. Numbers above bars indicate percent change in gold stocks, 1990-99.

b. Data are not available.

SOURCES: International Monetary Fund, *International Financial Statistics*; World Gold Council, [www.gold.org](http://www.gold.org); and *Wall Street Journal*, various issues.

Gold prices have fallen precipitously since their recent highs of February 1996, largely because of central banks' actions. Since 1996, many central banks—including those of Belgium, the Netherlands, the U.K., Australia, and Switzerland—have announced and undertaken sales from their gold reserves. Each announcement depressed the market price of gold.

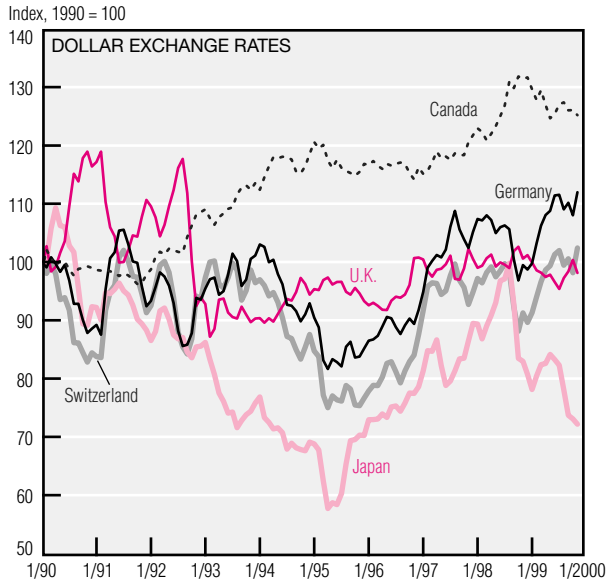
In the same year, the International Monetary Fund proposed selling as much as 10% of its gold reserves to finance debt relief for the

world's poorest nations. The IMF has 103 million ounces of gold, making it the largest holder of gold after the U.S. (262 million ounces) and Germany (112 million ounces). The European Central Bank's decision to limit gold holdings to 15% of its reserves also increased expectations of further central-bank gold sales and depressed prices. Market participants worried that the central banks of individual European nations that traditionally held more than 15% of their reserves in gold might sell off whatever they had not

already transferred to the ECB.

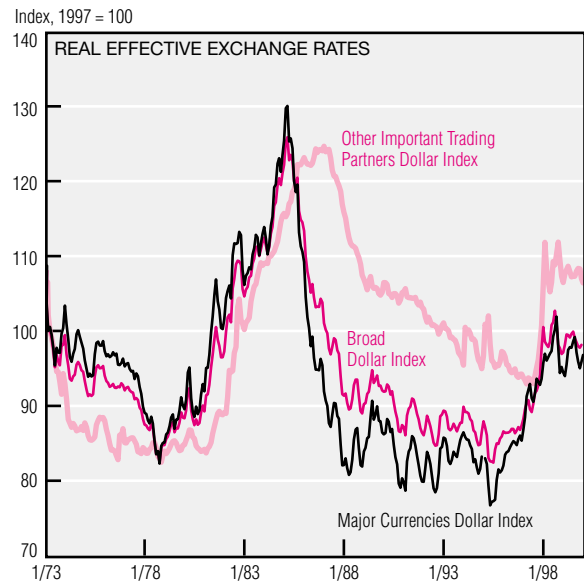
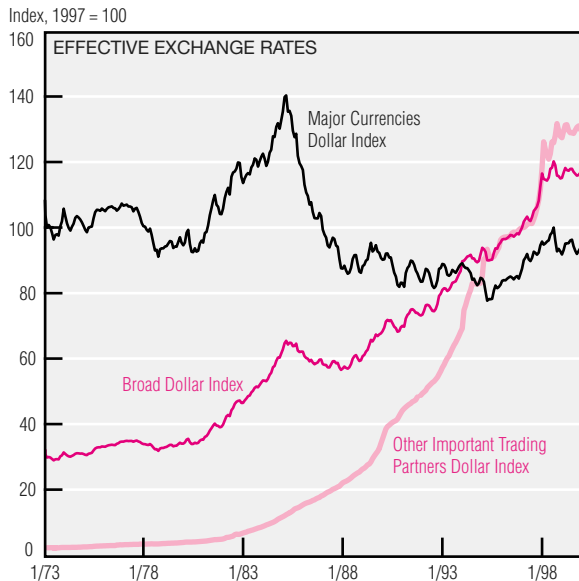
Concerned about the sharp drop in prices, 15 European central banks unexpectedly announced on September 26, 1999, that they would limit gold sales to 2,000 tons over the next five years. Much of this amount had already been earmarked for sale. The U.S., Japan, and the IMF will also abide by this agreement, which affects approximately 84% of the world's official gold stock. Between September and October, the average gold price jumped roughly \$51 per ounce.

## Effective Dollar Exchange Rates



Trade Weights for U.S. Dollar Indexes, 1997

	Broad	Major Currencies	Other Important Trading Partners
Canada	17.3	30.3	—
Euro area	16.4	28.7	—
Japan	14.6	25.6	—
Mexico	8.6	—	19.9
China	6.6	—	15.3
U.K.	4.6	8.0	—
Taiwan	3.9	—	9.1
Korea	3.7	—	8.6
Singapore	3.1	—	7.2
Hong Kong	2.8	—	6.6
Malaysia	2.4	—	5.5
Brazil	1.9	—	4.4
Switzerland	1.8	3.2	—
Other	12.3	4.2	23.4



NOTE: For more information, see "New Summary Measures of the Foreign Exchange Value of the Dollar," *Federal Reserve Bulletin*, October 1998, pp. 811–18.  
SOURCE: Board of Governors of the Federal Reserve System, "Selected Interest Rates," *Federal Reserve Statistical Releases*, H.15.

During 1999, the U.S. dollar depreciated against the Japanese yen, appreciated against most European currencies, and held steady against its Canadian counterpart. Did the dollar strengthen or weaken last year?

To monitor the dollar's overall movement, economists construct effective exchange-rate indexes. These calculate the average change in the dollar from a sample of individual bilateral exchange rates, each of which is weighted according to that country's importance in U.S.

trade. Canada and Japan, therefore, receive more weight in calculations of effective dollar exchange rates than Switzerland and Brazil. The Federal Reserve Board uses three measures of effective exchange rates. The Broad Dollar Index is a summary of 26 currencies. The Major Currencies Index—a subset of the Broad Dollar Index—includes major developed countries whose currencies are broadly traded: Australia, Canada, Japan, Sweden, Switzerland, the U.K., and the Euro area. The Other Important Trading Partners Index comprises

the remaining 19 countries in the Broad Dollar Index, whose currencies are not widely traded.

To better understand the global competitive posture of the U.S., one should also adjust exchange rates for relative inflation patterns here and abroad. A real effective exchange rate does this. Its rise represents a dollar appreciation and suggests that U.S. goods are becoming more expensive in world markets. A drop in the real effective exchange rate suggests that the nation's competitive position has improved.