

## *The Economy in Perspective*

*Where to, EMU? ...* Many European nations have been working hard over the past several years to lower their inflation rates and trim public sector deficits. The success of these moves, which are beneficial in their own right, will also qualify these nations for full admission into the European Monetary Union (EMU). In May 1998, participants will form a new European central bank and introduce a new currency, the euro. If plans go according to schedule, the European System of Central Banks will assume responsibility for monetary policy on January 1, 1999. What will make this institution unique is that it will be a central bank without a country.

Within nations, central banks are public or quasi-public institutions that perform a variety of financial services for the state and for private financial organizations. Central banks can facilitate government debt placement, disburse currency to the public through the banking system, and maintain the government's checking account. They also provide clearing and settlement for private firms that participate in the payments system. More important, central banks create their country's monetary standard of value and give the financial system the liquidity it needs to absorb adverse shocks.

Does the credit quality of a central bank's assets matter? Well, yes! First, if for no other reason, the government ordinarily receives net revenue from its central bank, and poor asset quality may diminish earnings. Second, lower asset quality may render the central bank's portfolio less liquid, leading to flexibility problems should it need to contract its balance sheet. But the principal reason to care is that asset quality gives government and private financial institutions an incentive to be concerned about their own credit quality, since it is their debt that the central bank would consider purchasing. To ensure credibility, a central bank must be designed so that it is restricted to holding assets of impeccable quality.

The European System of Central Banks (ESCB) will consist of a new European Central Bank (ECB) located in Frankfurt and the existing National Central Banks (NCBs). Monetary policy will be set by the ECB, but carried out on a decentralized basis by the NCBs. For our purposes, what is relevant about the arrangement is that the ESCB's security portfolio will contain the debt obligations of the constituent sovereign nations and perhaps also of other entities (such as credit institutions) headquartered in those nations. The ESCB will conduct both its monetary

policy and liquidity-enhancing operations by taking these debt obligations onto its books. Accordingly, the euro itself is ultimately backed by the credit of the EMU nations.

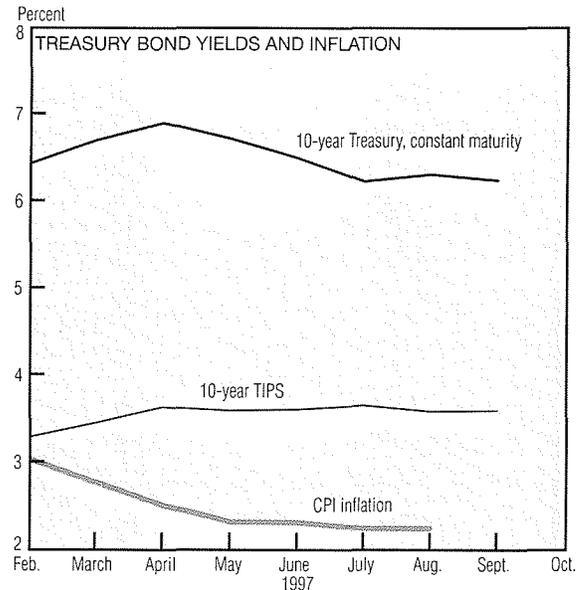
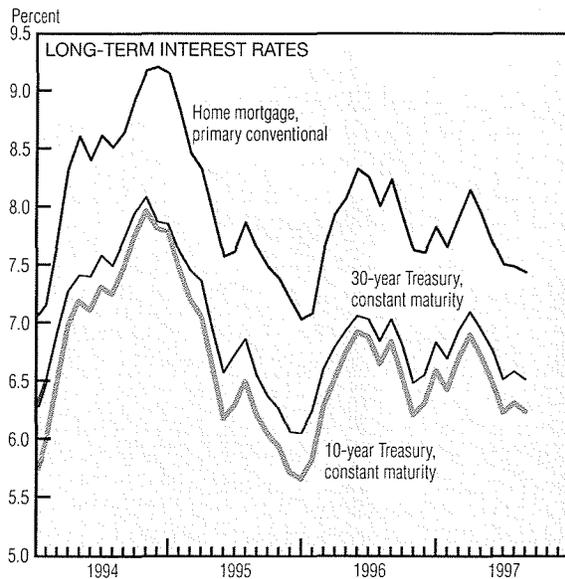
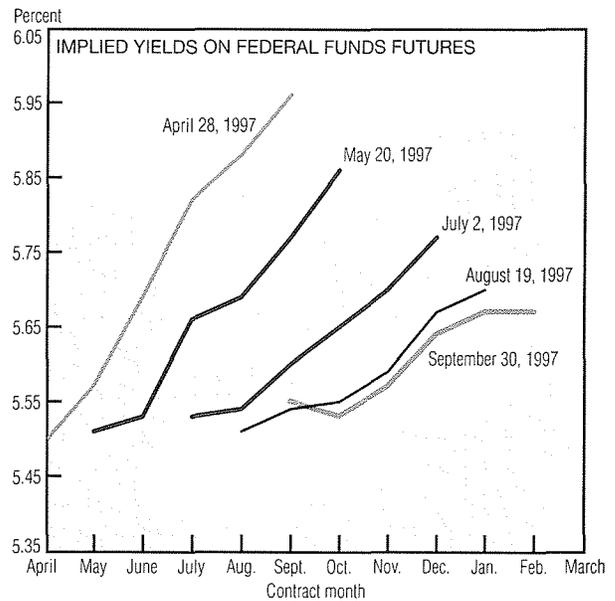
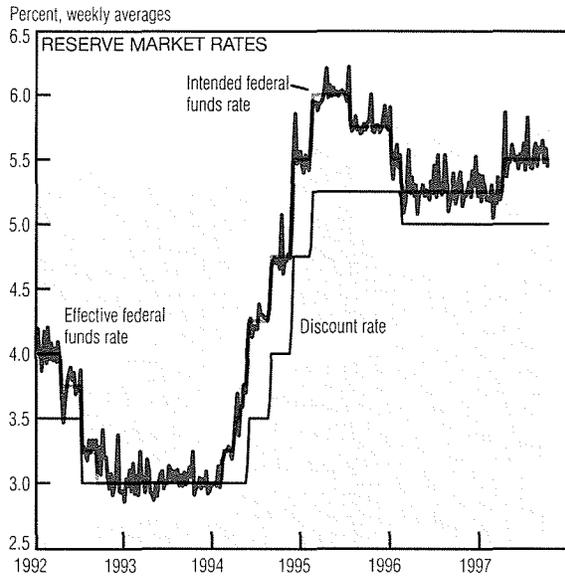
In the United States, the Federal Reserve holds nearly all of its assets in the form of U.S. government obligations—about \$400 billion. Hypothetically, suppose that the federal government had little or no debt outstanding. Then the Federal Reserve would have to hold other securities in its portfolio, most likely the obligations of state, and possibly municipal, governments. Should the Fed regard the debt of various state and municipal governments as equally credit-worthy? A constant worry, of course, is that the central bank could be used as a back-door device for channeling credit to "preferred" interest groups—unless the bank were legally bound to reject poor quality assets.

There is a possibility of adverse selection in open-market operations. Suppose the ESCB announced its willingness to purchase and then resell securities in the amount of 1 billion euros at a rate of 4%. Wouldn't it receive offers of the poorer quality assets from dealers before the better quality instruments were offered? Will the ECB allow the NCBs to accept all eligible securities on an equal basis, or will they discount for quality? There are obvious political issues here.

Interest rates vary among the EMU countries today, even in real terms, reflecting differences in such factors as tax policies, regulations, and saving rates. Although the participating nations have converged their deficit/output ratios around the 3% Maastricht target, the ratios still vary widely. The diversity of these fiscal positions, together with many well-publicized structural economic problems in Europe (costly welfare and agricultural support programs, to name just two), further challenge the ability of EMU governments to harmonize their economic and fiscal conditions.

Establishing a supranational central bank, the ESCB, creates an interesting, novel experience. Sovereign states relinquish their ability to issue non-interest-bearing claims on their governments—money—so they will be under even more pressure to manage their fiscal obligations prudently. Under the worst of circumstances, the ESCB may feel severe pressure to use its liquidity or monetary policy to address problems for which it is not suited. Under better circumstances, however, the ESCB can play a positive role in easing the structural changes that will be required of European nations in the years ahead.

# Monetary Policy



SOURCES: Board of Governors of the Federal Reserve System; U.S. Department of Labor, Bureau of Labor Statistics; Bloomberg information service; and the Chicago Board of Trade.

The Federal Open Market Committee (FOMC) decided at its September 30 meeting to let the federal funds rate stand at 5.5%, marking six months since the rate was last altered. This inaction came as no surprise to the financial markets, which had widely anticipated the decision. The Committee will reconvene on November 12.

Implied yields on federal funds futures have been flattening throughout the year as expectations for future increases in the funds rate

have been pushed out. Robust economic growth, coupled with continued low inflation and virtually no sign of any future acceleration, has significantly reduced the need for the FOMC to act. The market is not expecting the FOMC to change the funds rate in the near future.

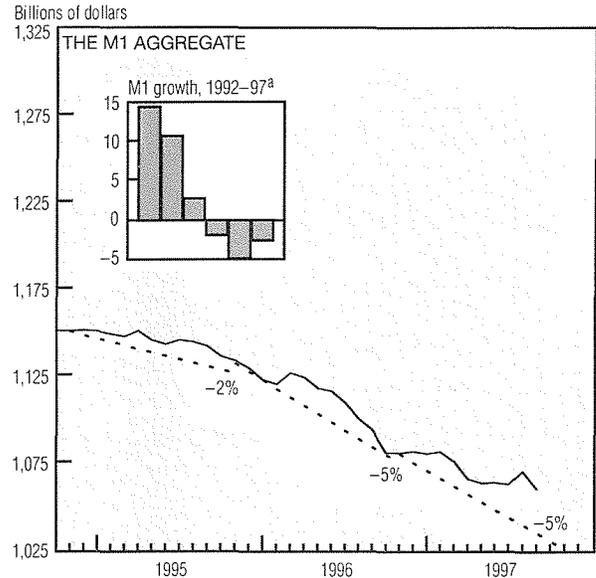
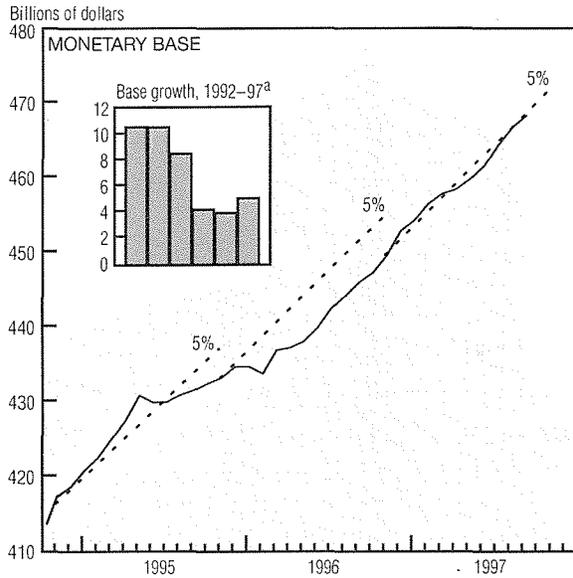
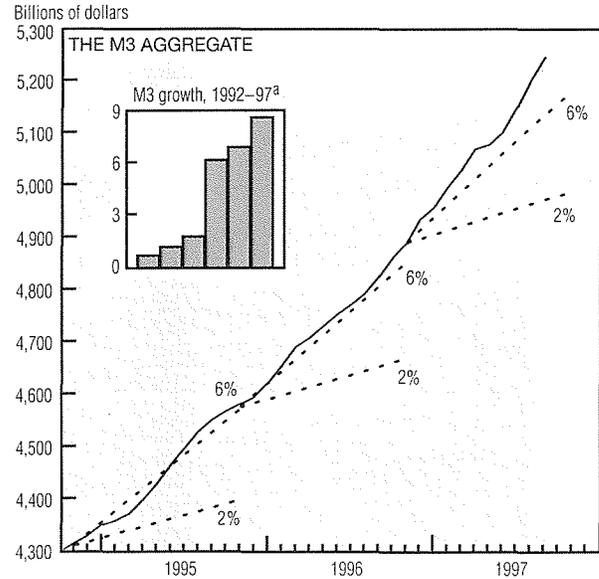
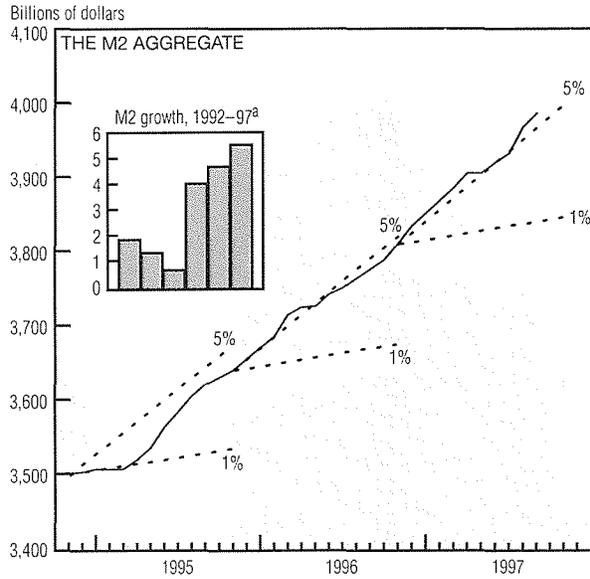
Long-term interest rates fell slightly in September, continuing the downward trend that began in April. The 30-year Treasury constant maturity dropped seven basis points to 6.51%, home mortgage rates fell five

basis points to 7.43%, and the 10-year Treasury moved down seven basis points to 6.23%.

Treasury Inflation-Protection Securities (TIPS) have been trading since late January 1997. Their average yield for the month of September was 3.6%, up 30 basis points from February. In theory, the spread between TIPS and traditional Treasury securities (currently 2.7%) should give some indication of the market's expectations for future inflation.

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# Monetary Policy (cont.)



a. Growth rates are percentage rates calculated on a fourth-quarter over fourth-quarter basis. Annualized growth rate for 1997 is calculated on an estimated September over 1996:IVQ basis.

NOTE: All data are seasonally adjusted. Last plot is estimated for September 1997. For M2 and M3, dotted lines are FOMC-determined provisional ranges. For the monetary base and M1, dotted lines represent growth rates and are for reference only.

SOURCE: Board of Governors of the Federal Reserve System.

However, the market for TIPS is not yet fully developed, and liquidity remains an issue. Investors generally require additional compensation for the extra risk they undertake when markets are less liquid, which affects an investment's yield. Hence, the TIPS/Treasury spread probably embodies more than just an expectation about future inflation, and investors should be cautious when attempting to use it to gauge such expectations.

M2 continues to expand at a rapid

pace, exceeding the upper bound of its FOMC-determined provisional range set last July. Through August, the aggregate grew at a 5.5% annual rate, and preliminary numbers for the first half of September suggest that it will maintain that pace through the end of the month.

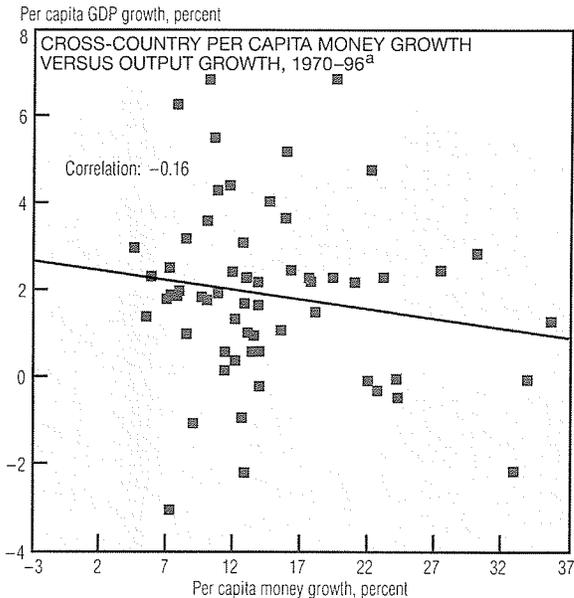
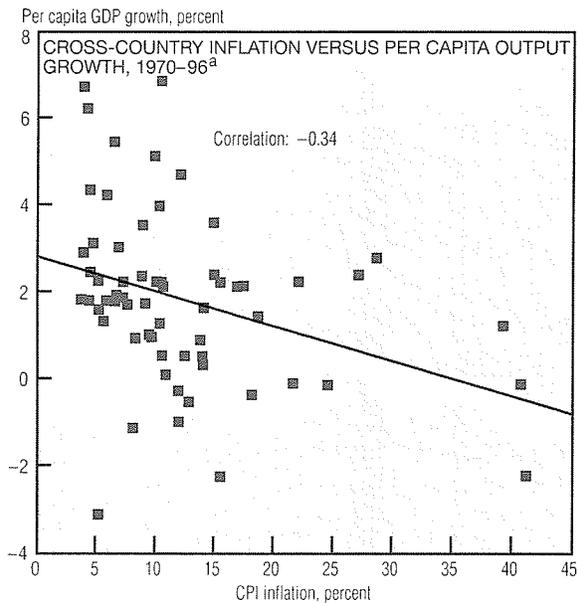
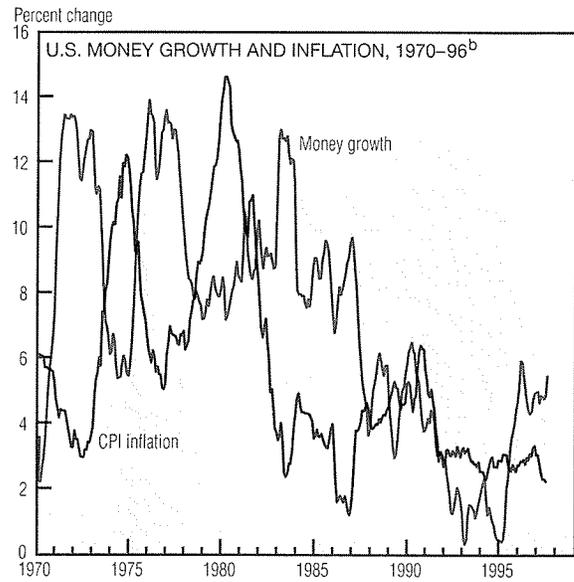
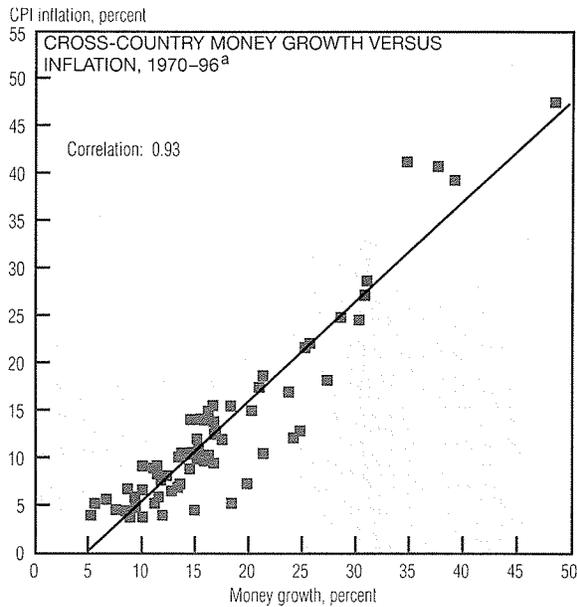
The M3 aggregate accelerated again in August, to an 8.4% annual rate. This is well above its specified range, and also above the growth rate of M2. The surge is attributable in part to robust demand for com-

mercial and industrial loans financed with negotiable CDs, which are included in M3 but not in M2.

The monetary base, a narrower measure of money that includes currency held by the public plus bank reserves, expanded at a 5% rate in August. The primary contributor to base growth in recent years has been its currency component. Foreigners, rather than U.S. residents, are responsible for most of the growth in currency.

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## Monetary Policy (cont.)



a. Average annual percent change.

b. 12-month percent change. Last plot is for August 1997.

NOTE: The sample includes 63 countries.

SOURCES: U.S. Department of Labor, Bureau of Labor Statistics; Board of Governors of the Federal Reserve System; and International Monetary Fund, *International Financial Statistics*.

M1, another narrow measure of money, fell 1.4% in August, reflecting the continued proliferation of sweep accounts, which allow banks to “sweep” money from reservable to nonreservable accounts in order to economize on their reserves.

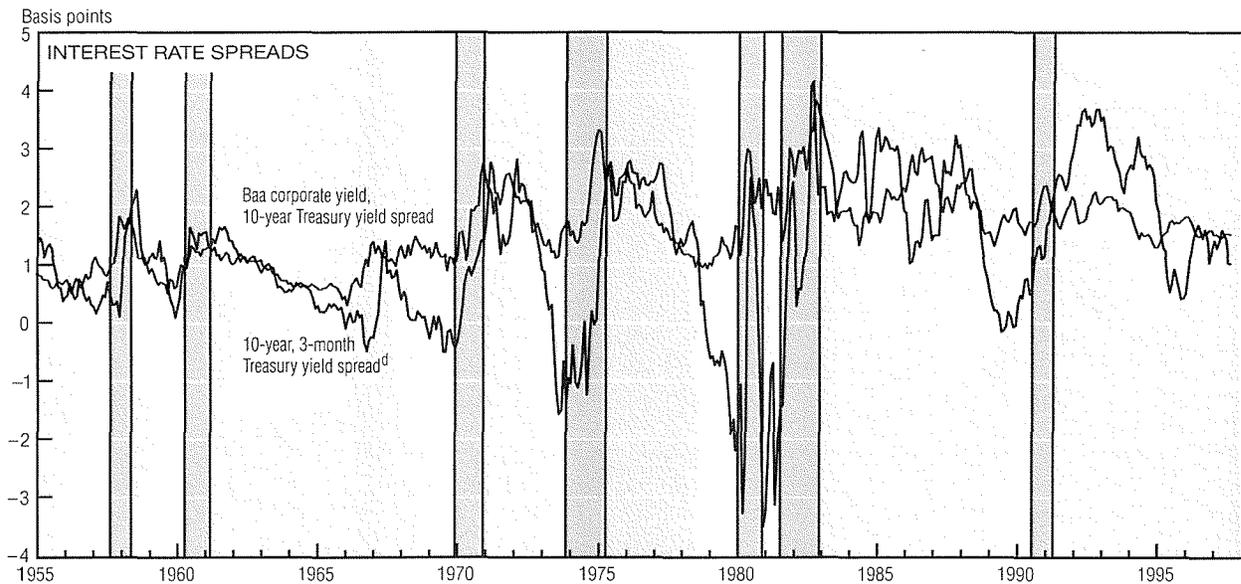
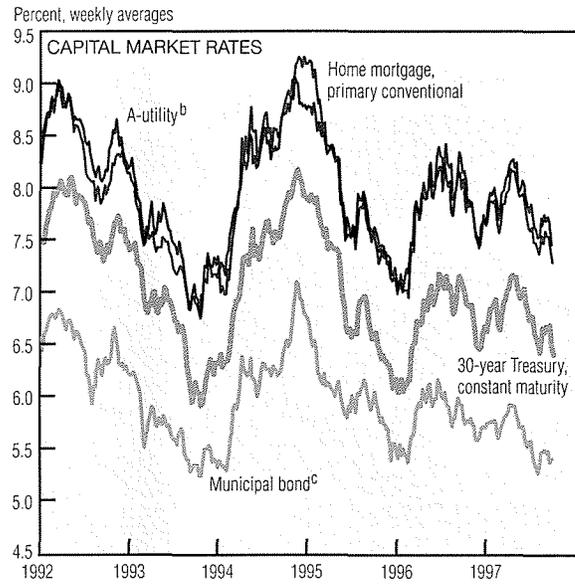
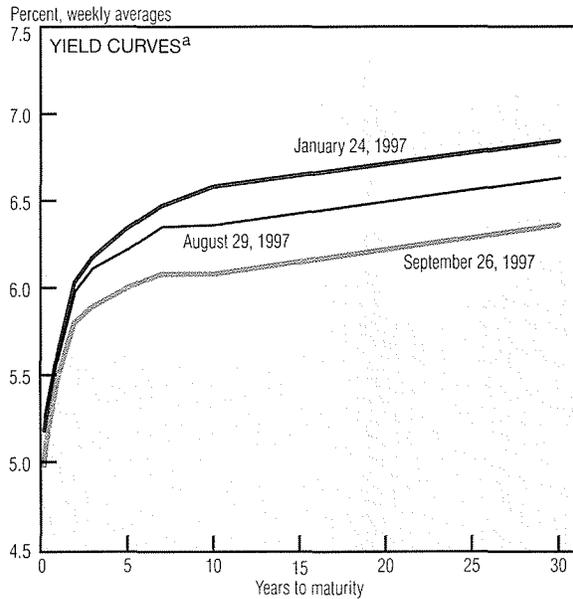
Why do economists look closely at money growth figures? Over long periods, there is a strong positive relationship between money growth and inflation. This connection can be clearly seen in the charts above,

which compare average growth and inflation rates across 63 countries over the last two and a half decades. Note that countries with high rates of money growth have almost equally high inflation rates. In the U.S., the relationship is less precise, but still clear: Rapid money growth preceded periods of accelerating inflation in the 1970s, and slower money growth has accompanied our more recent moderate inflation rates.

The inflation consequences of

rapid money growth might be more palatable if the pace of real output also quickened. This is not the case, however. To the extent that any long-term relationship exists between money and per capita output, it is negative. Countries with higher money growth between 1970 and 1996 tended to experience lower output growth. A similarly weak, but negative, correlation between inflation and per capita output growth reinforces this conclusion.

# Interest Rates



a. All instruments are constant-maturity series.  
 b. Estimate of the yield on a recently offered, A-rated utility bond with a maturity of 30 years and call protection of five years.  
 c. Bond Buyer Index, general obligation, 20 years to maturity, mixed quality.  
 d. Three-month instrument is quoted from the secondary market on a yield basis; 10-year instrument is a constant-maturity series.  
 NOTE: Shaded areas indicate recessions.  
 SOURCE: Board of Governors of the Federal Reserve System.

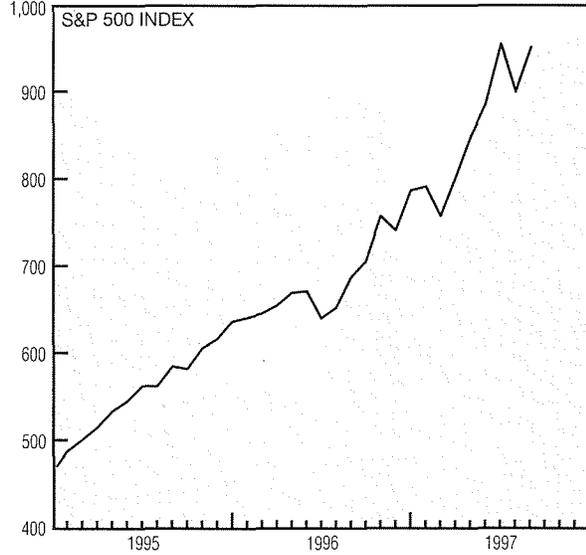
In September, the yield curve on government securities moved noticeably lower (about 20 basis points), but retained its general shape. The weekly average of the 3-month constant-maturity series moved below 5%. The 3-year, 3-month spread moved from 85 basis points to 91, while the other closely watched spread, the 10-year, 3-month, held steady at 110 basis points. Longer-term capital market rates also headed down, returning

to the low levels seen last December, and spreads were little changed. Two important and complementary indicators of the economy's direction are the spread between the 10-year and 3-month Treasuries, a *term spread*, and the spread between Baa-rated corporate bonds and the 10-year Treasury, a *risk spread*. The common wisdom is that term spreads predict future economic activity, signaling recessions by inverting. The risk spread serves as a

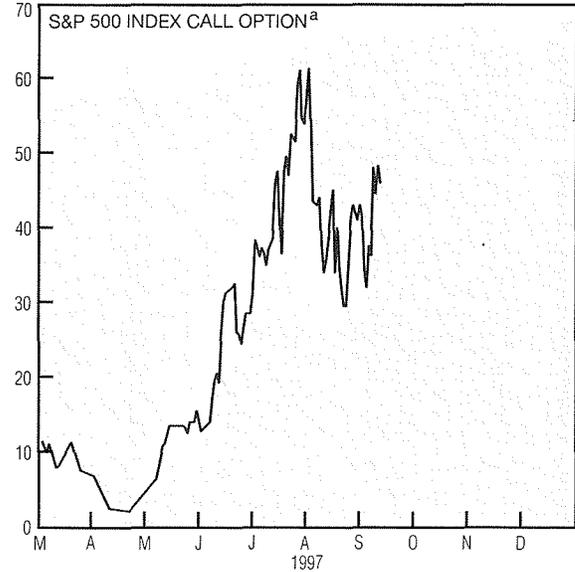
more contemporaneous indicator, since corporate bonds presumably become riskier than government bonds as the economy worsens. Certainly, these connections are not precise: No recession materialized until long after the term-spread inversion of 1966, and risk spreads in the 1980s often exceeded recession levels of even the 1950s and 1960s. Both types of spreads currently indicate a healthy economy—now and in the immediate future.

# Stock Market Volatility

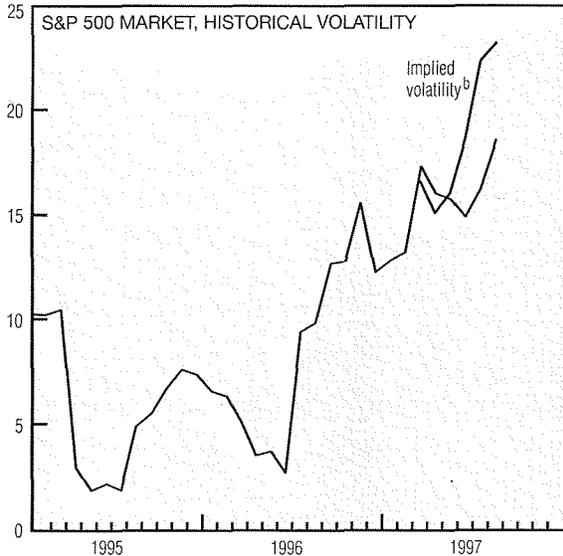
Capitalization-weighted index of 500 stocks



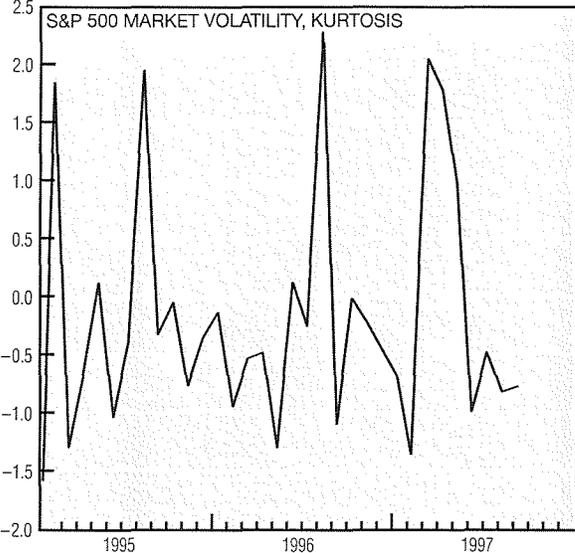
Value of option



Percent



Level



a. For December 1997 at a strike price of 950.

b. For the S&amp;P 500 Index call option for December 1997 at a strike price of 950.

SOURCE: Bloomberg information service.

Although the stock market has risen sharply over the last three years, a casual examination indicates a bumpier path since the middle of 1996. A more structured approach looks at the standard deviation of the index, which shows a dramatic upturn starting in mid-1996 and continuing through 1997. The standard deviation, a measure of the size of market fluctuations, has increased by a factor of 10 since May 1995.

A more forward-looking approach to analyzing market volatil-

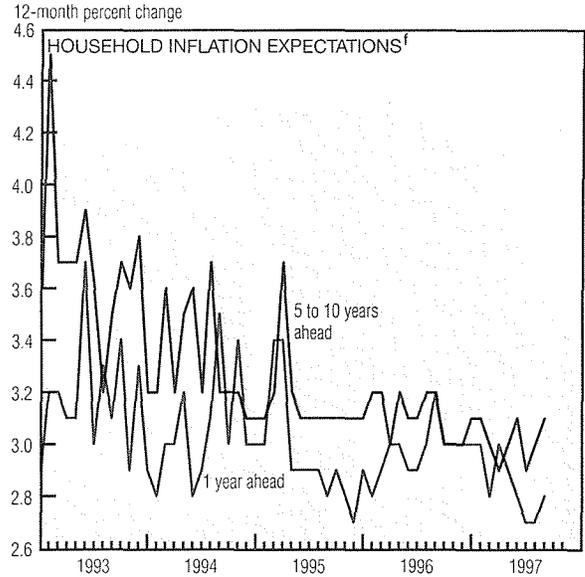
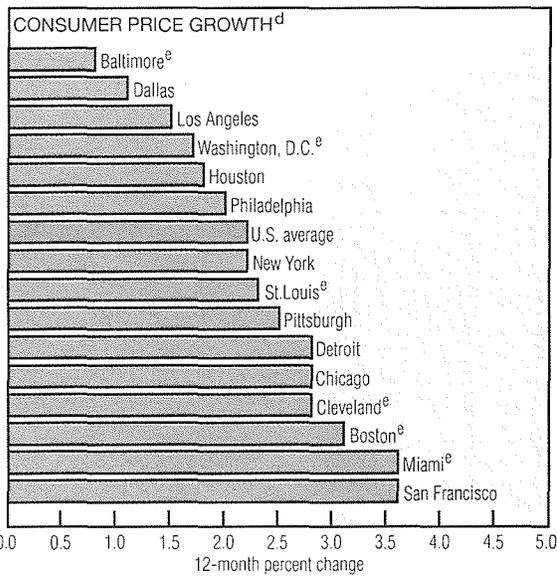
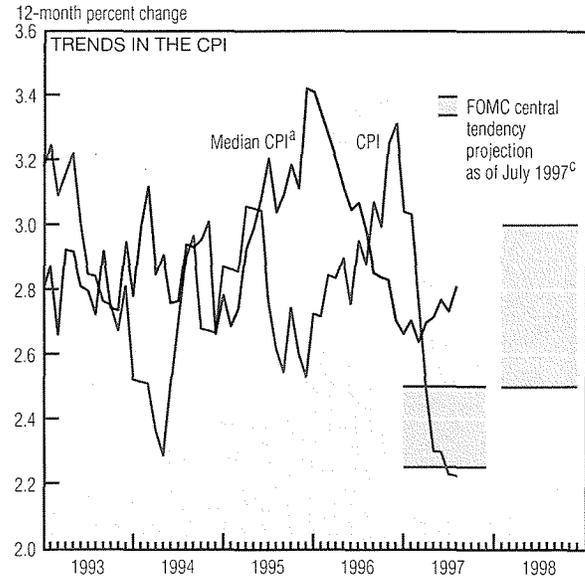
ity uses traded options. Call options, which give their owner the right (but not the obligation) to buy stock at a predetermined price, are particularly sensitive to volatility because it affects the likelihood that the option will expire "in the money"; that is, with the stock price above the strike price (the price at which the owner may buy the stock). For any given option, there is a volatility that will make the observed option price correct, termed the implied volatility. It too has generally been increasing in 1997, confirming the more

backward-looking historical pattern.

Another useful measure of volatility is stock market kurtosis. A high kurtosis level means a greater probability of extreme movements—both jumps and crashes. This is clearly reflected in the large price movements of early 1997, but the market seems to have settled down since then. Coupled with the increased standard deviation, lower kurtosis implies a more variable market, but one less likely to experience big swings.

# Inflation and Prices

	Annualized percent change, last:				1996 avg.
	1 mo.	7 mo.	12 mo.	5 yr.	
<b>August Price Statistics</b>					
<b>Consumer Prices</b>					
All items	2.3	1.6	2.2	2.7	3.3
Less food and energy	0.7	2.2	2.3	2.8	2.6
Median <sup>a</sup>	2.3	2.9	2.8	2.9	2.7
<b>Producer Prices</b>					
Finished goods	3.7	-2.2	-0.2	1.2	2.9
Less food and energy	0.8	-0.3	0.0	1.1	0.7
<b>Commodity futures prices<sup>b</sup></b>					
	27.3	-0.9	-2.9	3.7	-0.7



a. Calculated by the Federal Reserve Bank of Cleveland.  
 b. As measured by the KR-CRB composite futures index, all commodities. Data reprinted with permission of the Commodity Research Bureau, a Knight-Ridder Business Information Service.  
 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. August 1996 to August 1997, unless otherwise noted.  
 e. July 1996 to July 1997.  
 f. Median expected change in consumer prices as measured by the University of Michigan's Survey of Consumers.  
 SOURCES: U.S. Department of Labor, Bureau of Labor Statistics; the Federal Reserve Bank of Cleveland; the Commodity Research Bureau; and the University of Michigan.

Consumer prices rose at a 2.3% annualized rate in August, a small acceleration from the year-to-date average increase of 1.6% and only a shade higher than the 12-month average of 2.2%. The median CPI, an alternative measure of inflation, also advanced 2.3% in August, below its 12-month trend increase of 2.8%. The Consumer Price Index (CPI) continues to track just under the 1997 central tendency range set by the Federal Open Market Commit-

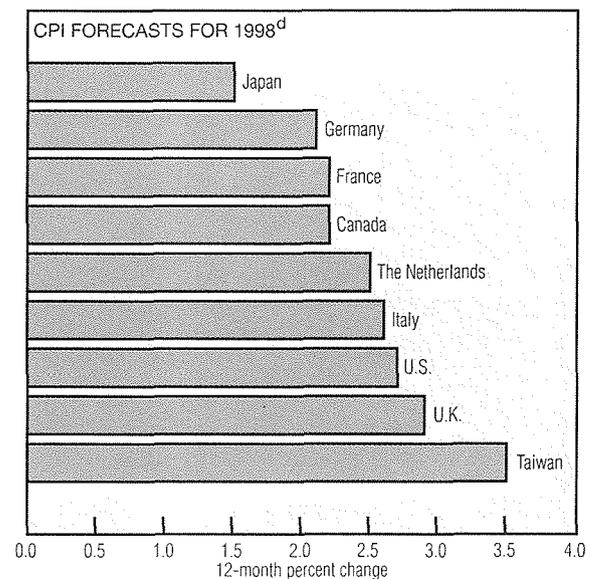
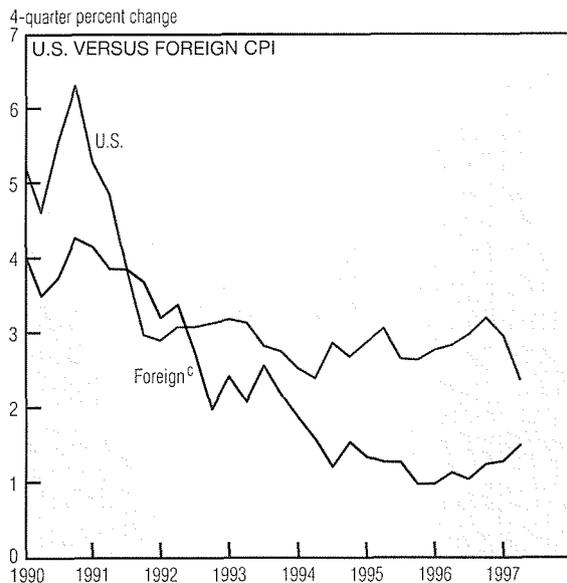
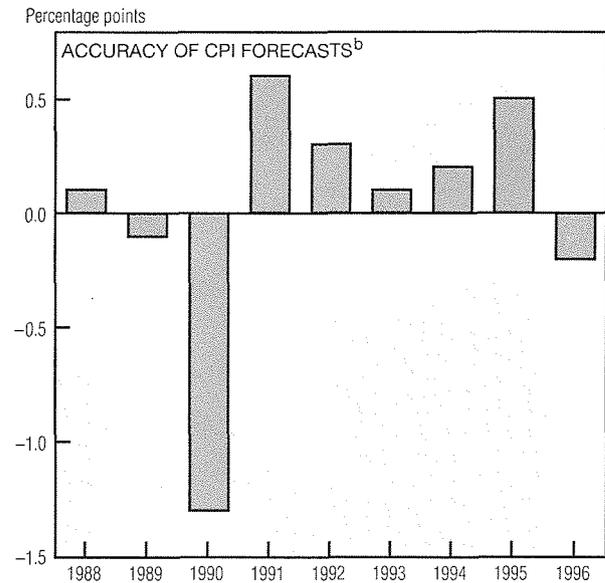
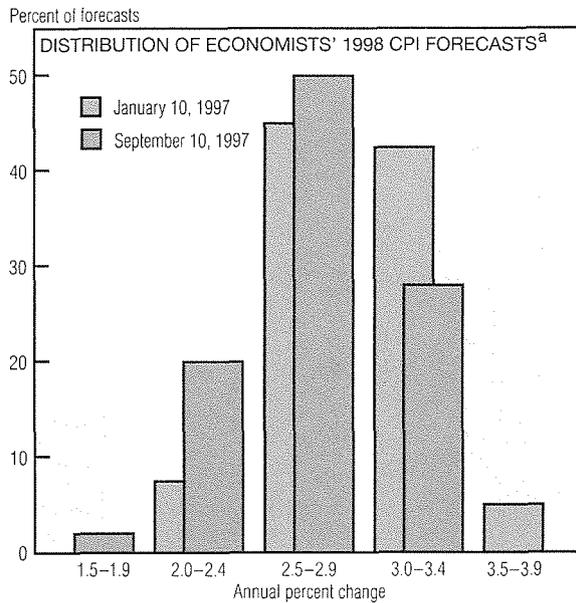
tee (FOMC) last July, and is about half a percentage point below the group's 1998 midpoint.

While consumer prices have risen moderately this year, retail price growth has varied substantially by region. Over the most recent 12-month period, retail price increases averaged a mere 0.8% in Baltimore and 1.1% in Dallas. At the other extreme, Miami and San Francisco residents saw retail prices rise at an average rate of slightly more than 3½%.

According to survey data, households expect the average increase in retail prices to pick up to 2.8% over the next 12 months and to reach slightly more than 3% over the next five to 10 years.

Economists also foresee next year's inflation rate exceeding this year's modest rise. The Blue Chip consensus forecast shows the CPI advancing at a 2.7% pace between this year and next. Still, this is a  
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## Inflation and Prices (cont.)



- a. Blue Chip panel of economists.  
b. Percentage-point deviation, Blue Chip consensus forecast minus actual CPI.  
c. Trade-weighted average.  
d. Consensus forecast of the Blue Chip panel of economists.

SOURCES: U.S. Department of Labor, Bureau of Labor Statistics; International Monetary Fund, *International Financial Statistics*; and *Blue Chip Economic Indicators*, January 10 and September 10, 1997.

much more sanguine outlook than projected at the beginning of the year. In January, nearly half of the economists surveyed believed that the CPI would reach 3% or more in 1998. Less than 30% hold that view today. Moreover, while fewer than 10% of those participating in January's survey predicted that inflation would come in under 2½% next year, more than 20% expect such a slight uptick today.

This year, economists are likely to have overestimated the growth rate of the CPI by at least half a percent-

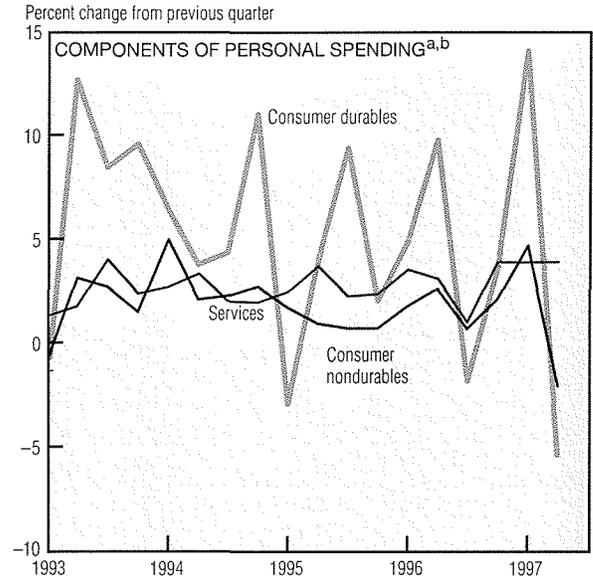
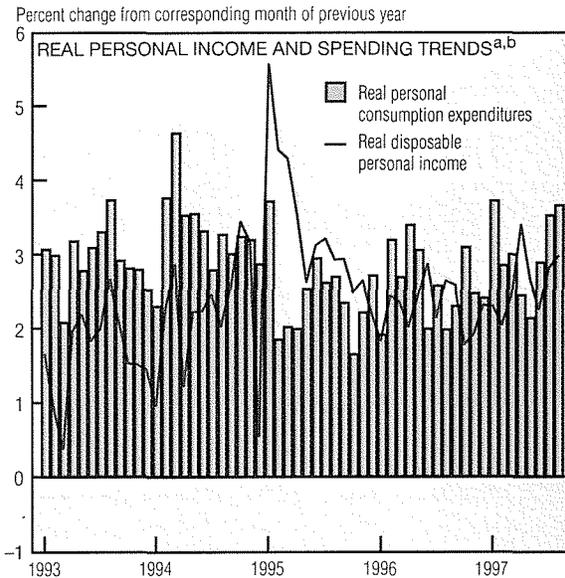
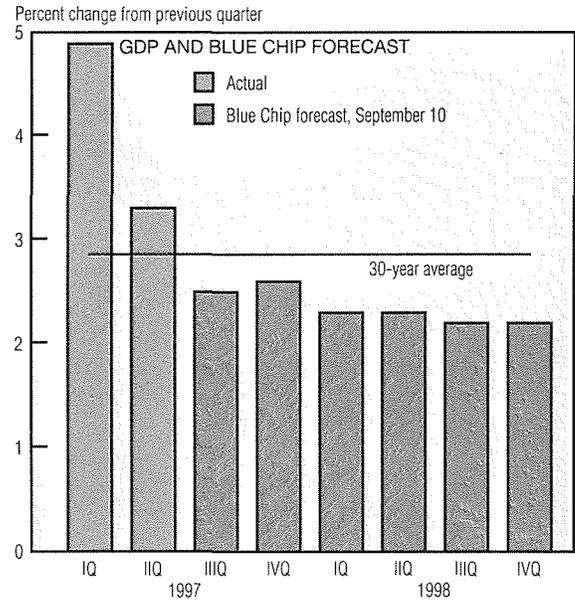
age point, and almost certainly more. In fact, the Blue Chip panelists have been overly pessimistic about the inflation outlook in six of the past seven years, overpredicting the CPI's growth rate by 0.35 percentage point per year. Last year, however, they were overly optimistic about the inflation trend, which was 0.2 percentage point higher than the consensus forecast.

Although the U.S. retail price performance has been favorable relative to both our recent history and expectations, increases have tended to be ½ to 1½ percentage points

higher, on average, than those of our major trading partners. In fact, on a trade-weighted basis, foreign retail prices have risen less than 2% per year since late 1993. Economists predict that the U.S. inflation rate will be somewhat worse than that of our foreign trading partners again in 1998. Of our largest trading partners, only the U.K. (at 2.9%) and Taiwan (3.5%) are expected to post higher retail price increases. Canada, France, Germany, and Japan are all expected to see consumer prices rise less than 2½% next year.

# Economic Activity

	Change, billions of 1992 \$	Percent change, last:	
		Quarter	Four quarters
Real GDP	58.0	3.3	3.4
Consumer spending	11.3	0.9	2.5
Durables	-8.8	-5.4	2.3
Nondurables	-7.8	-2.1	1.3
Services	25.9	3.9	3.1
Business fixed investment	32.4	12.6	7.3
Equipment	32.7	23.0	12.5
Structures	-2.4	-4.8	4.3
Residential investment	4.9	7.4	0.4
Government spending	9.6	3.1	0.4
National defense	5.5	7.4	-4.3
Net exports	-10.3	—	—
Exports	39.8	18.4	13.6
Imports	50.2	20.6	14.5
Change in business inventories	13.9	—	—



a. Chain-weighted data in billions of 1992 dollars.  
 b. Seasonally adjusted annual rate.  
 SOURCES: U.S. Department of Commerce, Bureau of Economic Analysis; and *Blue Chip Economic Indicators*, September 10, 1997.

The Commerce Department's final estimate places second-quarter real GDP growth at 3.3%, down a bit from the preliminary estimate of 3.6%. This downward revision primarily reflects adjustments to personal consumption expenditures and net exports.

Overall, the U.S. economy remains strong, and economists participating in the Blue Chip survey now expect real GDP for 1997 to come in at about 3.6%—the fastest clip since 1988. Many analysts believe that the

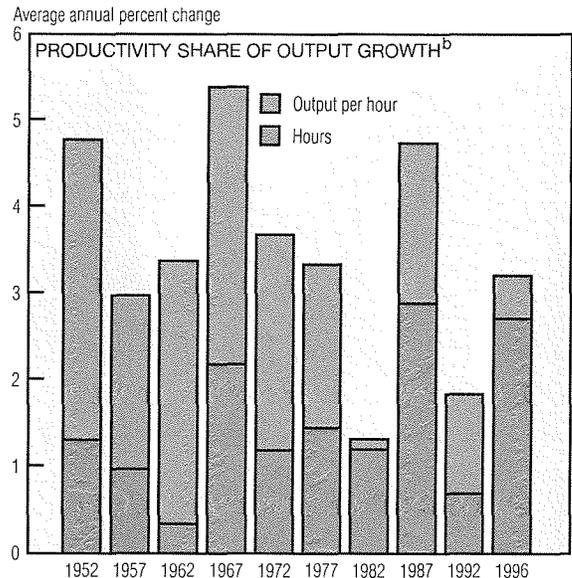
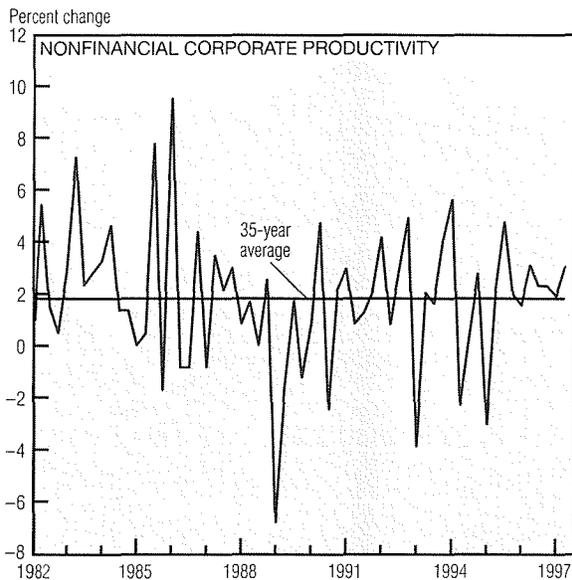
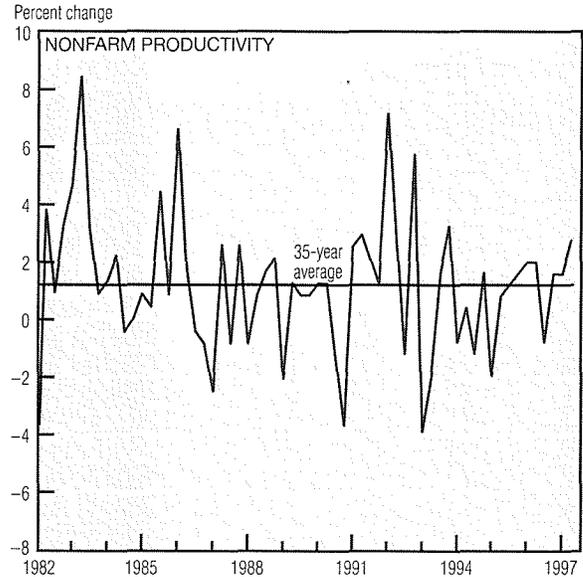
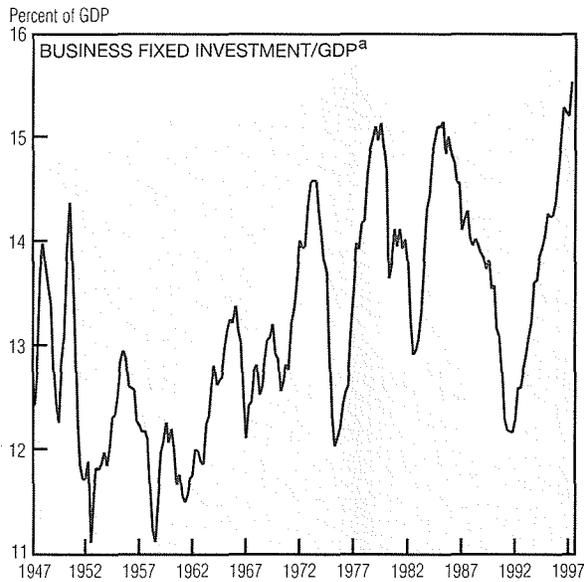
U.S. currently has the potential, in terms of resource availability and productivity trends, to sustain growth of about 2%, or slightly faster. Consequently, most output projections tend to revert toward this rate over the forecast horizon. The economy's strong advance since 1996:IVQ, however, has led many to suspect that current estimates of potential growth are too low.

What happens throughout the remainder of this year will depend heavily on inventories and consumer spending. Although inventory-to-

sales ratios are not out of line at present, most economists expect the rate of inventory accumulation to slow. The prognosis for consumers remains favorable. Although consumer spending stalled in the second quarter, the year-over-year pace has remained brisk. The recent decline in nondurables spending may be a bit troubling, but sharp swings in outlays for durable goods are not uncommon. A 16.5% drop-off in automobile purchases led the decline in consumer durables in 1997:IIQ.

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# Economic Activity (cont.)



a. 1997 data are for the first two quarters.  
 b. For the five-year period ended as shown.  
 NOTE: All data are seasonally adjusted.

SOURCES: U.S. Department of Labor, Bureau of Labor Statistics; and U.S. Department of Commerce, Bureau of Economic Analysis.

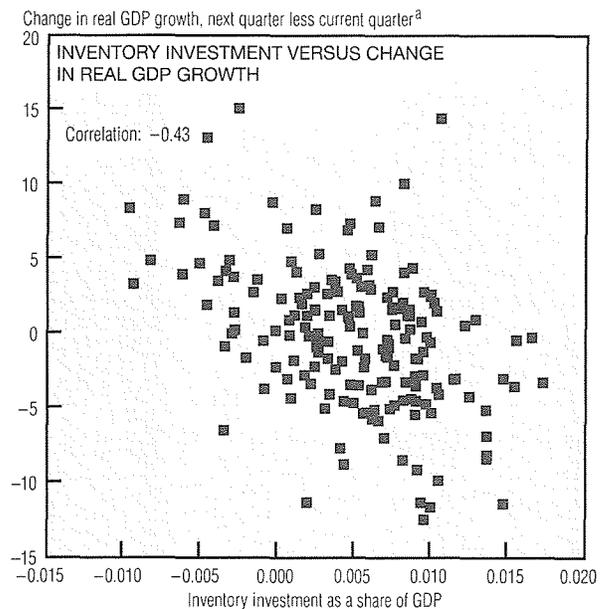
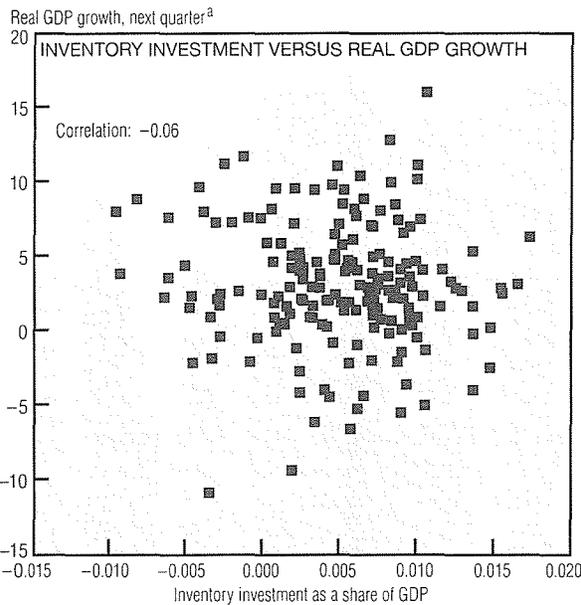
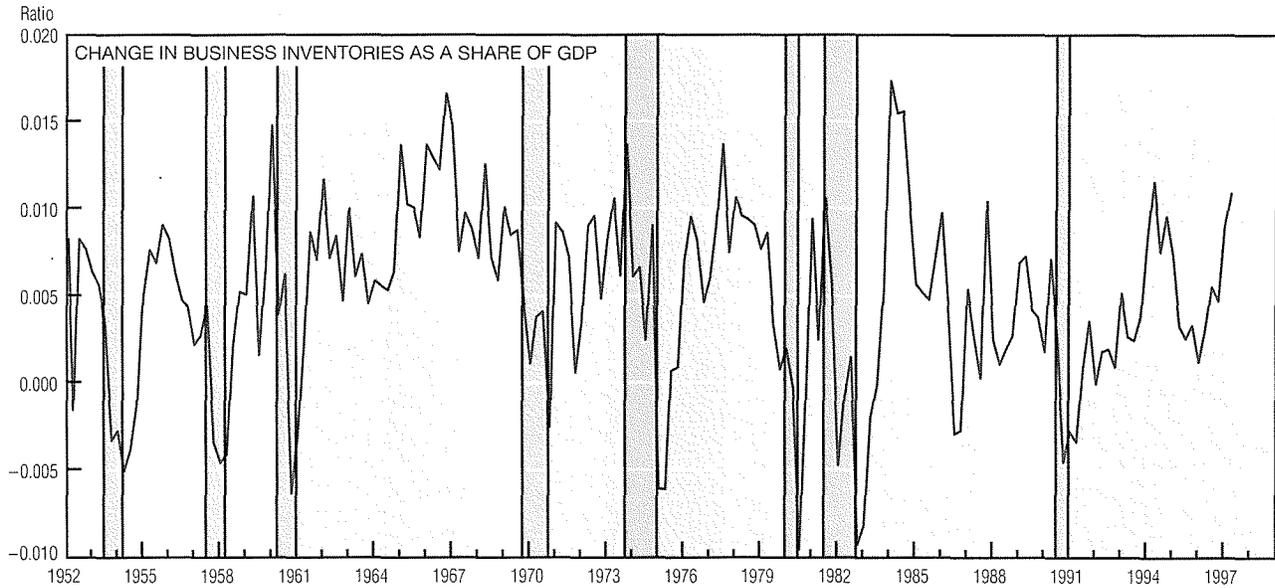
The nation continued to experience a strong capital spending boom in the second quarter. Since 1991, business fixed investment has risen from 12.3% of GDP to 15.5%. This rapid expansion is particularly welcome after the torpid pace of capital accumulation in the 1980s. Increases in capital investment should enhance labor productivity, defined as the output that each worker can produce in a given period. Over the long term, the pace

of labor productivity determines the rate at which workers' real compensation grows. Moreover, prior to the mid-1970s, productivity growth accounted for the largest share of overall output growth.

Nonfarm productivity increased 2.7% in 1997:IIQ, the biggest advance since 1993. Since 1991, however, it has grown just 1.2%, below the 1.5% pace of the previous business expansion. Given the strong advances in business fixed invest-

ment, the generally slow pace of productivity growth has led many to question the accuracy of the productivity data. Many suspect that the numbers understate the contribution of services to output growth. An alternative measure that is not so susceptible to services bias—nonfinancial corporate productivity—rose 3.2% in the second quarter and has averaged 1.9% over the current expansion, roughly the same pace as in the previous upturn.

# Inventories



a. Annualized percent change.

NOTE: Shaded areas indicate recessions.

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

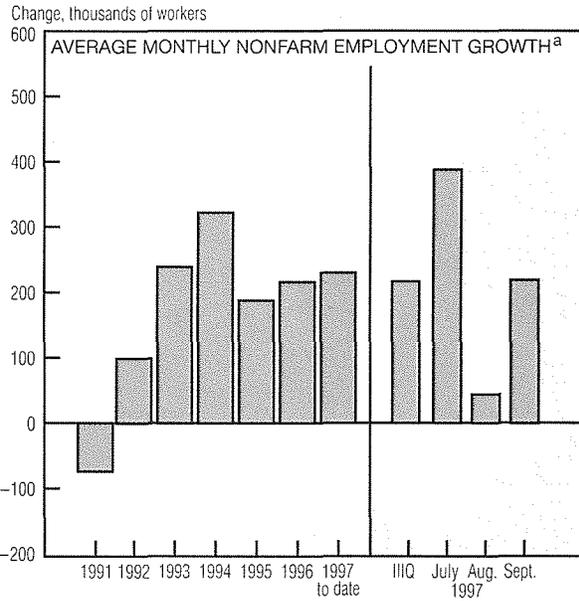
During the first half of 1997, real GDP rose by \$142 billion, translating into a 4.1% annual growth rate. Over this same period, real investment in business inventories totaled \$141 billion, almost equaling the rise in real output. Many analysts have characterized this rate of inventory investment as excessive or unsustainable, and have consequently predicted a marked slowdown in real output growth for the remainder of the year.

Looking back at the pattern of inventory investment over the past 45 years, one finds that its recent behavior is not unusual. Inventory investment was roughly 1% of GDP in each of the first two quarters of 1997, well above its long-run average of about 0.5% but well within its historical range during economic expansions.

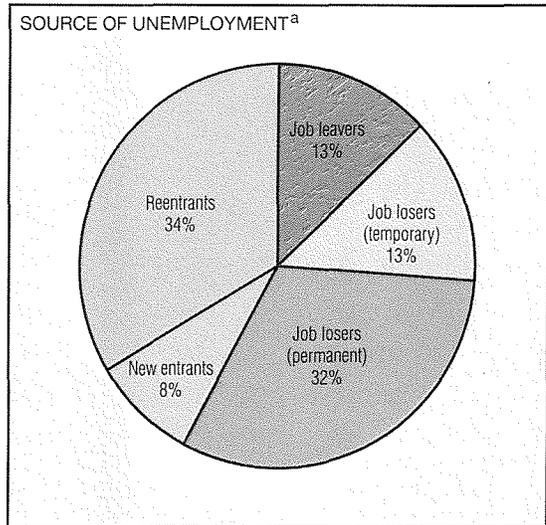
A high level of inventory investment is not, by itself, a clear predictor of either fast or slow output growth. However, it is generally as-

sociated with a slowdown in output growth from its current rate. This association partly reflects the fact that high levels of inventory investment are related to high rates of GDP growth in the same quarter. Thus, a slowdown of output growth to rates closer to its historical average would produce the negative association. From experiences in the mid-1980s and in 1994, we see that strong inventory investment need not be a precursor to recession.

# Labor Markets



	Average monthly change (thousands of employees)				
	1996	1997			
	Year	IIIQ	July	Aug.	Sept.
Payroll employment	212	213	384	40	215
Goods-producing	19	14	-1	58	-14
Manufacturing	-5	9	-4	48	-16
Service-producing	192	199	385	-18	229
TPU <sup>b</sup>	9	6	9	-159	167
Services	99	92	162	15	98
Business services	33	20	37	-22	46
Retail trade	48	45	80	32	23
Government	14	26	80	76	-78
Local	19	22	54	78	-65
Household employment	232	117	344	96	-89
Average for period					
Civilian unemployment rate (%)	5.4	4.9	4.8	4.9	4.9
Participation rate (%)	66.8	67.1	67.1	67.1	67.0



a. Seasonally adjusted.  
 b. Transportation and public utilities.  
 c. Vertical line indicates break in data series due to survey redesign.  
 SOURCE: U.S. Department of Labor, Bureau of Labor Statistics.

Labor market growth in September appeared to recover from August's sluggish pace, with nonfarm payroll employment rising 215,000 nationwide. However, when one factors in the return to work of the former UPS strikers, the estimate is closer to 53,000—much lower than expected. Indeed, September was characterized by weakness in a variety of industries, eclipsing the strike effects and the difficulty of measuring education employment now that many districts have switched to year-round schooling.

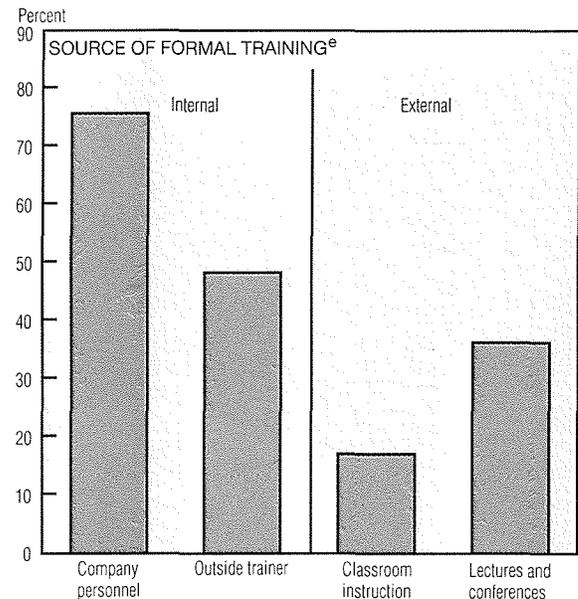
The federal government trimmed 9,000 jobs last month, mainly postal workers hired during the strike. Manufacturing payrolls also shrank (-16,000), primarily because of layoffs in the transportation equipment industry (-20,000). This reverses the 30,000 gain seen in August. Another loser was local education (a subset of local government), which pared 47,000 jobs after adding 63,000 a month before. This wide swing largely reflects seasonal variations in the data, not real effects.

The unemployment rate stood at 4.9% in September, and the employment-to-population ratio fell slightly, to 63.7%. Of those who are currently jobless, 55% are new entrants, reentrants, or workers who left their jobs voluntarily. This implies that Americans still believe job opportunities are plentiful. Average hourly earnings were up four cents—3.6% above last year's level—another indicator that some workers are realizing solid gains.

# Human Capital Investment

Job skills	Formal	Informal	General skills	Formal	Informal
Management	28.4	32.3	Basic	6.7	2.9
Professional and technical	30.9	27.7	Occupational safety	58.0	47.7
Computer procedures, programming, and software	38.4	54.3	Communications, employee development, and quality training	40.2	32.6
Clerical and administrative support	18.7	30.1	Other	3.4	0.8
Sales and customer relations	26.6	30.9			
Service-related	12.5	14.7			

Industry	Formal	Informal
Construction	195.0	551.6
Manufacturing		
Durable goods	346.5	468.6
Nondurable goods	353.8	238.1
TPU <sup>c</sup>	236.8	234.5
Wholesale trade	149.4	393.1
Retail trade	49.1	414.2
FIRE <sup>d</sup>	235.3	643.6
Services	252.4	465.7



a. At any time prior to the survey.

b. May to October 1995.

c. Transportation and public utilities.

d. Finance, insurance, and real estate.

e. In the 12 months prior to the survey.

NOTE: Employees were surveyed from May to October 1995. Survey covers establishments employing 50 or more persons.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, 1995 Survey of Employer-Provided Training, USDL 96-515, December 1996.

Human capital theory suggests that training, whether formal or on the job, enhances worker productivity and thus leads to higher wages. Training prepares new workers and enhances the skills of existing workers. More U.S. employees now receive computer-related training from their current employer than any other type of instruction. In contrast, fewer than 10% receive

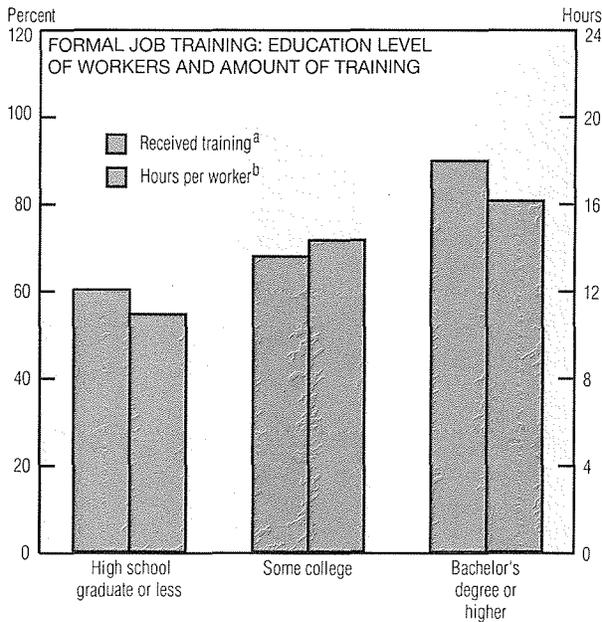
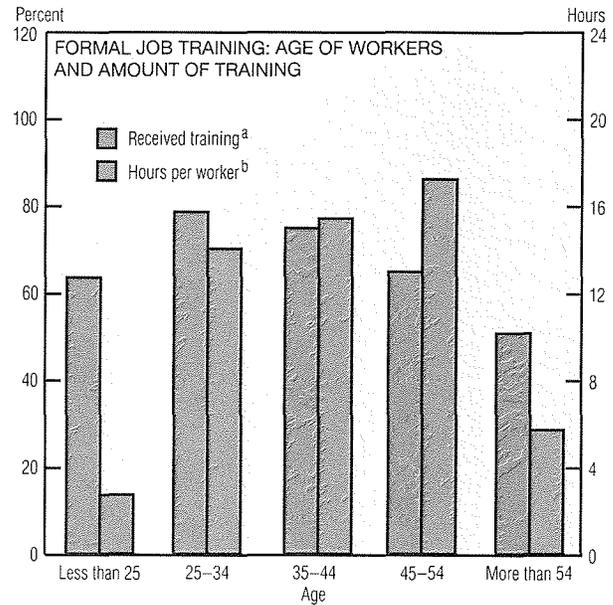
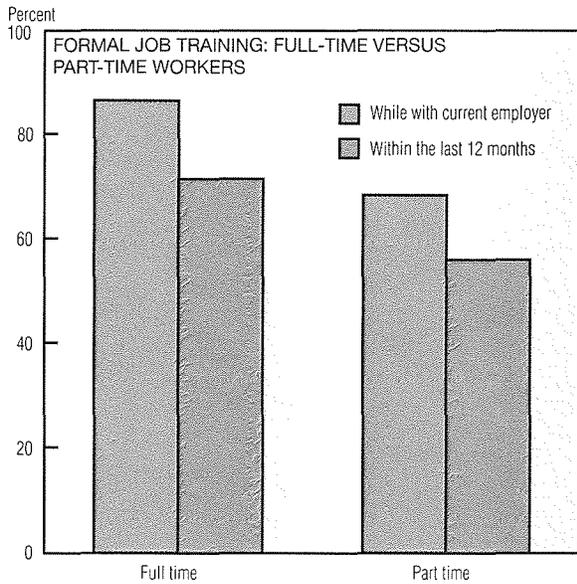
basic skills training, such as elementary reading, writing, and arithmetic.

Training is not without cost, however, in terms of the time that workers would otherwise have spent at their jobs. The value of that time (hourly wage times the number of hours spent in training) varies by industry, with formal training costs per worker the highest in manufacturing and the lowest in retail trade. An ad-

ditional cost consideration is overhead, as nearly 76% of employees receive their formal training from in-house personnel.

Less training for part-time workers is also consistent with human capital theory. Given the greater uncertainty and short-term nature of part-time positions, corporations are less willing to invest in these  
*(continued on next page)*

# Human Capital Investment (cont.)



**Amount of Job Training by Earnings Level<sup>b</sup>**  
 (Hours per employee)

Earnings quartile	Formal	Informal	Total
First	4.1	30.6	34.7
Second	11.6	30.5	42.1
Third	15.9	39.6	55.5
Fourth	22.8	21.1	43.9

a. In the 12 months prior to the survey.  
 b. May to October 1995.

NOTE: Employees were surveyed from May to October 1995. Survey covers establishments employing 50 or more persons.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, 1995 Survey of Employer-Provided Training, USDL 96-515, December 1996.

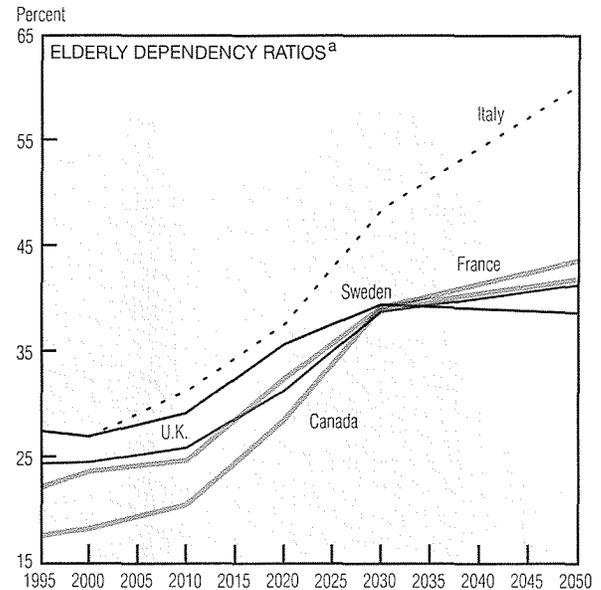
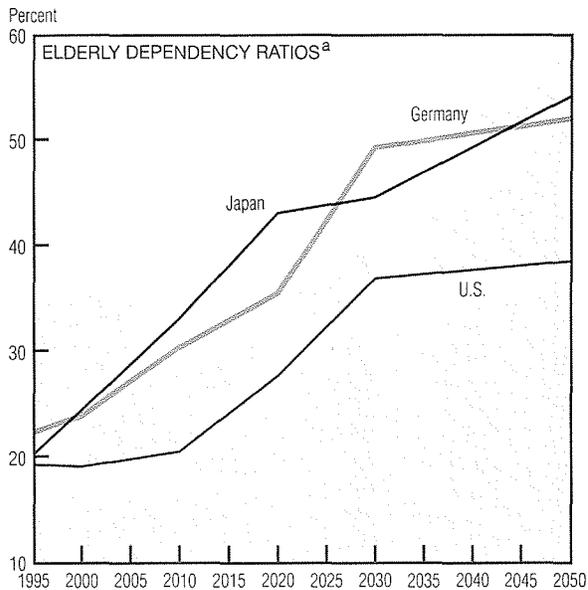
workers because they have a shorter time in which to recoup their costs. Similar patterns emerge when one looks at the demographics of those who receive formal job training. The youngest and oldest employees receive far less training than their middle-aged counterparts. Clearly, the tendency for young people to job-hop and the uncertainty of the new arrangement

cause employers to delay the investment process. Similarly, the fact that older workers are nearing the end of their careers impacts the amount of investment allocated.

In much the same way, the marginal benefit to firms of training a well-educated employee is greater than for training someone with a high school diploma or less. Educated workers already have a knowledge base on which to build;

therefore, money spent on training activities is likely to yield even greater benefits to the employee and the firm. In addition, these workers require more training just to maintain their given skill level.

Training costs are greater in high-wage industries. Not only is the work time forgone more expensive, but the total hours devoted to training are also higher.



#### Normal Retirement Ages and Benefit Accrual Factors

	Retirement age (male/female)	Accrual factors <sup>b</sup>
U.S.	65/65 <sup>c</sup>	— <sup>d</sup>
Japan	60/55	0.75
Germany	65/65	1.50
France	60/60	1.75
Italy	62/57	2.00
U.K.	65/60	0.40
Canada	65/65	0.50
Sweden	65/65	— <sup>e</sup>

#### Benefit Indexation Rules and Generosity

	Benefit indexation	Maximum replacement rate (percent)
U.S.	Prices	41
Japan	Net wages <sup>f</sup>	30
Germany	Net wages <sup>f</sup>	60
France	Prices/gross wages	50
Italy	Prices	80
U.K.	Prices	20
Canada	Prices	25
Sweden	Prices	60

a. Population aged 65 years or over/population aged 15 to 64.

b. Percent of assessed wages per year.

c. Scheduled to increase gradually to 67 beginning in 2003 (for both sexes).

d. Increases as assessed income declines.

e. Declines as number of contribution years increases.

f. Net of income and payroll taxes.

SOURCE: International Monetary Fund, "Aging Populations and Public Pension Schemes," Occasional Paper No. 147, December 1996.

In a pay-as-you-go (PAYGO) public pension program like the U.S. Social Security system, the elderly dependency ratio provides a crucial link between payroll tax rates and benefit levels: An increase implies that lower benefit levels or higher tax rates will be needed to maintain system solvency.

During the next two decades, elderly dependency ratios are projected to increase rapidly in developed countries, almost all of which have PAYGO or partially funded public pension programs. Japan's

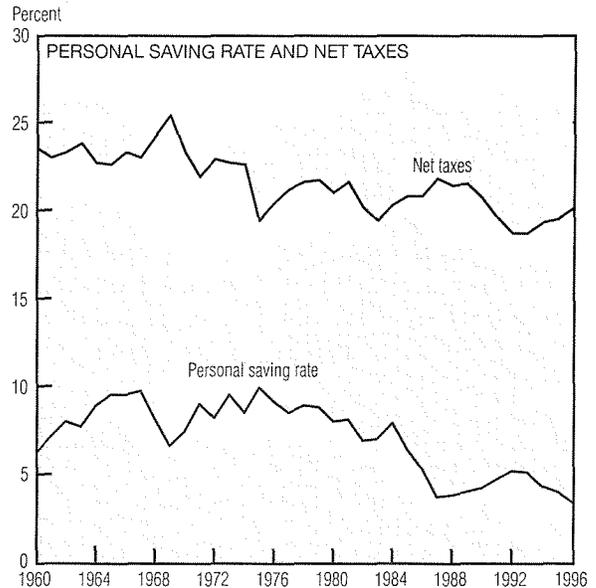
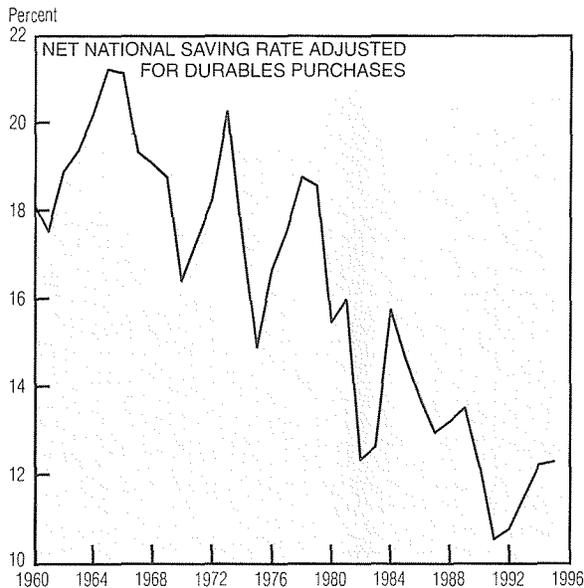
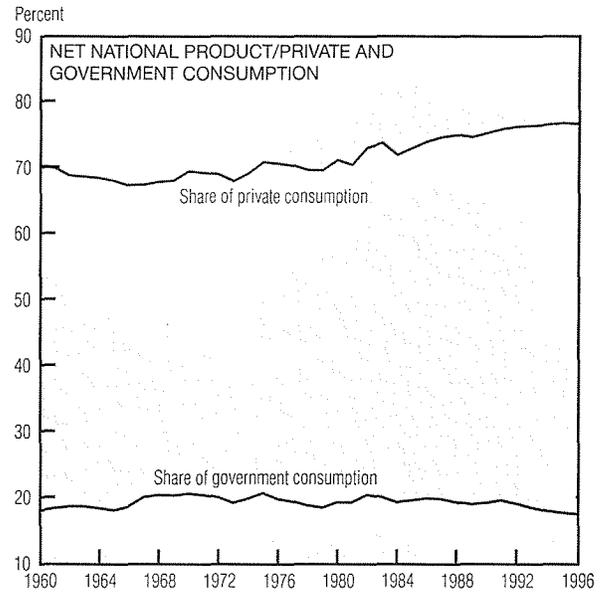
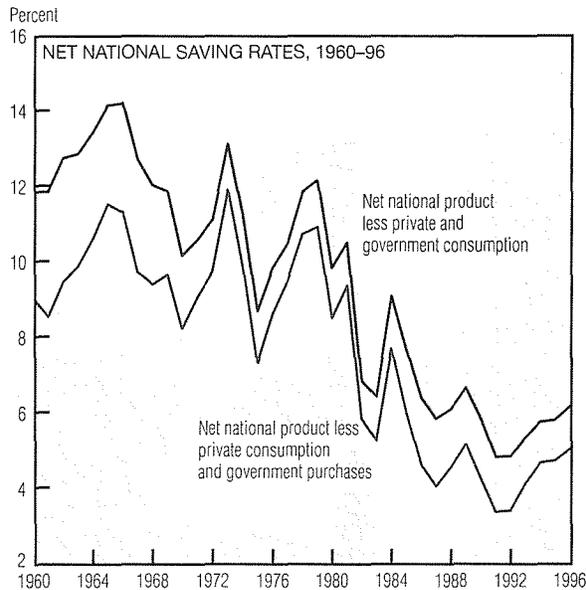
ratio is already rising sharply, while Germany's will begin to spike in the year 2000. The U.S. is not projected to see a major increase until after 2010.

For most of the countries included in the charts, the ratio ends up at about 40% by 2040, an increase of more than 100% from current levels. For Germany and Japan, however, the ratio will exceed 50%, and for Italy, it is projected to reach 60%.

Pressure to reform PAYGO public pension systems will depend on the generosity of the existing programs:

Those offering more generous replacement rates—the fraction of income replaced by benefits—and those having fewer reserves will become bankrupt earlier if no reforms are implemented. Moreover, those whose benefits are wage- rather than price-indexed and those with higher benefit accrual factors will experience more rapid growth in outlays as the population ages. Germany, France, and Italy have the largest replacement rates and the highest benefit accrual factors. These nations are all fully PAYGO.

# National Saving Trends



SOURCE: DRI/McGraw-Hill.

Policymakers have been keeping an eye on the nation's net national saving rate, which has been trending down over the last two and a half decades. The less we save, the less we can invest to ensure future consumption and output growth, or the more we must borrow from abroad to finance investment. Foreign capital inflows will shore up domestic output, but future U.S. consumption may not increase, since much of the extra output will have to be devoted to servicing the

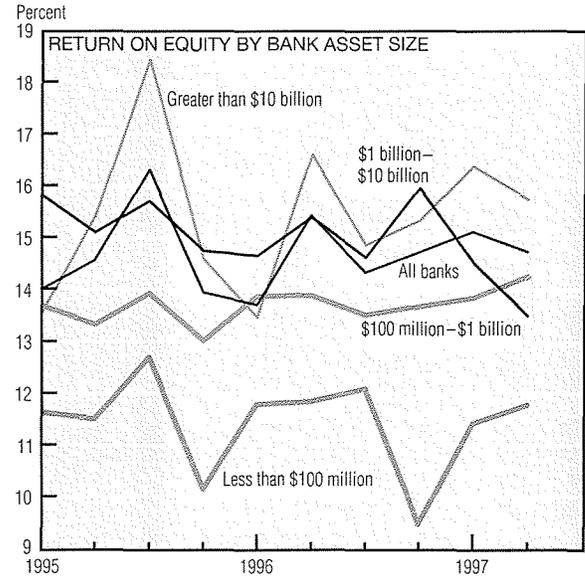
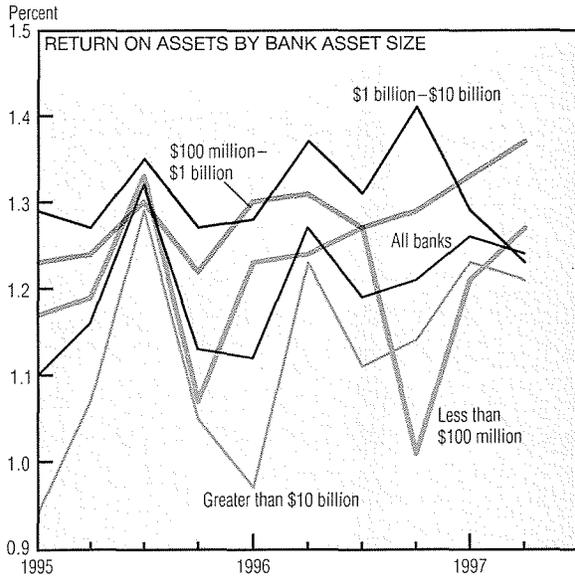
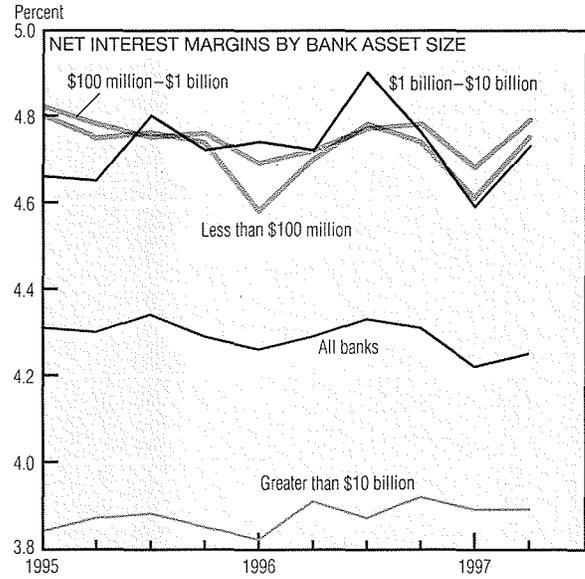
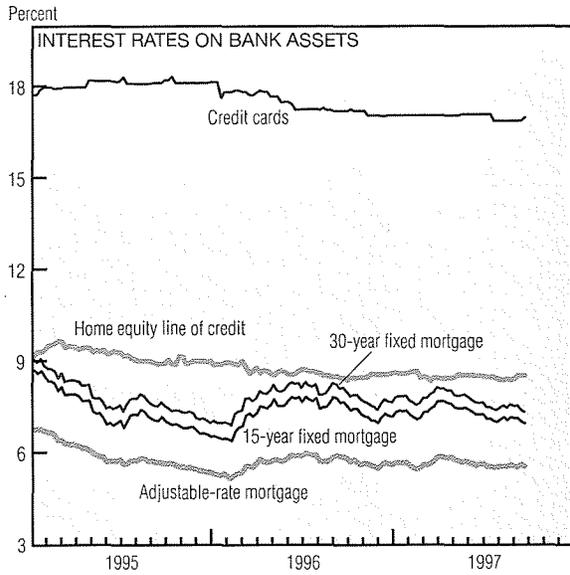
additional foreign debt.

Separating the private and government consumption components shows that the former is responsible for the steep decline witnessed since the mid-1970s. However, some private consumption outlays are for durable goods and should actually be counted as investment. Replacing private durables spending by the service flow from existing durables yields a higher level of saving. Nonetheless, a long-term decline is also evident in this adjusted measure. A third gauge—personal saving—is

calculated as personal disposable income minus personal consumption expenditures. Because much of the trend and variation in the personal saving rate is generated by variation in net taxes, this measure fails to distinguish clearly between private and government saving.

Although net national saving rates have been much lower in recent years, an upward trend, caused largely by a decline in government spending, has been evident since the early 1990s.

# Banking Conditions



NOTE: All data are for FDIC-insured commercial banks.  
 SOURCES: Federal Deposit Insurance Corporation; and *Bank Rate Monitor*, various issues.

FDIC-insured commercial banks reported record profits of \$14.6 billion in the second quarter, surpassing the previous high set in the first three months of the year. Net interest income and net non-interest income increased 7.9% and 8.9%, respectively.

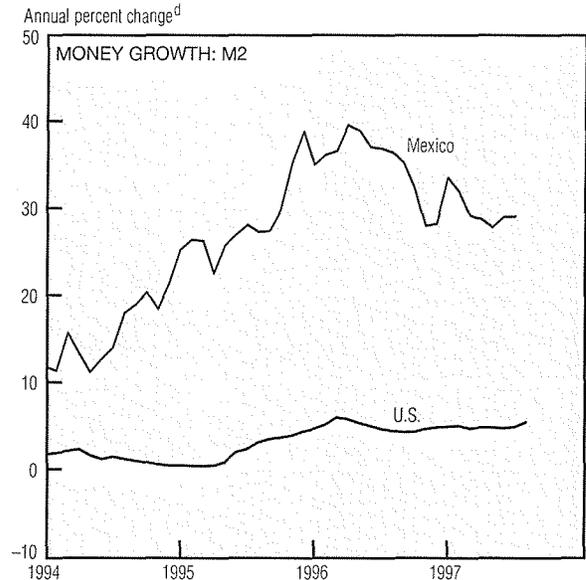
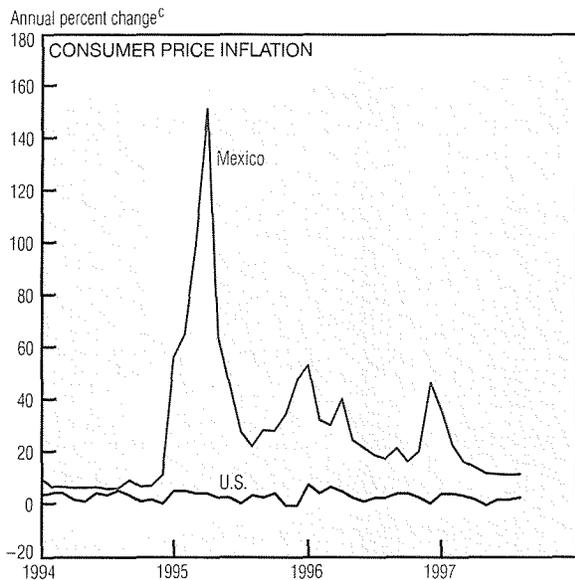
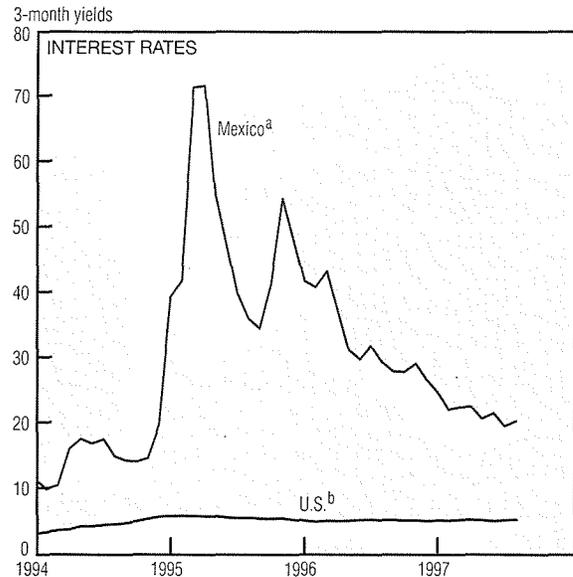
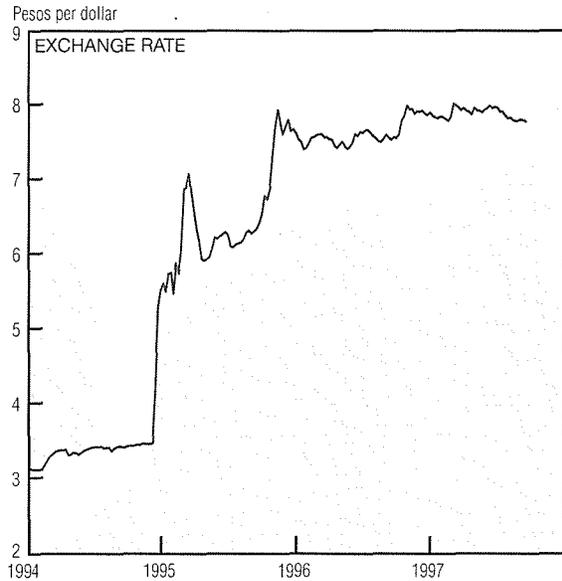
Net interest margins, the difference between the rate earned on assets and the rate paid on liabilities, rose despite declines in 15- and 30-year fixed mortgage rates. However, margins so far in 1997 are no higher

than 1996 levels. The growth rate of bank assets, on the other hand, is well above last year's posting—8.5% versus 5.4%—reflecting strong loan demand. Commercial and industrial loan growth accounted for 56% of the increase in bank assets in the second quarter.

Net interest margins were markedly lower for the nation's largest banks, reflecting both reduced yields on earning assets and higher costs of funding those assets. Second-quarter

return on assets (ROA) stood at 1.24%, the fifth-highest ever for the industry. Differences among bank size categories were much less pronounced for ROA (net operating income after taxes divided by assets) than for net interest margins. Non-interest income reached 2.9% of assets for the largest banks, but only 1.4% for the smallest, while the comparable numbers for non-interest expense were 4.1% and 3.9%.

# The Mexican Economy



- a. Treasury certificates, 3-month.
- b. Government bond yield, 3-month.
- c. Calculated on a month-over-month basis, annual rate, not seasonally adjusted.
- d. Calculated on a year-over-year basis, not seasonally adjusted.

SOURCES: U.S. Department of Labor, Bureau of Labor Statistics; Board of Governors of the Federal Reserve System; Federal Reserve Bank of New York; and Bank of Mexico.

On September 22, the Bank of Mexico announced that it was taking policy actions designed to lower Mexican interest rates so as to reduce capital inflows and decrease international demand for the peso. This action should help lower the peso's price relative to other currencies. At the time of the announcement, the value of the peso in terms of U.S. dollars was strengthening and had reached a high not seen since late 1996.

A stronger peso makes Mexican exports more expensive for foreign-

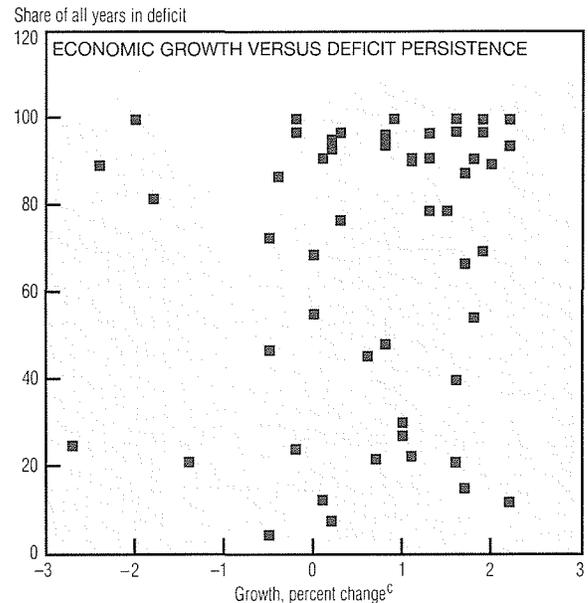
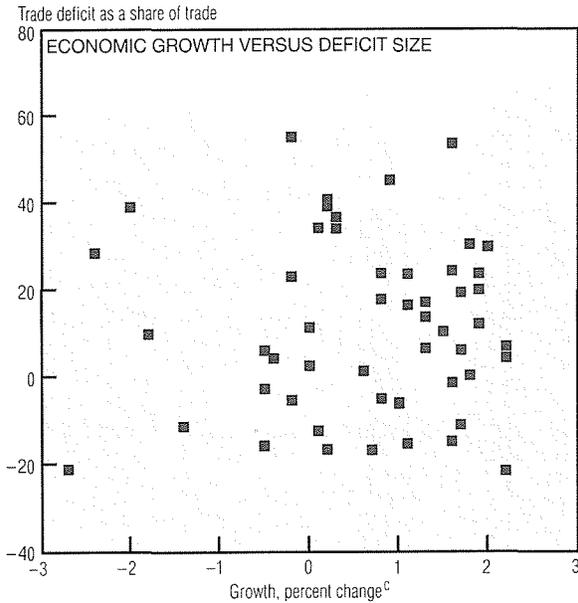
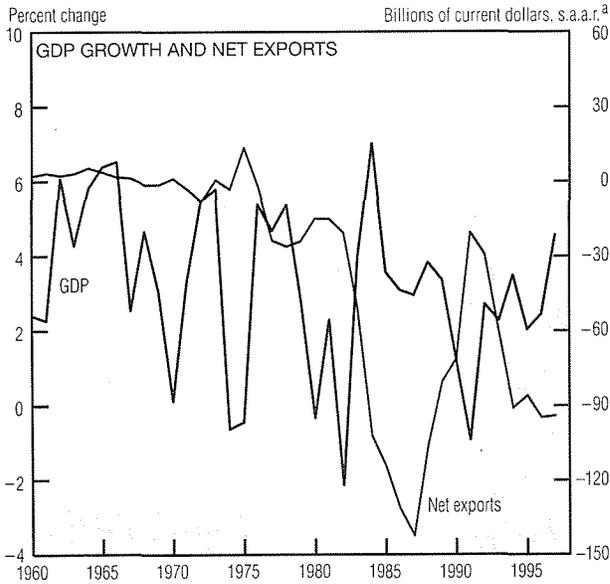
ers, ultimately damaging the nation's current account balance (the difference between the value of Mexico's exports of goods and services and the value of its imports). Most analysts were predicting that Mexico's current account balance would deteriorate next year.

The new policy might prevent a repetition of the crisis of late 1994 and 1995, when capital flew out of Mexico in response to a variety of factors, including the perception that Mexico's current account balance was inconsistent with its exchange rate peg. As a practical matter, sus-

taining a current account deficit requires capital inflows, which are sensitive to news about the relative attractiveness of investing abroad.

Before the recent crisis, the attractiveness of the peso to overseas investors had been damaged by the perception that the Mexican economy was accumulating bad debts, mirroring the recent situation in Southeast Asia. In both instances, the bad debts were attributed to massive capital inflows that led to excessive consumer spending and unwise bank lending.

# Trade Deficits and Economic Growth



- a. Seasonally adjusted annual rate.
- b. Seasonally adjusted.
- c. Based on trade data and GDP per capita growth rates for 52 countries between 1960 and 1989.

SOURCES: U.S. Department of Commerce, Bureau of Economic Analysis, Survey of Current Business, May 1997; U.S. Department of Labor, Bureau of Labor Statistics; David M. Gould and Roy J. Ruffin, "Trade Deficits: Causes and Consequences," Federal Reserve Bank of Dallas, *Economic Review*, Fourth Quarter 1996, pp. 10-20; and International Monetary Fund, *Direction of Trade Statistics*.

The U.S. merchandise trade deficit jumped unexpectedly in July, rising to \$10.3 billion from \$8.3 billion the month before. Many economists now expect our current account deficit—a broad measure of the U.S. trade imbalance—to exceed \$160 billion in 1997, up from \$148 billion in 1996. To many observers, a persistent trade deficit reveals an inability to compete in world markets that inevitably threatens a nation's standard of living.

The U.S. trade deficit widened dramatically in the early 1980s, and by the end of the decade, we had become a debtor country. Nevertheless, the economy has continued to expand, and employment growth has remained brisk despite the competition from abroad.

The U.S. experience is not a fluke. A cross-country comparison of output growth with either the magnitude or the persistence of trade deficits reveals no correlation

over the 1960-89 period. In other words, nations having large and ongoing deficits do not appear to grow more slowly.

The necessary counterpart of a trade deficit is an inflow of foreign savings. Deficit countries can consume beyond their present income, borrow from abroad, and repay their obligations without a diminution of growth. In Benjamin Franklin's words, "No nation was ever ruined by trade."