

The Economy in Perspective

An embarrassment of riches... In the not-too-distant land of Cornucopia, an inventor named Henri Lagnippe found a way to increase the efficiency of power generation by a factor of five. Whether fueled by coal, water, sun, wind, or nuclear material, electrical power could now be produced much less expensively than before. Moreover, genius that he was, Lagnippe showed no sign of letting up. The previous year, he had discovered how to reduce the friction of ball-bearings by one-third; the year before that, he had patented a process to improve the yields of corn and soybeans dramatically. And now he was rumored to be on the verge of finding a foolproof method to protect information traveling on the Internet.

At first, as companies saw a chance to sell more products at a lower cost, they began to extend their work hours and offer more jobs. Cornucopians benefited from greater earnings and the ability to buy products at better prices. Corporate profits soared and businesses began stepping up the pace of capital investment. The entire process repeated itself until economic activity reached fever pitch. Investors raised their notions of the value of Cornucopian businesses, which promised to be more profitable in the future than in the past. These optimistic investors bid up the price of equity shares, and the stock market soared to new heights: Boom times had come to Cornucopia.

If that were the whole story, its ending would be a happy one. But there is more to chronicle. Cornucopians and others became incautious, less from greed than from a fundamental uncertainty about the productivity innovations affecting their country and the economy's dynamic response to them. Cornucopians knew they were wealthier, but not by how much or for how long.

When productivity first began to improve, they increased their saving rate, content to save more today in return for expanded future consumption. As this cycle of virtue lengthened, however, they became increasingly willing to lower their saving rate. After all, large direct holdings of stock or large indirect holdings in pension accounts had made many people wealthy. If productivity would be even greater in the future, why defer consumption when you can have more today *and* more tomorrow?

In a closed economy, consumption and investment growth rates cannot increase simultaneously for long because investment must be

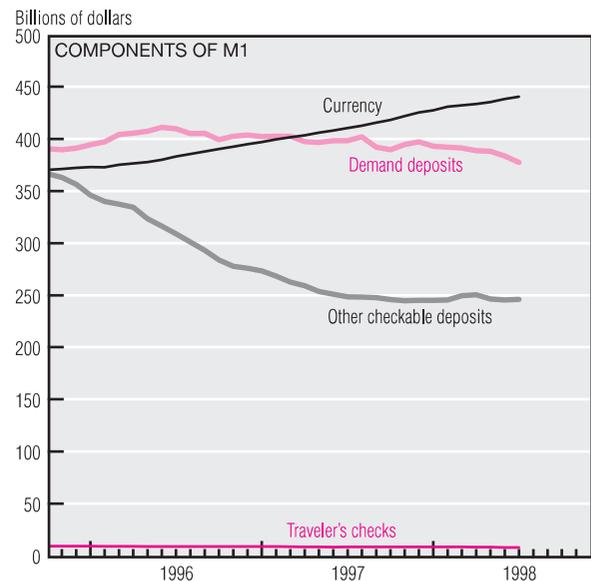
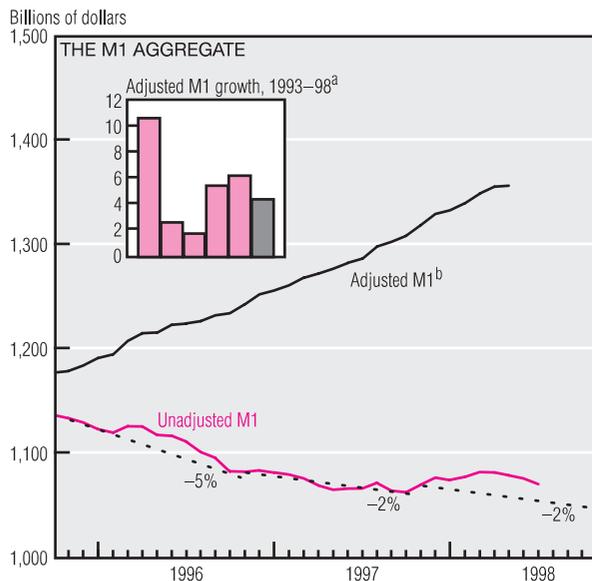
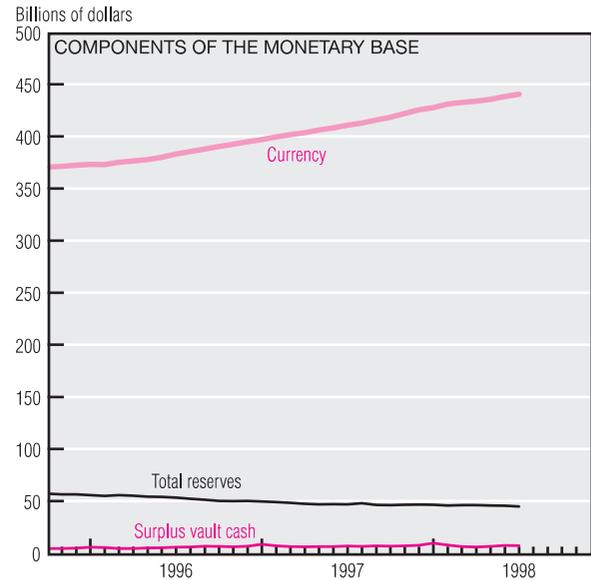
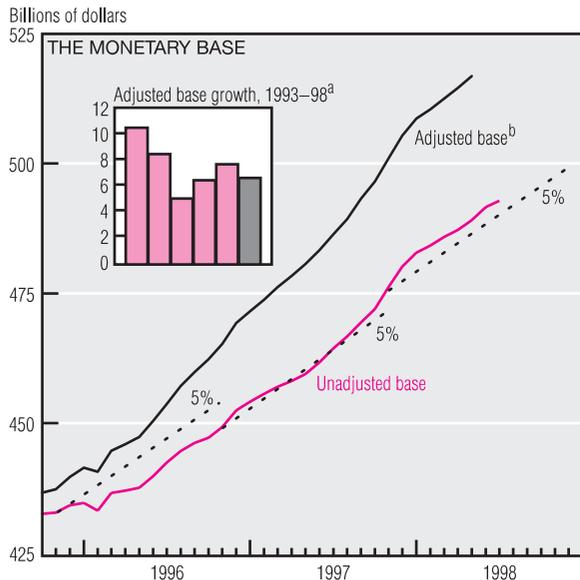
financed by savings, the part of income that is not consumed. Cornucopia's open economy could support both expanding consumption and investment growth rates because foreign investors were flocking to its stock market. With their currency's buying power increasing on foreign exchange markets, Cornucopians could buy imports cheaply. Foreigners were willing to exchange their current production for a claim on the future output of Cornucopians, who, for their part, were eager to sell foreigners claims on their future production because they expected to have such bounty.

Meanwhile, naysayers and skeptics preached the demise of this virtuous cycle. Some predicted accelerating inflation, others expected a slowdown in consumption, and all worried about the stock market's viability. But the boom thundered along, ushering in a New Age for Cornucopia. Luxury cars jammed traffic, planes jetted people to ever more exotic vacations and second homes, cell phones chirped on golf courses, and sophisticated medical care prolonged the length and joy of life.

In retrospect, the end of the boom was no surprise; in fact, many people were relieved when it came. Because of Henri Lagnippe and his fellows, Cornucopians had certainly become legitimately wealthier, but not by nearly as much as they'd believed. They had persuaded themselves that increases in corporate profits were sustainable, but in truth the permanent portion of that growth was only a fraction of the initial spurt. They drastically overbuilt their capital stock, including housing and durable goods, and borrowed against the future to finance it. Once it became clear that profit growth was slowing down, equity values fell and people felt less wealthy. Investment halted in its tracks. The cycle that had spun virtuously along turned vicious.

Despite its setback, Cornucopia remains a wealthy country to this day. Nevertheless, its people suffered through a period of hardship that could have been avoided if the boom had been tempered. Fortunately, people were not in a mood to look for scapegoats, because they believed they had mostly themselves to blame. Even more fortunate were those who might have served as scapegoats, because they believed they might have made a difference. And everyone lived somewhat happily ever after.

Monetary Policy



a. Growth rates are percentage rates calculated on a fourth-quarter over fourth-quarter basis. Annualized growth rate for 1998 is calculated on an April over 1997:IVQ basis.

b. Adjusted for sweep accounts.

NOTE: Data are seasonally adjusted. Last plots for unadjusted base and M1 are estimated for July 1998. Dotted lines are FOMC-determined provisional growth levels.

SOURCE: Board of Governors of the Federal Reserve System.

The monetary base, including reserves and currency held by the public, grew at an annualized rate of about 4.3% in June and about 5.3% since the beginning of the year. The sweep-adjusted monetary base, however, went up 6.3% between April and May (the most recent data). All three of these increases can be attributed to currency, which has grown at a 6.6% annualized rate so far this year.

In June, M1 fell at an annualized rate of 3.7%. Its year-to-date growth, however, is slightly positive at just

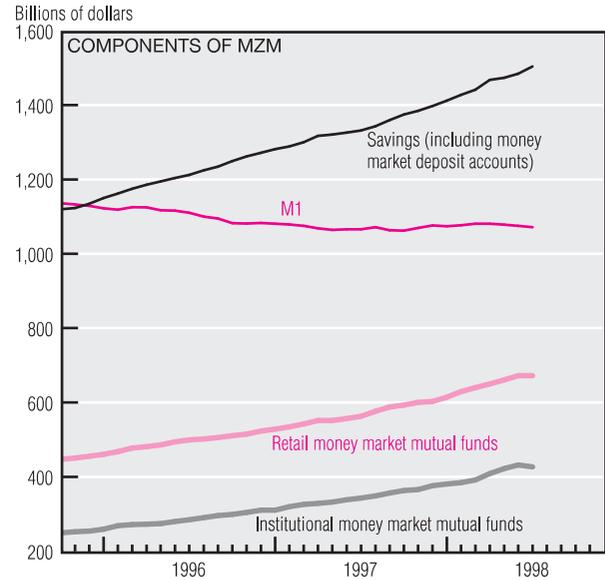
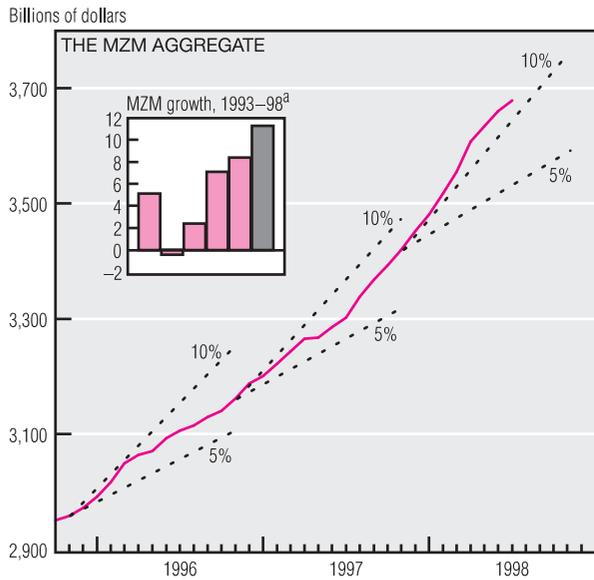
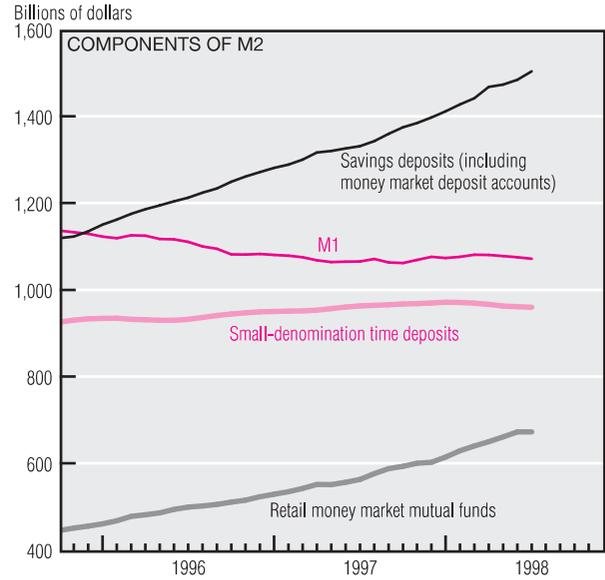
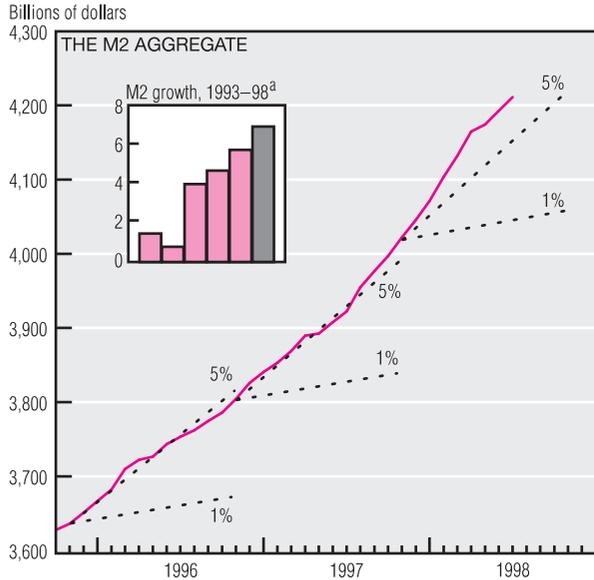
under 0.4%. The major factor mitigating M1 growth is demand deposits, which have fallen at a 6.2% annualized rate. Without demand deposits, M1 would have had an annualized growth rate of 4.2% since January. Adjusted for sweep accounts, its year-to-date annualized growth rate approached 5.7%.

For July, the annualized growth rate of M2 was nearly 4.4%. This may be welcome news to some, given M2's rapid advance of 6.9% since the beginning of the year. In the Humphrey-Hawkins report pre-

sented on July 21, however, Chairman Greenspan noted that "the rapid growth of M2 and M3 over the first half of the year...was consistent with the unexpectedly strong advance in aggregate demand." For example, the actual growth rate of GDP between 1996:IVQ and 1997:IVQ was 3.8%, which exceeded output growth estimates of 3% to 3.25% for 1997 and 2% to 2.5% for 1998.

In the report given last month, Chairman Greenspan expressed the Federal Open Market Committee's *(continued on next page)*

Monetary Policy (cont.)



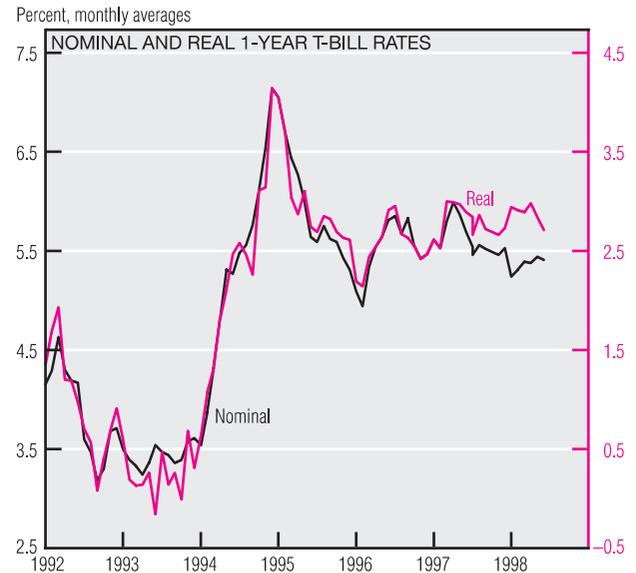
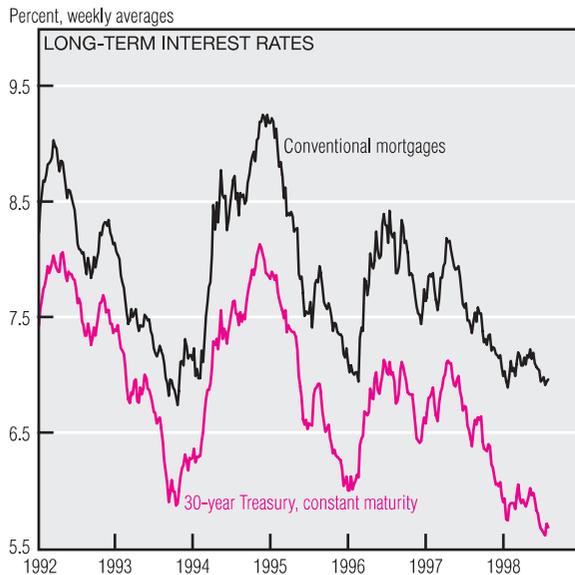
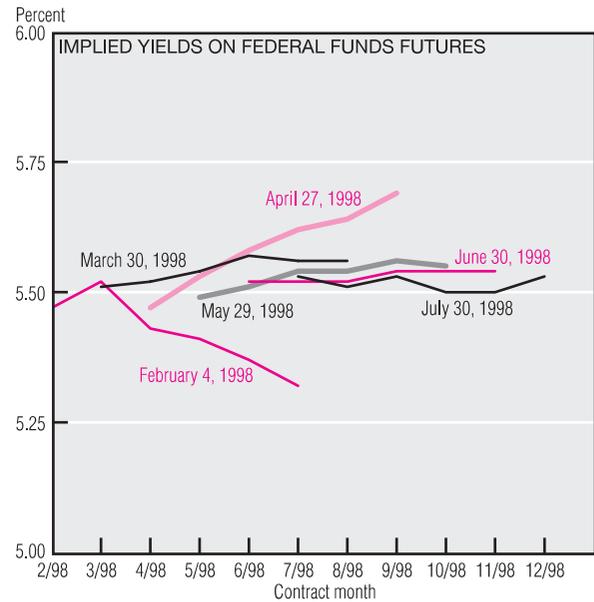
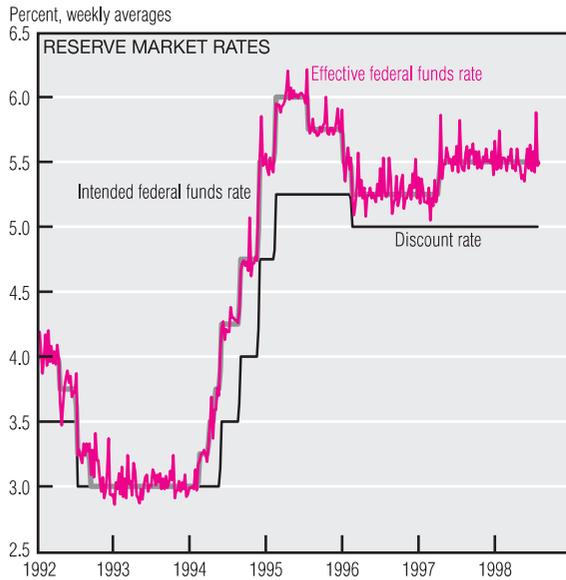
a. Growth rates are percentage rates calculated on a fourth-quarter over fourth-quarter basis. Annualized growth rate for 1998 is calculated on an estimated July over 1997:IVQ basis.
 NOTE: Data are seasonally adjusted. Last plots for M2 and MZM are estimated for July 1998. Dotted lines for M2 are FOMC-determined provisional ranges. Dotted lines for MZM represent growth ranges and are for reference only.
 SOURCE: Board of Governors of the Federal Reserve System.

intention of continuing to watch the monetary aggregates as “benchmarks for the achievement of price stability under conditions of historically normal velocity behavior.” While velocity behavior has not been stable enough to allow the FOMC to tie policy directly to monetary aggregate growth, these measures were recognized as providing “some information about trends in the economy and inflation.” Rapid growth of monetary aggregates was also cited by some members as a reason for their dissents at the May 19 FOMC

meeting. The provisional ranges for monetary aggregates’ growth, however, were left unchanged in the most recent Humphrey–Hawkins testimony. MZM is another monetary measure designed to capture money’s transactions role. MZM, which consists of “money” stocks with zero maturity, grew at an annualized rate of slightly more than 5% in June; however, its year-to-date annualized growth rate has been a dramatic 11.1%. MZM’s closest cousin is M2. MZM equals M2 less small-denomination

time deposits plus institutional money market funds. The difference in the growth rates of the two measures clearly results from the growth of institutional money market mutual funds (which have contributed over 2.5 percentage points to MZM growth) relative to small-denomination time deposits (which have cut at least 1.5 percentage points from the annualized growth of M2) since January. The effective federal funds rate continues to oscillate around the 5.5% intended rate set by the FOMC. *(continued on next page)*

Monetary Policy (cont.)



SOURCES: Board of Governors of the Federal Reserve System; and University of Michigan Survey of Consumers.

Market participants' opinion, as measured by the federal funds futures market, seems to be that there will be no change in the target rate in the near future. This has been the case since April of this year, when participants expected a rate hike that failed to materialize.

Chairman Greenspan noted that low interest rates on mortgages were contributing to households' ability "to purchase homes and to refinance outstanding debt." It is clear that long-term interest rates have been on a reasonably steady

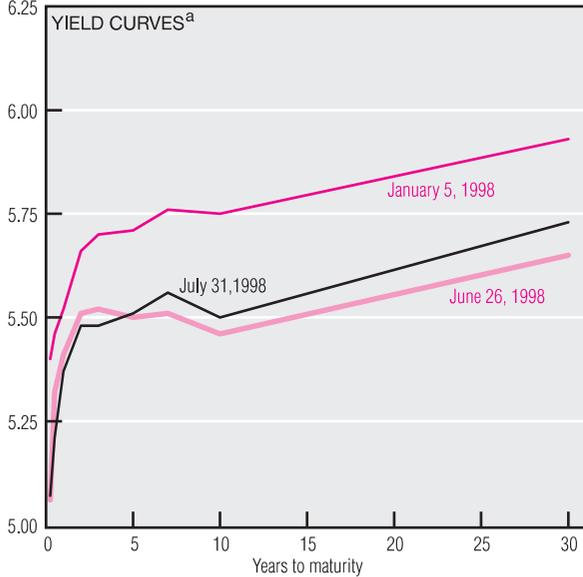
decline since early in 1997:IIQ. There was some increase early in 1998, but the decline resumed and has continued since then. In the week ending July 31, 1998, the interest rate on constant maturity 30-year Treasury bonds averaged 5.73%, more than 70 basis points lower than the same week in 1997, and the average conventional mortgage rate was 6.97%, 46 basis points lower than the same week in 1997.

Nominal interest rates on constant maturity 1-year Treasury bills have experienced small upticks in the

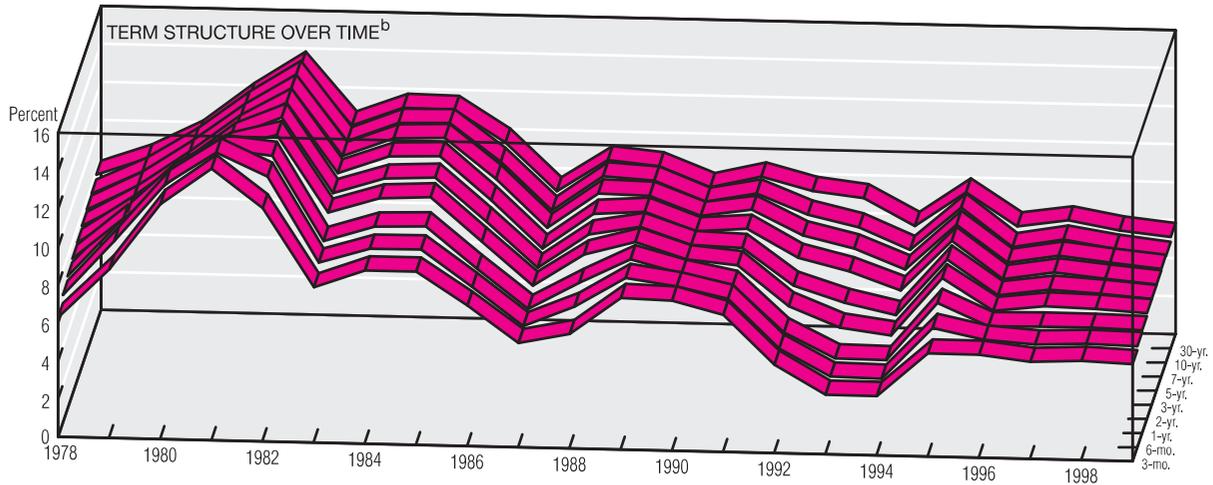
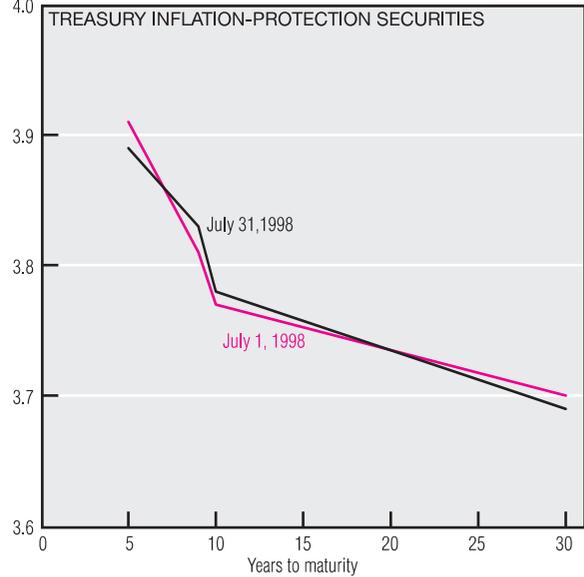
past few months, after dropping throughout 1997. Real interest rates declined from nearly 3% in April to approximately 2.7% in June because inflation expectations (as measured by the University of Michigan Survey of Consumers) have increased slightly since the beginning of the year, after falling in 1997. Many view a decline in real interest rates as an implicit easing of policy, accomplished through the FOMC's inaction (a steady nominal federal funds rate) combined with rising inflation expectations.

Interest Rates

Percent, weekly averages



Percent



a. All instruments are constant-maturity series.

b. End-of-period quarterly averages of daily data. All observations are fourth-quarter data except the final one, which is for 1998:IIQ.

SOURCE: Board of Governors of the Federal Reserve System.

The yield curve has moved only slightly since last month, the biggest shift being a decrease of 11 basis points in the 6-month yield. Spreads are mixed, with the 3-year, 3-month spread falling from 46 to 41 basis points, and the 10-year, 3-month spread increasing from 40 to 43 basis points. Both remain well below their historical averages of 80 and 120 basis points.

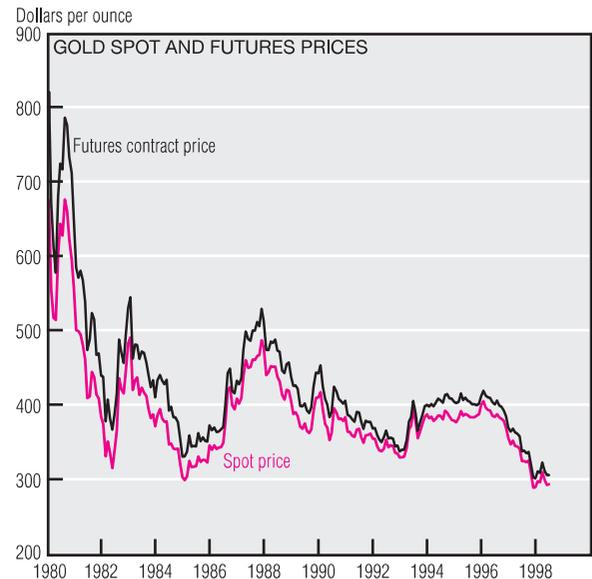
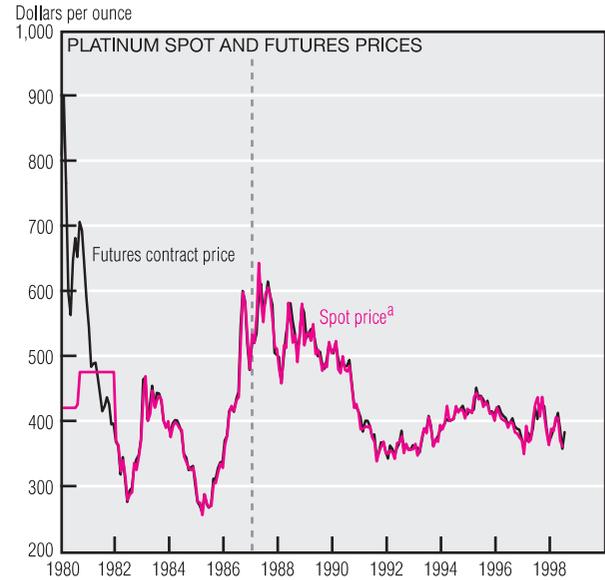
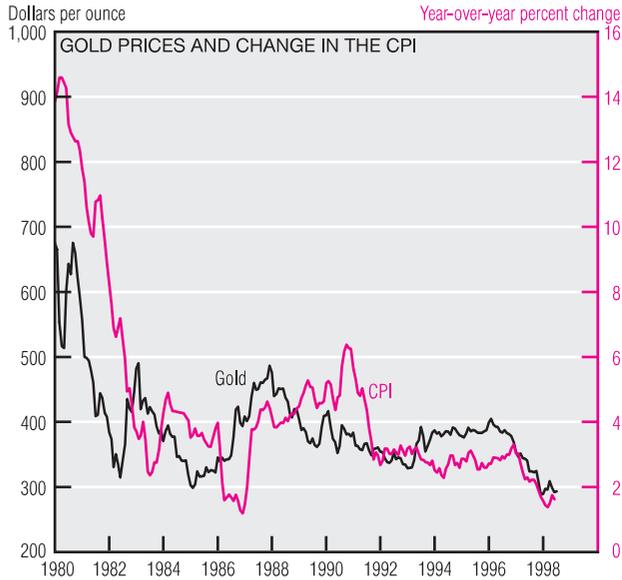
The traditional yield curve plots nominal interest rates. With the advent of Treasury Inflation-Protection Securities at maturities of 5, 9, 10,

and 30 years, it is now possible to plot a yield curve for real interest rates, that is, for bonds whose payout is indexed to the inflation rate. Real interest rates are not available for all maturities, but comparing the real and nominal yield curves remains instructive. The real yields are uniformly lower than the nominal yields; as they are protected against inflation, real yields show no "inflation premium," the extra return required by investors who worry that a dollar will buy less in 2028. The real yield curve also slopes down-

ward, suggesting that the upward slope of the nominal curve derives from investors' expectation that their purchasing power will deteriorate more in 30 years than in 5 or 10.

A bird's-eye view of the yield curve's shifts over the past two decades emphasizes the relative placidity of the recent bond market. Compared to the beginning of the year, the yield curve seems to have made some significant drops and twists, but the movement looks much less impressive when placed in its historical context.

Precious Metals Prices



a. Prior to 1987, prices are monthly averages; subsequently, they are end-of-month closing prices.

NOTE: All precious metal prices are in dollars per troy ounce.

SOURCES: DRI/McGraw-Hill; Bloomberg information services; and Bridge Commodity Research Bureau, *The CRB Commodity Yearbook, 1997*. New York: John Wiley & Sons, Inc., 1997, p. 208.

Movements in precious metals prices have long held a fascination for both economists and the general public. Although precious metals have many industrial and commercial applications, their prices behave more like those of long-term assets than those of consumable commodities. As a result, traders have strong incentives to acquire all information about economic developments that could influence future commodity values and to incorporate the information into

current (or spot) prices. This explains why spot and futures prices of precious metals normally move together (as the charts for silver and platinum so clearly illustrate).

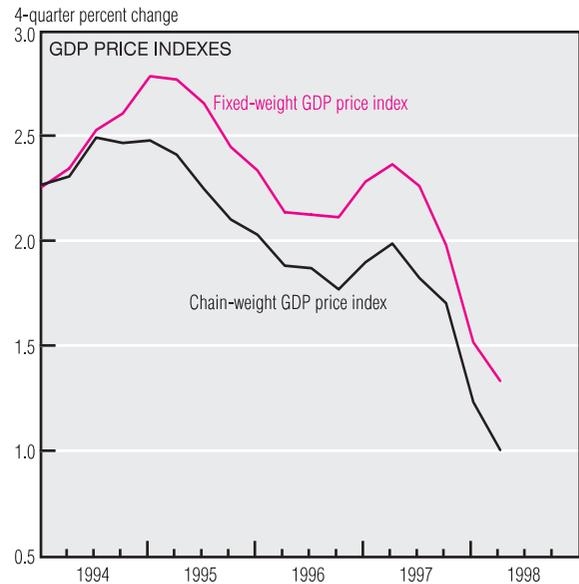
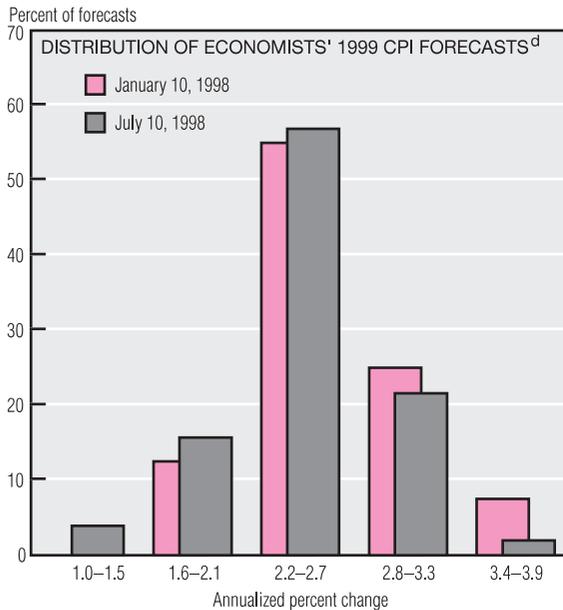
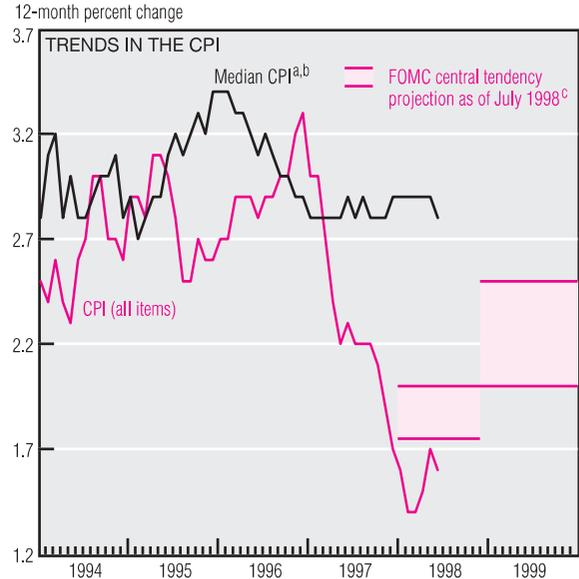
Because precious metals prices embody expectations and are quoted more frequently than broad price indexes, economists often consider their movements when attempting to predict inflation. Gold prices, for example, tend to mirror inflation, especially in high-inflation years. Like

all commodities, however, precious metals are also sensitive to the peculiarities of their own markets. Hence, a particular metal may give a false reading on overall inflation.

Commodity prices generally have remained fairly flat or have declined over the current business cycle, as has the overall rate of inflation. Recently, all precious metals prices have flattened out or ticked up, suggesting that further gains against inflation may not be imminent.

Inflation and Prices

	Annualized percent change, last:				1997 avg.
	1 mo.	3 mo.	12 mo.	5 yr.	
June Price Statistics					
Consumer prices					
All items	0.7	2.5	1.6	2.5	1.7
Less food and energy	1.4	2.6	2.2	2.6	2.2
Median ^{a,b}	2.2	2.7	2.8	2.9	2.9
Producer prices					
Finished goods	-0.9	1.2	-0.8	0.8	-1.2
Less food and energy	2.5	2.6	0.8	1.0	0.0



a. Calculated by the Federal Reserve Bank of Cleveland.

b. The median CPI component structure and market basket were updated in May 1998, and the weighting scheme was revised.

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. Blue Chip panel of economists.

SOURCES: U.S. Department of Labor, Bureau of Labor Statistics; U.S. Department of Commerce, Bureau of Economic Analysis and Bureau of the Census; the Federal Reserve Bank of Cleveland; and *Blue Chip Economic Indicators*, January 10 and July 10, 1998.

Following a modest acceleration in May, the monthly price statistics resumed their nearly year-old pattern of unusually small increases. The Consumer Price Index (CPI) rose at a very slight 0.7% annualized rate (a.r.) in June, and is up a mere 1.6% over the past 12 months. Even excluding food and energy prices (which have trended lower over the past year or so), the CPI is up only 2.2% over the 12 months ended in June, about 0.4 percentage point lower than its five-year average an-

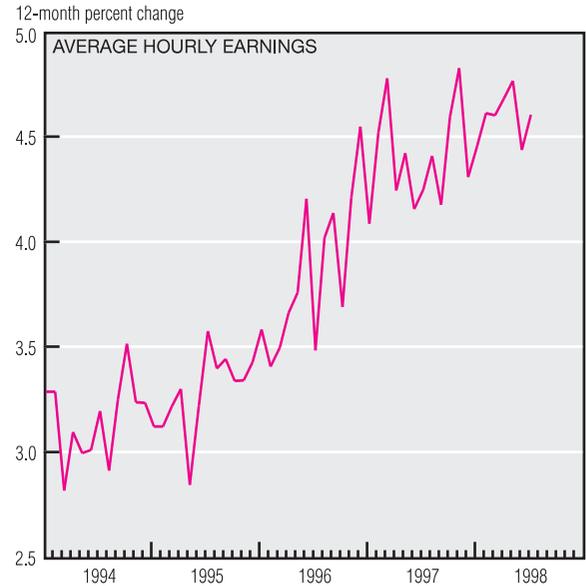
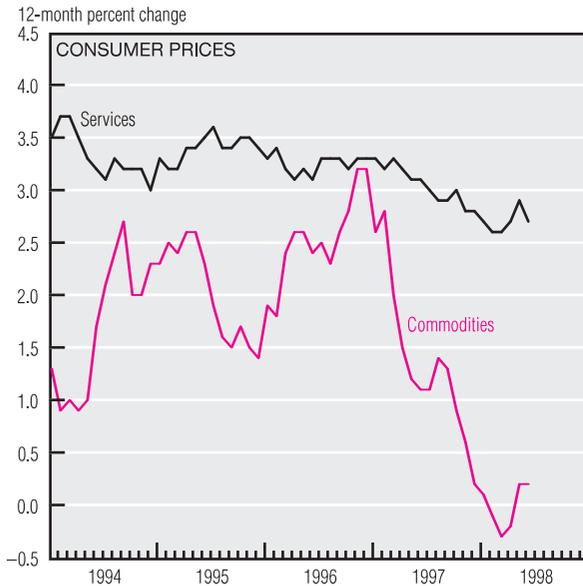
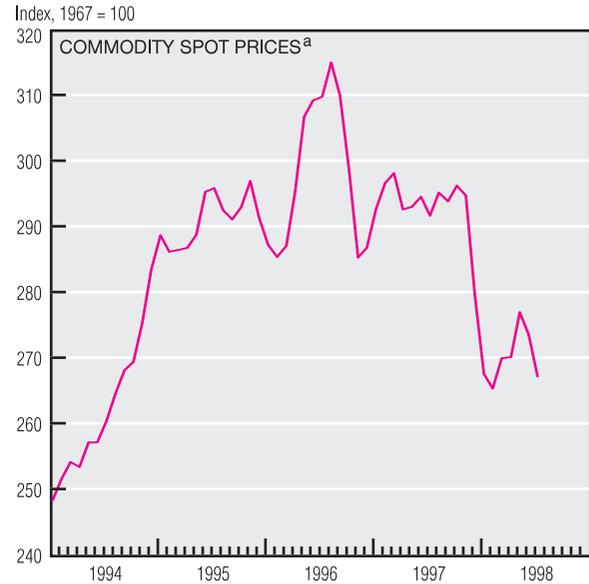
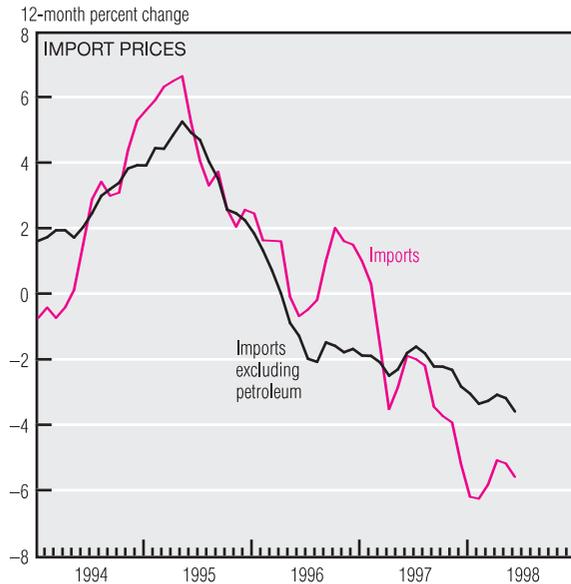
nual increase. Likewise, the Producer Price Index (PPI) fell 0.9% (a.r.) in June and 0.8% over the past 12 months.

Prices' unexpectedly modest behavior this year prompted the Federal Open Market Committee (FOMC), the chief policymaking body of the Federal Reserve, to revise its 1998 CPI projection downward to a range of 1¾%–2%. The Committee sees the CPI's growth trajectory moving slightly higher in 1999 (into the 2%–2½% range).

The overwhelming majority of Blue Chip economists also see the rate of retail price increase moving a bit higher next year. Almost 57% of those surveyed expect the CPI to rise at a rate of between 2.2% and 2.7% next year, although the proportion who foresee an even faster growth rate (24%) is slightly greater than those expecting a smaller increase (20%). Still, the number of inflation pessimists seems to be shrinking—last January, about one-

(continued on next page)

Inflation and Prices(cont.)



a. As measured by the KR-CRB composite spot index, all commodities. Data reprinted with permission of the Commodity Research Bureau, a Knight-Ridder Business Information Service.

SOURCES: U.S. Department of Labor, Bureau of Labor Statistics; and the Commodity Research Bureau.

third of the economists projected the CPI would rise at a rate exceeding 2.7% next year.

In his semiannual Monetary Policy Report to Congress, Federal Reserve Chairman Greenspan warned that, despite unusually favorable trends in the major price indexes, “the risks of a pickup in inflation remain significant,” and that the FOMC “elected in March to move to a state of heightened alert against inflation.” He indicated that while consumer prices, as well as broader measures including a variety of GDP price indexes, suggest that inflation has

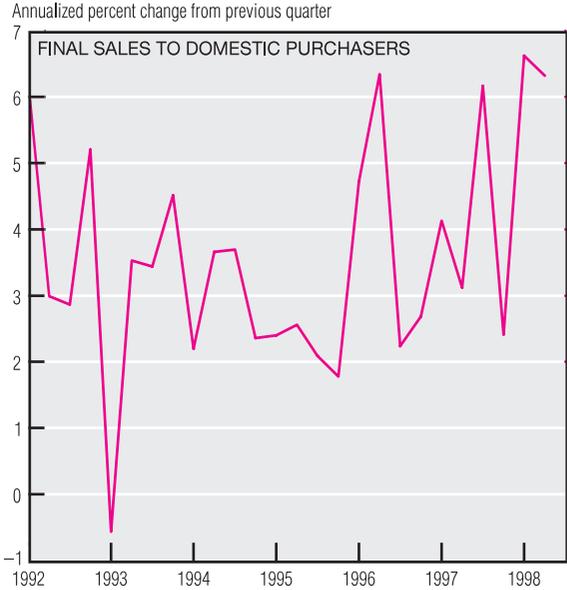
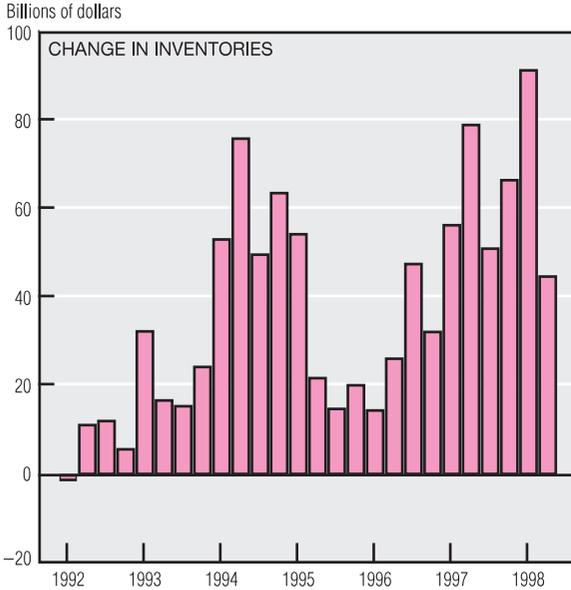
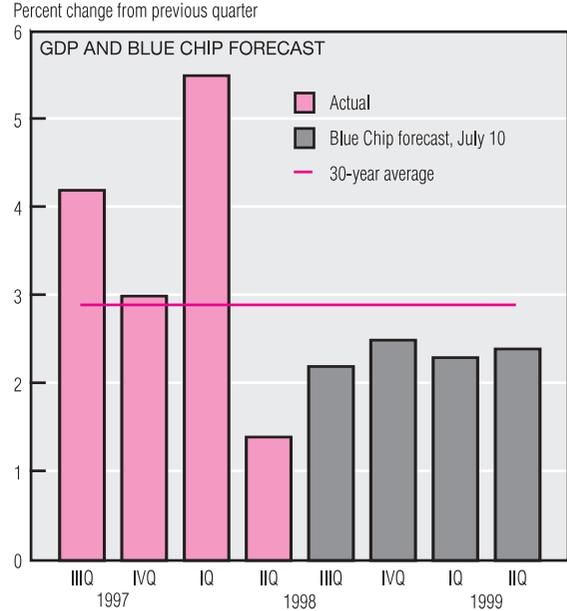
moved down, some of this improvement was transitory. Prominent among these temporary influences has been the “reduced demand from Asia that, among other things, has led to a softening of commodity prices [and] a strong dollar that has contributed to bargain prices on many imports.” Indeed, “service price inflation, less influenced by international events, has remained steady at about a 3% rate since before the beginning of the crisis.”

Chairman Greenspan also noted the need to find a balance between compensation growth and productivity growth, although admittedly,

“the adverse wage-price interactions that played so central a role in pressuring inflation higher in many past business expansions—eventually bringing those expansions to an end—have not played a significant role in the current expansion.” Still, compensation growth has clearly accelerated over time (as evidenced by a run-up in the growth rate of average hourly earnings). If those trends continue or accelerate further, and should labor productivity growth not keep pace, the relatively sanguine inflation reports of recent quarters may come abruptly to an end.

Economic Activity

	Change, billions of 1992 \$	Percent change, last:	
		Quarter	Four quarters
Real GDP	26.3	1.4	3.5
Consumer spending	71.4	5.8	5.2
Durables	17.1	10.0	11.3
Nondurables	21.9	5.9	4.5
Services	33.6	4.8	4.3
Business fixed investment	25.6	11.4	12.9
Equipment	30.9	17.8	17.7
Structures	-2.3	-4.5	0.8
Residential investment	9.4	13.2	9.0
Government spending	11.8	3.7	0.8
National defense	6.7	9.5	-3.8
Net exports	-54.4	—	—
Exports	-20.6	-8.1	0.8
Imports	33.8	11.9	11.8
Change in business inventories	-46.7	—	—



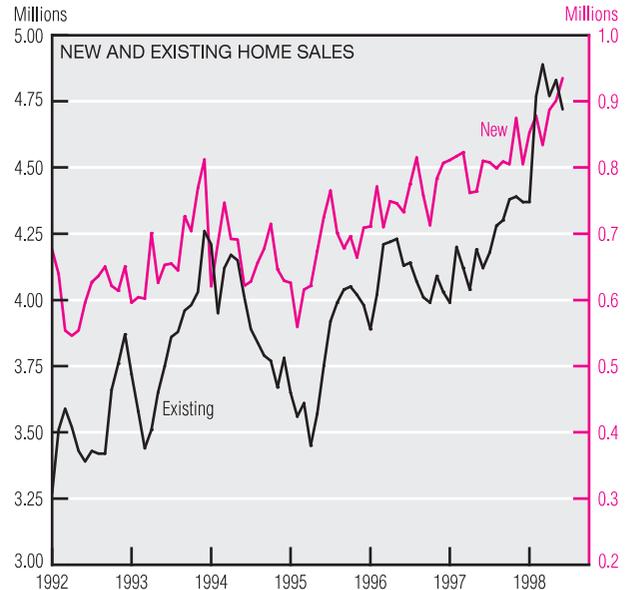
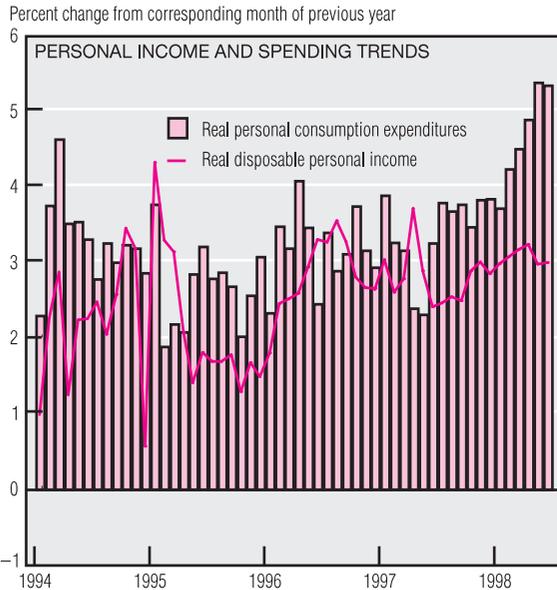
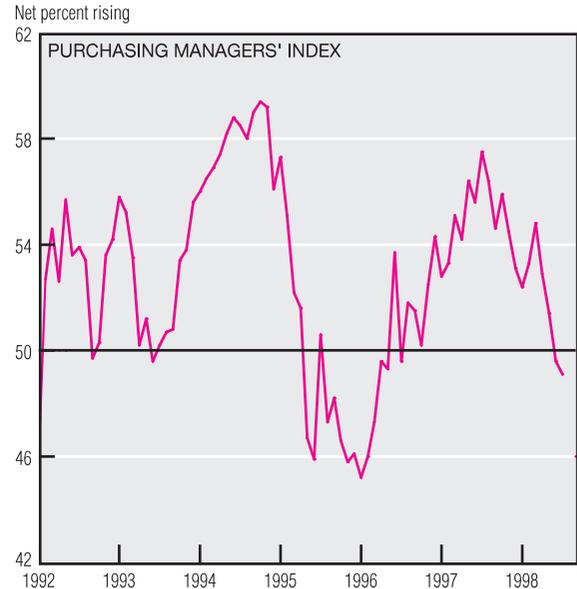
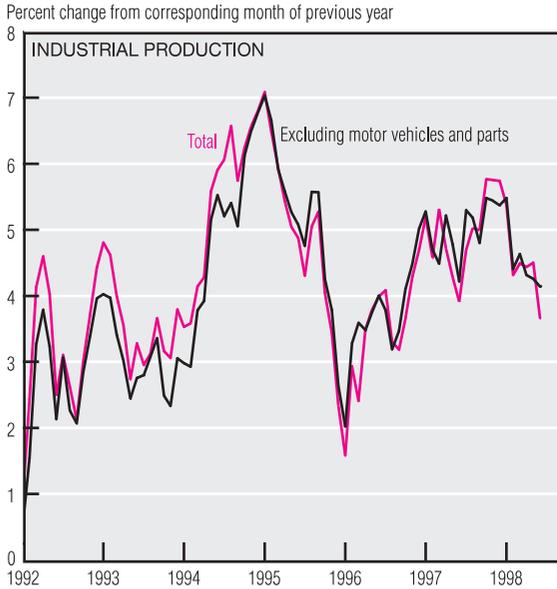
a. Chain-weighted data in billions of 1992 dollars.
 NOTE: All data are seasonally adjusted.
 SOURCES: U.S. Department of Commerce, Bureau of Economic Analysis; and *Blue Chip Economic Indicators*, July 10, 1998.

As expected, the economy grew more slowly in the second quarter than in the first. According to the Commerce Department's advance estimates, real GDP grew at an annualized rate of 1.4% in 1998:IIQ. This stands in stark contrast to the first quarter's revised growth rate of 5.5%, but the slowdown may not warrant much concern. At several other times in the current expansion, GDP growth has slipped for a quarter or two before rebounding. Forecasters currently expect real

GDP to grow at a rate of 2.2% in the third quarter and 3.3% for the entire year. The major factors leading to the slowdown in GDP growth were weakened net exports and a smaller inventory accumulation. Inventories rose \$44.7 billion in the second quarter after growing a revised \$91.4 billion in the first. This came as no surprise to forecasters, who had been expecting inventory accumulation to slow after its spectacular growth in the last few quarters. The

dip in net exports, caused by plunging exports to Asia as well as continued rapid growth of imports, was equally significant. However, consumer spending, business fixed investment, and residential investment remained strong. Indeed, final sales to domestic purchasers (GDP excluding net exports and inventories) grew 6.3%, nearly equaling the strong first quarter growth of 6.6%. After a small gain in May, industrial production dropped in June. (continued on next page)

Economic Activity (cont.)



NOTE: All data are seasonally adjusted.
 SOURCES: U.S. Department of Commerce, Bureau of Economic Analysis and Bureau of the Census; Board of Governors of the Federal Reserve System; National Association of Purchasing Management; and National Association of Realtors.

Much of this decline is related to the now-resolved General Motors strike although industrial production excluding motor vehicles and parts also dipped slightly. Some of the overall decline was likely related to the recent trimming of inventories and declining exports to Asia.

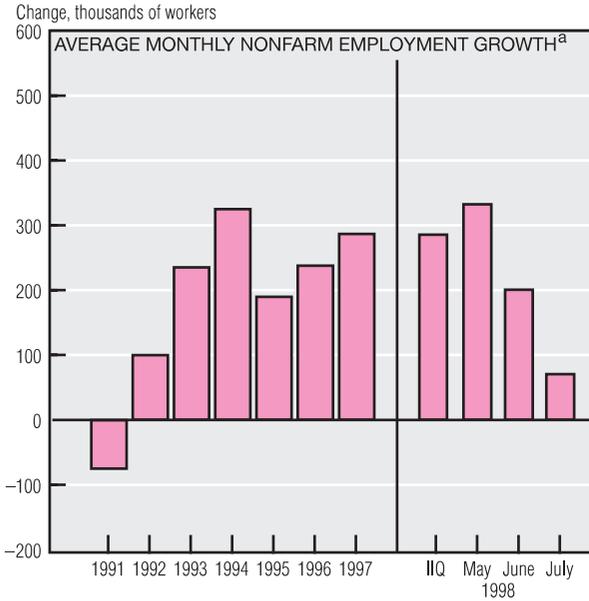
The slump in the manufacturing sector is shown clearly in the National Association of Purchasing Management index. An index of less than 50 indicates contraction in

the manufacturing sector; an index of more than 50 indicates growth. For both June and July, this index has been showing contraction in the manufacturing sector, following an extended growth streak. The resolution of the General Motors strike should reverse some of this slump, but adverse economic conditions in Asia may put a damper on manufacturing for the rest of 1998.

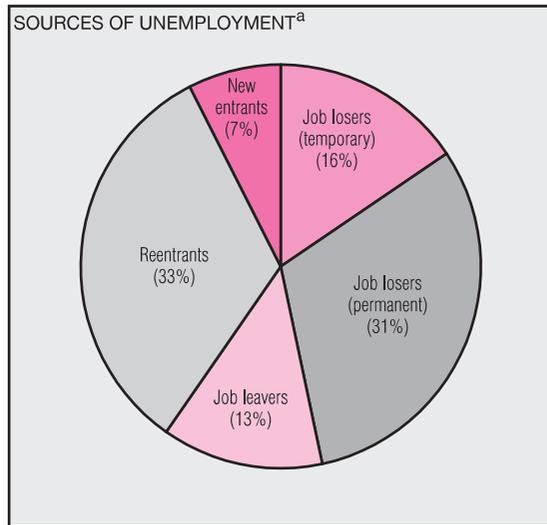
In contrast to the pause in the manufacturing sector, consumers

continue to display confidence. Real personal consumption expenditures have grown 5.4% since last June, while real disposable income has grown 3.0%. The robust housing sector provides key evidence of consumers' continued optimism. This June, new home sales soared to a record annual rate of 935,000 units. Existing home sales slipped somewhat for the month, but still remain near record levels.

Labor Market Conditions



	Average monthly change (thousands of employees)				
	1995	1996	1997	1998	
				Year to date	July
Payroll employment	185	233	282	219	66
Goods-producing	8	31	42	-8	-163
Manufacturing	-1	3	21	-27	-176
Motor vehicles	2	-1	3	-17	-111
Service-producing	178	202	240	228	229
Services	112	117	142	110	65
Retail trade	37	42	34	48	125
FIRE ^b	-1	14	17	25	32
	Average for period				
Civilian unemployment rate (%)	5.6	5.4	5.0	4.5	4.5
Nonfarm workweek (hours)	34.4	34.4	34.6	34.6	34.6



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

In July, labor markets showed strength tempered by the effects of the General Motors strike. Nonfarm payrolls increased despite job losses in the manufacturing sector, and the unemployment rate held constant.

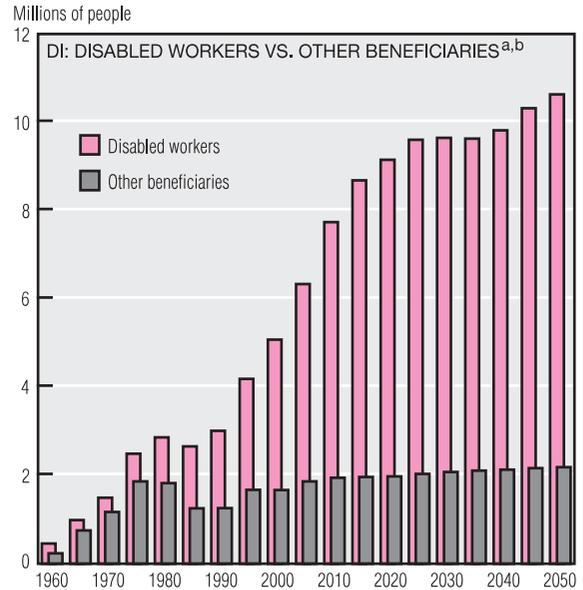
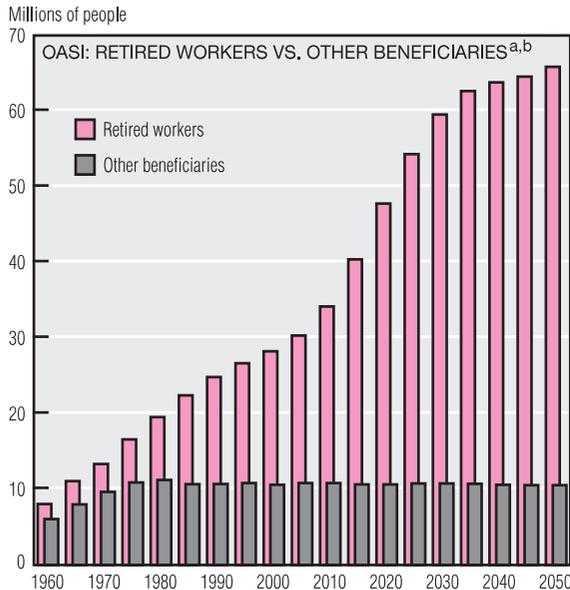
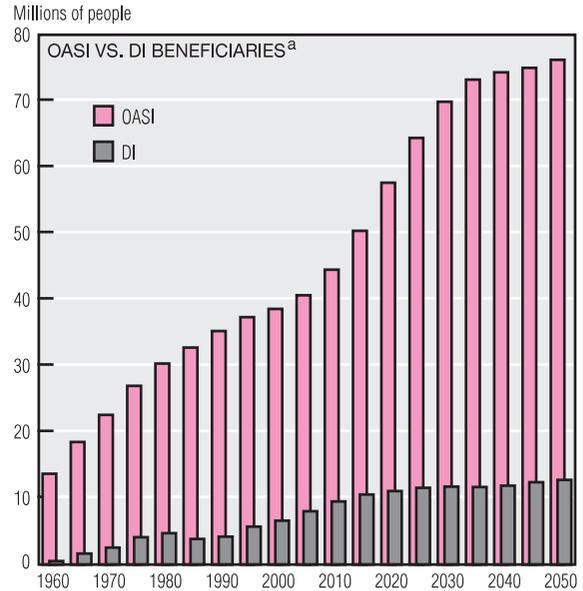
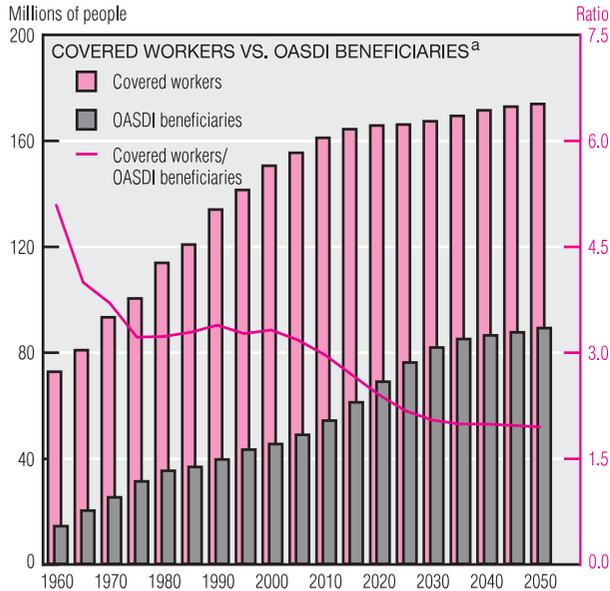
Nonfarm payrolls added 66,000 jobs, the smallest gain since employment fell 48,000 in January 1996. July's increase is off-pace for 1998, which has seen payrolls rise 219,000 per month on average. While goods-producing industries lost 163,000

jobs, employment in service industries kept pace with the first half of the year, increasing 229,000 for the month. Manufacturing payrolls fell 176,000, the biggest drop since October 1982. Most of this decrease was in motor vehicles and equipment, which lost 111,000 jobs in July.

The employment-to-population ratio fell just slightly to 63.9% last month. Still, the ratio has been hovering near the record 64.2% attained earlier this year. The unemployment

rate held steady at 4.5%, continuing a 12-month stretch with unemployment below 5%. The GM strike had some effect on unemployment. It increased the number of temporary job losers (laid-off workers who expect to return to work within six months) by 125,000 in July, which accounted for about 16% of all unemployed workers. Typically, this category includes about 13% of the unemployed.

Social Security Beneficiaries



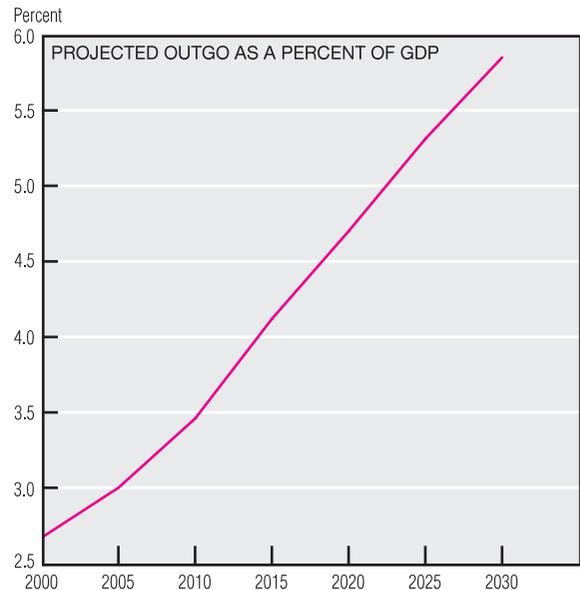
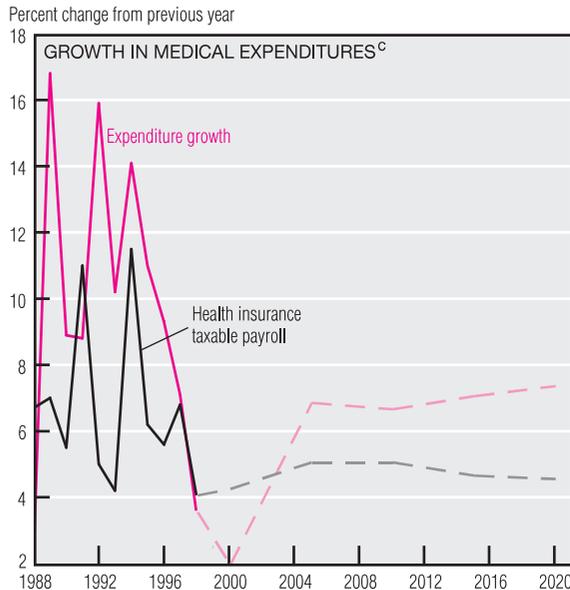
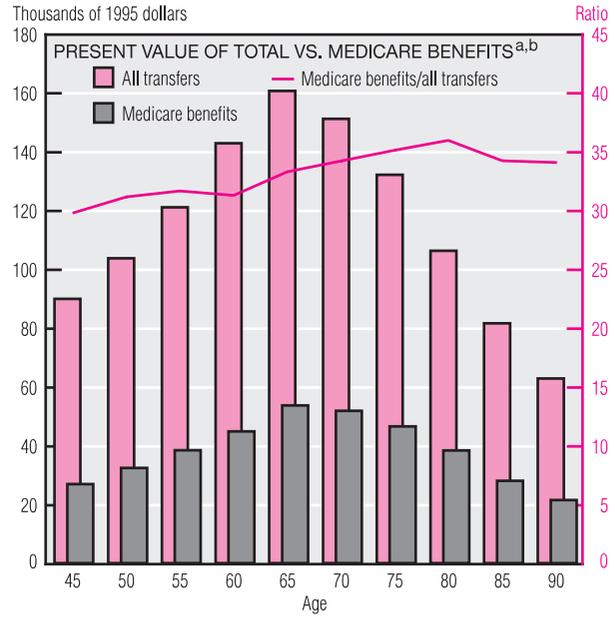
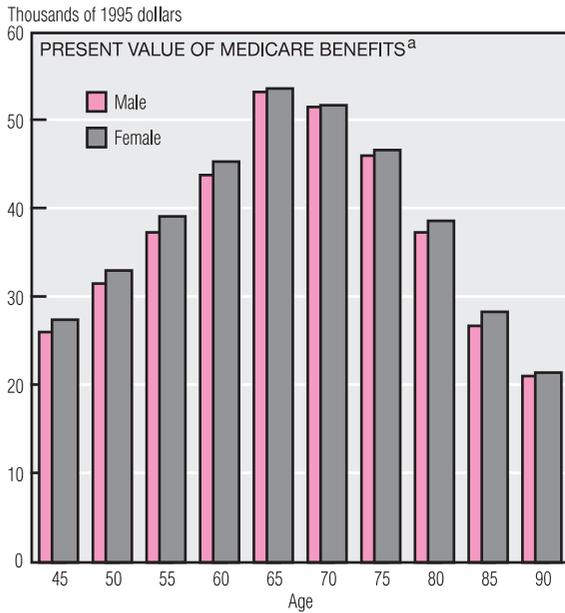
a. OASI stands for Old Age and Survivors Insurance, DI for Disability Insurance, and OASDI for both.
 b. Other beneficiaries include dependent and surviving spouses and children.
 SOURCE: Social Security Administration.

Although it has accumulated surpluses in recent years, Social Security faces a future budget crunch. The ratio of contributing workers to beneficiaries is projected to shrink from 3.4 today to about 2.0 by 2035. Because Social Security is a pay-as-you-go program that disburses nearly all its current revenue as benefits, a drop in the number of contributors per beneficiary will cause shortfalls. Preserving its current structure will force lower benefits or higher payroll tax rates: At the current tax rate of 12.4%, 3.4 workers' contributions suffice to replace 41.2% of one

beneficiary's past earnings. With only two contributors per beneficiary, the same tax rate will replace only 24.8% of those earnings, implying a benefit reduction of over 40%. Alternatively, to guarantee the same replacement rate, tax rates must increase 70%, from 12.4% to 21.1%. Social Security includes Old Age and Survivors Insurance (OASI) and Disability Insurance (DI) programs. DI outlays have grown fast recently because of higher participation rates for younger workers and more liberal eligibility rules for categories like widowed workers. The projected increase in DI partic-

ipants, however, is more gradual and stabilizes earlier than for OASI participants. The Social Security program provides dependent and survivor benefits to others who may never have contributed, including non-working spouses (current and divorced) and children 18 or younger of retired, disabled, and deceased workers. The Social Security Administration's population estimates for "other recipients" in both OASI and DI show modest increases in future decades compared to those for covered workers.

Medicare Benefits



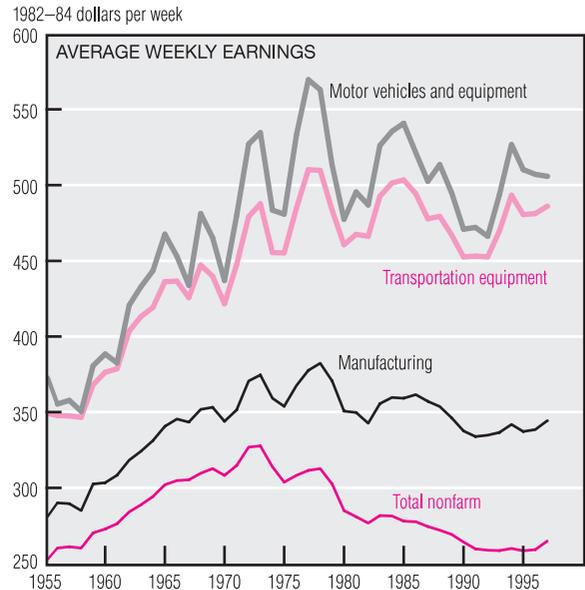
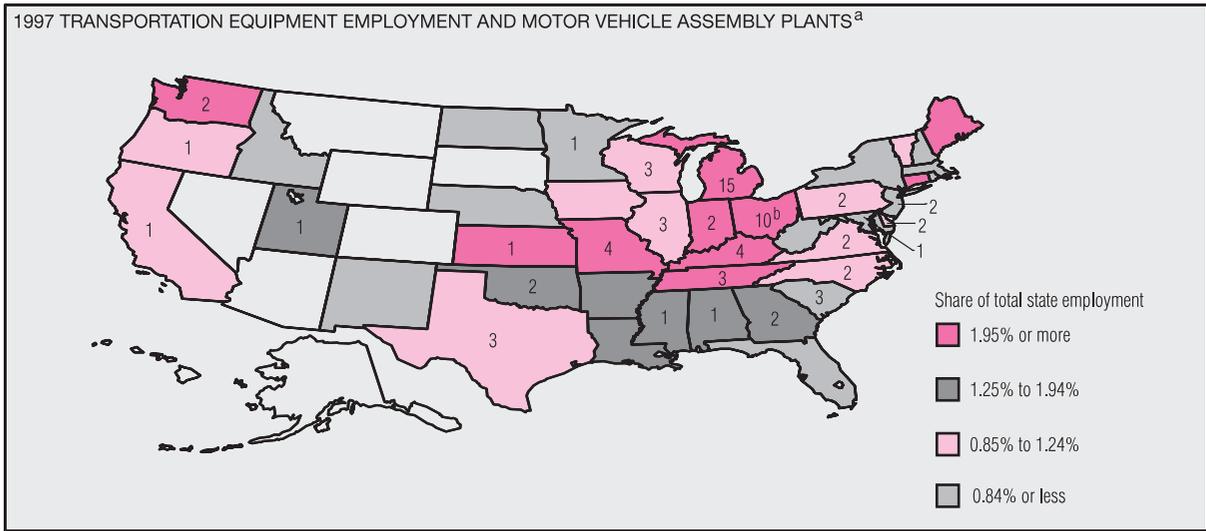
a. As of 1996.
 b. Average of males plus females by age.
 c. Dashed lines indicate projections.
 SOURCES: Department of Health and Human Services, Health Care Financing Administration; and Federal Reserve Bank of Cleveland.

Medicare is an important source of support for elderly Americans. Under current reimbursement rules, the actuarial present value of future Medicare benefits for middle-aged people is \$26,100 for males and \$27,300 for females. The actuarial present value increases markedly for people nearing retirement: \$53,300 for 65-year-old males and \$53,700 for 65-year-old females. (Females have larger present values than males because their mortality rates are lower.) Those who are even older will receive less in actuarial present value of bene-

fits because they have fewer years to live and a higher probability of death. For middle-aged people, Medicare benefits average just under 30% of all transfers; for the oldest retirees, the share increases to just under 35%. Historically, Medicare spending growth has been fairly volatile, ranging from 2% to over 16%. The program's year-over-year growth in total outlays has fallen considerably in the last four years, from 14.1% in 1994 to 7.1% in 1997. Much of this decline occurs because beneficiaries shift from traditional fee-for-service

to managed care plans. The growth in outlays is projected to come in at under 4% in 1998. On average, Medicare grew at a much faster rate during the past decade than did its taxable payroll. This trend is expected to continue in the future. Indeed, the growth rate of Medicare outlays is expected to accelerate over time, while that of Medicare's taxable payroll is expected to slow. By the year 2030, rapid Medicare spending growth is projected to raise the share of Medicare outlays in GDP from slightly less than 3% to almost 6%.

Fourth District Auto Production



a. Numbers indicate final assembly plants in each state. Data are not available for Alaska, Arizona, Colorado, Hawaii, Montana, Nevada, South Dakota, and Wyoming.
 b. In April 1997, Volvo Heavy Truck Corporation closed its plant in Orrville, Ohio, decreasing the number of final assembly plants in the state to nine.
 SOURCES: U.S. Department of Labor, Bureau of Labor Statistics; *Ward's Automotive Reports*, September 29, 1997; and "General Motors Update on Operations Affected by the Work Stoppages at the GM Fabricating Division, Flint Metal Center, and the Delphi Energy and Engine Management Flint East Complex," http://today.newscast.com/nctdf.cgi?menu=doc&backto=searchresults_browse&docid1=2&docid2=980724&docid3=483&index=19&sid=901896125-237942742-14252, July 24, 1998.

By July 24, 1998, the United Auto Workers' strike had affected nearly 200,000 employees at General Motors' North American Operations and Delphi Automotive Systems facilities; 16.4% of them were at plants in the Fourth Federal Reserve District.

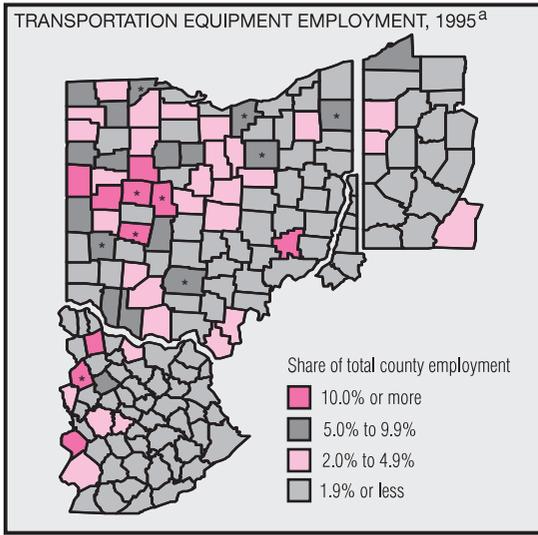
Much of U.S. auto production is located along the Interstate 75 corridor, which runs from Detroit through Ohio, Kentucky, Tennessee, and Georgia. Most of the

nation's final assembly plants are in Michigan and Ohio, but parts producers are spread out along this corridor, so labor disputes like the recent GM-UAW work stoppage will affect all these areas.

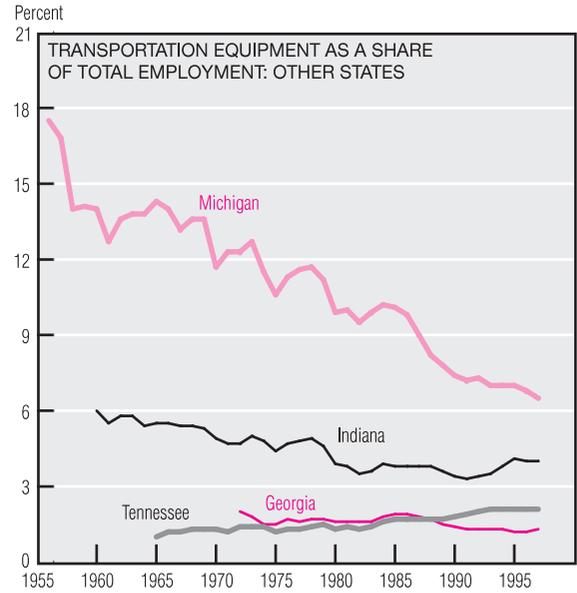
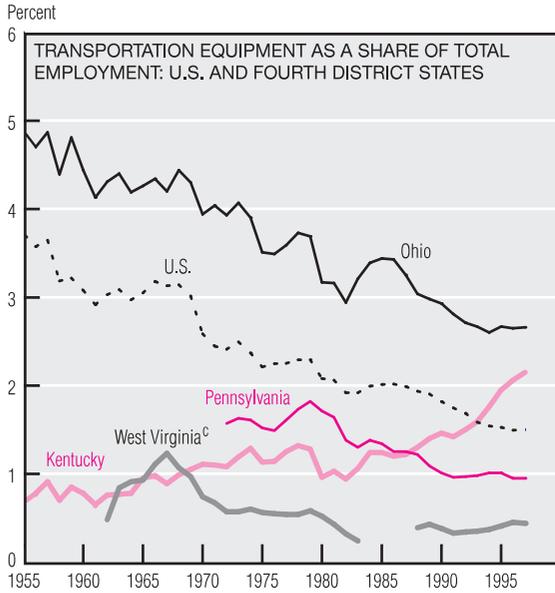
Motor vehicle production's share of U.S. employment is decreasing; even so, the industry has been experiencing strong employment growth (4.9% annually) since 1990. That year, only 726,200 workers

were employed in the motor vehicle and equipment industry—the sixth-lowest level since the late 1950s. In the 1990s, foreign auto makers expanded their U.S. production, and domestic companies began to recover some of their market share. After seven years of upward movement, automotive employment reached a near-record average of 1 million workers for the
(continued on next page)

Fourth District Auto Production (cont.)



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



a. Counties marked with asterisks contain final assembly plant(s).
 b. Excluding medium and heavy trucks.
 c. 1984-87 data for West Virginia are not available.
 SOURCES: U.S. Department of Commerce, Bureau of the Census; U.S. Department of Labor, Bureau of Labor Statistics; Ohio Bureau of Employment Services, Labor Market Information Division; and *Ward's Automotive Reports*, September 29, 1997.

first half of 1998, only slightly below the 1979 peak of 1.04 million.

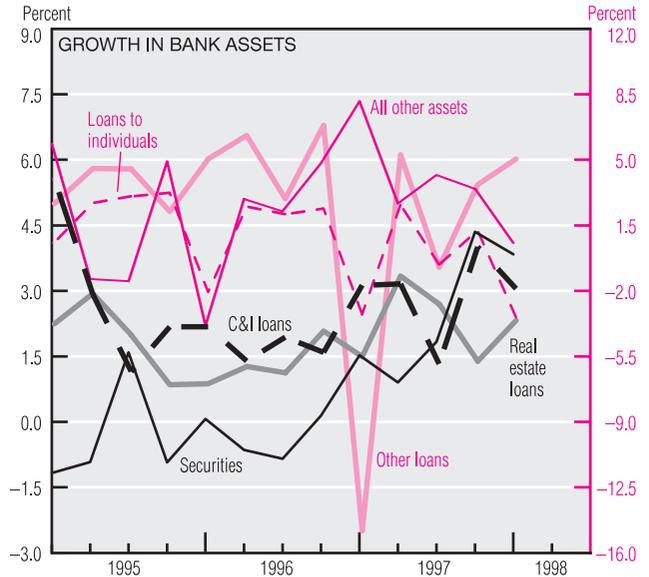
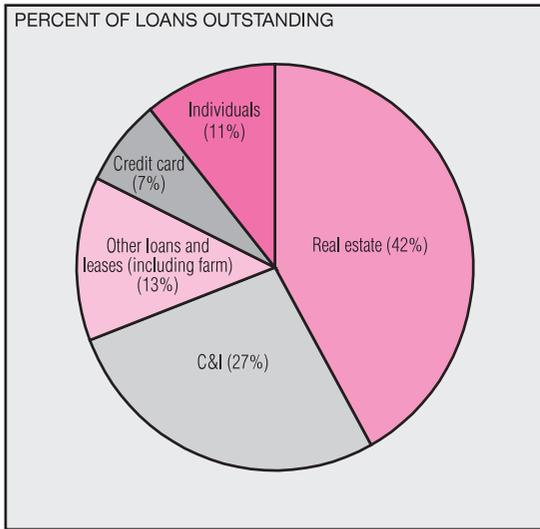
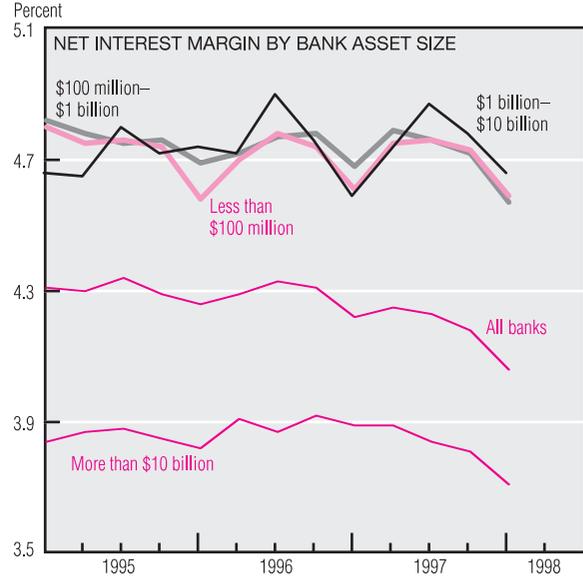
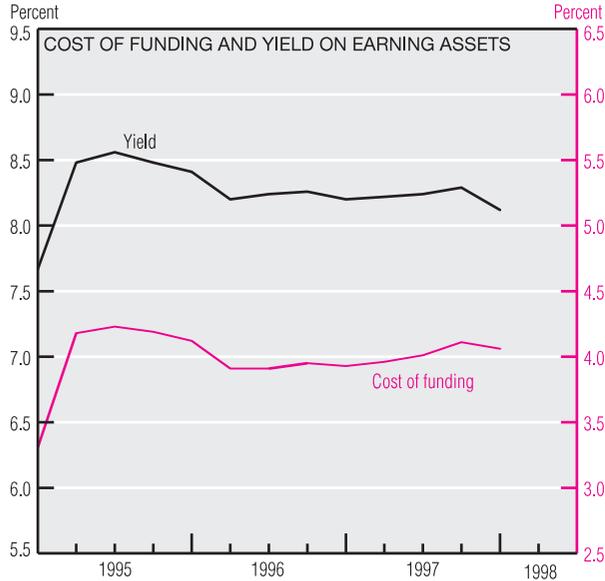
Although real earnings in manufacturing and total nonfarm employment have dropped over the past 20 years, they have remained relatively high in the motor vehicle and transportation equipment industries. In fact, average weekly earnings of workers in the motor vehicles and equipment sector have exceeded those in transportation equipment as a whole, which also encompasses aircraft production and shipbuilding.

The Fourth District's employment in the transportation equipment industry is concentrated along its western border. Final assembly plants are found in only 10 of the District's counties, but parts suppliers are widespread and account for a large share of its auto industry employment.

Ohio leads the District in the share of employment devoted to producing transportation equipment; indeed, it exceeds the national average. However, like the

U.S., Ohio's employment in the industry has declined as a share of total nonfarm employment. The pattern is similar in Michigan, where transportation equipment accounted for 17.5% of total employment in 1956, but only 6.5% by 1997. States that have been able to buck this trend, like Kentucky and Tennessee, have benefited from the automotive industry's move southward. However, they have also become more vulnerable to labor disputes like the recent GM-UAW work stoppage.

Banking Conditions



NOTE: All data are for FDIC-insured commercial banks.
 SOURCE: Federal Deposit Insurance Corporation, *Quarterly Banking Profile*, various issues.

Amid concerns that loan standards may be easing too much, insured commercial banks reported their fifth consecutive quarter of record earnings. First-quarter bank profits totaled \$15.9 billion, a 4.1% increase over the previous record, set in 1997:IVQ. The industry's return on average assets also improved to 1.26%, from 1.24% in the previous quarter. Analysts attributed earnings' strength to the continued strong asset expansion, growth in contributions from noninterest revenue sources, and favorable asset quality. However, the industry's net income did receive a boost of more

than \$1 billion from nonrecurring gains, the returns from a one-time sale of assets. There are other points of concern: Net interest margins have continued to narrow for banks of all asset sizes, credit-loss provisions have risen, and noninterest expenses related to mergers and holding company restructurings have increased.

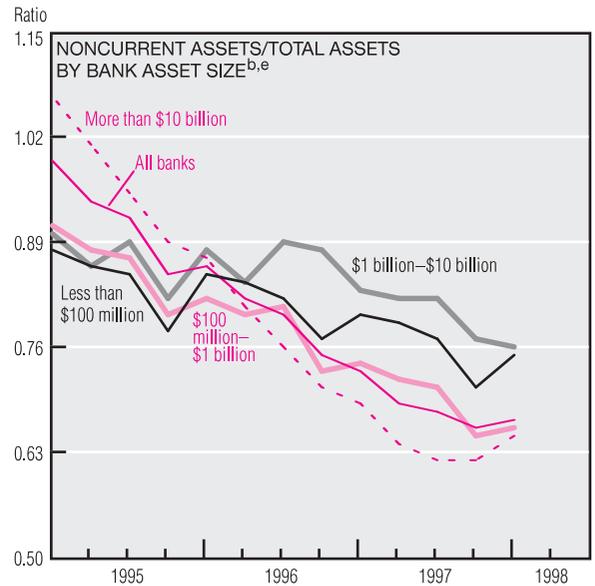
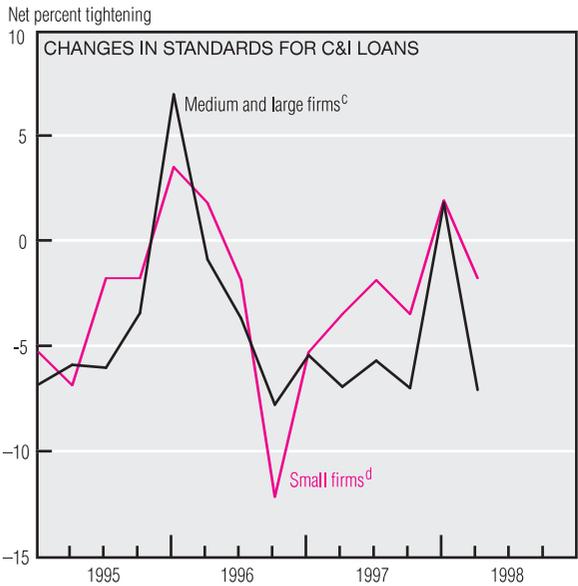
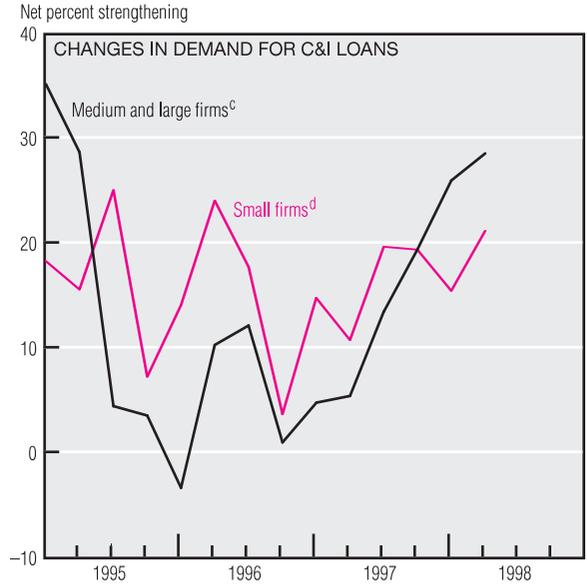
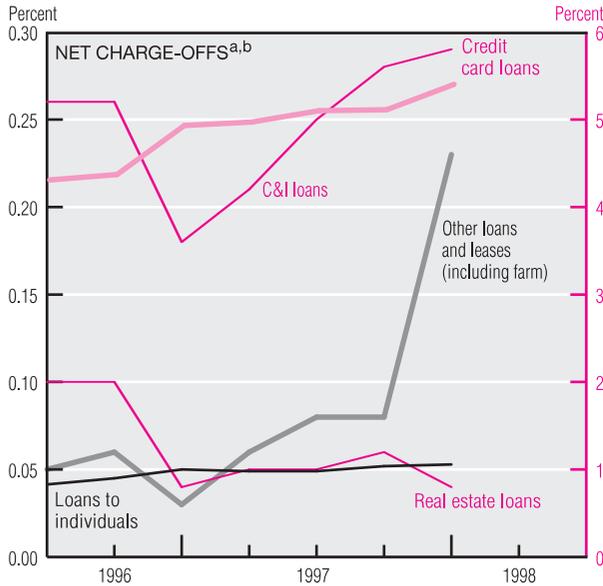
Of the three largest categories of loans outstanding—real estate, commercial and industrial (C&I) loans, and other loans and leases (including farms)—two improved on their strong growth of the previous quarter. Loans to individuals, the most

volatile loan category, shrank 3.42% in 1998:IVQ after a modest 1.24% growth rate in the previous quarter.

Commercial banks' securities acquisitions slowed from the 4.35% growth rate posted in 1997:IVQ, yet remained at a robust 3.84%, still strong relative to recent experience. Respondents to the Federal Reserve's May 1998 senior loan officer opinion survey indicated that banks were purchasing securities to leverage up their capital and boost returns on equity. The old standby strategy—repurchasing shares to pay out excess capital—is not

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Banking Conditions (cont.)



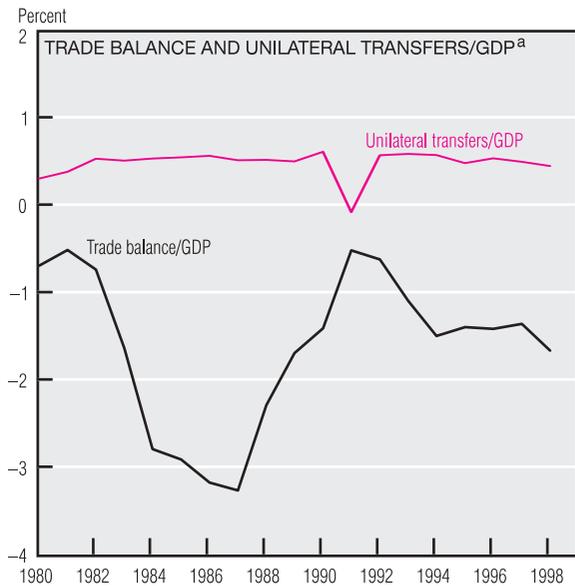
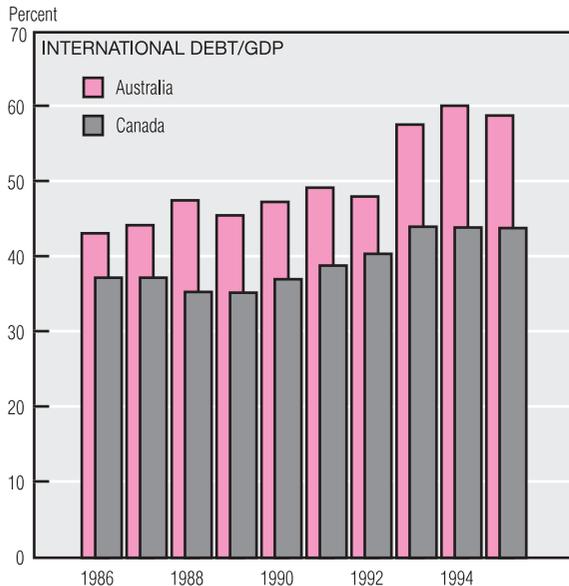
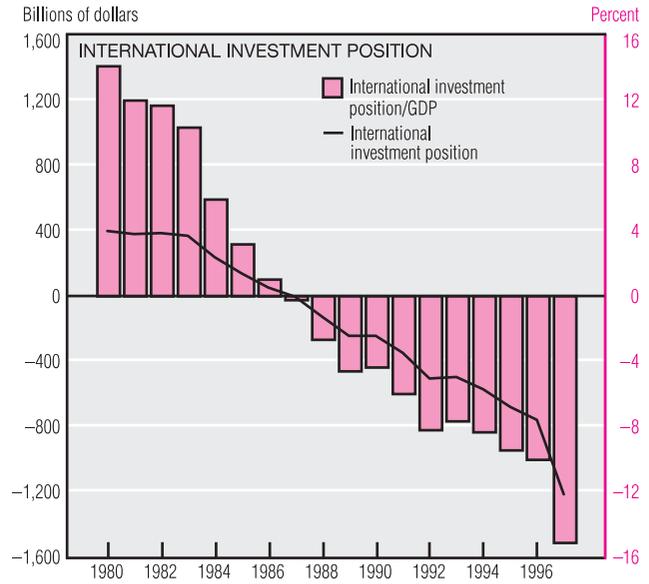
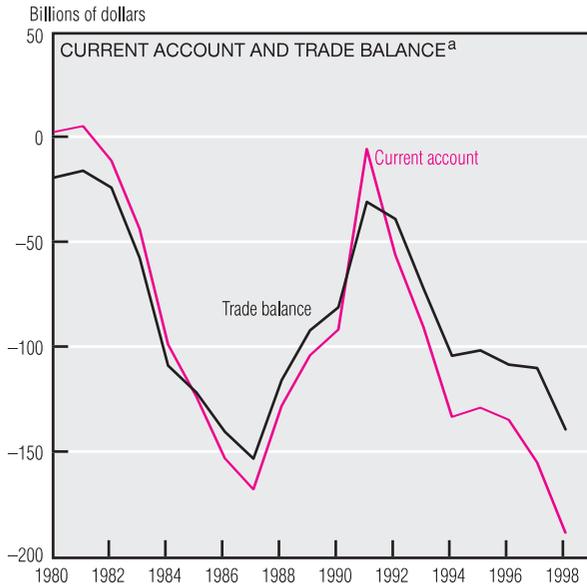
a. The net charge-off rate is the percentage of total loans that banks remove from their balance sheets because of uncollectibility, less amounts recovered on loans previously charged off, expressed as an annual rate.
 b. All data are for FDIC-insured commercial banks.
 c. \$50 million or more in annual sales.
 d. Less than \$50 million in annual sales.
 e. Noncurrent assets are the sum of loans, leases, debt securities, and other assets that are 90 days or more past due or in nonaccrual status. Banks' noncurrent assets include "other real estate owned."
 SOURCES: Board of Governors of the Federal Reserve System, *Senior Loan Officer Opinion Survey on Bank Lending Practices*, May 1998; and Federal Deposit Insurance Corporation, *Quarterly Banking Profile*, various issues.

attractive in an environment of high stock prices. In addition, legal restrictions bar holding companies that engage in pooling-of-interest mergers from repurchasing shares for a time. For banks in these holding companies, securities purchases serve to put excess capital to work. In recent months, banking regulators have begun to express concern about the loosening of loan standards. Net loan charge-offs jumped 18.8% in the first quarter over the

same period in 1997. The largest increases in net charge-offs resulted from C&I loans and credit cards. Although credit card charge-offs accounted for 62.3% of all loan charge-offs taken by commercial banks in the quarter, credit card lending remains one of banks' most profitable lending areas, generating high-interest-rate loans and significant noninterest income. The Fed's May 1998 survey of senior loan officers revealed that stan-

dards for C&I loans eased, despite the continued strong demand for them. The cause most often cited by respondents was more aggressive competition from other commercial banks and from nonbank lenders. While standards eased slightly overall, most banks (more than 85%) held loan standards unchanged. Noncurrent assets rose for banks of most asset sizes, but the increases were fairly modest and these ratios remain near their four-year lows.

Sustainable Current-Account Deficits



a. 1998 values are based on first-quarter data.

SOURCES: U.S. Department of Commerce, Bureau of the Census and Bureau of Economic Analysis; and International Monetary Fund, *International Financial Statistics*.

One way nations spend beyond their means is by incurring debts to the rest of the world. The U.S. current-account deficit indicates that Americans have been consuming in excess of their income by amassing foreign liabilities for more than 15 years. With the situation in Southeast Asia threatening a further deterioration in U.S. international accounts, some might wonder how long we can continue to service rising debts without a sharp hike in interest rates, a rapid depreciation of the dollar, or some other financial market disruption.

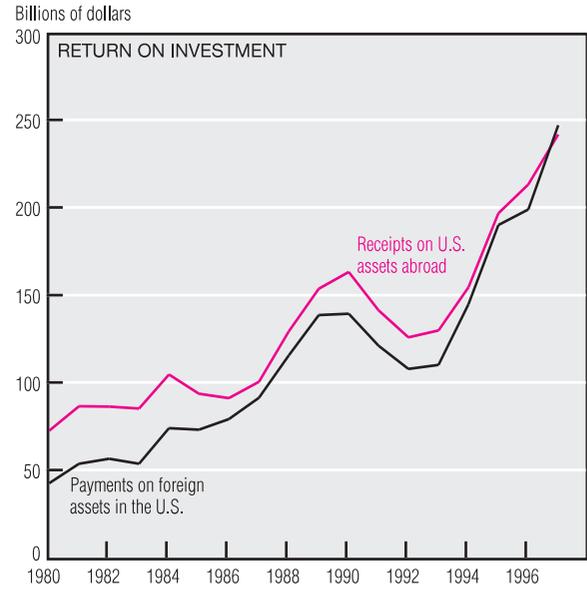
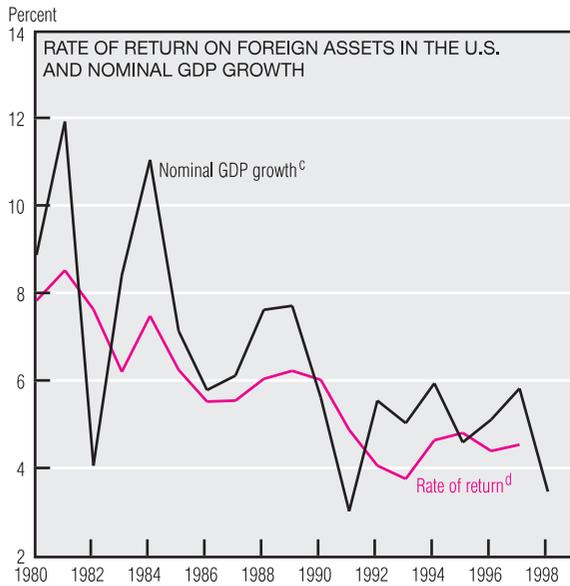
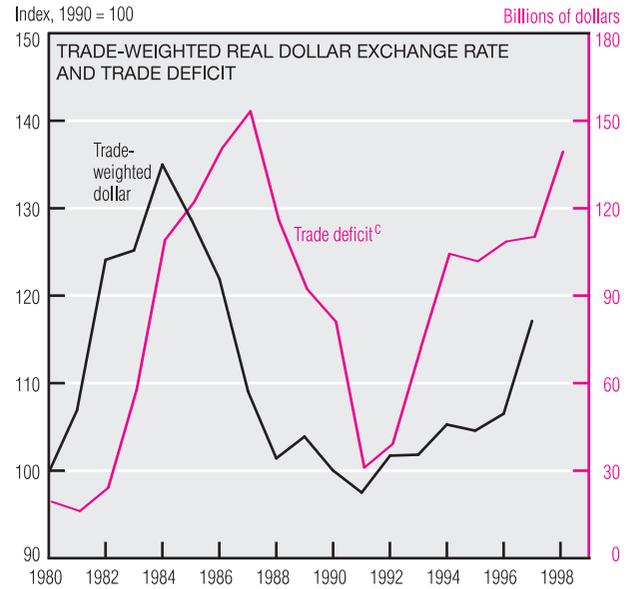
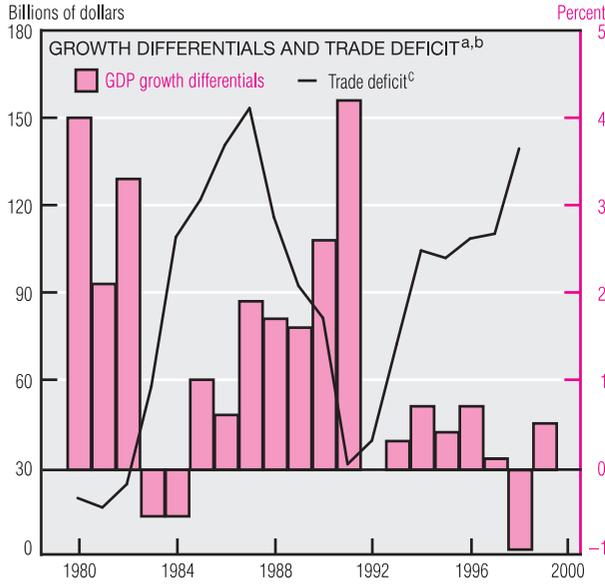
Foreigners will lend to the U.S. as long as they believe the nation can make interest payments on time and repay any maturing principle. Because our capacity to do so is ultimately linked with our ability to produce, foreigners will consider the ratio of U.S. international indebtedness to GDP in gauging our creditworthiness. The U.S. shifted to debtor status in the late 1980s, and although the debt has since mounted rapidly, it equaled only about 15% of GDP in 1997. Economists do not know how high the ratio can rise before foreign investors attach a signifi-

cant default risk to it, but Canada and Australia have carried substantially larger debt burdens for many years without any obvious financial-market meltdowns.

Stabilizing our debt-to-GDP ratio depends primarily on our ability to fix our trade deficit (and unilateral transfers) relative to GDP. To do so—holding other things equal—foreign economic growth must exceed U.S. economic growth by approximately two percentage points, which seems unlikely to occur over the next two years. Moreover, the

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Sustainable Current-Account Deficits (cont.)



a. The growth differential equals the trade-weighted average growth rate for the top 15 U.S. trading partners in 1990–95 minus the U.S. growth rate. Projections for 1997–99 utilize various sources.
 b. The real effective dollar index includes the top 15 U.S. trading partners, 1990–95.
 c. 1998 values are based on first-quarter data.
 d. The rate of return equals current income payments on foreign assets in the U.S. divided by the market value of foreign assets in the U.S.
 SOURCES: U.S. Department of Commerce, Bureau of the Census and Bureau of Economic Analysis; Organisation for Economic Co-operation and Development, *Economic Outlook*; International Monetary Fund, *International Financial Statistics*; DRJ/McGraw-Hill; and *Blue Chip Economic Indicators*, July 10, 1998.

dollar's steady real appreciation since 1991 does not favor a narrower trade deficit.

Even if the trade deficit stabilizes relative to GDP, holding the overall foreign-debt-to-GDP ratio constant requires that the rate of return on our foreign liabilities, which affects the proportion's numerator, be less than our economic growth, which affects its denominator. Over the long term, one would expect the rate of return to approximate our

nominal growth rate, making this second criterion rather inconsequential. If, however, foreign investors attach a risk premium to their expected return (possibly because our trade-deficit-to-GDP ratio reached a very high level), maintaining creditworthiness might necessitate a declining trade deficit or a trade surplus, instead of just a stable ratio. This situation could force some rather unpleasant outcomes: relatively slower real U.S. economic

growth or a rapid real depreciation of the dollar.

Creditworthiness aside, persistent current-account deficits could still affect real interest rates if U.S. foreign borrowing increased faster than the rest of the world's savings. The U.S. is a large borrower; its liabilities equal about one-third of the rest of the world's assets. Over the past 10 years, however, U.S. liabilities and foreign assets have grown in sync.