

The Economy in Perspective

A productive debate about monetary policy ...

A country's rate of productivity growth determines how rapidly it can expand its standard of living. Although a 1% or 2% annual change in a country's productivity growth rate may seem a small matter, it becomes significant when sustained over a long period. In practical terms, productivity growth enables people to have more of what they want over the course of their lives, whether it takes the form of food, clothing, shelter, or leisure time.

Measuring productivity requires an ability to gauge all the factors of production—such as hours worked, equipment, and energy used—as well as the goods and services produced. These estimates have never been exact, but they become increasingly difficult to specify as the composition of output shifts toward services, and the qualities that add value to inputs shift away from easily quantifiable physical attributes. Compounding the estimation problem even further, the information needed to determine today's pace of productivity growth will not be available for several years. What this means is that any conclusion about an upshift in U.S. productivity growth, though provocative, must be regarded as tentative.

With that caveat, consider a hypothesis about the current U.S. economic expansion that we have sketched in this space before. New technologies have become available and have taken root more firmly here than elsewhere, perhaps because the United States has a more entrepreneurial business culture and flexible market structure than most other countries. In the course of deploying the new technologies, businesses become more adept at creating new products and services that people value highly—and at producing everything more efficiently. Measured productivity rises but quite possibly continues to understate the true amount.

Meanwhile, U.S. businesses begin to step up their rate of investment spending. As they compete with households for resources, interest rates ordinarily rise. Higher interest rates discourage some people and firms from borrowing and, simultaneously, encourage some people and firms to save more. However, suppose that capital from abroad, attracted to the profitable investment environment, flows into the United States. The dollar strengthens as foreign residents buy dollar-denominated assets. The cost of capital (interest rates) need not rise to attract either domestic or foreign savings. The strong dollar stimulates

imports at favorable prices, while relatively low interest rates stimulate housing and durable goods sales. Many people, realizing that they have become permanently wealthier, begin without delay to consume at a faster rate. The expanding trade deficit represents both the amount we are consuming in excess of our production and the source of capital that enables the virtuous cycle to keep on spinning.

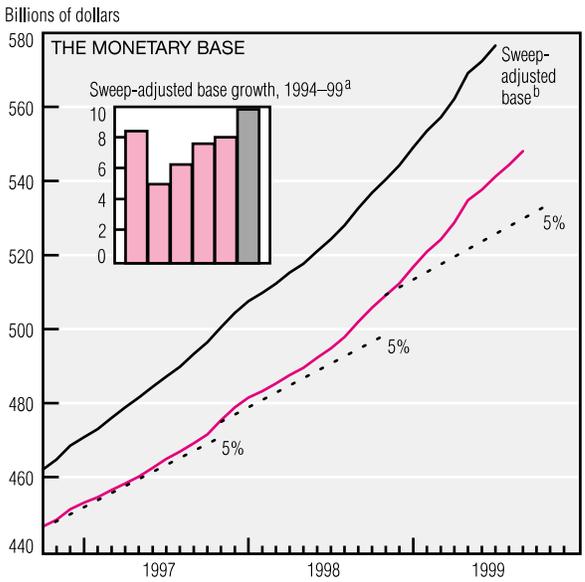
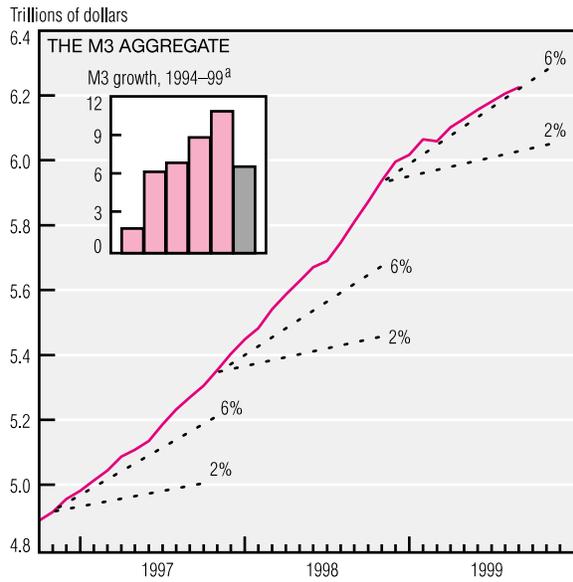
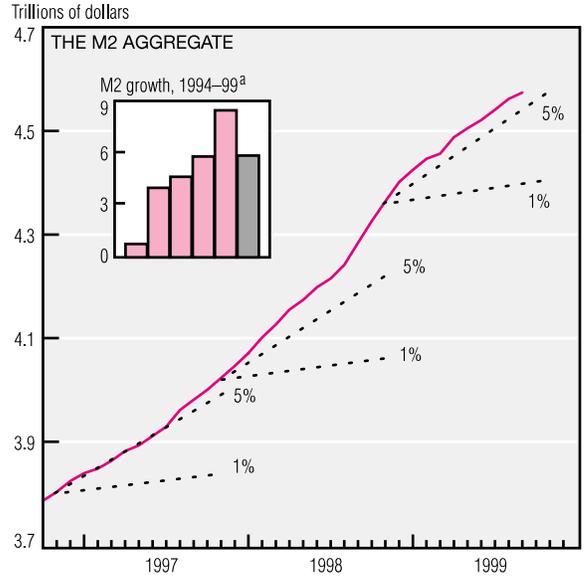
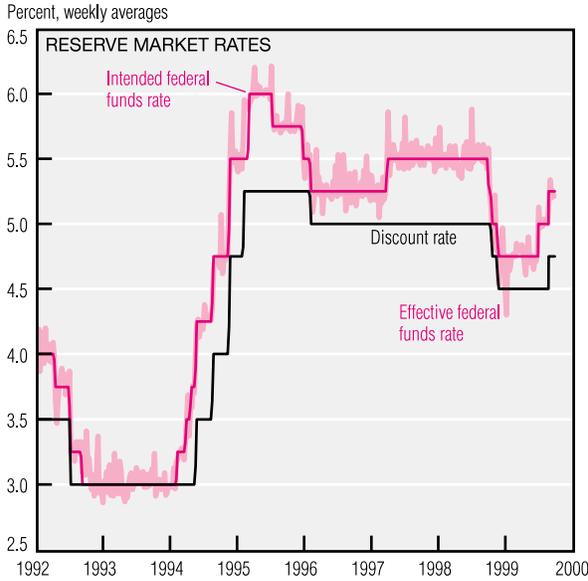
Suppose the Federal Reserve in our hypothetical example seeks to promote sustainable economic growth by achieving price stability. At the federal funds rate it selects, our textbook monetary authority will supply whatever reserves the banking system wants. As the virtuous cycle whirls, labor compensation and productivity growth rates accelerate in tandem, keeping the rise in unit labor costs low and steady. Growth in the nominal stock of money accommodates growth in the overall pace of economic activity. As a result, although the volume of goods and services consumed expands dramatically, inflation can still remain low and stable.

Recall that a stable real rate of interest is the linchpin of the virtuous cycle. If the rest of the world begins to compete more aggressively for resources, the real interest rate will rise and the rate of U.S. economic growth will slow. The textbook Federal Reserve cannot neutralize this force. However, if it does not raise the federal funds rate, it will supply more money than the economy needs, and inflation will accelerate.

Consider another effect of the real interest rate. Suppose that U.S. productivity growth continues to accelerate at successively faster speeds. The virtuous cycle will spin correspondingly faster, and the real rate of interest will rise correspondingly higher. By adjusting the federal funds rate up, the textbook Federal Reserve will be able to notch inflation down further as the economic expansion continues.

Favorable productivity developments unquestionably generate positive benefits. As they ride the swelling productivity waves, monetary policymakers must be able to discern the implications of interest rates and money demand through the spray. The public must recognize a treacherous undertow: Inflation cannot be pounded into submission by the relentless force of technological progress alone. Inflation remains a monetary phenomenon controlled through monetary policy.

Monetary Policy



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

The September Federal Open Market Committee (FOMC) meeting concluded with no change in the intended federal funds rate. Earlier in the summer, the FOMC raised the intended funds rate by a total of 50 basis points (bp). A higher funds rate tends to increase the opportunity cost of holding fixed-rate deposits.

As an apparent result of the rate increases, growth rates of the broader monetary aggregates slowed. M2 growth decreased from

6.1% in August to 5.8% in September, a drop of 26 bp. Similarly, M3 declined 20 bp (from 6.1% to 5.9%).

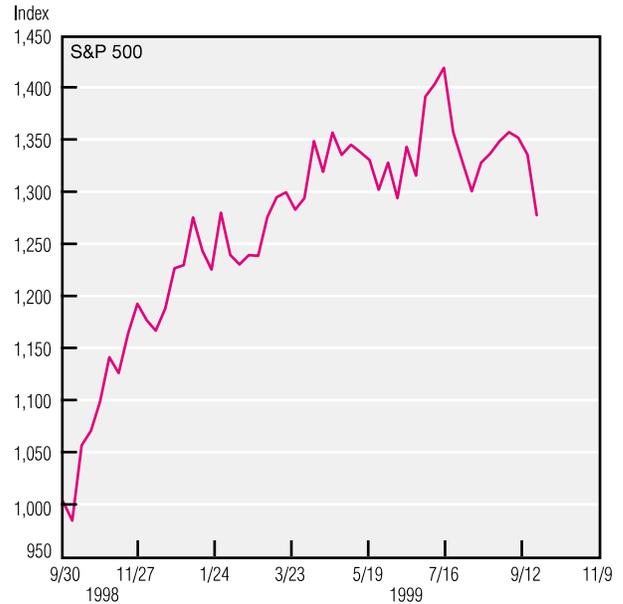
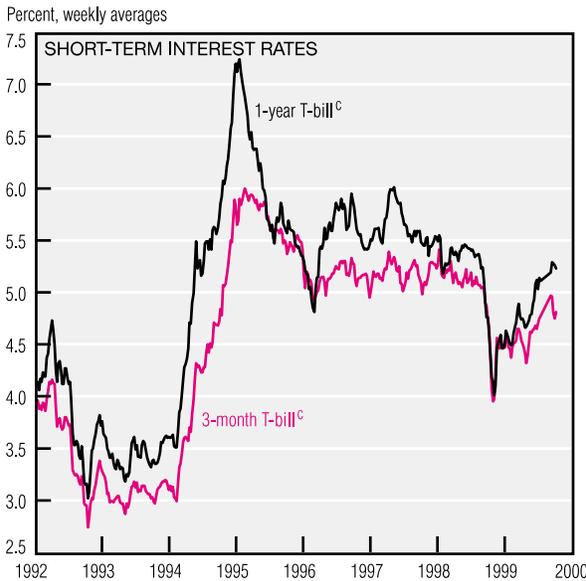
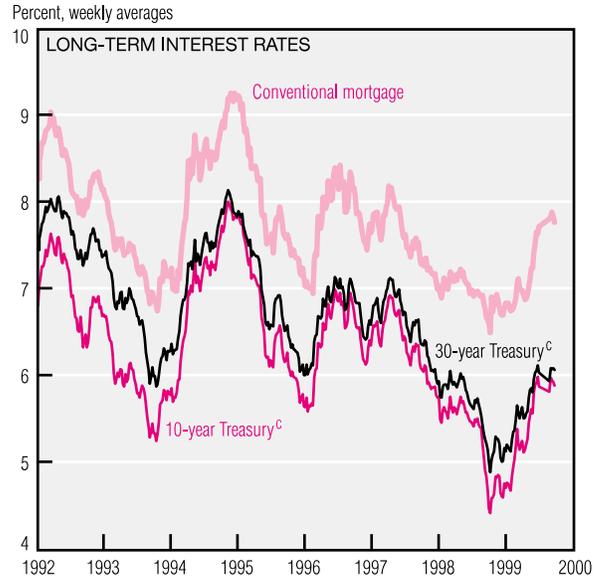
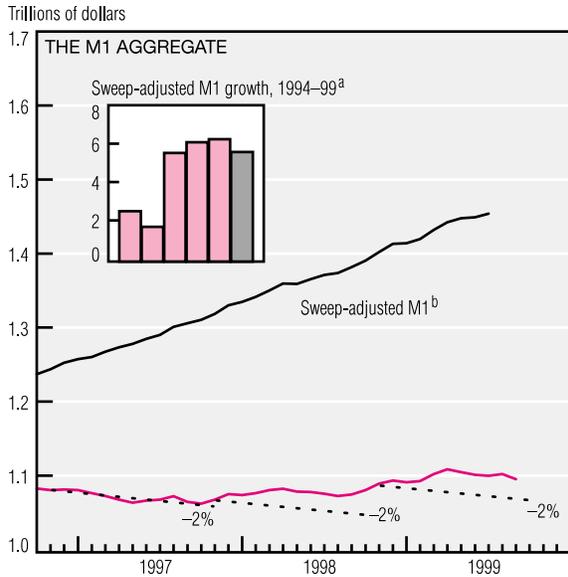
M1 growth has decreased steadily from its high of 4.59% in April to 0.81% in September. Sweep-adjusted M1, which includes funds that are moved from checkable deposits into money market deposit accounts to avoid reserve requirements, declined from 7.0% in April to 5.7% in August. (September sweep data are not yet available). In contrast, the

monetary base and the sweep-adjusted monetary base continue to expand vigorously, with little or no change in the rate of growth. Currency is driving growth in the monetary base, possibly because individuals are holding extra currency in preparation for Y2K.

Long-term interest rates have leveled off somewhat, after rebounding from the lows of October 1998. By this July, the 30-year Treasury, which

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Monetary Policy (cont.)



a. Growth rates calculated on a fourth-quarter over fourth-quarter basis. 1999 growth rate for sweep-adjusted M1 calculated on an August over 1998:IVQ basis.
 b. Sweep-adjusted M1 includes an estimate of balances temporarily shifted from M1 to non-M1 accounts.
 c. Constant maturity.
 NOTE: M1 data are seasonally adjusted. Last plot for M1 is estimated for September 1999. Last plot for sweep-adjusted M1 is August 1999. Dotted lines represent growth in levels and are for reference only.
 SOURCES: Board of Governors of the Federal Reserve System; and Standard & Poor's Corporation.

slipped to a 10-year low of 4.7% last October, topped 6% for the first time since this May. Since July, it has hovered around that mark, averaging slightly above it (6.04%). Short-term interest rates are more mixed. While the 1-year T-bill has continued its ascent, the 3-month T-bill has fallen to 4.81% in recent weeks.

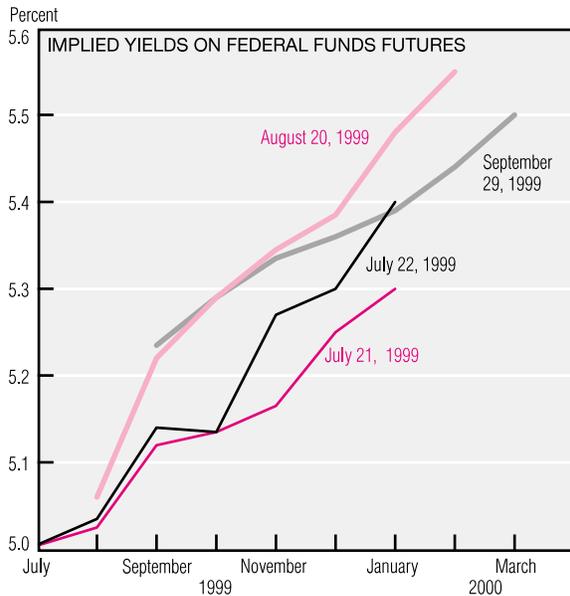
The S&P 500, a commonly used gauge of stock performance, has lost 11.1% of its value since July 16.

(Analysts generally see a loss of 10% or more as a market correction.) The correction, coupled with benign inflation figures, apparently led many market participants to believe that a further hike in the federal funds rate was unlikely.

The expected federal funds rate trajectory drifted up at midsummer. This anticipation of a rate increase was realized when the FOMC raised the intended fed funds rate from 4.75% to 5.25% in two consecutive

moves. But, generally speaking, how well does the fed funds futures market predict changes in the funds rate? Does the recent flattening of the implied yield on federal fund futures imply that the latest bout of rate increases is over? Futures contracts indicate that market participants, on average, are betting that the fed funds rate will inch up a mere 10 bp over the next three months. Over the
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Monetary Policy (cont.)



Federal Funds Rate: Actual Changes and Market Predictions, 3 Months Forward^{a,b}

Actual change	Predicted changes		
	25 or less	More than 25 and less than 75	75 or more
25 or less	71%	56%	33%
More than 25 and less than 75	12%	6%	33%
75 or more	0%	25%	22%
Wrong direction	18%	13%	11%

Federal Funds Rate: Actual Changes and Market Predictions, 6 Months Forward^{a,c}

Actual change	Predicted changes		
	25 or less	More than 25 and less than 75	75 or more
25 or less	77%	70%	56%
More than 25 and less than 75	8%	10%	33%
75 or more	0%	10%	11%
Wrong direction	15%	10%	0%

Federal Funds Rate: Actual Changes and Market Predictions, 3–6 Months Forward^{a,c,d}

Actual change	Predicted changes		
	25 or less	More than 25 and less than 75	75 or more
25 or less	82%	45%	40%
More than 25 and less than 75	0%	27%	20%
75 or more	0%	18%	0%
Wrong direction	18%	9%	40%

a. Changes are given as number of basis points.

b. 1988:IVQ–1999:IIQ.

c. 1990:IVQ–1999:IIQ.

d. The data for 3–6 months forward are derived from the 3-months-forward and 6-months-forward contracts.

SOURCE: Chicago Board of Trade.

next six months, the anticipated increase is 25 bp.

Historically, when the market has bet that the funds rate would move less than 25 bp in the next three months, it has proved right about 71% of the time. Furthermore, the actual change on those occasions never exceeded 75 bp. This is an impressive performance. The market fared far worse, however, when it bet that the change in the funds rate would exceed 75 bp. This guess

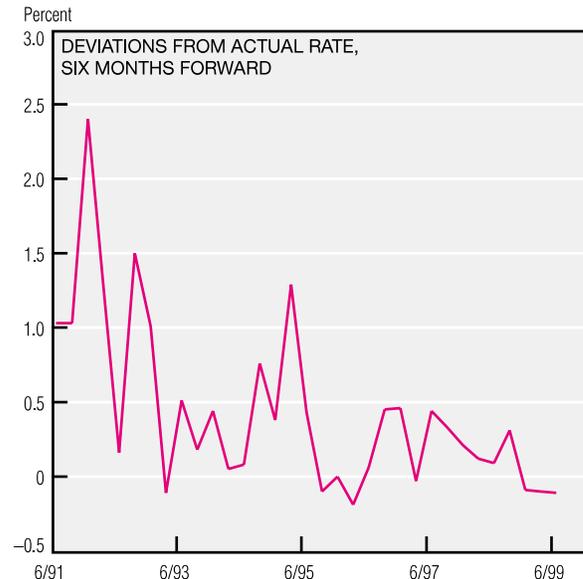
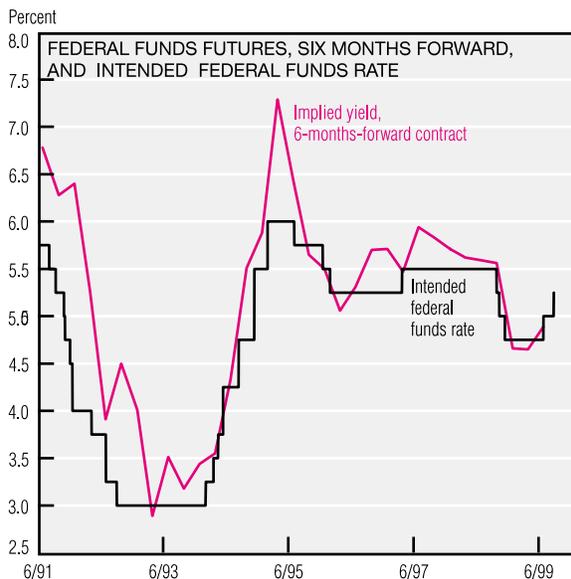
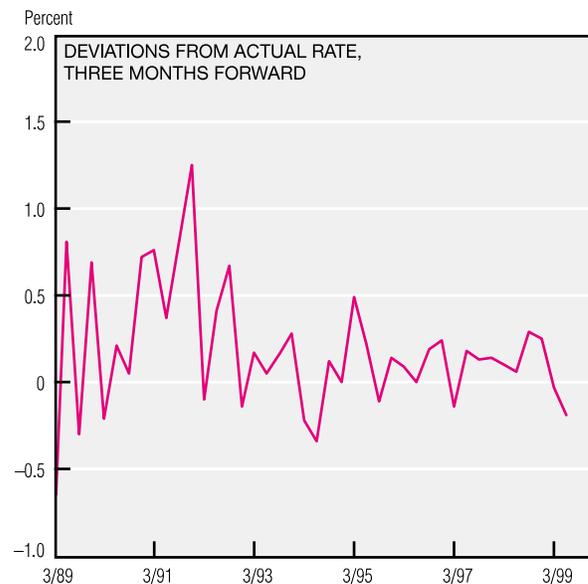
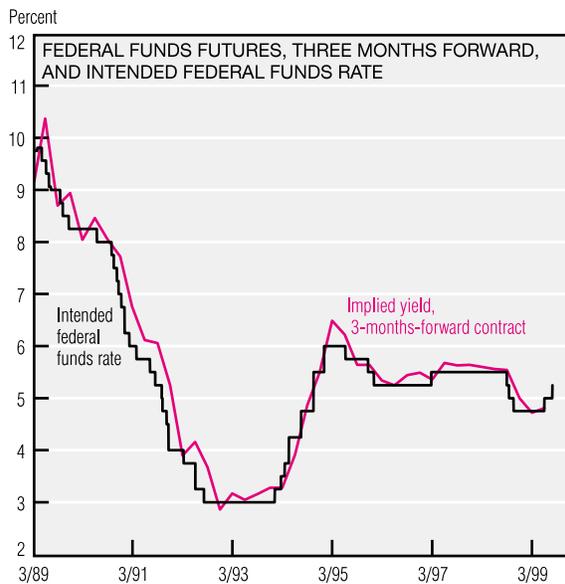
proved right only 22% of the time, and the wrong guesses were far wide of the mark. In fact, 44% of the time the funds rate changed less than 25 bp or moved in the direction contrary to the market's prediction. This indicates that the FOMC rarely moved when the market was not expecting any large change, but the opposite was not true. The market's expectation of a large change had little power to predict what the next move would be (if any).

The six-months-forward contract

for the funds rate tells a similar story. When the market bet that the funds rate would move less than 25 bp, the actual funds rate followed suit 77% of the time. But when the market expected a large change in the funds rate (more than 75 bp), the actual funds rate differed markedly from this bet 56% of the time. Using the six- and three-months-ahead contracts, one can back out expectations for the funds rate three to six

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Monetary Policy (cont.)



SOURCE: Chicago Board of Trade.

month ahead. Once again, the story is similar.

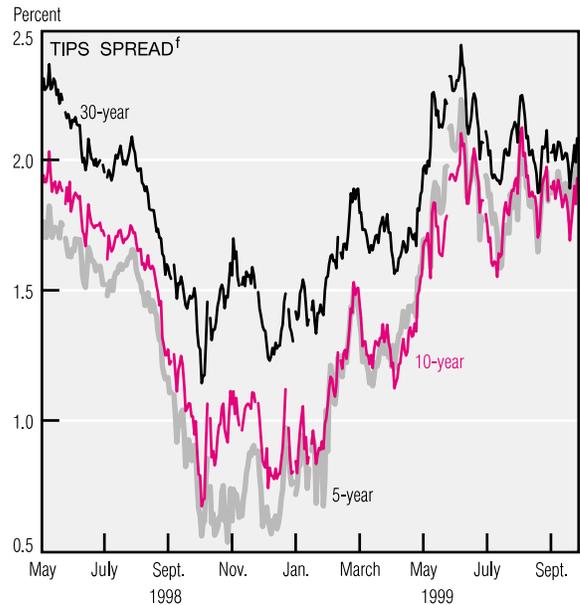
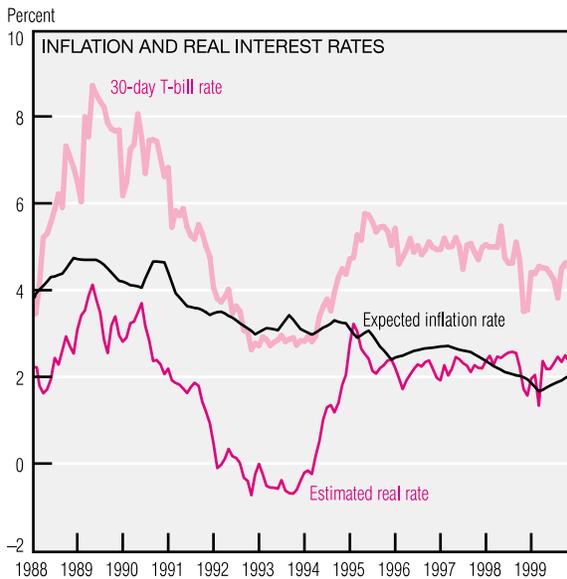
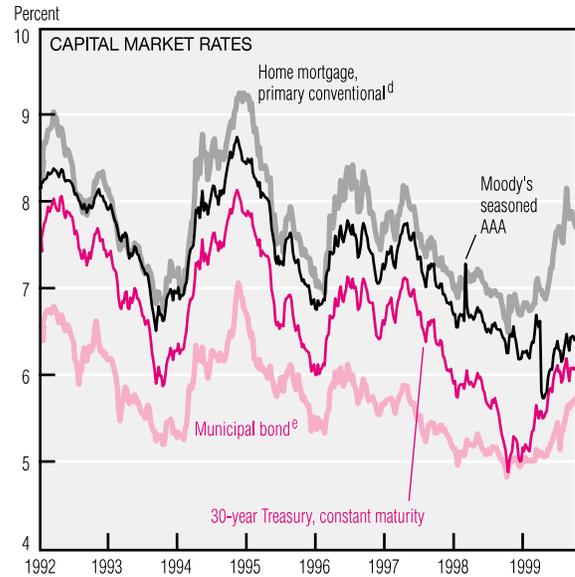
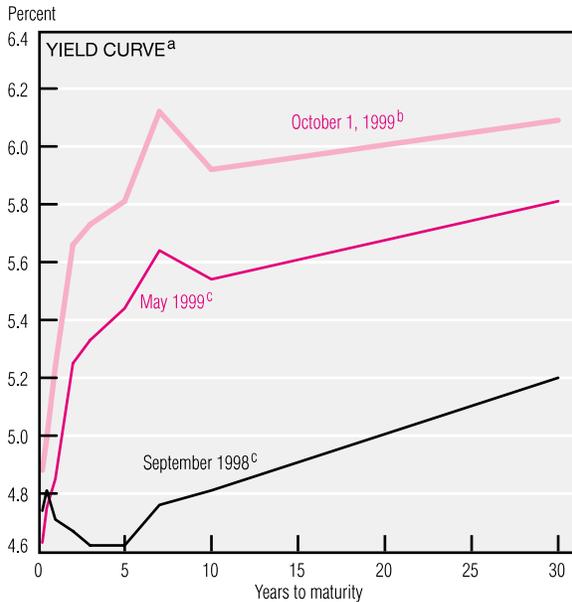
Another way to ascertain how efficient the fed funds futures market has been in foreseeing rate movements is to measure the deviations between the predicted and actual funds rates. Although the average miss for three months ahead was 30 bp, the large misses are concentrated early in the sample, when the FOMC lowered the funds rate dra-

matically (from 8% to 3% in just over a year). After that, the misses are relatively narrow and are centered on zero—another implication of an efficient forecast.

The six-months-ahead contract, with an average miss of 46 bp, tells a far different story. But the real indication that this number does not represent the market's best guess is the fact that the errors do not cluster around zero. Instead of averaging to zero, they average 41 bp.

The lack of predictive power in six-months-ahead contracts is not surprising, because there are generally few investors participating actively in this market. Contracts over the next three months, however, have substantially more investors, so their predictions are more efficient. Current three-months-ahead contracts clearly show that market participants would be surprised if the Fed moved substantially in the next three months.

Interest Rates



a. All yields are from constant-maturity series.

b. Weekly averages.

c. Monthly averages.

d. Contract interest rates on commitments for fixed-rate first mortgages.

e. Bond Buyer Index general obligation, 20 years to maturity, mixed quality, Thursday quotations.

f. The spread between the interest rate on constant-maturity Treasury securities and the interest rate on Treasury inflation-protection securities with the same maturity.

SOURCES: Board of Governors of the Federal Reserve System, "Selected Interest Rates," *Federal Reserve Statistical Releases*, H.15; Bloomberg Financial Information Services; and the *Wall Street Journal*.

What a difference a year makes! One year ago, financial markets were still reeling from the Asian crisis, the Russian default, the collapse of Long Term Capital Management, and the associated flight to quality and liquidity. The Treasury yield curve has moved from a position of short-rate inversion with a 10-year, 3-month spread of only seven basis points (bp) to a more normal, upward-sloping shape with a 10-year, 3-month spread of 104 bp, just below the historical average of 120 bp.

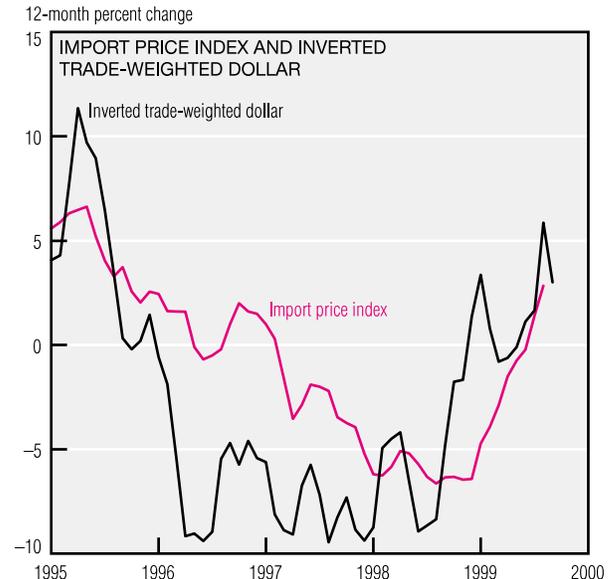
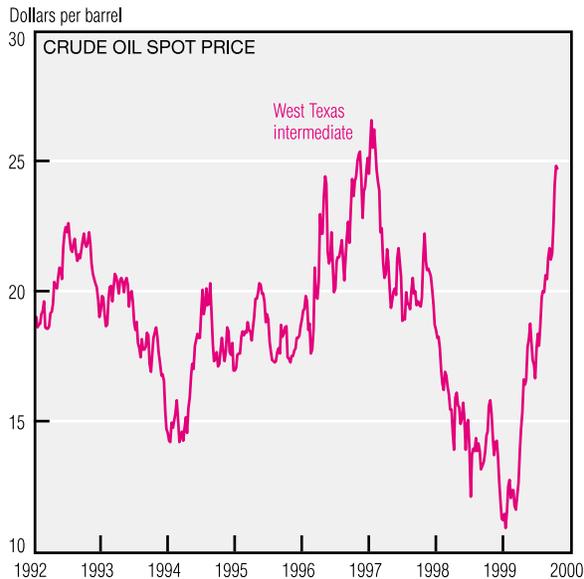
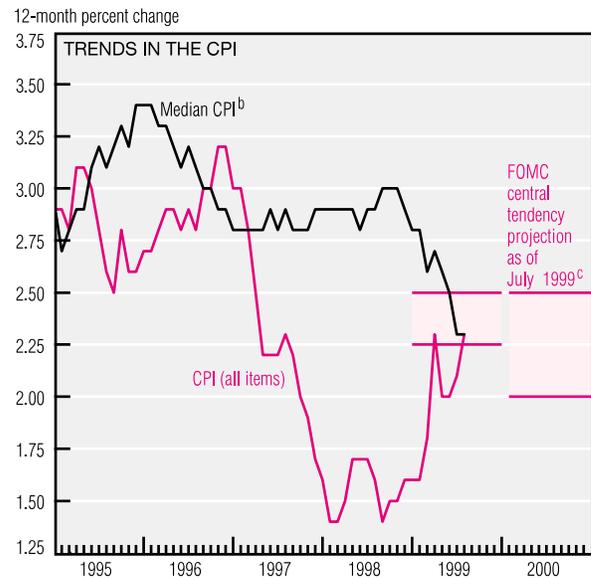
An increase in long rates has contributed to the steepening of the yield curve, but not all long-term rates have increased by the same amount as 30-year Treasuries. Home mortgage rates have risen equally with Treasuries (87 bp since the beginning of the year). However, yields on municipal bonds and on seasoned (that is, not newly issued) corporate AAA bonds have not kept pace.

Long rates often vary with expectations of inflation, and there is some evidence that such expectations

have increased over the past year. A procedure that uses 30-day T-bill rates in conjunction with survey forecasts shows that expectations of short-term inflation have increased from 1.66% in March 1999 to 1.98% in October 1999. Expectations of longer-term inflation, obtained by subtracting the yield on Treasury inflation-protection securities (TIPS) from the nominal bond yield, also show an increase. Only part of the increased spread represents a retreat from last year's flight to liquidity.

Inflation and Prices

	Percent change, last:				1998 avg.
	1 mo. ^a	3 mo. ^a	12 mo.	5 yr. ^a	
August Price Statistics					
Consumer prices					
All items	3.7	2.4	2.3	2.3	1.6
Less food and energy	1.4	1.4	1.9	2.4	2.5
Median ^b	2.5	1.7	2.3	2.9	2.9
Producer prices					
Finished goods	6.5	2.7	2.3	1.1	-0.1
Less food and energy	-0.8	-1.1	1.3	1.1	2.5



a. Annualized.

b. Calculated by the Federal Reserve Bank of Cleveland.

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

SOURCES: U.S. Department of Labor, Bureau of Labor Statistics; Federal Reserve Bank of Cleveland; International Monetary Fund, *International Financial Statistics*; Organisation for Economic Co-operation and Development, *World Economic Outlook*; Standard & Poor's Corporation; and *Blue Chip Economic Indicators*, September 1999.

Retail prices continued to rise rapidly in August, as shown by a 3.7% (annualized) increase in the Consumer Price Index (CPI). Persistent upward pressure on energy prices contributed greatly to the increase. For the year to date, crude oil prices have climbed about \$13 per barrel (nearly 115%) and are nearing the levels of early 1997.

The CPI minus food and energy posted a modest increase of 1.4% in August, equal to its average over the past three months. However, another measure of core inflation, the median CPI, rose 2.5% during the month. This suggests that retail

price inflation actually lies somewhere between the CPI and the CPI excluding food and energy.

Over the past 12 months, the CPI and the median CPI showed the same increase (2.3%), the first time this has happened in roughly 2½ years. The narrowed gap between these two inflation statistics has resulted partly from a rising CPI trend during 1999, but also from a falling median CPI trend (on the order of half a percentage point). The latter change, however, may be mostly an artifact of methodological adjustments to the CPI.

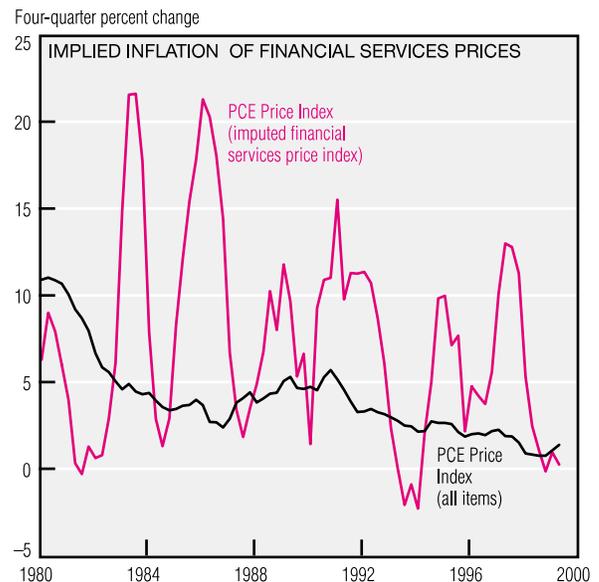
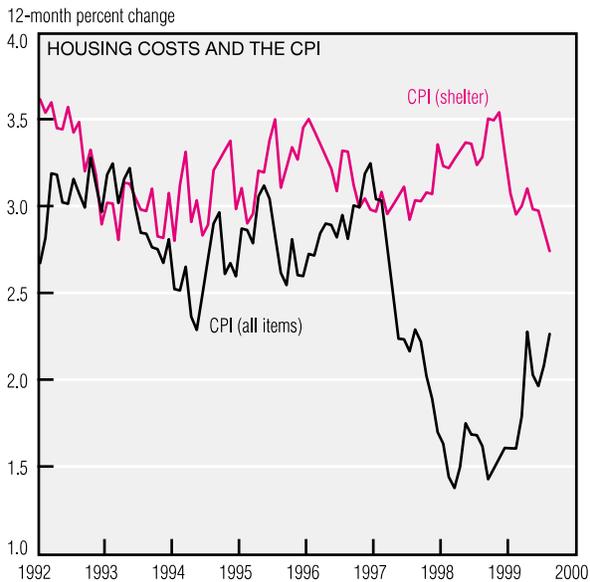
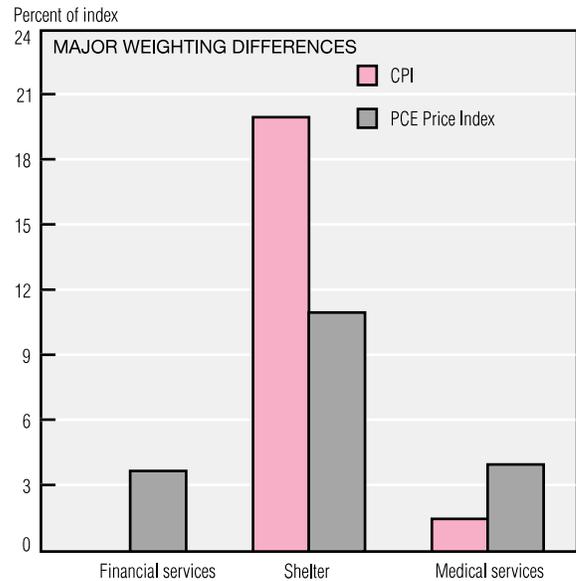
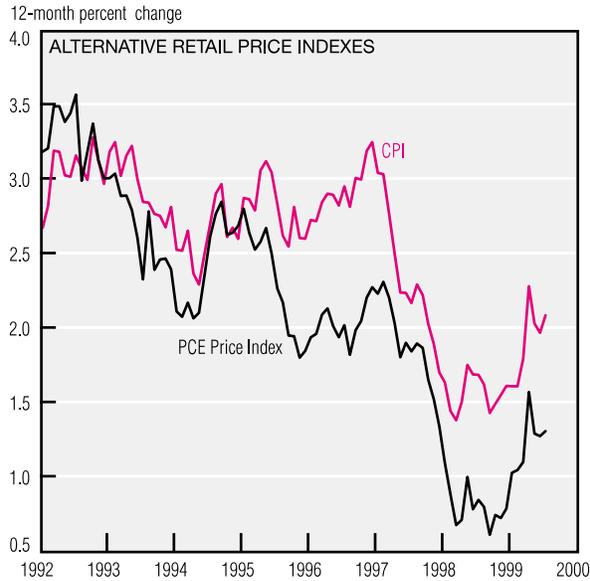
Another cause of the recent accel-

eration in retail prices is the dollar's declining value in foreign-exchange markets. Inverting the trade-weighted dollar value of foreign currencies shows how, as the dollar falls, the dollar prices of foreign goods to U.S. consumers might be expected to rise. Import prices, which are believed to have had a strong downward influence on the measurement of U.S. retail prices in 1997 and 1998, have contributed to the rise in aggregate prices this year.

While the CPI is the most popular retail price index, an alternative

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Inflation and Prices (cont.)



SOURCES: U.S. Department of Labor, Bureau of Labor Statistics; U.S. Department of Commerce, Bureau of Economic Analysis; and Todd E. Clark, "A Comparison of the CPI and the PCE Price Index," Federal Reserve Bank of Kansas City, *Economic Review*, third quarter 1999.

statistic is the Personal Consumption Expenditures Chain Price Index (PCEPI). While the PCEPI has also trended upward this year (presumably for the same reasons as the CPI), it has risen from a much lower level. Indeed, it has shown smaller rates of increase than the CPI over much of the past four years.

There are many reasons why these two price measures do not always agree. First, they differ in the scope of coverage. The CPI measures only out-of-pocket costs paid by urban consumers, while the PCEPI includes expenditures made on behalf of households by employers, government agencies, and non-

profit organizations. The two measures also use different surveys of consumer spending to gauge the importance of various items in the consumer market basket. As a result, the two indexes weight many components differently, and some of these differences are substantial. For example, the CPI gives greater importance to shelter costs, while the PCEPI places more emphasis on medical services. Shelter costs have tended to rise more rapidly than prices of other goods and services over the past few years, and this, among other things, has helped push the CPI above the PCEPI.

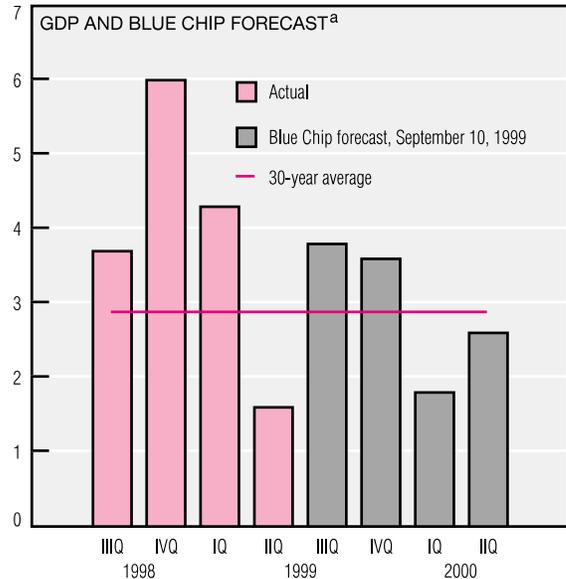
One major drawback of the

PCEPI, however, as argued in a recent Federal Reserve Bank of Kansas City research paper, is its way of computing nonmarket prices (which are outside the scope of the CPI). For example, the PCEPI tries to include the value of unpriced financial services afforded to many account holders. Because the value is difficult to compute, it raises questions as to the accuracy of these imputed price movements. The Bureau of Economic Analysis, which produces the PCEPI, is expected to introduce a new method for computing this item with its upcoming revision to the National Income and Product Accounts, scheduled for the end of October.

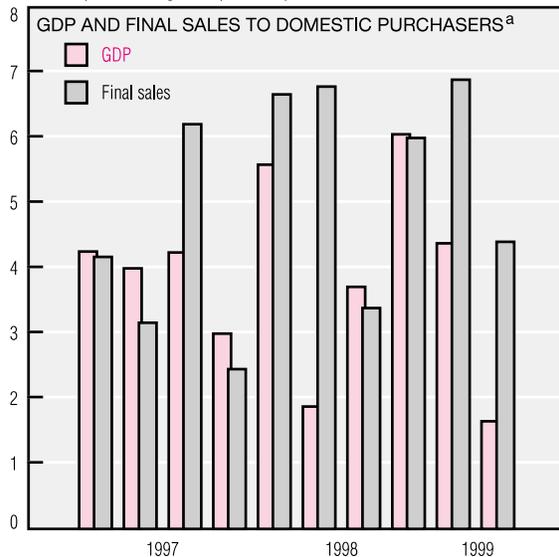
Economic Activity

	Change, billions of 1992 \$	Percent change, last:	
		Quarter	Four quarters
Real GDP	31.0	1.6	3.9
Consumer spending	62.9	4.8	5.2
Durables	18.6	9.6	12.1
Nondurables	11.2	2.8	4.6
Services	34.4	4.8	4.0
Business fixed investment	26.3	10.8	8.1
Equipment	29.7	15.3	10.1
Structures	-0.5	-1.0	2.7
Residential investment	5.9	7.2	10.6
Government spending	-6.4	-1.9	1.8
National defense	-2.6	-3.4	-1.2
Net exports	-34.4	—	—
Exports	12.0	4.9	3.7
Imports	46.5	15.1	10.6
Change in business inventories	-31.3	—	—

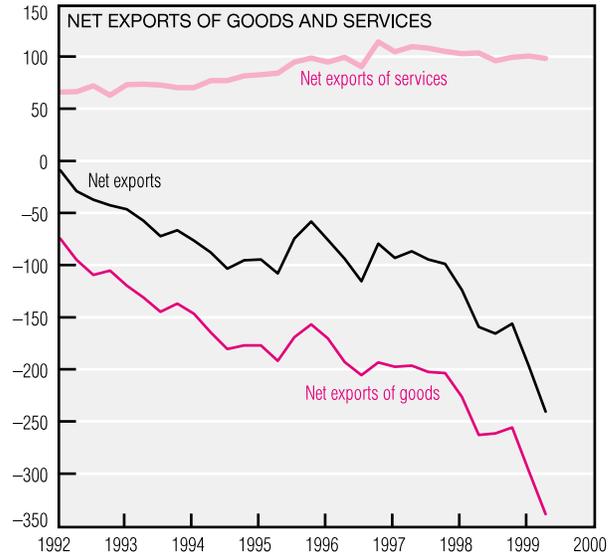
Annualized percent change from previous quarter



Annualized percent change from previous quarter



Billions of current dollars



a. Chain-weighted data in billions of 1992 dollars.

b. Components of real GDP need not add to totals because current dollar values are deflated at the most detailed level for which all required data are available.

NOTE: All data are seasonally adjusted.

SOURCES: U.S. Department of Commerce, Bureau of Economic Analysis; and *Blue Chip Economic Indicators*, September 10, 1999.

The final estimate of second-quarter GDP growth is 1.6%, down from the 1.8% preliminary estimate. The downward revision reflects a lower estimate of inventory accumulation and a higher amount of imports. Combined, these more than offset an upward revision to consumer spending.

For most of 1999, consumer spending has been stronger than expected. Financial turmoil abroad in 1998 led many firms to expect declines in both foreign and domestic

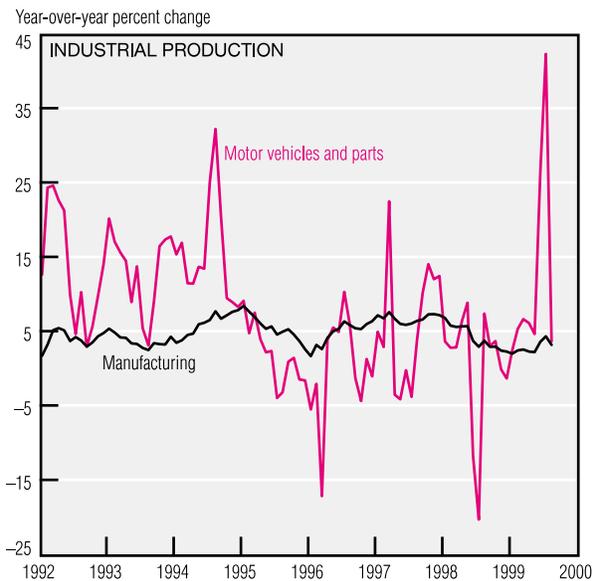
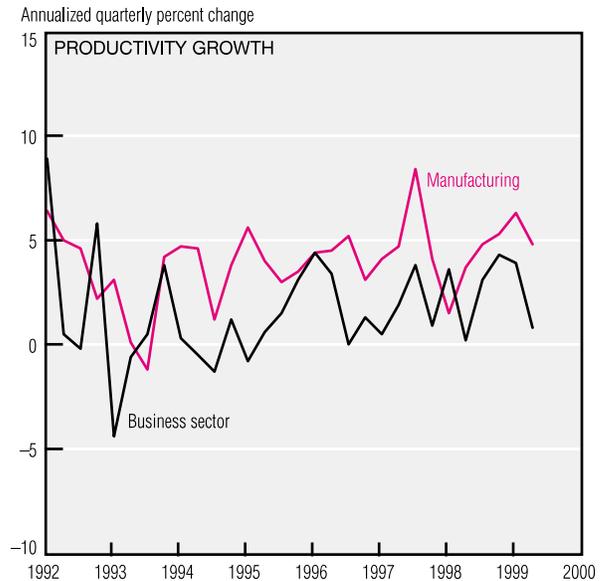
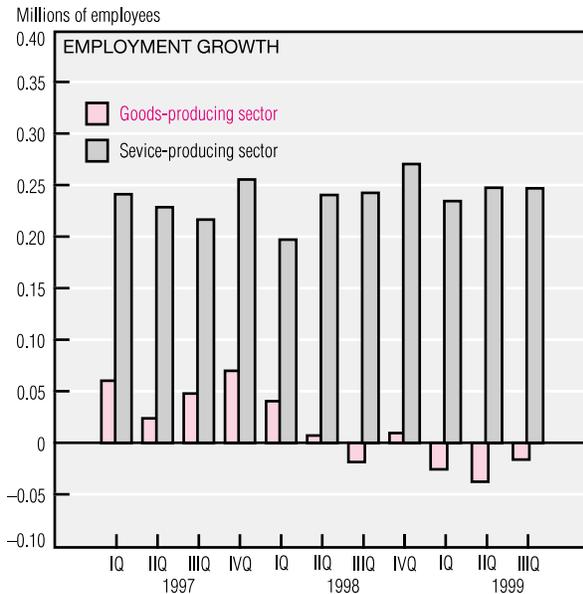
demand for goods; as a result, firms allowed inventory levels to fall in 1998:IVQ and 1999:IQ. Demand, however, was unexpectedly strong, which probably depleted inventories still further, reducing inventory-to-sales ratios to record lows. Indeed, inventory investment has fallen in each of the past three quarters, and these declines subtract from real GDP growth.

This recent trend is likely to reverse in the last six months of this year and then return in 2000:IQ, as

evidenced by the Blue Chip forecasts. The continued strength of consumer demand has prompted many firms to rebuild their inventories by placing new orders. Some firms may even order extra inventory as a precaution against possible supply disruptions as a result of the century date change. Firms may also be ordering extra inventory on the assumption that consumers will stock up on supplies for the event.

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Economic Activity (cont.)



NOTE: All data are seasonally adjusted.

SOURCES: U.S. Department of Commerce, Bureau of Labor Statistics; Board of Governors of the Federal Reserve System; and National Association of Purchasing Management.

For the past several years, growth in final sales to domestic purchasers, a measure of domestic demand, has outpaced GDP growth on average. Robust demand, combined with weak import prices caused by economic frailty abroad, has been drawing in more and more foreign goods. The resulting deficit in net exports of goods now has reached almost \$340 billion. Although the U.S. has a surplus in net exports of services, it is not nearly large enough to offset our goods deficit.

The increase in imports is a trend

that seems unlikely to slow in the near future. Employment growth has been persistently strong over the past several years, but most of the gains have occurred in service-producing industries. Employment in goods-producing industries has actually been declining in recent quarters.

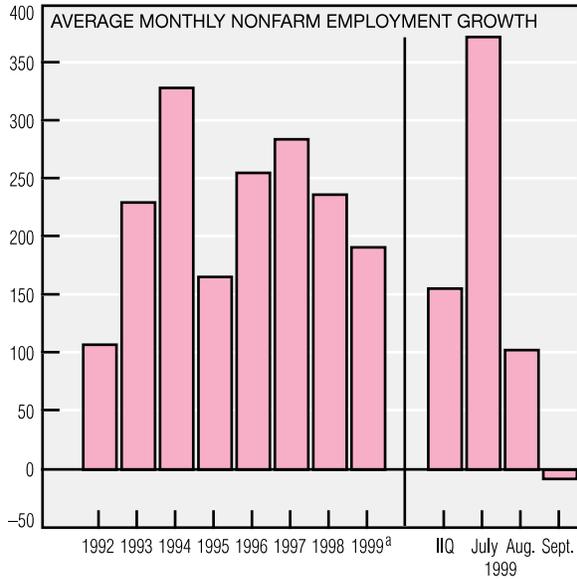
Robust productivity growth in goods-producing industries has allowed employment to falter without commensurate weakness in goods output. Because employment has been shifting to the less-productive service sector, import growth has

kept supply equal to the rising domestic demand.

Nevertheless, business conditions in the domestic manufacturing economy are good. Production in the manufacturing sector continues to grow (at about a 3% average rate since January over 1998). Production of motor vehicles, in particular, has been exceptionally strong. The Purchasing Managers' Index confirms positive sentiment in the manufacturing sector. The index has exceeded 50 since January, indicating expansion in the manufacturing economy.

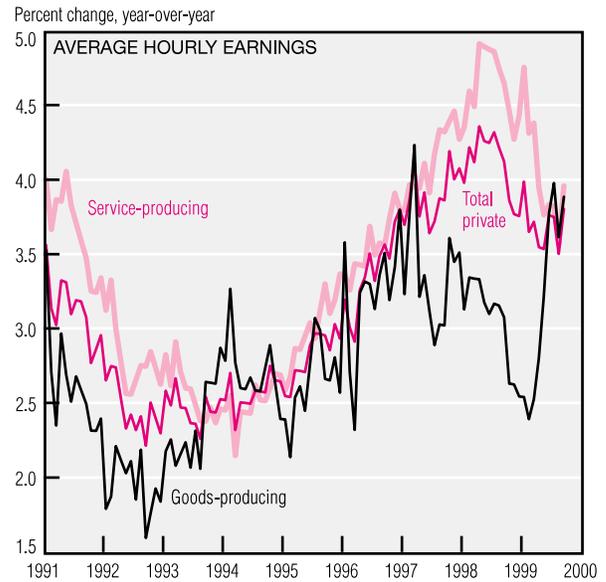
Labor Markets

Change, thousands of workers



Labor Market Conditions

	Average monthly change (thousands of employees)				
	1996	1997	1998	1999	
				YTD ^a	Sept.
Payroll employment	234	281	244	192	-8
Goods-producing	32	48	8	-24	1
Mining	1	2	-3	-5	1
Construction	28	21	30	10	21
Manufacturing	3	25	-19	-29	-21
Durable goods	10	27	-9	-13	-17
Nondurable goods	-7	-2	-10	-16	-4
Service-producing	202	233	235	215	-9
Retail trade	43	24	32	34	-49
FIRE ^b	14	20	26	12	-3
Services	117	141	119	115	39
Help-supply svcs.	19	28	10	14	-7
Health services	20	17	9	12	8
	Average for period (percent)				
Civilian unemployment	5.4	4.9	4.5	4.3	4.2



a. Year to date.
 b. Finance, insurance, and real estate.
 c. Vertical line indicates break in data series due to survey redesign.
 d. Includes earnings data for production and nonsupervisory workers on private nonfarm payrolls (approximately four-fifths of total private nonfarm employees).
 NOTE: All data are seasonally adjusted.
 SOURCE: U.S. Department of Labor, Bureau of Labor Statistics.

Labor markets were mixed in September. Although the unemployment rate remained at its 29-year low of 4.2%, employers cut 8,000 jobs from payrolls. Hurricane Floyd contributed to the decline, the first in almost four years.

Buoyed by an increase of 370,000 jobs in July, average monthly employment increased 156,000 in the third quarter. This, however, is 50,000 fewer jobs than the 210,000 jobs added per month in the first

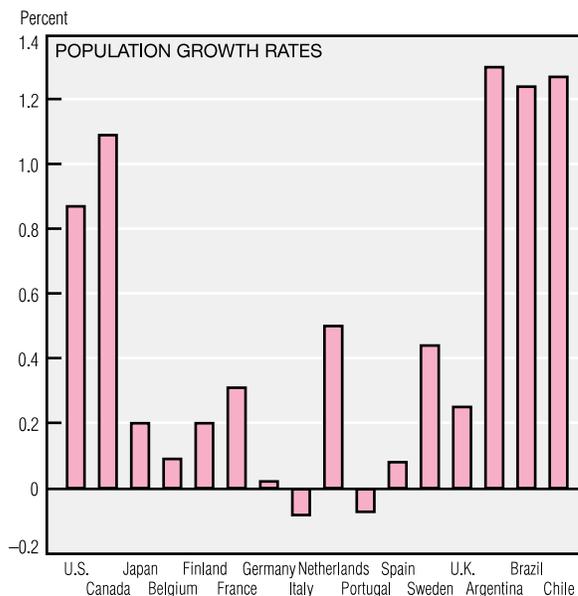
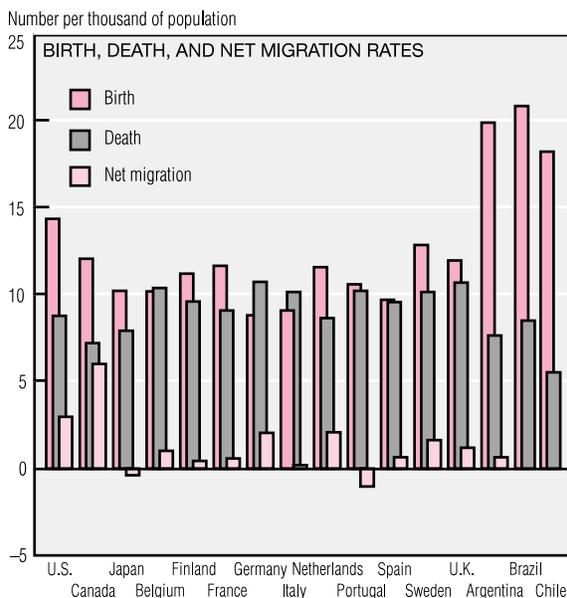
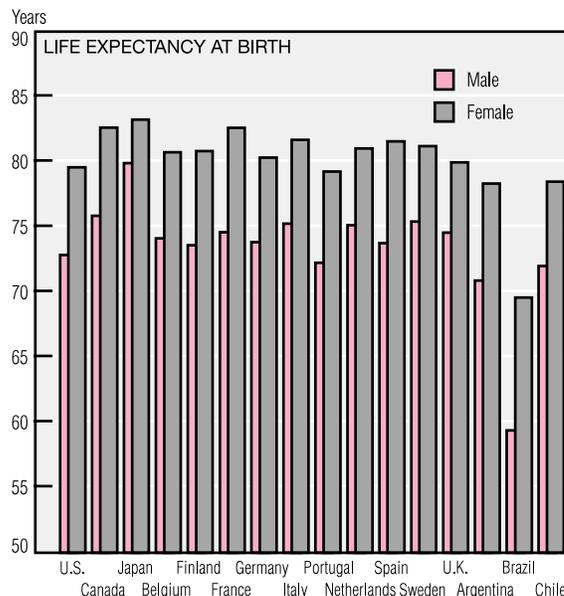
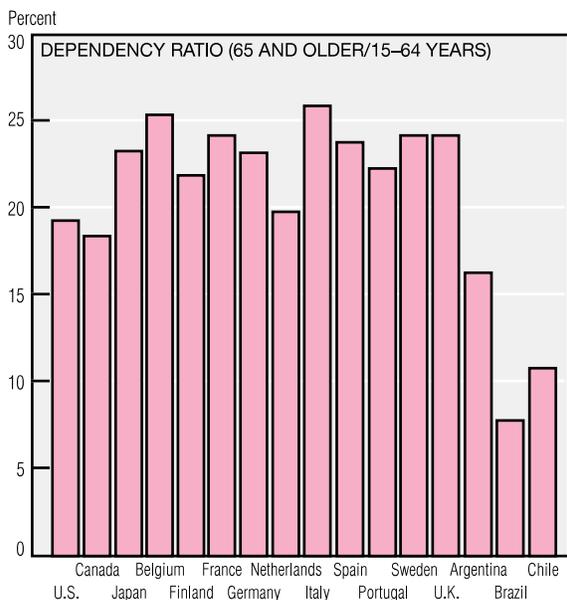
half of 1999. The employment-to-population ratio remained at a near-record high of 64.1%.

Employment in the service-producing sector, which has averaged gains of 215,000 jobs per month in 1999, declined 9,000 jobs in September. Reductions in retail, help-supply services, and local, state, and federal government employment contributed to the September contraction. Manufacturing employment continued its downward trend, losing 21,000 jobs last

month. However, declines in manufacturing employment averaged only 15,000 jobs in the third quarter, down from the 36,000 jobs per month lost over the first half of the year. Employment in construction continued to fluctuate, adding 21,000 jobs in September after losing 29,000 jobs the previous month.

Since September 1998, average hourly earnings have risen 3.8%, compared to a 3.1% increase during the current expansion.

Demographic Change



NOTE: Charts are based on data available as of January 1, 1999.
SOURCE: U.S. Central Intelligence Agency, *The World Factbook 1999*.

The rapid aging and slow growth of the developed world's population will soon exert tremendous pressure on public pension and health care budgets. Aging can be gauged using the dependency ratio—the ratio of people older than 65 to those aged 15–64. Dependency ratios in the U.S. and Canada are still significantly lower than in Europe and Japan. The U.S. ratio is expected to soar, however, as baby boomers begin retiring within a decade. By contrast, dependency ratios in Latin America remain quite low.

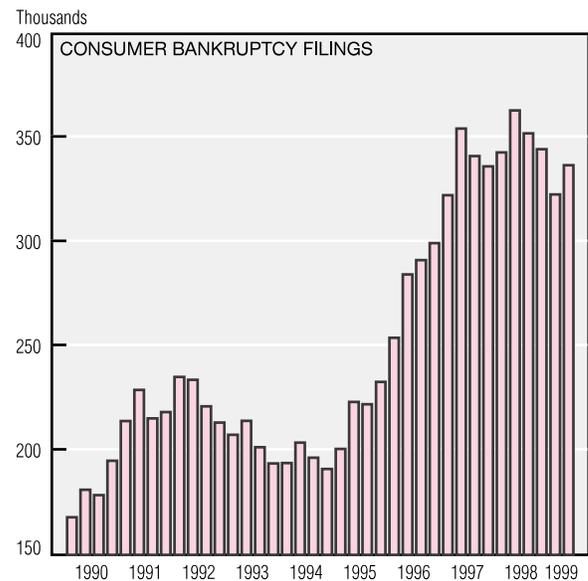
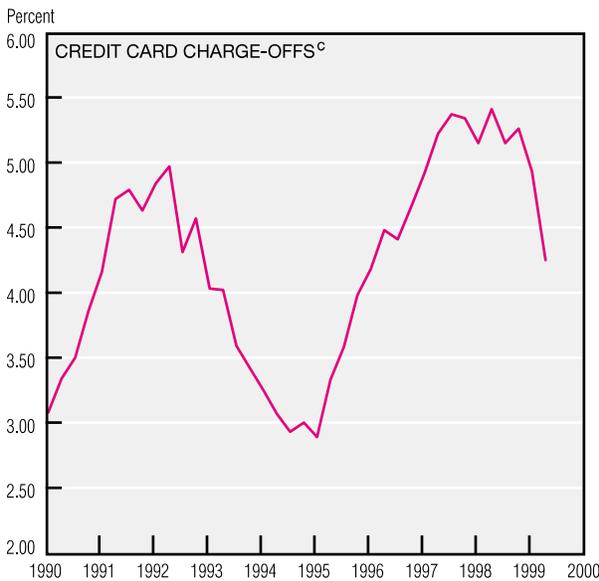
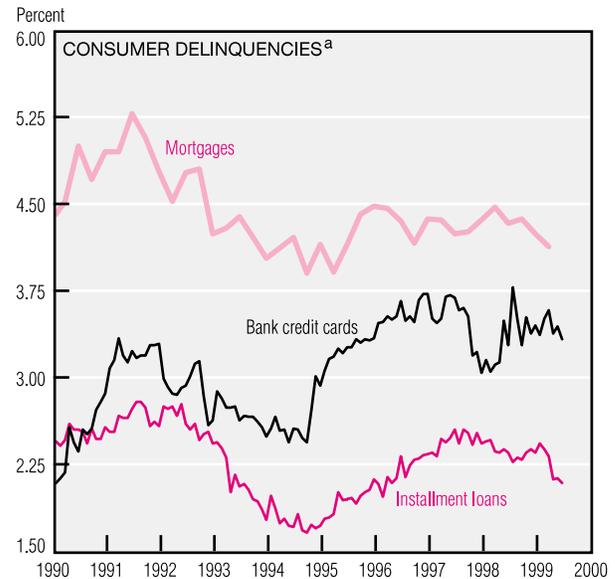
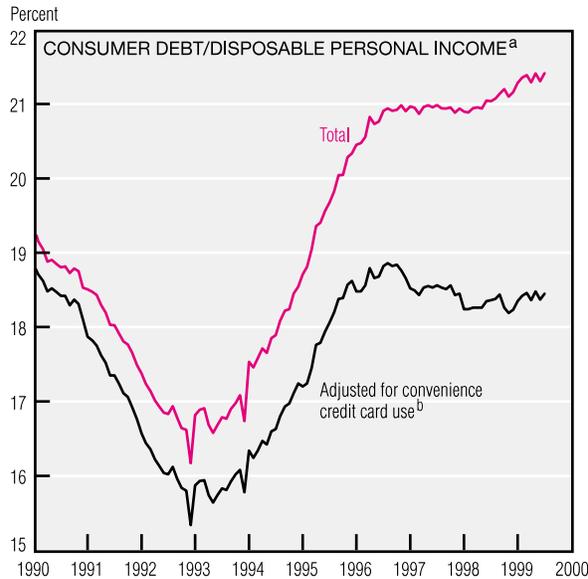
Life expectancy at birth is highest in Japan, followed by parts of Europe. Canadians expect to live as long as Europeans, but U.S. residents' life expectancy is slightly lower.

The population growth rate equals the birth rate plus the net migration rate minus the death rate. Lower population growth rates in the developed world will lead to steeper increases in dependency ratios. Italian and Portuguese population growth rates are negative. Italy's net migration rate is too low to offset the excess of its death rate over its birth rate. In Portugal, rapid out-

migration counters the impact of a birth rate that exceeds the death rate. Germany's population growth is barely positive because its net migration rate is just high enough to close the gap between its birth and death rates.

In the U.S. and Canada—where in-migration accounts for a sizable fraction of the annual addition to the total population—population growth rates are about 1% per year. By contrast, the high population growth in Latin American countries is almost entirely due to an excess of births over deaths.

Regional Conditions



a. Seasonally adjusted annual rates.

b. Adjusted consumer debt as a fraction of disposable income is calculated using an estimate of bank card debt actually accruing financial charges.

c. The net charge-off rate is the percentage of total credit card debt that banks remove from their balance sheets because of uncollectibility, less amounts recovered on credit cards previously charged off, expressed as an annual rate.

SOURCES: U.S. Department of Commerce, Bureau of Economic Analysis; Board of Governors of the Federal Reserve System; Administrative Office of the U.S. Courts; Federal Deposit Insurance Corporation, *Quarterly Banking Profile*; American Bankers Association, *Consumer Credit Delinquency Bulletin*; Mortgage Bankers Association of America, *National Delinquency Survey*; and *Bankcard Update/Bankcard Barometer*.

From the beginning of 1993 through the end of 1995, consumer indebtedness relative to income accelerated rapidly. It then stabilized for about two years before resuming an upward climb. This reacceleration of debt growth, topping levels that were already high by historical standards, is one of the few negatives in a long-running economic expansion.

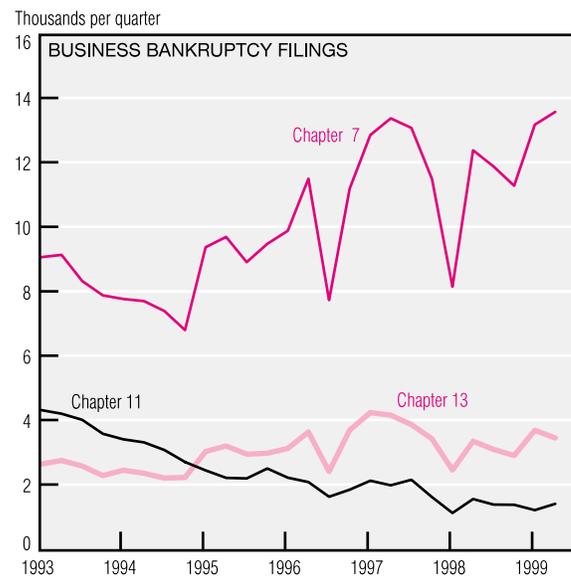
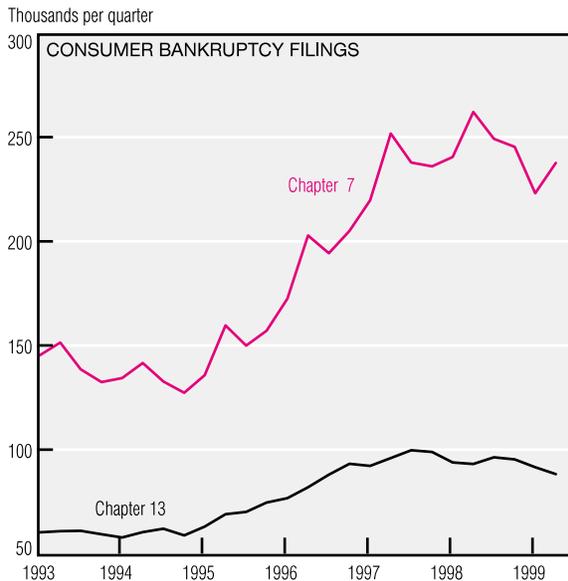
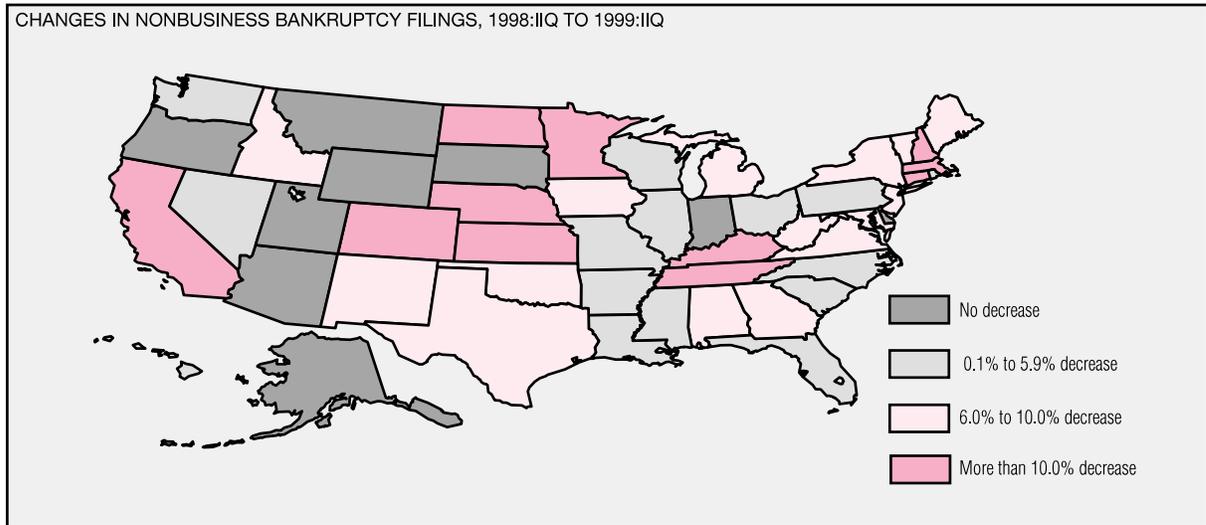
However valid the fears that high debt-to-income ratios undermine economic strength, a closer look

at households' financial positions through 1999:IIQ seems to mitigate such concerns considerably. For example, the recent increase in measured consumer indebtedness can be traced to temporary use of credit card balances to finance normal transactions. Through 1995, debt-to-income ratios, adjusted for convenience credit card use, mimicked the behavior of the unadjusted ratio. During the past year's expansion, however, the unadjusted ratio has

had no counterpart in the adjusted one. In fact, while total debt has risen since July 1996 from 20.9% to 21.4% of disposable personal income, adjusted debt has fallen from 18.9% to 18.5% of income.

Other obvious measures of consumer finances likewise provide scant evidence of weakness in household balance sheets. The trend in consumer delinquencies—whether associated with mortgage
(continued on next page)

Regional Conditions (cont.)



SOURCES: Administrative Office of the U.S. Courts; and American Bankers Association, *Consumer Credit Delinquency Bulletin*.

debt, credit card liabilities, or installment loans—has been benign. Credit card charge-off rates have, in fact, dropped precipitously between 1998:IIQ and 1999:IIQ.

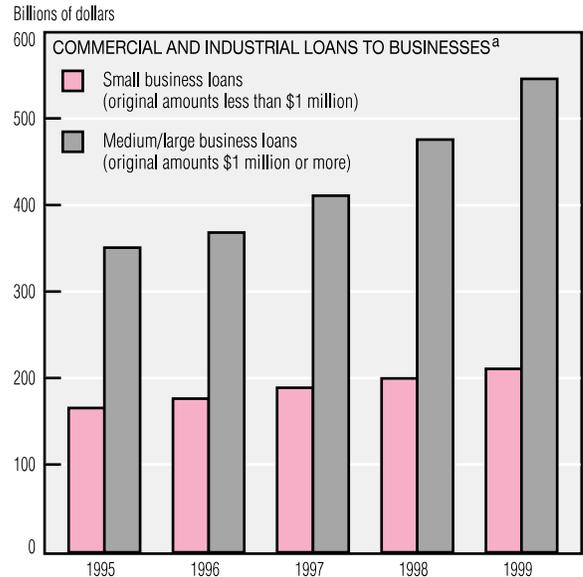
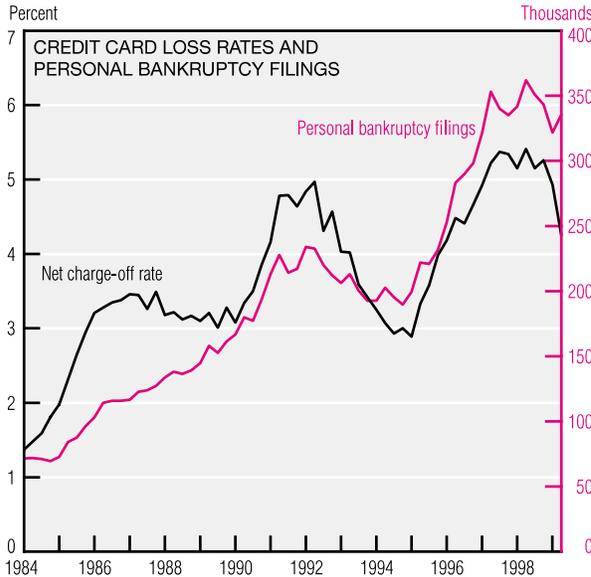
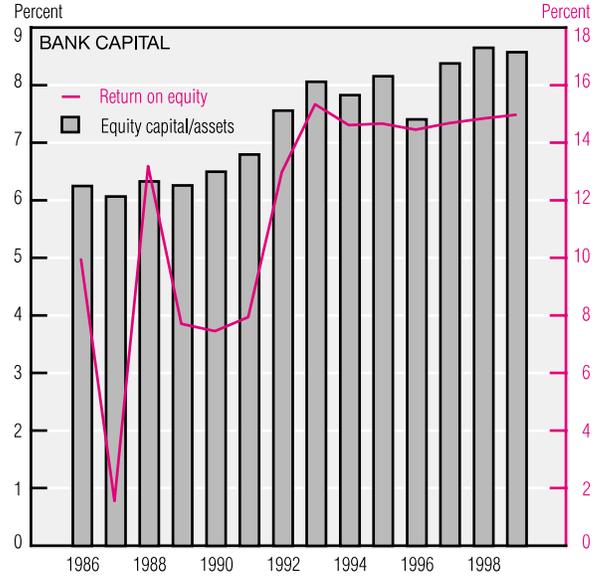
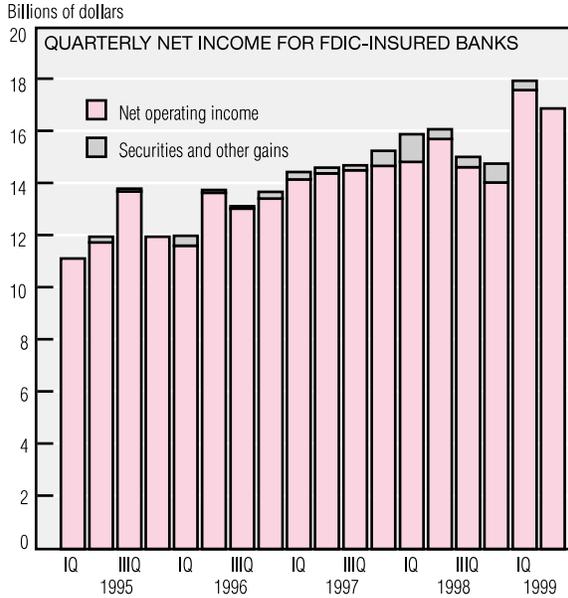
Like these other measures, consumer bankruptcy filings have revealed no sign that household balance sheets are deteriorating relative to the previous three years. Indeed, the 1998 spike in filings has moderated somewhat. Furthermore, a state-by-state comparison shows no remarkable regional pattern. Only eight states failed to register

decreases in nonbusiness filings between 1998:IIQ and 1999:IIQ (interestingly, however, five of these were the contiguous states of Arizona, Utah, Wyoming, Montana, and South Dakota). Nonetheless, consumer bankruptcies remain at quite high levels, and the disproportionate increase of Chapter 7 filings—designed primarily for use by individuals who wish to free themselves of debt simply and inexpensively—has yet to be reversed.

The story does not really change with a shift from the household to the business sector. Chapter 11

business bankruptcy filings, which require court-monitored reorganization, have continued the downward drift experienced over the course of this expansion. Chapter 13 filings, which can be used by sole proprietorships, have been more or less stable since 1995. On the other hand, Chapter 7 business filings have increased sharply since the start of 1998. Chapter 7 filings are fairly volatile, however; thus the latest readings, although high, are not wildly out of line with recent experience.

Banking Conditions



a. As of June 30, 1999.
SOURCE: Federal Deposit Insurance Corporation, *Quarterly Banking Profile*, 1999:IIQ.

The latest statistics show that the U.S. banking industry continues to enjoy good health. In 1999:IIQ, banks posted \$17 billion in earnings, despite a \$1.5 billion net loss at one bank that had large, merger-related charges. Net gains in securities contributed little to this second-best quarterly profit ever. Other positive news was that return on equity inched up to 14.97%, improving further on the high level banks have achieved since 1993. Also, bank capital dipped slightly but remained near the record high achieved in 1998.

The number of problem institu-

tions fell from 64 to 62, although the assets of these institutions remained at \$5 billion. One blemish on this strong record was an increase in the share of unprofitable institutions from 4.5% for the first half of last year to 6.3% for the first half of 1999.

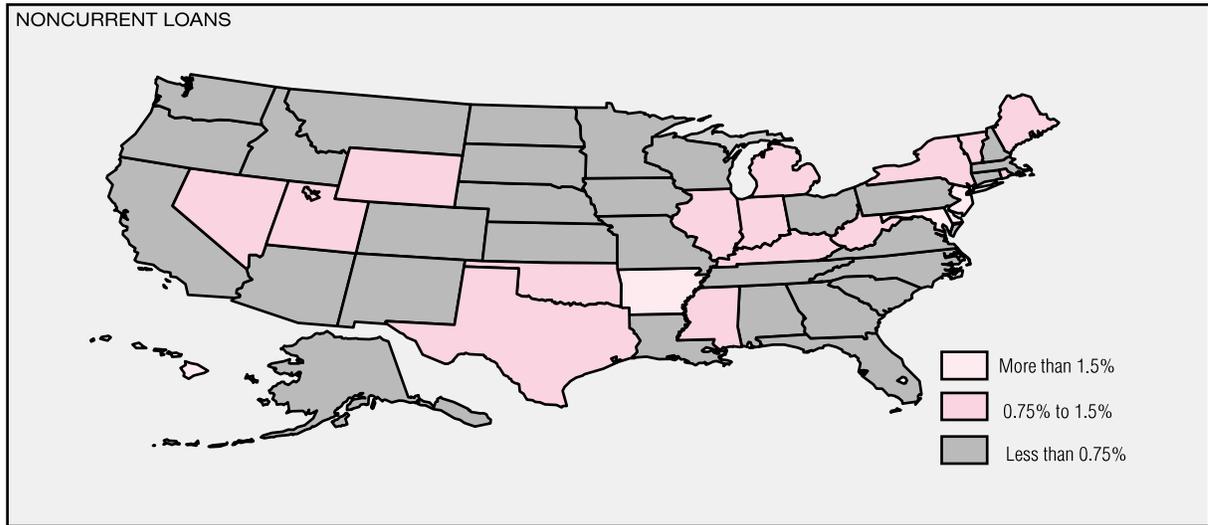
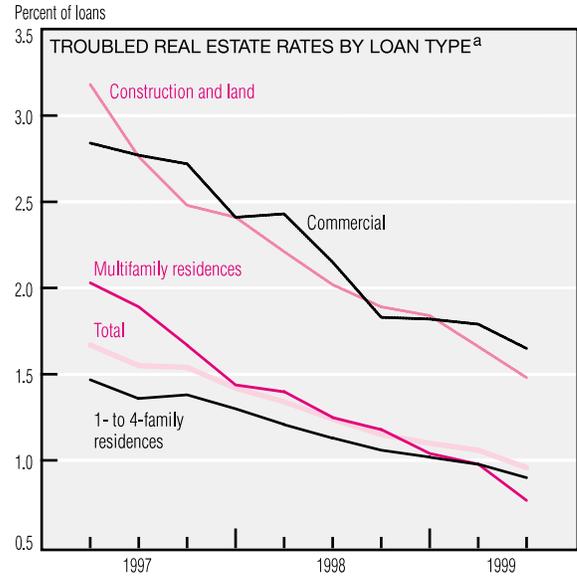
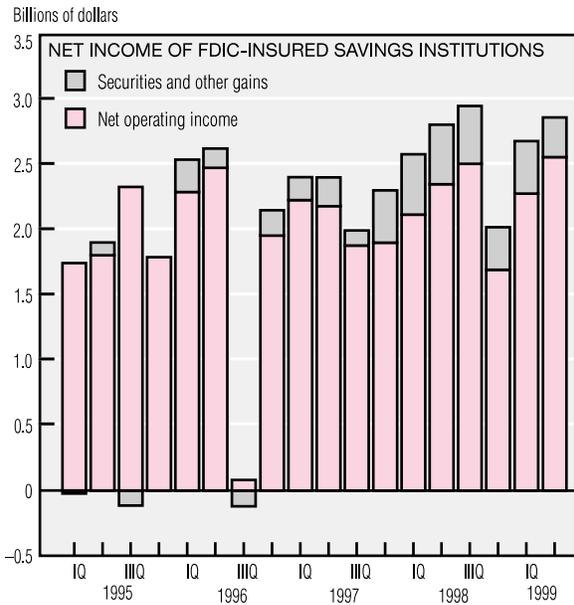
Asset quality picked up in 1999:IIQ, led by improvements in the quality of consumer loans, as both loan losses and noncurrent loans declined. The net charge-off rate dropped to 0.56%, the lowest level since 1996:IIIQ. The lion's share of the gain stemmed from a 20.4% decline in net charge-offs from credit card loans, 26.5% less

than a year ago. The annualized net charge-off rate on credit card loans fell to 4.3% and is now the lowest quarterly charge-off rate since 1996:IQ. The lower level of personal bankruptcy filings relative to the record high of 1998 seems consistent with this recovery.

Bank lending to small businesses trails lending to larger commercial borrowers. The disparity is sometimes attributed to mergers, but recent research contradicts this view. A more likely reason is that the classification of borrowers is based on loan

(continued on next page)

Banking Conditions (cont.)



a. Troubled real estate rate is defined as the ratio of noncurrent real estate loans plus other real estate owned (OREO) to total real estate loans plus OREO. SOURCE: Federal Deposit Insurance Corporation, *Quarterly Banking Profile*, 1999:IIQ.

size, not on the status of the borrower, which is not reported.

Thrifts insured by the FDIC earned \$2.9 billion in 1999:IIQ, a level exceeded only by the nearly \$3.0 billion posted in 1998:IIIQ. Return on equity fell to 11.7% for the year to date, somewhat lower than the 11.9% achieved at the same point last year. Small institutions, however, continued to lag the rest of the industry. Those with less than \$100 million eked out only a 5.5% return, compared to the 13.6% earned by institutions with more than \$5 billion.

Thrifts' problems often show up

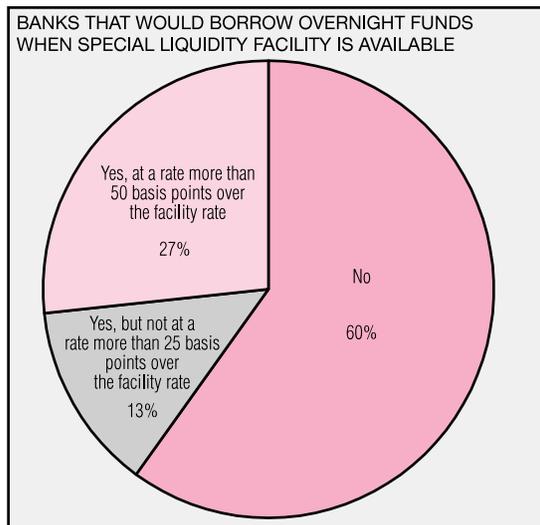
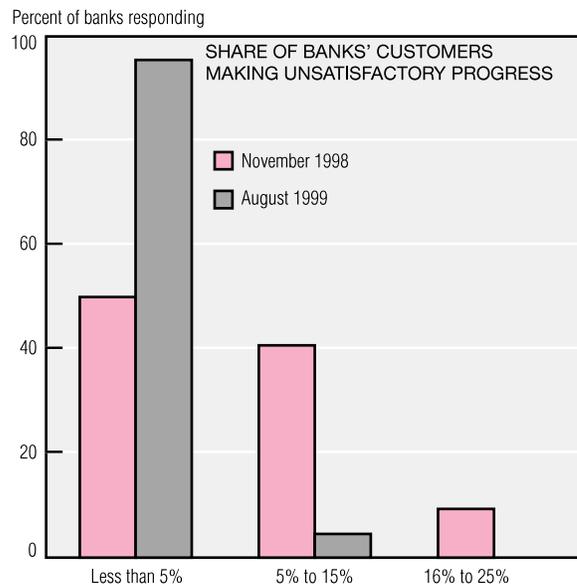
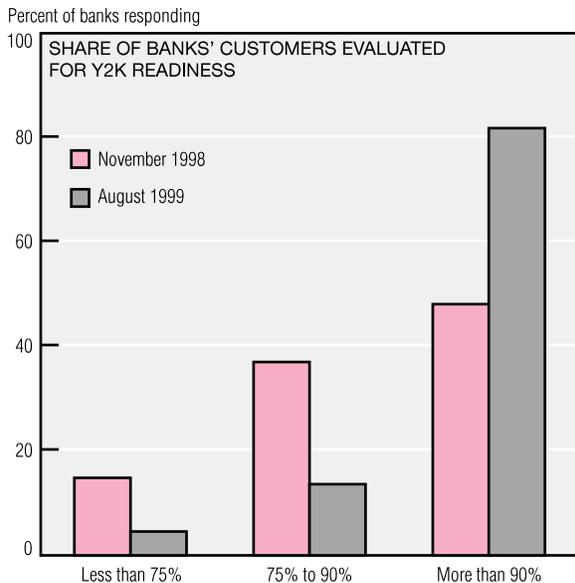
in real estate loans first. They can be gauged by the overall troubled real estate rate—the ratio of noncurrent real estate loans plus other real estate owned (OREO) to total real estate loans plus OREO—which hit a record low of 0.96% in 1999:IIQ. All types of real estate loans have improved consistently over the last two years.

Noncurrent loan rates averaged 0.62% for the nation as a whole, but this figure masks a great deal of regional variation. While the Southwest and Northeast had the highest levels, there was considerable variation within each region. In the

Southwest, for example, Arkansas' rate was 3.1%, but Louisiana's was only 0.4%.

With fewer than 100 days left until 2000, regulators feel increasingly confident that the financial industry's electronic infrastructure will be prepared. Other key electronic infrastructures appear to be nearing readiness as well. Preparations have cost private firms at least \$50 billion. Despite uncertainties associated with our links to less-prepared countries, the probability of a systemic breakdown is now seen as negligible. (Of course, even this cannot guarantee *(continued on next page)*)

Banking Conditions (cont.)



Effect of Special Liquidity Facility on Banks' Willingness to Extend Credit during the Century-Date-Change Period

	To nondepository institutions	To depository institutions
More willing	5.6%	11.1%
Not affected	94.4%	88.9%
Less willing	0%	0%

SOURCE: Board of Governors of the Federal Reserve System, *Senior Loan Officer Opinion Survey on Bank Lending Practices*, November 1998 and August 1999.

zero failures. On an average day in the U.S., 1% to 2% of ATMs are out of service; it would be unreasonable to expect the systems that support modern life to be any more reliable next January.)

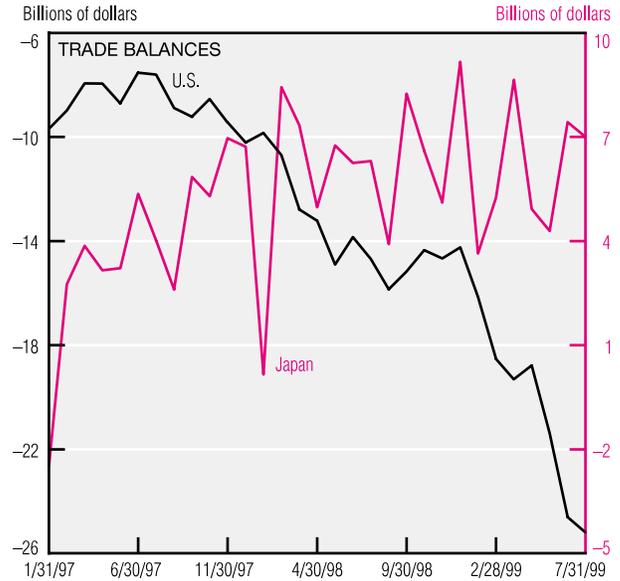
A recent survey buttresses this optimism. Since last November, banks have made great progress in evaluating the Y2K readiness of their material business customers. Last November, fewer than half of banks had evaluated more than 90% of their customers; by August, over 80% had. More important, the share of customers making unsatisfactory

progress has plummeted. Virtually all banks now report that less than 5% of their customers are lagging behind.

A key uncertainty is how the American people will respond in the months ahead. To be prepared for all contingencies, the Federal Reserve has made plans to provide currency to banks in the remote possibility of heavy withdrawals. Also, the Fed's Board of Governors has amended Regulation A to establish a special lending program. Under this program, Reserve Banks will extend credit at a rate that is 150 basis points above the Federal Open

Market Committee's targeted federal funds rate to eligible institutions, in order to accommodate greater liquidity needs during the century-date-change period. Unlike adjustment credit, these loans will not require borrowers to seek credit elsewhere first. Uses of funds will not be limited, and loans may be outstanding for any period while the facility is open. A recent survey suggests that although banks are likely to use this program, it will have little effect on their willingness to extend Y2K credit.

The Japanese Economy and the Yen



SOURCES: Board of Governors of the Federal Reserve System; and DRI/McGraw-Hill.

The Japanese yen has strengthened significantly against the U.S. dollar since mid-May, reflecting improved growth prospects for the Japanese economy. However, the potential impact of a stronger yen on Japanese exports has caused concern. Official efforts to weaken the Japanese currency through foreign-exchange intervention (selling yen) have been mostly unsuccessful.

The U.S. has posted a current-account deficit, heavily financed by foreign investment, since 1992. In 1999:IIQ, this deficit reached a record level of \$80.67 billion. Robust U.S. economic growth has

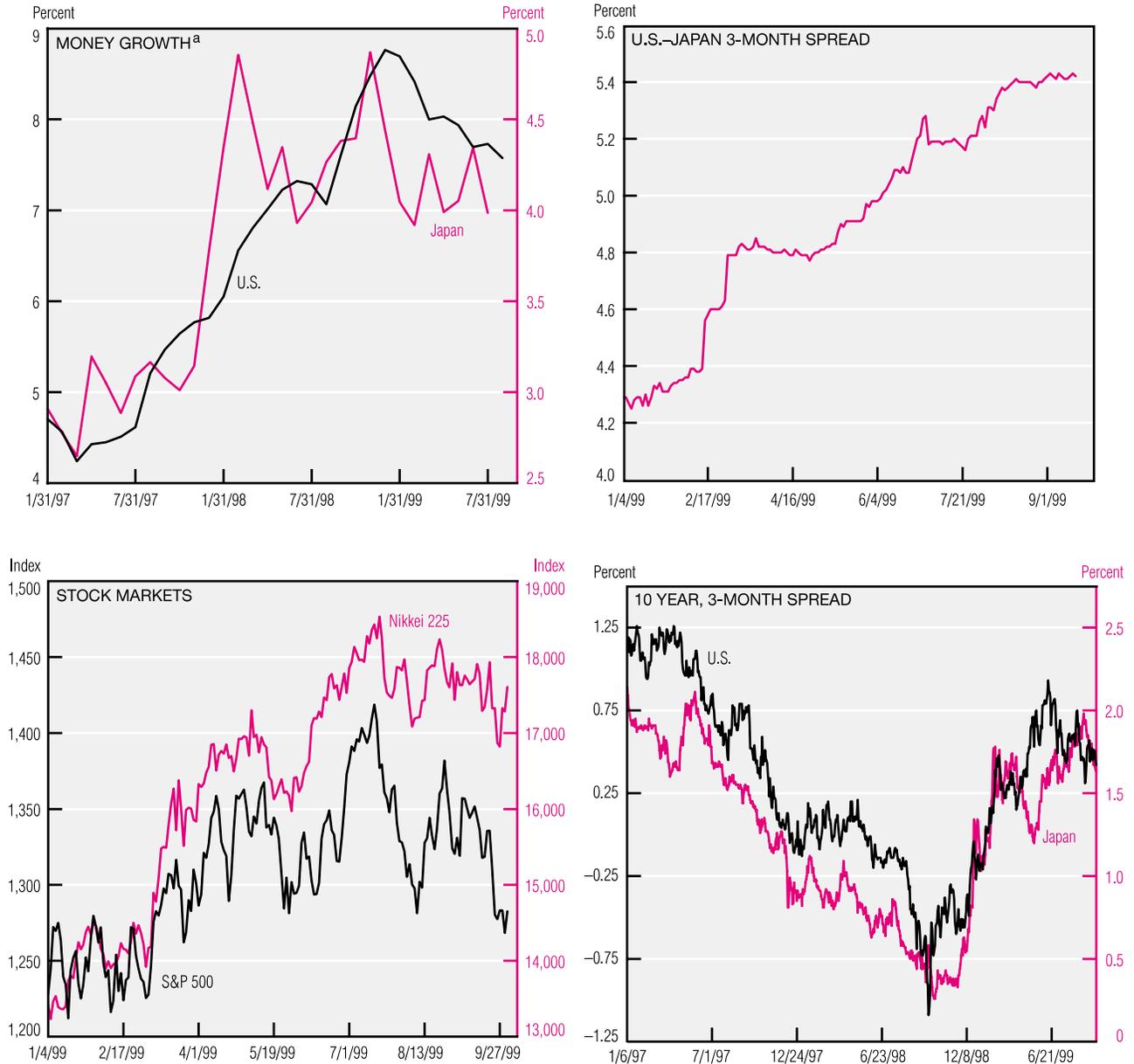
been the main cause of foreigners' willingness to invest here. U.S. imports of goods increased 5% in 1999:IIQ, consistent with the view that the current-account deficit reflects the strength of domestic demand. This view is bolstered by our record July trade deficit of \$25.2 billion, which represents an increase of 70% in the last year.

In contrast to the U.S., Japan has long been running a current-account surplus. Data for 1999:IIQ show this surplus at \$28.4 billion, which is less than 1999:IQ. Japan's trade surplus was \$6.9 billion in July, 5.8% less than in June. Private demand in Japan continues to be

weak, fueling concern that the yen run-up, by harming Japanese exports, could sidetrack the country's economic recovery.

One possible reason why Japan has failed to reduce the international value of its currency is that its intervention is sterilized, so that there is no increase in the Japanese money supply. Much research has shown that such intervention is likely to have only a fleeting influence on exchange rates. By selling yen, the Japanese authorities try to convince the markets that a lower level for the yen is appropriate, but traders are more likely to evaluate the yen's *(continued on next page)*

The Japanese Economy and the Yen (cont.)



a. The money supply consists of M2 for the U.S. and M2 plus certificates of deposit for Japan.
 SOURCES: Board of Governors of the Federal Reserve System; and DRI/McGraw-Hill.

level in terms of the fundamental strength of the Japanese and U.S. economies. This reasoning implies that intervention will not succeed unless it conveys information about new Japanese policies.

One new policy, advocated by some, is an increase in the Japanese money supply. By some measures, U.S. and Japanese money growth have both been weak in 1999. Japanese authorities have expressed a hope that the U.S. or other countries will join the intervention effort, but U.S. sales of yen could only succeed in driving down the yen if the policy were supported by higher

U.S. interest rates. Although increased U.S. economic strength might lead to higher interest rates and thus help bring down the yen, Japan's monetary loosening cannot lower its interest rates much further. Rather, such a policy might seem to indicate official willingness to do more for the economy even at the expense of higher inflation.

One link between interest rates and the exchange rate is uncovered interest-rate parity. This condition implies that when the U.S. short-term interest rate exceeds its Japanese counterpart, the dollar is expected to depreciate against the yen. The yen's

appreciation is supported by capital flows into Japan, buoying the Nikkei stock index. Capital movements from the U.S. into Japan might raise the cost of financing the U.S. current-account deficit and weaken U.S. equity markets.

The difference between 10-year and 3-month interest rates can be viewed as an indicator of market expectations of future interest rates. Thus, the widening of this spread in both the U.S. and Japan since the beginning of the year indicates that interest rates are expected to rise in both countries.