

The Economy in Perspective

On the road again ... U.S. stock markets rallied on news that employment grew only 43,000 in February; market participants had expected a figure five times that size. Reactions like this no longer puzzle readers of the business press, who have been conditioned to believe that strong economic growth increases the risk that inflation will accelerate. This outcome is not entirely unthinkable, but neither is it inevitable. Vigorous economic growth in itself does not cause inflation to accelerate, but it can appear to do so.

Inflation is a monetary phenomenon: Money growth in excess of the public's need eventually decreases the purchasing power of money or, equivalently, raises the general price level. This long-term relationship between money and prices has been documented for so many countries and eras that few economists doubt it. In theory, monetary authorities desiring to promote price stability need only gear supply to demand. Complications arise when monetary authorities cannot discern the true level of money demand. In the United States, for example, the inconsistency of the public's demand for money over the past few decades has given the Federal Reserve difficulty in gauging how much to supply. Federal funds rate targeting has filled the void.

The public cares about its economic welfare—the ultimate outcome—not directly about the price level and its fluctuations. But suppose short-term changes in underlying (nonmonetary) economic conditions depend partly on actual or expected movements in the price level, and vice versa. And suppose further that the public dislikes volatile business-cycle fluctuations. In these circumstances, monetary authorities must understand the interactions between price-level movements and fundamental economic activity, and how their own policy actions affect each of these factors.

Economists have been divided over the relative usefulness of money and labor market information for understanding, predicting, and controlling inflation over the past 40 years. One school of thought teaches that inflation accelerates in boom times because central banks mistakenly let money supplies expand beyond the quantities needed to meet the increased needs of commerce. Labor markets become tight, factories operate at high levels of capacity utilization, and

imports increase to fill the demand that domestic firms cannot supply. Implementing monetary policy in this framework requires knowing, among other things, when monetary growth is excessive. Boom conditions may reflect, rather than cause, this excess.

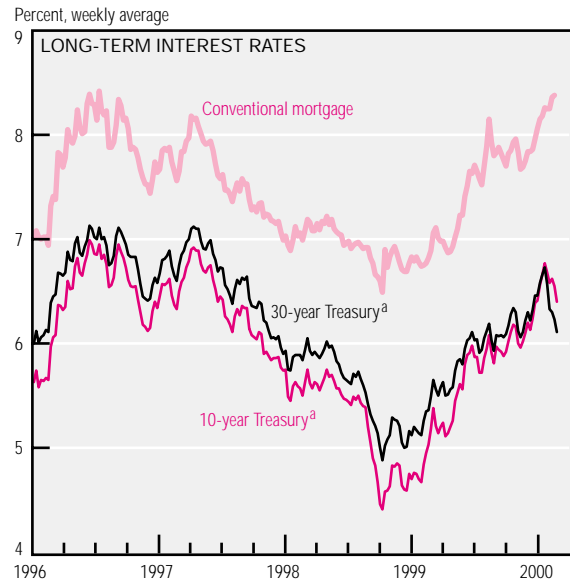
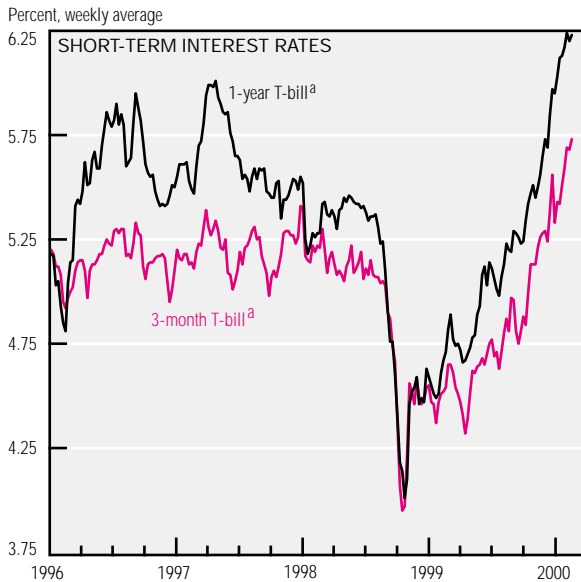
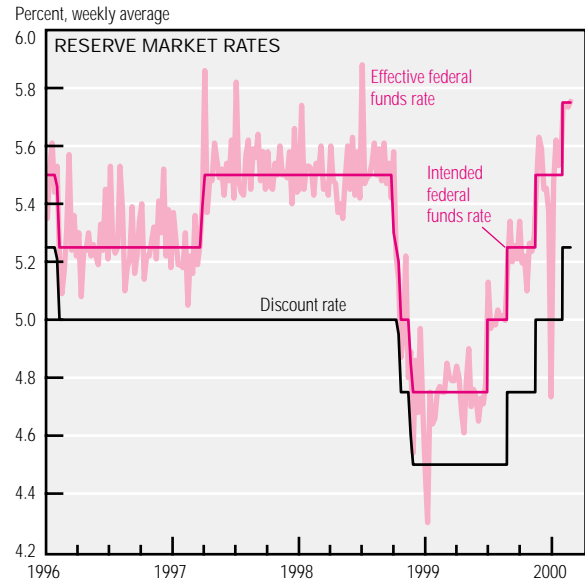
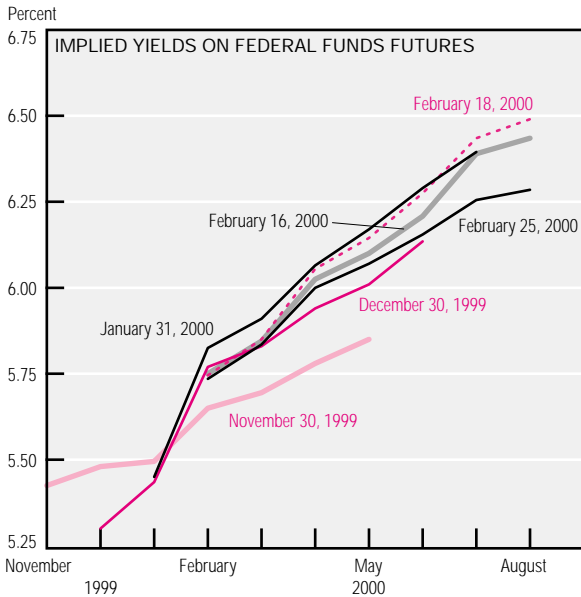
A competing school teaches that excessive labor market tightness can induce businesses to increase product prices in an effort to maintain their profit margins in the face of rising labor costs. Prudent monetary policy requires hiking interest rates to slow economic activity and relieve wage pressures that otherwise would lead to inflation. Implementing monetary policy within this framework entails knowing at what point labor market tightness will spark inflationary wage-setting practices. If money plays a role in this framework, it is a decidedly passive one.

Unreliable money-demand estimates, coupled with a statistical relationship between inflation and unemployment rates, encouraged U.S. policymakers to rely on labor market conditions for guidance in conducting monetary policy. After all, even if a tight labor market does not truly cause inflation to accelerate, why ignore the unemployment rate if its decline (arguably following prior excessive monetary stimulus) appears to foreshadow accelerating inflation?

It is easy to see why a sizeable pickup in the rate of productivity growth poses challenges for both designing and discussing monetary policy. When improved productivity can generate faster output growth and absorb the profit-margin impact of higher wages, how should estimates of labor market tightness be recalibrated? How much confidence can be placed in this indicator, which may be just as problematic as the money supply?

Experience in the practice of monetary policy over many decades shows that reliable guideposts come and go, sometimes requiring policymakers to adjust their theories and methods. At the same time, historical observation suggests caution after long periods of strong economic growth, if only because such periods have often been followed by inflationary and financial imbalances. The Federal Reserve's recent policy actions could be regarded as steps taken to keep the economy on a steady path.

Monetary Policy



a. Constant maturity.

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

On February 17, the Board of Governors of the Federal Reserve System submitted its semiannual Monetary Policy Report (or Humphrey-Hawkins Report) to the Congress, as mandated by the Full Employment and Balanced Growth Act of 1978. On the same day, Federal Reserve Chairman Alan Greenspan testified on the report to the House of Representatives' Committee on Banking and Financial Services.

Chairman Greenspan commented that the economy's strong performance in 1999 was "unprecedented in my half-century of observing the

American economy." He noted that continued acceleration in productivity is a key factor in this economic strength. However, in a cautionary note that drew a great deal of media attention, he also pointed out that "those profoundly beneficial forces driving the American economy to competitive excellence are also engendering a set of imbalances that, unless contained, threaten our continuing prosperity."

Despite the media fanfare, the chairman's cautionary remarks did not cause any strong reaction in implied yields on federal funds futures, which are often used as a proxy for

market participants' expectations about the future path of policy. The implied yield curve shifted upward only slightly following his testimony, and has since fallen back below pretestimony levels. Apparently, market participants had already built in expectations of significant future interest rate increases, and the chairman's testimony was largely in line with those expectations. As of February 25, the August contract traded at 6.26%, 51 basis points (bp) above the current intended federal funds rate of 5.75%.

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Monetary Policy (cont.)



Economic Indicators (percent)

	1999 Actual	Projections for 2000 ^b	
		Range	Central tendency
Nominal GDP ^c	5.9	5-6	5¼-5½
Real GDP ^d	4.2	3¼-4¼	3½-3¾
PCE chain-type price index ^c	2.0	1½-2 ½	1¾-2
Civilian unemployment rate ^e	4.1	4-4¼	4-4¼

Growth Ranges for Monetary and Debt Aggregates (percent)

	1998	1999	2000
M2	1-5	1-5	1-5
M3	2-6	2-6	2-6
Debt	3-7	3-7	3-7

a. Constant maturity.

b. By Federal Reserve governors and Reserve Bank presidents.

c. Change, fourth quarter to fourth quarter.

d. Chain-weighted change, fourth quarter to fourth quarter.

e. Average level, fourth quarter.

SOURCE: Board of Governors of the Federal Reserve System.

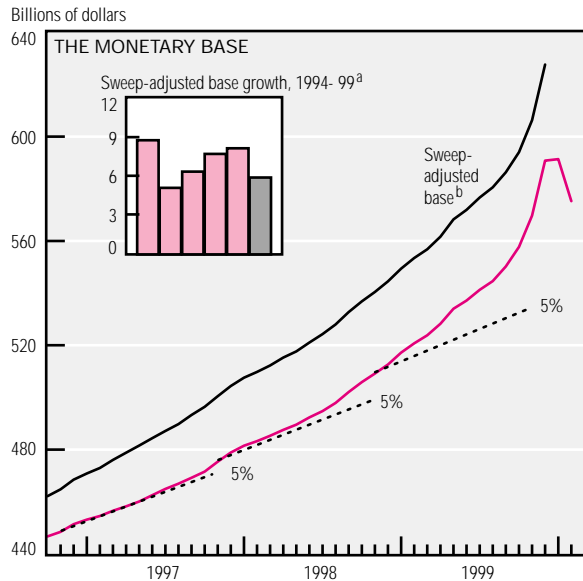
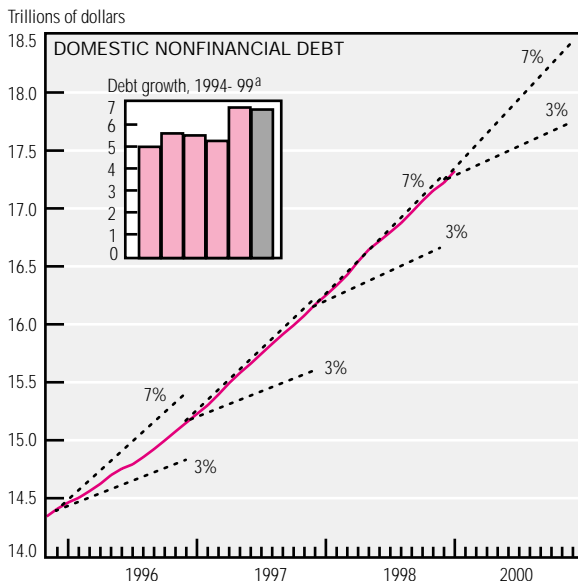
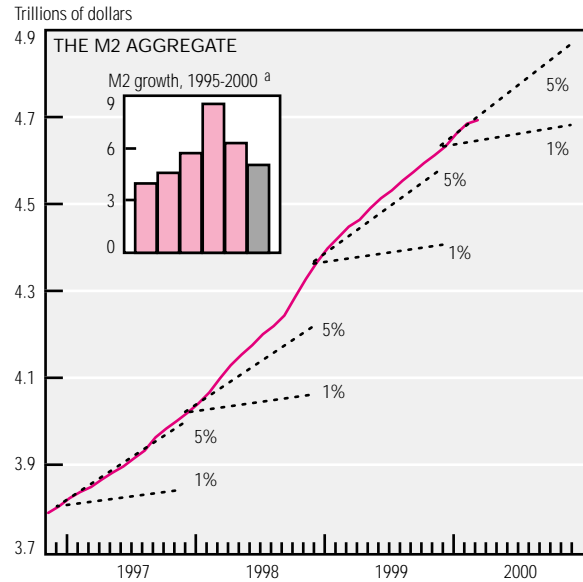
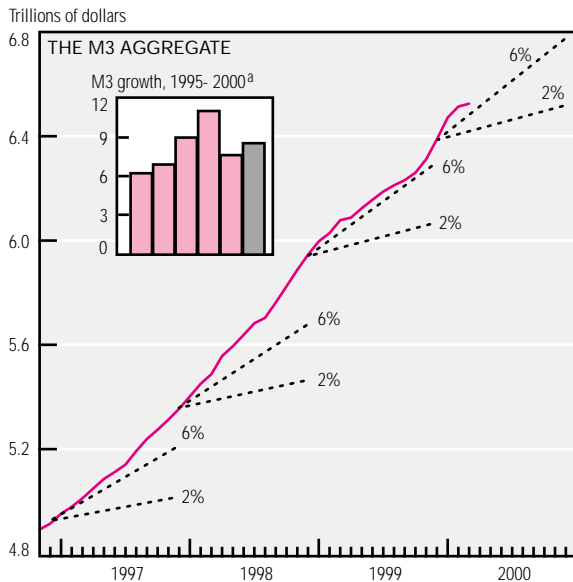
Beginning on June 30, 1999, the Federal Open Market Committee (FOMC) raised the intended rate a full percentage point through a series of four 25-bp increments. The first three increases can be interpreted as "taking back" the rapid 75 bp decrease associated with concerns about international financial markets that prevailed in the second half of 1998. The latest 25 bp increase, on February 2, marked the first time the intended rate exceeded the level that held throughout 1997 and most of 1998.

Recent increases in the intended federal funds rate may be viewed as responses to increases in market interest rates. Over essentially the same period as the increases in the intended rate (June 25, 1999–February 4, 2000), the 3-month Treasury and the 1-year Treasury rates rose 94 bp and 110 bp, respectively. Furthermore, recent changes in the federal funds rate substantially lagged increases in other interest rates, lending some credence to this view (although plausible alternative stories could be told).

Long-term interest rates show a similar pattern. As of February 18, the 10-year Treasury bond yield reached 6.55%, up 57 bp since June 25, 1999. Rates on 30-year conventional mortgages have risen 75 bp over the same period. In contrast, the 30-year Treasury yield for February 18 of 6.23% is only 12 bp higher than it was on June 25, 1999. However, supply and demand factors may be affecting the yield on 30-year Treasury bonds, causing the

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Monetary Policy (cont.)



a. Growth rates are percentage rates calculated on a fourth-quarter over fourth-quarter basis.

b. The sweep-adjusted base contains an estimate of required reserves saved when balances are shifted from reservable to nonreservable accounts.

NOTE: Data are seasonally adjusted. Last plots for M2, M3, and the monetary base are estimated for February 2000. Last plots for domestic nonfinancial debt and the sweep-adjusted base are December 1999. Dotted lines for M2, M3, and debt are FOMC-determined provisional ranges. All other lines represent growth in levels and are for reference only.

SOURCE: Board of Governors of the Federal Reserve System.

30-year rate to fall below the 10-year rate.

On average, the intended federal funds rate tends to move with short- and long-term interest rates, partly because the underlying rate of inflation is a common factor in determining all interest rates. However, daily data show that changes in the federal funds rate can be associated with no change in market interest rates—and sometimes with changes in the opposite direction. The simplistic and oft-cited view that an increase in the federal funds rate translates directly into same-sized

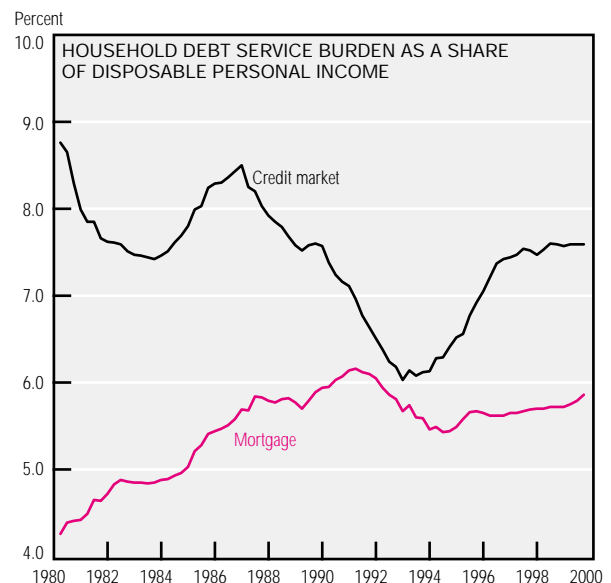
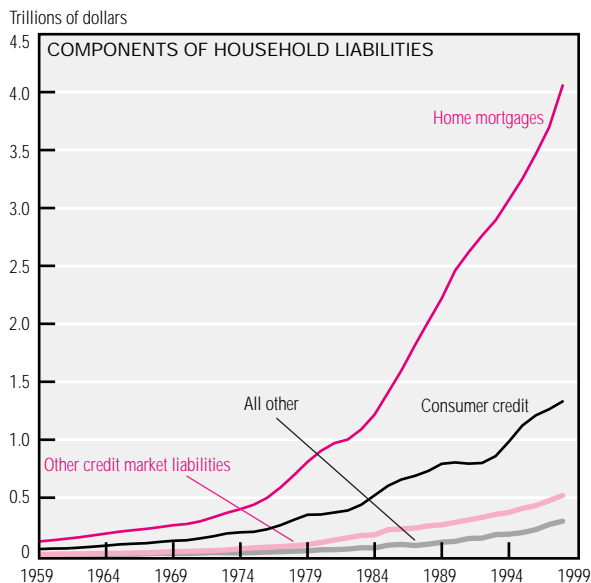
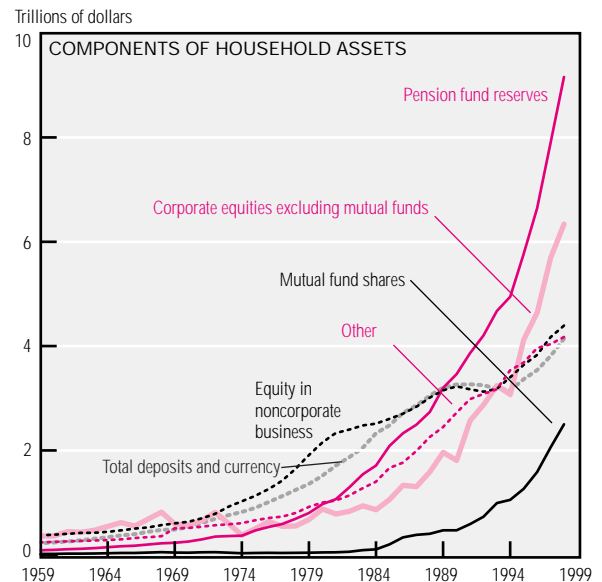
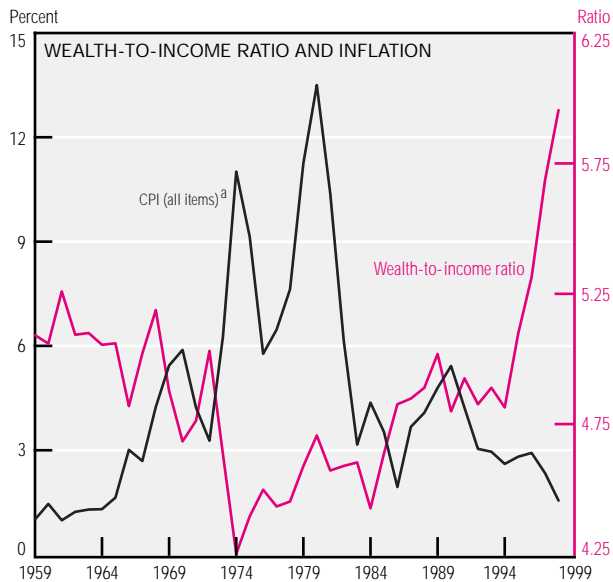
increases in rates on mortgages and car loans is simply not borne out by the data.

The Humphrey-Hawkins report contains economic projections for 2000. Members of the Board of Governors and Federal Reserve Bank presidents expect another strong year. The central tendency of projections for real GDP growth is 3½%–3¾% for inflation (as measured by the Chain-Type Price Index for personal consumption expenditures), the central tendency is 1¾%–2%. The unemployment rate is expected to be 4%–4¼% in the fourth quarter of the year.

The report also contains the monetary growth ranges provisionally adopted on July 28 and confirmed at the February 2 meeting. The ranges are intended to reflect conditions of price stability and historical velocity relationships, not to serve as guides for policy. The report states that “the Committee still has little confidence that money growth within any particular range selected for the year would be associated with the economic performance it expected or desired,” but also notes that “the Committee believes that money

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Monetary Policy (cont.)



a. Year-over-year change.

NOTE: Wealth is defined as household net worth. Income is defined as personal disposable income. Data are not seasonally adjusted.

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

growth has some value as an economic indicator, and will continue to monitor the monetary aggregates... ” M2 and M3 growth rates started out the year at or above the upper ranges, mirroring the experience of the past several years.

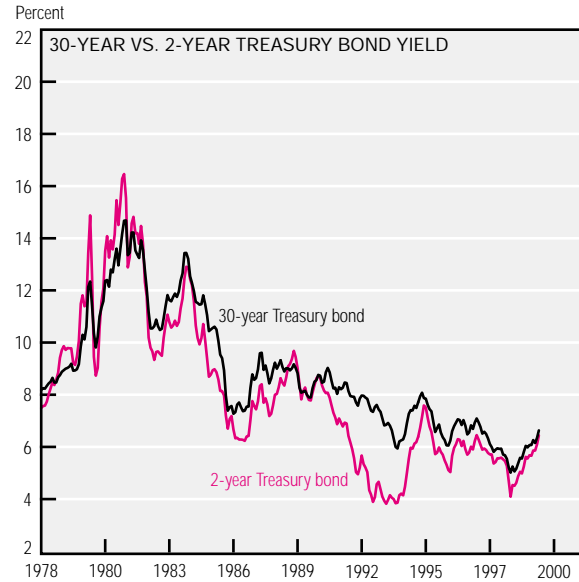
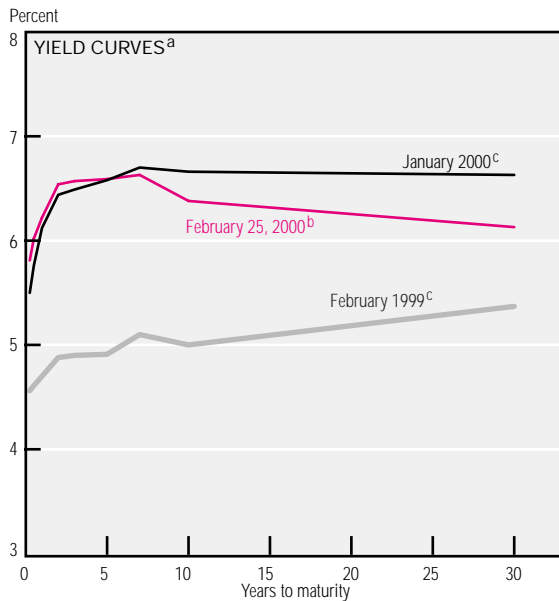
Finally, Chairman Greenspan expressed concern that the wealth effect associated with the rising stock market has contributed to a sharp rise in consumer spending that may soon place inflationary pressures on the economy. Households' wealth-

to-income ratio has climbed to unprecedented levels, while the personal savings rate has declined dramatically. A comparison of inflation to the wealth-to-income ratio does not suggest an obvious relationship, but this may merely indicate that the relationship cannot be captured by such a simple graph.

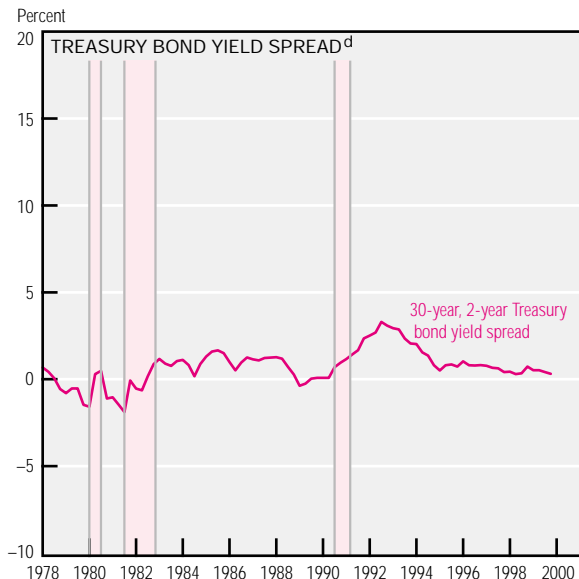
Consider the constituent elements of the wealth-to-income ratio. Have the components of wealth that are tied to equity markets driven the increase in this ratio? Yes. Wealth,

measured by a household's net worth, is simply an accounting identity, calculated as total assets minus total liabilities. Total assets have risen across the board, but the fastest-growing components—mutual fund shares, corporate equities, and pension reserves—are all tied to equity markets. While liabilities (most notably those reflected in home mortgages and consumer credit) are also rising substantially, their increase has not matched asset growth.

Interest Rates



Interest-Bearing Public Debt Outstanding (millions of dollars)		
	January 31, 1999	January 31, 2000
Treasury bills	662,725	669,954
Treasury notes	1,917,738	1,764,027
Treasury bonds	621,166	643,695
Treasury inflation-indexed notes	59,131	74,563
Treasury inflation-indexed bonds	17,043	32,561
Federal financing bank	15,000	15,000
Total marketable	3,292,804	3,199,800



- a. All yields are from constant-maturity series.
 b. Averages for the week of February 25, 2000.
 c. Monthly averages.
 d. Shaded areas indicate recessions.

SOURCES: U.S. Department of the Treasury, Bureau of the Public Debt; U.S. Department of Commerce, Bureau of Economic Analysis; and Board of Governors of the Federal Reserve System, "Selected Interest Rates," *Federal Reserve Statistical Releases*, H.15.

Unlike most, this month's yield curve cannot be described as either flatter or steeper than last month's. Rather, it is more hump-shaped. The inversion at the long end has become more pronounced, as the 30-year rate fell below even the 1-year rate. The short end remains upward sloping, however, with the 3-year, 3-month spread at 76 basis points (bp), near its historical average; likewise, the 10-year, 3-month spread remains positive at 57 bp.

The current inversion at the long

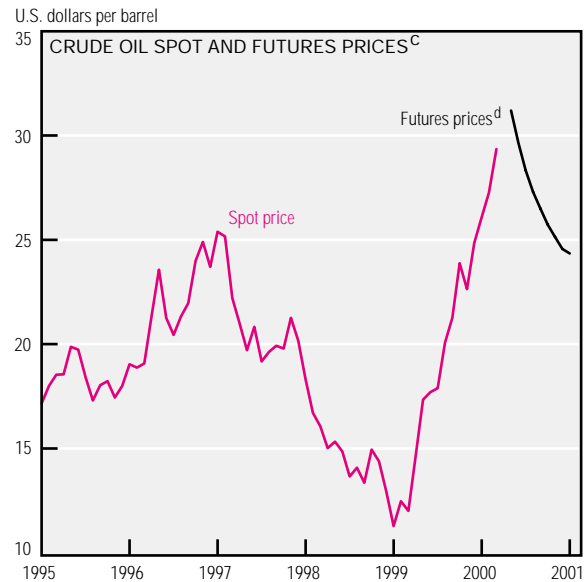
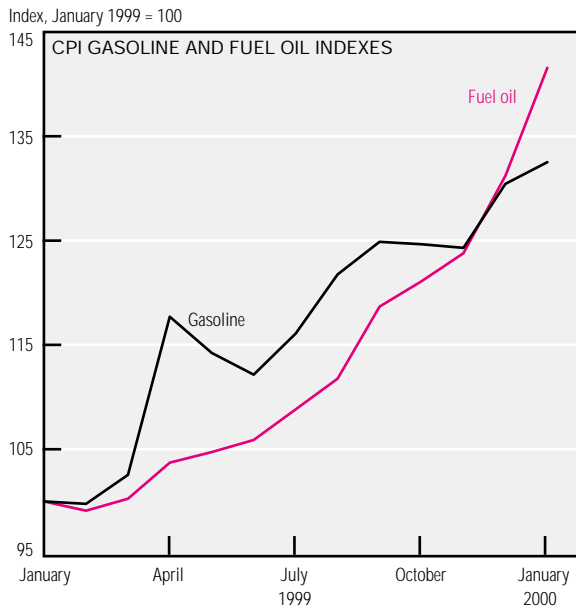
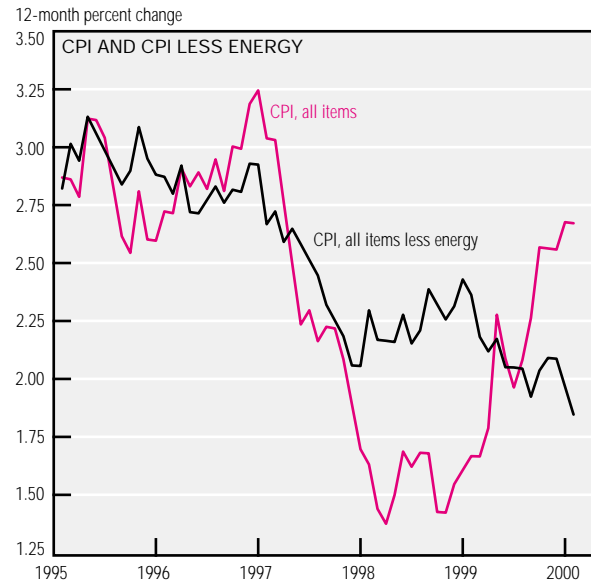
end represents a small shift among spreads that have been relatively stable since 1995. A new concern is the federal budget surplus and the consequent reduction of Treasury debt. Surprisingly, yields have fallen most for Treasury bonds (with maturities of 10 years or more), whose supply actually has increased over the past year. Chalk this one up to expectations. Early in February, the Treasury announced that it will buy back \$30 billion of debt, concentrating initially on the longer-term ma-

turities (though full details have not been announced).

Does this inversion portend anything about the future of the economy? The traditional wisdom is that inversions imply, or at least suggest, recessions. The 30-year, 2-year spread has gone negative prior to the last several recessions. Since other spreads thought to predict recessions (particularly the 10-year, 3-month spread) remain positive, any prediction based on the long spread should be treated with caution.

Inflation and Prices

	Percent change, last:				1999 avg.
	1 mo. ^a	3 mo. ^a	12 mo.	5 yr. ^a	
Consumer prices					
All items	2.2	2.4	2.7	2.3	2.7
Less food and energy	2.0	1.8	1.9	2.4	1.9
Median ^b	3.1	2.9	2.3	2.9	2.3
Producer prices					
Finished goods	0.0	1.2	2.6	1.2	3.0
Less food and energy	-2.4	-0.5	0.8	1.2	0.8



a. Annualized.

b. Calculated by the Federal Reserve Bank of Cleveland.

c. West Texas Intermediate crude oil.

d. As of February 29, 2000.

SOURCES: U.S. Department of Labor, Bureau of Labor Statistics; Federal Reserve Bank of Cleveland; Bloomberg Financial Information Services; and Dow Jones Energy Service.

The Consumer Price Index (CPI) rose at a 2.2% annualized rate in January, about the same as each of the previous three months. Likewise, the CPI excluding food and energy, a gauge of so-called core inflation, increased at a 2.0% annualized rate. Over the past 12 months, however, the two indexes have diverged, the CPI growing by 2.7% and the CPI excluding food and energy by 1.9%.

Much of the difference in these measures can be attributed to last year's dramatic ascent of petroleum-based energy prices. Eliminating en-

ergy from the CPI suggests a very different price trend than is indicated by the "all items" CPI. Indeed, over the last half decade, while energy prices have sent the "all items" index up and down, the CPI excluding energy has fallen almost steadily.

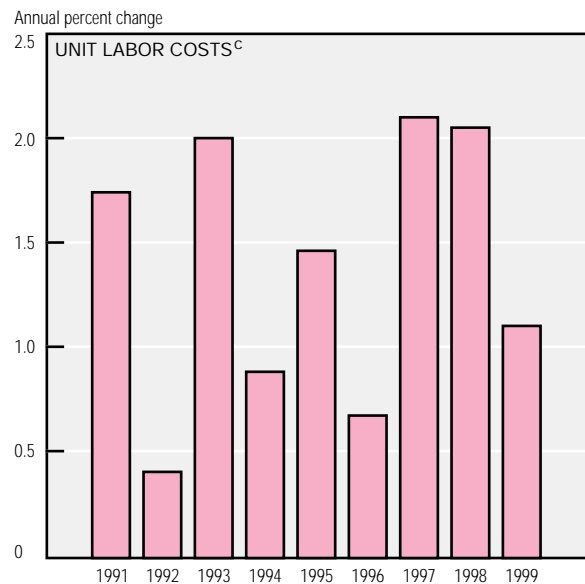
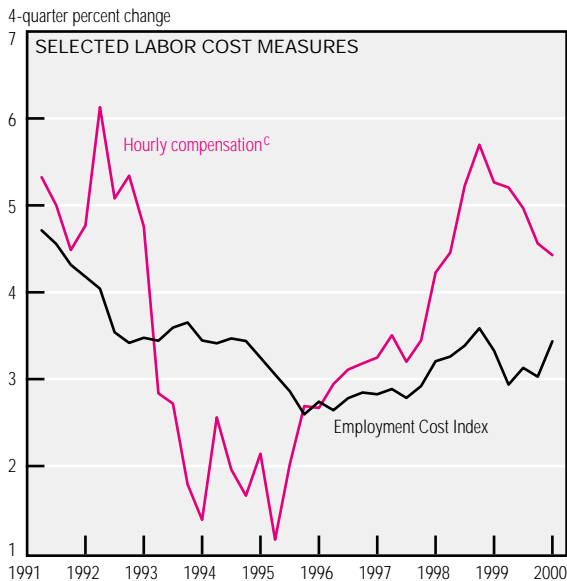
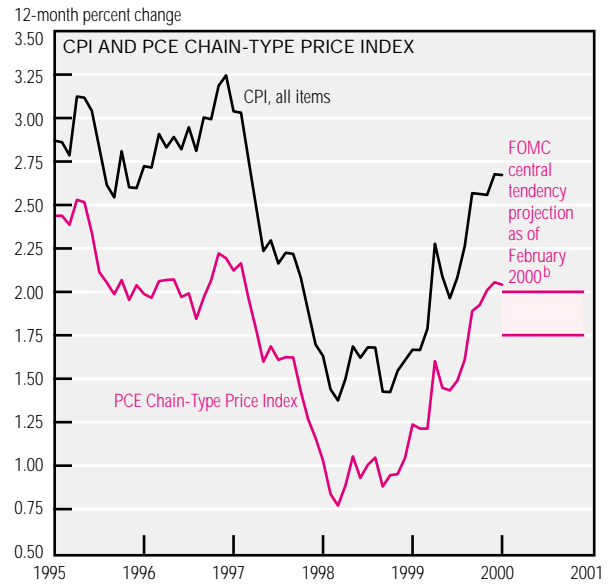
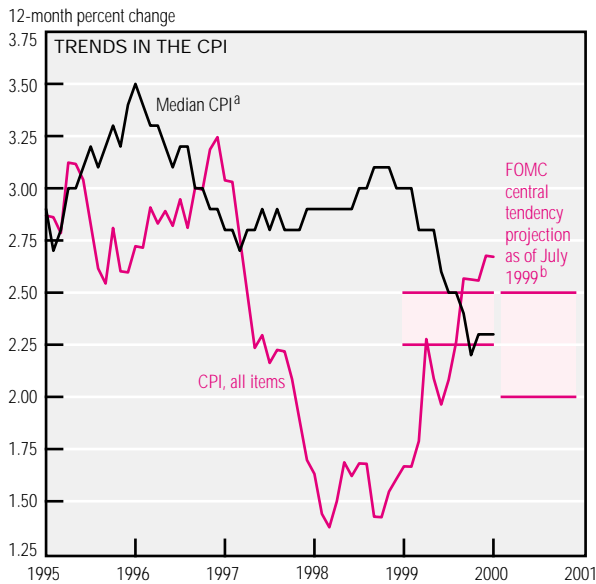
Selected CPI energy components show just how stark energy-related price movements have been over the past year. Both the CPI gasoline and fuel oil indexes have risen 30% to 40% during this period. The reason, in large measure, is the action of the OPEC nations. OPEC, along with a few non-OPEC countries like

Mexico and Norway, agreed last March to reduce daily world oil supplies by nearly 7% for one year, seeking an end to the global oil glut that sent prices to a 12-year low in December 1998, near the nadir of Asia's economic crisis.

But as the world economy began to recover—and with it global oil demand—OPEC's reduced production sent oil prices to a level much higher than that during the pre-Asian crisis period. Over the past year, in fact, oil prices have more than doubled, reaching their

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Inflation and Prices (cont.)



a. Calculated by the Federal Reserve Bank of Cleveland.

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

c. Nonfarm business sector.

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

highest point since the Gulf War. As a result, American consumers have begun to clamor for lower oil prices.

Meanwhile, the cartel appears to be fracturing, with oil ministers from Saudi Arabia, Mexico, and Venezuela all favoring production increases. This is no surprise to futures markets participants, who have consistently been forecasting a drop in oil prices.

The median CPI, another measure of core inflation, confirms the effect of energy prices on the CPI. Like the CPI excluding food and energy, the

median CPI has also fallen almost steadily over the past five years. Though it ticked up 0.3% in January (3.1% annualized), its rate over the previous 12 months, at 2.3%, remains below that of the CPI.

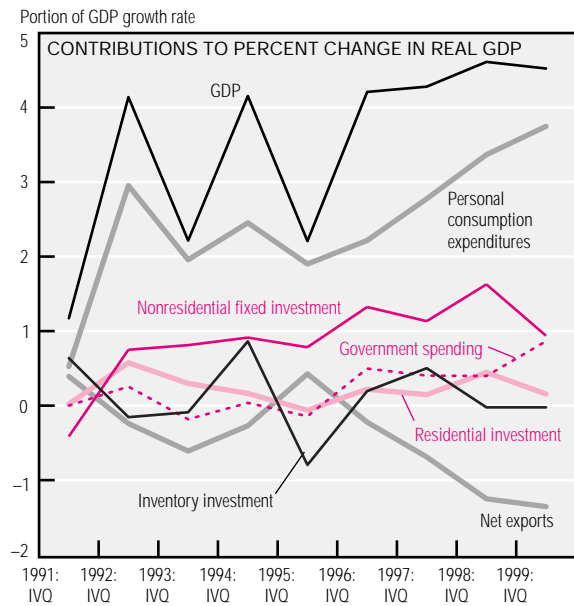
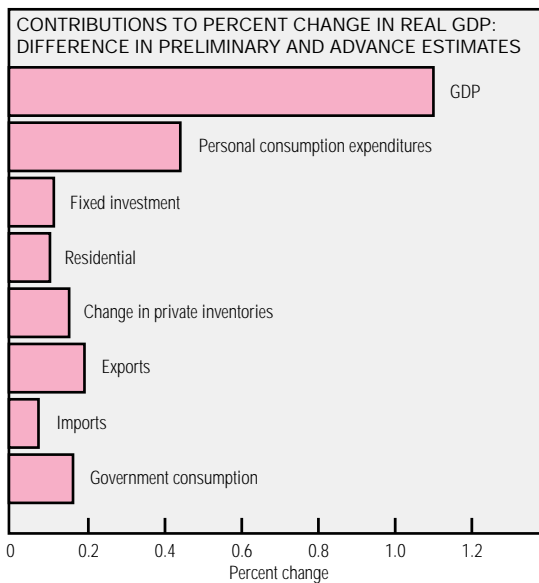
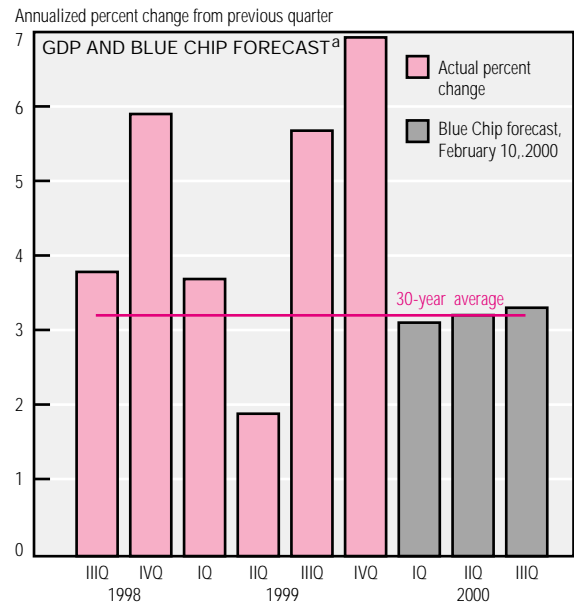
The inflation outlook for the next 12 months is discussed in the Board of Governors' Monetary Policy Report to Congress, which accompanied the recent semiannual congressional testimony of Federal Reserve Chairman Alan Greenspan. Unlike years past, the report's inflation outlook is not framed in terms of the

CPI, but an alternative price statistic—the Chain-Type Price Index for Personal Consumption Expenditures. In general, both statistics have tended to register the same rates of acceleration in inflation.

In his testimony, Chairman Greenspan pointed to still other price measures. For example, he noted the remarkably low rates of increase in the labor price measures. "Importantly," the Chairman indicated, "unit labor costs ... declined in the second half of the year."

Economic Activity

Real GDP and Components, 1999:IVQ ^{a,b} (Preliminary estimate)	Change, billions of 1996 \$	Percent change, last:	
		Quarter	Four quarters
Real GDP	150.3	6.9	4.5
Consumer spending	87.0	5.9	5.6
Durables	25.4	13.0	10.5
Nondurables	31.3	7.2	5.7
Services	32.4	3.8	4.5
Business fixed investment	7.7	2.5	7.0
Equipment	11.4	4.7	11.0
Structures	-2.7	-4.3	-4.8
Residential investment	1.0	1.1	3.7
Government spending	34.3	9.2	5.0
National defense	13.7	16.7	5.0
Net exports	-11.5	—	—
Exports	22.2	8.7	4.5
Imports	33.7	10.0	13.0
Change in private inventories	30.7	—	—



a. Chain-weighted data in billions of 1996 dollars.

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

NOTE: All data are seasonally adjusted.

SOURCES: U.S. Department of Commerce, Bureau of Economic Analysis; and *Blue Chip Economic Indicators*, February 10, 2000.

GDP increased at a surprisingly robust 6.9% rate in 1999:IVQ, according to the preliminary estimate released late in February. This was 1.1 percentage points more than the advance estimate released just one month earlier. Such a sizeable increase is outside the range of more than two-thirds of all revisions from advance to preliminary values observed between 1978 and 1998. Values of all major GDP components increased. The smallest revision was to the volume of imports that is subtracted from exports in calculating GDP; the largest was to the already

high contribution of personal consumption expenditures.

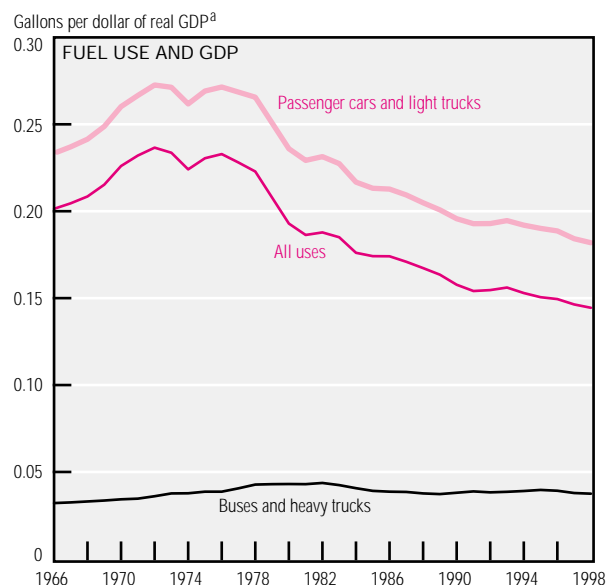
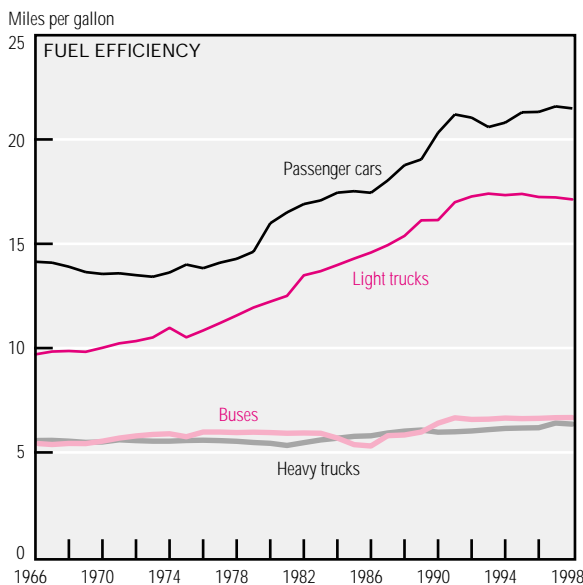
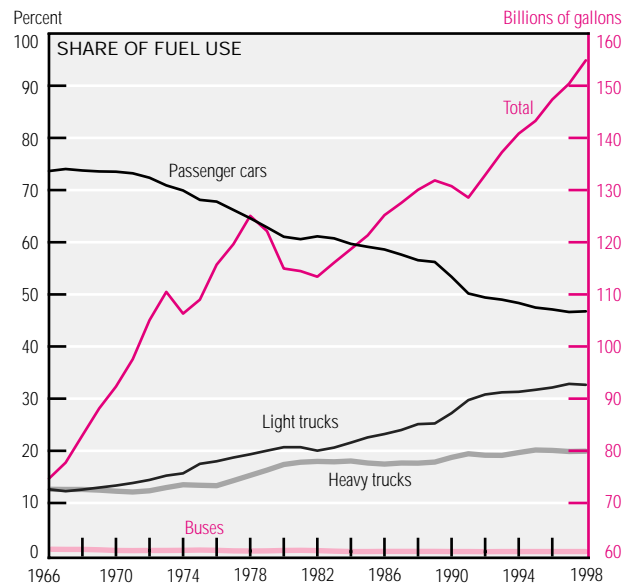
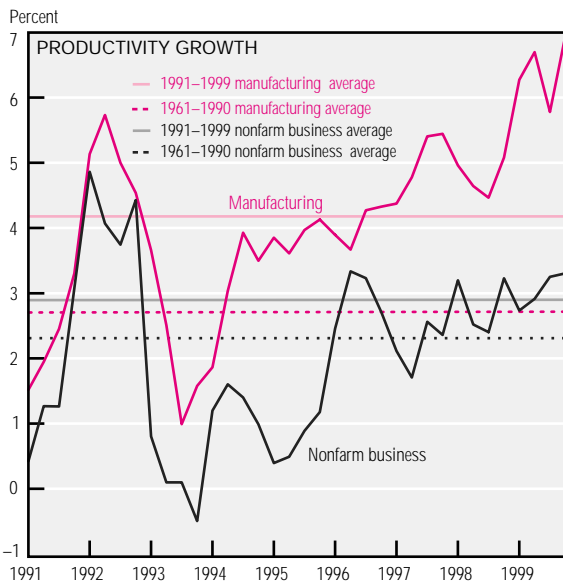
GDP growth has been on a high plateau since 1996. Personal consumption expenditures (PCE) have made an increasing contribution to GDP growth, and the Blue Chip consensus forecast does not foresee a reversal of this pattern until 2000:IVQ. Government expenditures also have increased their contribution to the GDP growth rate. Declining contributions from other sectors have made room for these expanding sectors. Slowing growth of inventory investment, as well as last year's slow-

down in residential and nonresidential fixed investment, have played only a small role. Increasing imports and the resulting substantial decline in net exports have provided most of the room for growth in PCE and government spending.

Growth of the capital stock and labor force, plus a modest decline in the unemployment rate, provided a basis for continued brisk GDP growth. In addition, productivity increases in the nonfarm business sector remain about one full percentage point above the average for the

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Economic Activity (cont.)



a. Chain-weighted data in billions of 1996 dollars.

NOTE: All data are seasonally adjusted.

SOURCES: U.S. Department of Labor, Bureau of Labor Statistics; and Federal Highway Administration, *Highway Statistics Report*.

30 years ending in 1991 and about half a percentage point above the average since 1991. Manufacturing clearly is a major source of this splendid productivity performance. The growth rate of productivity in the manufacturing sector took another upward leap in 1999, rising 6.9% between 1998:IVQ and 1999:IVQ.

Memories of cartel-induced petroleum price increases and escalating inflation in the 1970s make current fuel-price hikes a matter of widespread concern. How has the role of motor-vehicle fuel in GDP changed since that earlier experience? Total fuel consumption has grown at an

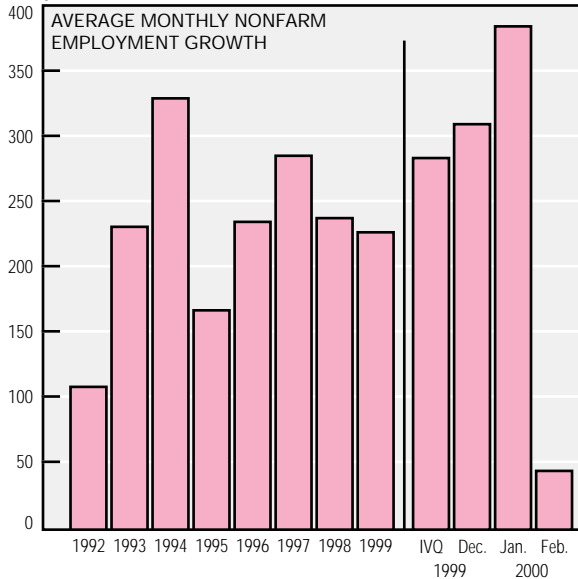
average annual rate of 2.1% since 1970, about one percentage point slower than GDP growth. Passenger cars' share of annual fuel use declined markedly, but a rising share of fuel consumption in light trucks (a category that includes the increasingly popular sport-utility vehicles) offset about three-quarters of this decline. Combined, the share of fuel that is used in these two categories has dropped from 86% to 79%. The share used by heavy trucks and buses has risen correspondingly.

Fuel efficiency has changed in a similar way. Passenger cars and light trucks averaged 13.3 miles per

gallon (mpg) in 1970. Since then, efficiency has increased at an average annual rate of 1.3%, reaching 19.7 mpg in 1998. The 5.5 mpg averaged by heavy trucks and buses in 1970, on the other hand, crept up at an average annual rate of only ½ percent through 1998, to 6.4 mpg. Still, because these industrial and commercial gas-guzzlers account for little more than 20% of all fuel used, fuel consumption relative to GDP has declined by one-fourth since 1970, from more than 24 gallons to just over 18 gallons per \$1,000 of GDP (both in 1996 prices).

Labor Markets

Change, thousands of workers

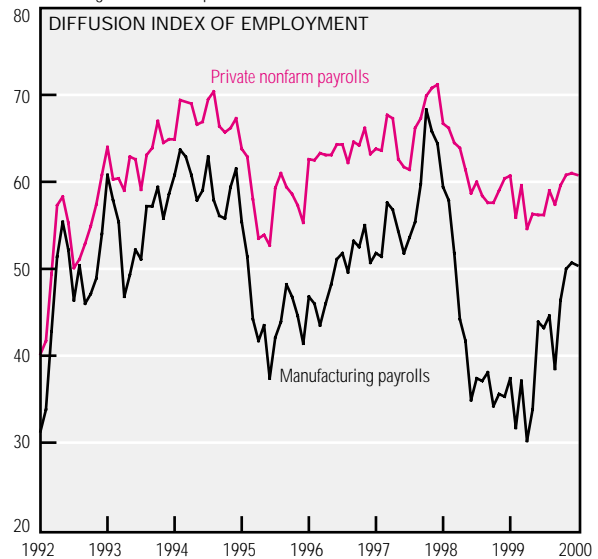


Labor Market Conditions

	Average monthly change (thousands of employees)				
	1997	1998	1999	YTD ^a	Feb. 2000
Payroll employment	281	244	226	214	43
Goods-producing	48	8	-6	59	-19
Mining	2	-3	-3	1	2
Construction	21	30	18	45	-26
Manufacturing	25	-19	-21	13	5
Durable goods	27	-9	-10	17	20
Nondurable goods	-2	-10	-11	-4	-15
Service-producing	233	235	232	155	62
TPU ^b	24	32	18	-2	-8
FIRE ^c	14	26	12	2	10
Retail trade	24	32	37	34	33
Services	117	119	121	74	6
Government	17	27	29	33	13
	Average for period (percent)				
Civilian unemployment	4.9	4.5	4.3	4.1	4.1



Percent rising, three-month span



a. Year to date.

b. Transportation and public utilities

c. Finance, insurance, and real estate.

d. Vertical line indicates break in data series due to survey redesign.

NOTE: All data are seasonally adjusted.

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

After making substantial increases in January, employers added only 43,000 workers to payrolls in February. Another measure of employment growth, the employment-to-population ratio, nevertheless remained at a record high of 64.8%. The unemployment rate was up slightly in the month to 4.1%; it has now remained below 4.2% for five consecutive months. February's average hourly earnings rose 4 cents to \$13.53, marking an increase of 3.6% over the levels of February 1999.

Because of sharp declines in

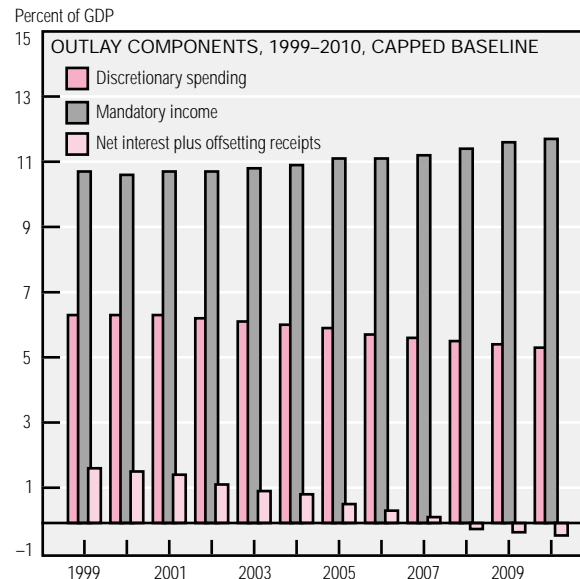
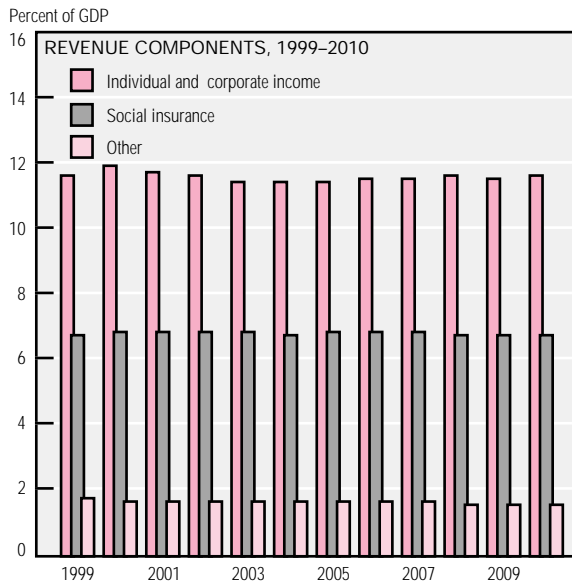
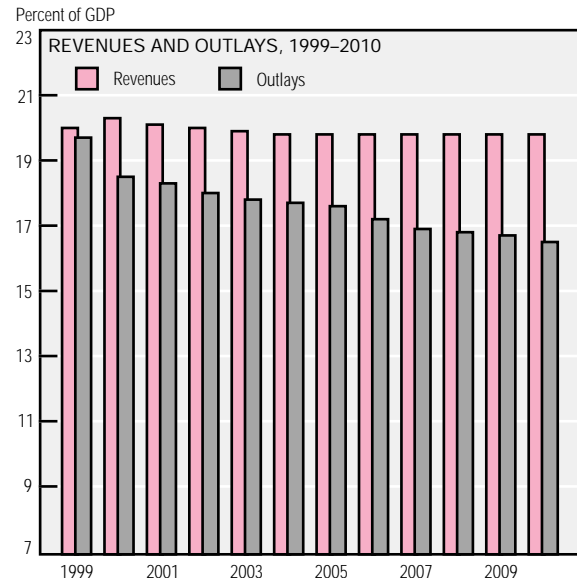
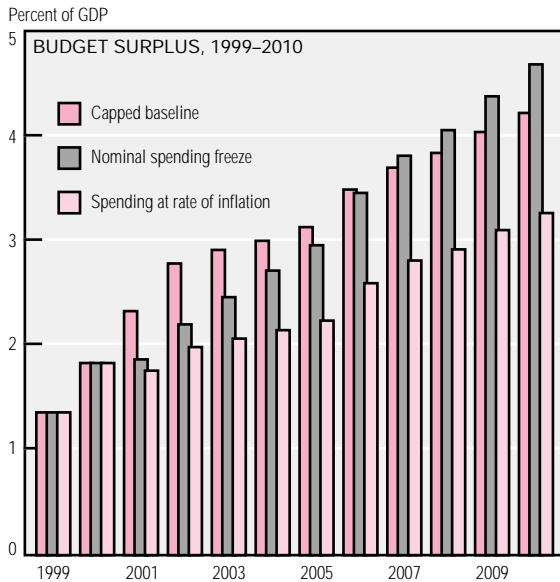
employment in construction and nondurable-goods manufacturing, the goods-producing sector showed a net loss of 19,000 jobs in February. After an increase of 116,000 jobs in January, construction employment fell by 26,000 jobs last month. However, durable-goods manufacturers increased payrolls by 20,000 jobs in February. Manufacturing employment as a whole, after decreasing about 480,000 jobs in 1998 and 1999, has increased an average of 13,000 per month thus far this year.

In the service-producing sector, the pace of employment growth

slowed substantially for a net gain of only 62,000 jobs, more than half of which were concentrated in retail trade.

The Diffusion Index of Employment shows the fraction of industries in which employment is rising. For the three months ending January 2000, 61% of the 349 nonfarm industries surveyed showed increasing employment. In the manufacturing sector, which has rebounded recently, half of all survey participants reported an increase in their employment.

The Federal Budget



NOTE: All data are for fiscal years.
SOURCE: Congressional Budget Office.

Strong economic growth in the U.S. has produced a federal budget surplus for the second consecutive year: \$124 billion for fiscal year 1999 on the heels of 1998's \$69 billion surplus. The surpluses are projected to continue and, indeed, to increase if Congress adheres to its current discretionary spending policy. The size of future surpluses, however, depends on the precise interpretation of "current discretionary spending policy."

The cumulative surplus for the period 2000-10 is projected to be \$4.2 trillion if discretionary spending is kept within statutory caps in 2001 and 2002 and allowed to grow with

inflation thereafter. An almost identical cumulative surplus is projected if discretionary spending is frozen in nominal terms at its fiscal year 2000 level. Alternatively, if Congress allows discretionary spending to grow at the same rate as inflation, the cumulative 2000-10 surplus will be smaller—\$3.1 trillion.

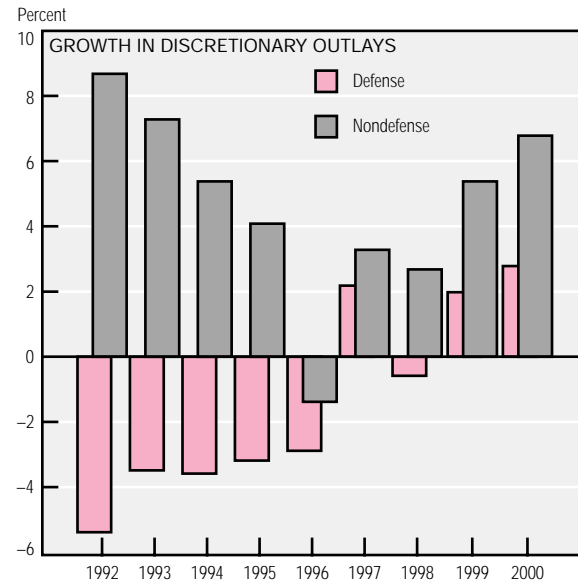
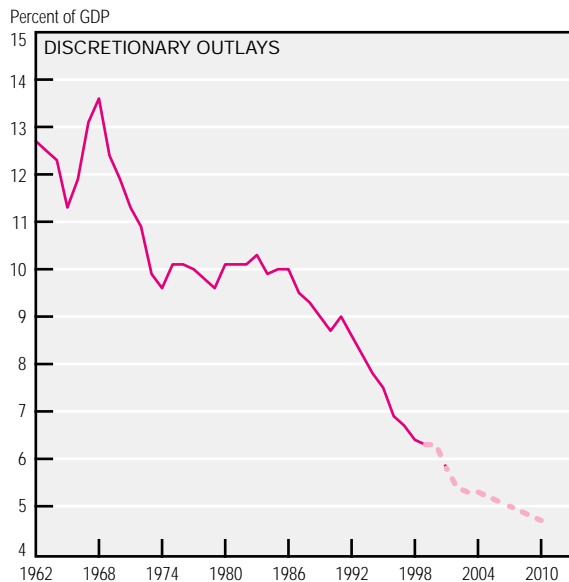
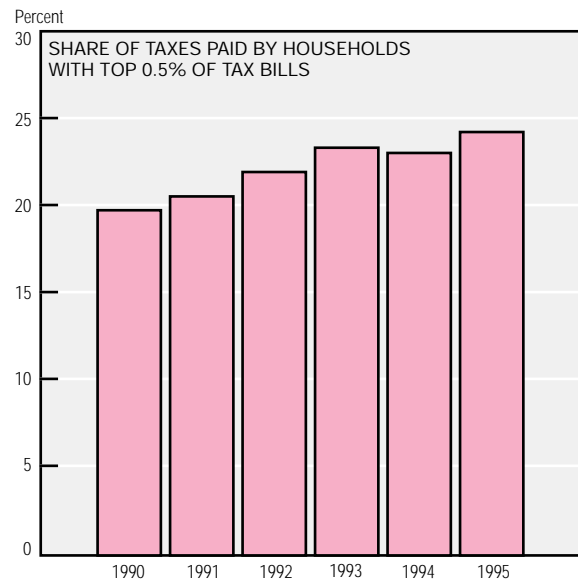
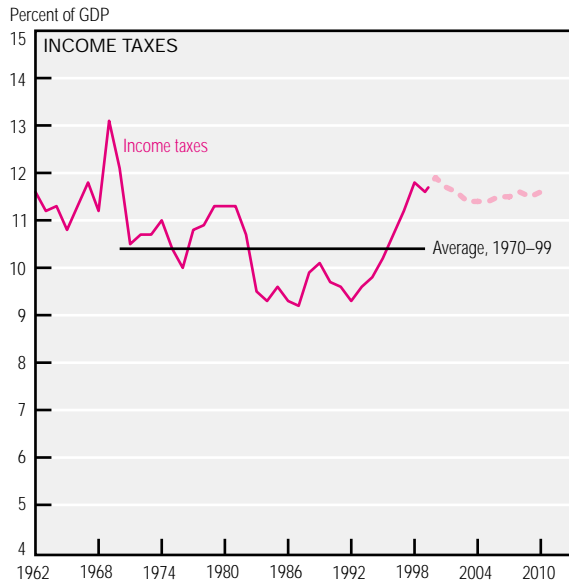
The main factors underlying federal surpluses are strong revenue growth and declining discretionary spending. During fiscal 1998 and 1999, federal personal plus corporate income taxes exceeded 11.5% of GDP for the first time since the late 1960s. At 6.3%, federal discretionary spending as a share of GDP

is at a post-World War II low. Depending on which policy assumption is adopted, discretionary spending falls to between 4.2% and 5.3% of GDP by 2010. In addition, budget surpluses imply a decline in federal debt relative to GDP and, hence, lower servicing costs. As a result, net interest outlays fall from 2.5% of GDP in fiscal year 1999 to only 0.5% of GDP in 2010.

The current economic boom is historically unique. It has already outlasted the longest previous growth spurt. It has also reversed the decline in income tax revenues that began with the recession and

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The Federal Budget (cont.)



NOTE: All data are for fiscal years.
SOURCE: Congressional Budget Office.

marginal rate cuts of the early 1980s. Since that time, sustained increases in earnings and asset income, the partial reversal of tax rate cuts in 1993, and the strong surge in asset prices since 1995 have swelled U.S. income tax revenues.

Larger incomes have shifted some Americans into higher tax brackets, and much of the recent income growth has been concentrated at the upper end of the income distribution. In addition, the strong surge in asset prices has raised the rate of asset turnover, increasing revenue from capital gains taxes. Indeed, the share of income taxes paid by

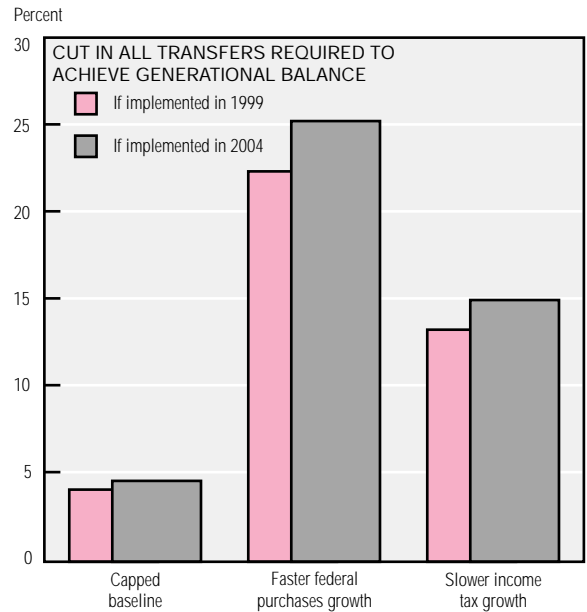
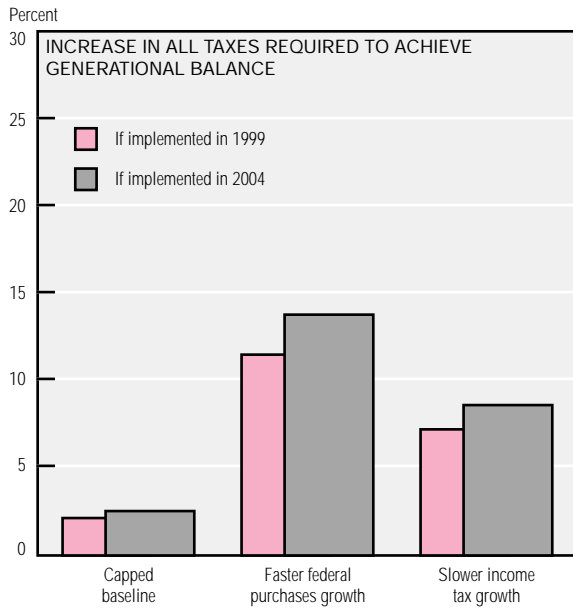
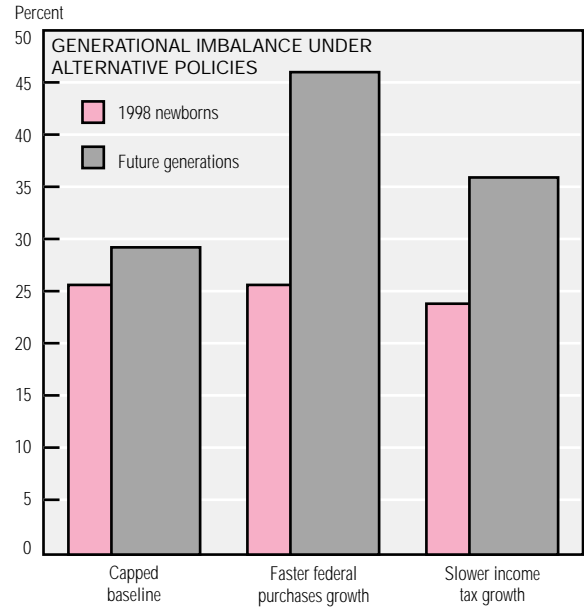
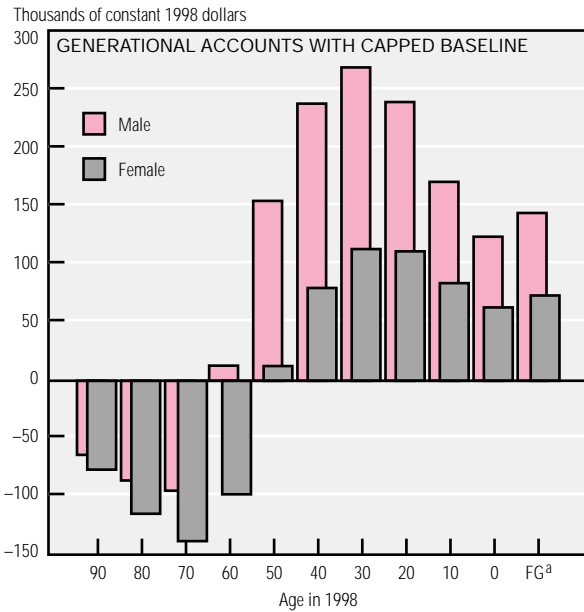
households at the top 0.5% of the income distribution has jumped from 19.7% in 1990 to 24.2%. These higher income tax revenues, along with reduced discretionary spending in the 1990s, have transformed the federal budget; it has gone from producing deficits in the 1980s and 1990s to generating large projected surpluses in 2000 and beyond.

The decline in discretionary spending during the early 1990s can be traced to post-Cold War defense cutbacks—retrenching personnel, forgoing replacement of old equipment, and reducing new acquisitions. Although defense spending

has bounced back since 1996, it has grown more slowly than the overall rate of inflation. Growth in nondefense spending, which outstripped the overall inflation rate during the early 1990s, slowed in the latter half of the decade.

Generational accounts show the present values of future taxes minus transfers for Americans who were alive in a given year. The calculations use survey data on distribution of taxes and transfers and the Congressional Budget Office's July 1999 baseline projections of spending within statutory caps. Generational
(continued on next page)

The Federal Budget (cont.)



a. Future generations

SOURCE: Jagadeesh Gokhale, Benjamin R. Page, John R. Sturrock, and Joan L. Potter, "Generational Accounts for the United States," *American Economic Review*, forthcoming, May 2000.

accounts for 1998 show a significant life-cycle pattern: Older generations are net recipients because the transfers they will receive—Social Security and Medicare benefits—exceed the taxes they will pay in the future. The opposite is true for working-age generations, who will pay taxes for several years before receiving transfers.

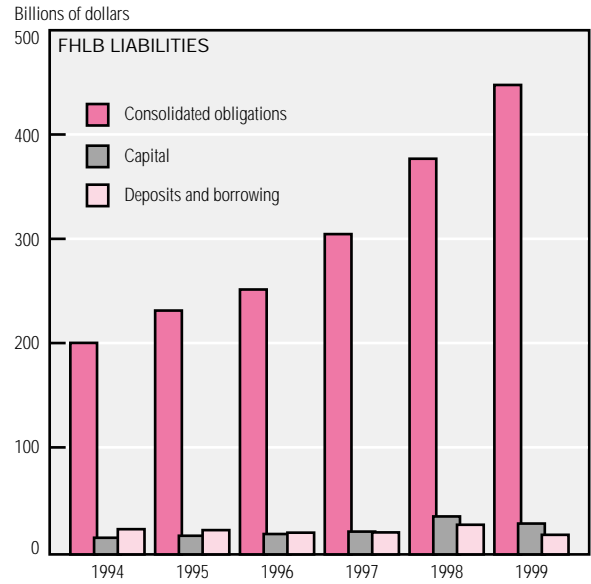
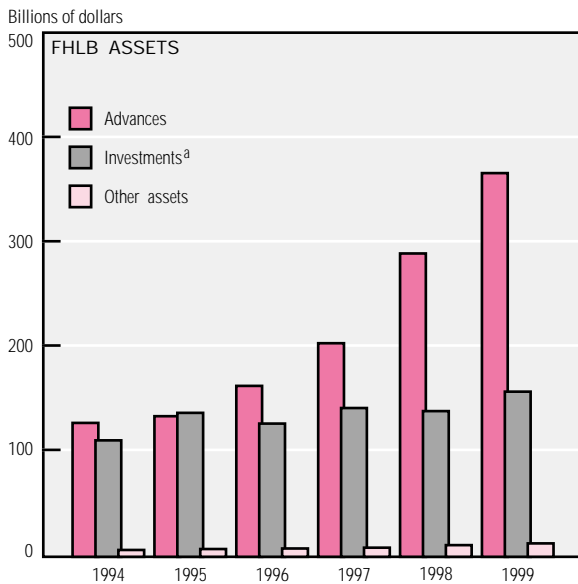
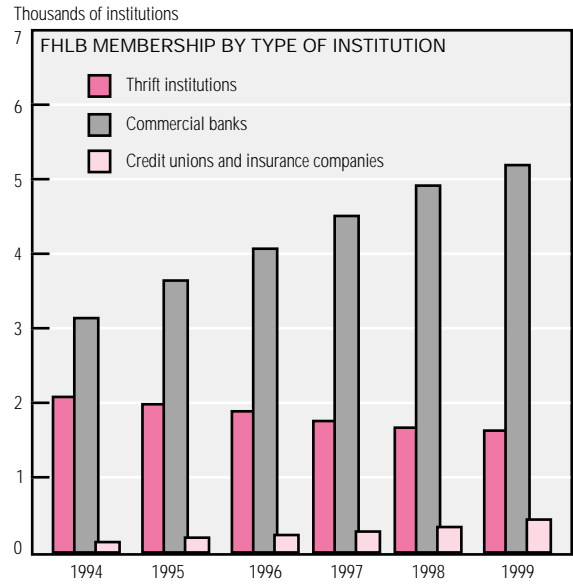
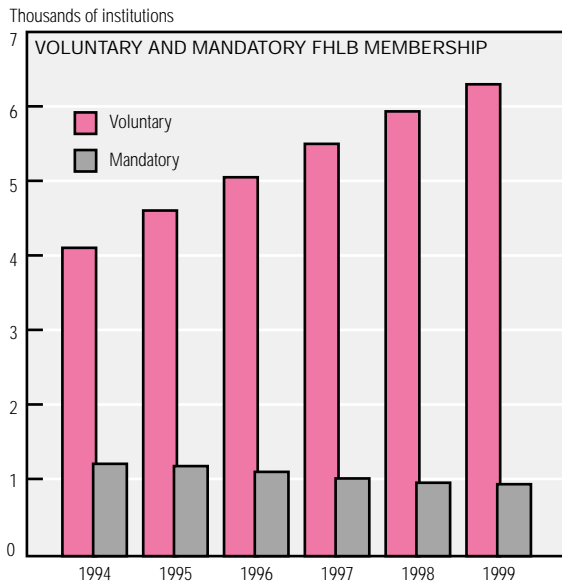
Given projected federal purchases and assuming that living (including newborn) generations will continue to be treated under 1998 policy, future generations' net taxes must be higher, on average, than those of

1998 newborns to balance the budget over the indefinite future. With spending capped, future generations' lifetime net tax rate (their generational account as a fraction of their lifetime labor income) will be 29.2%—14% larger than the 25.6% rate faced by 1998 newborns. The difference becomes still greater if federal purchases are assumed to grow at the same rate as GDP or if the ratio of future federal income taxes to GDP equals 10.4%, its average since 1970.

Restoring intergenerational balance to U.S. fiscal policy requires

hiking taxes or cutting transfers so that living generations face larger net taxes and future generations face smaller ones. For example, under the capped-baseline assumption, all taxes would have to rise 2% immediately and permanently. Bigger hikes are required under the other assumptions mentioned earlier. Alternatively, government purchases could be reduced from projected levels (not shown). Moreover, postponing policies for restoring a generationally balanced fiscal policy makes the required policy changes larger.

Federal Home Loan Banks



a. Investments include federal funds sold.
 NOTE: 1999 data are as of September 30, 1999.
 SOURCE: Federal Home Loan Bank System, *Quarterly Financial Report* for the nine months ended September 30, 1999.

The 12 Federal Home Loan Banks are stock-chartered, government-sponsored enterprises designed to provide liquidity for specialized housing finance lenders. FHLB membership has increased steadily over the years, reaching its high of 7,856 institutions at the end of 1999:IIIQ. Mandatory membership, however, continued its decline to 929 institutions, partly because of consolidation in the thrift industry. (All federally chartered savings associations must belong to their district Federal Home Loan Bank.)

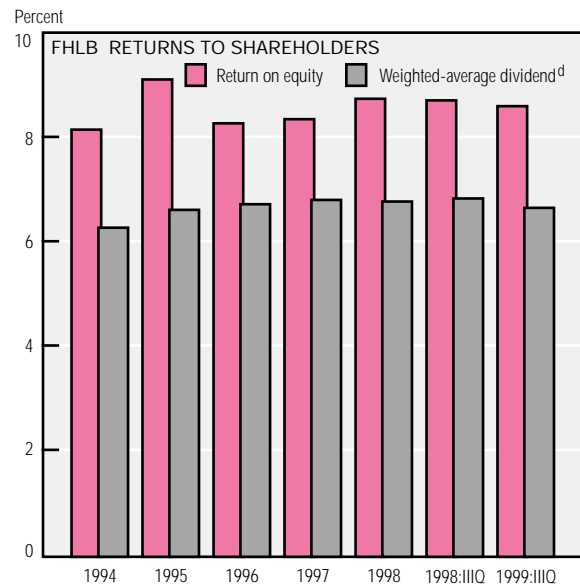
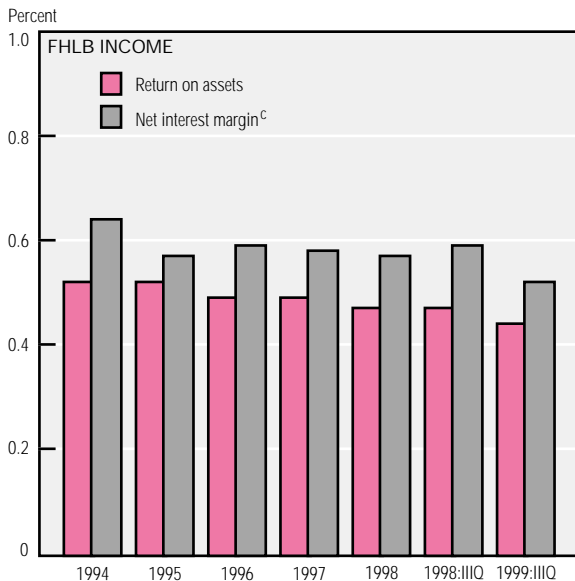
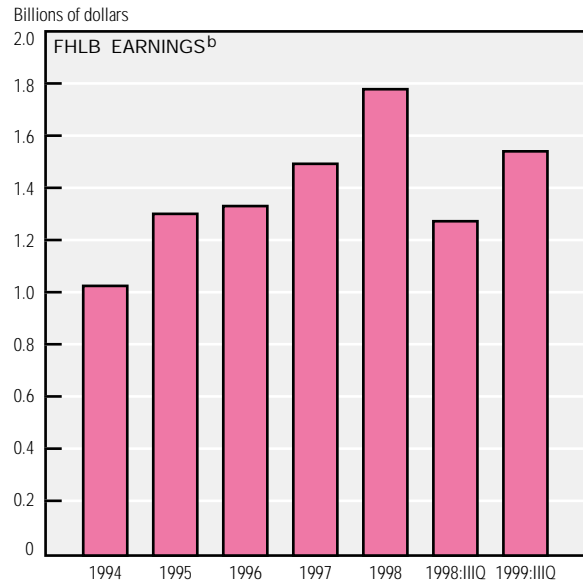
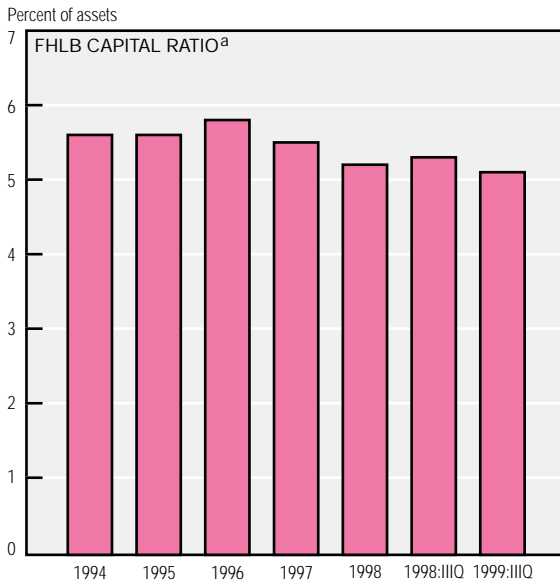
Growth in voluntary FHLB membership is driven by commercial banks, which account for more than 66% of all members and nearly 72% of voluntary members. FHLB advances, which represent an important funding source for member institutions' mortgage portfolios, increased from \$288.2 billion at the end of 1998 to \$365.3 billion at the end of 1999:IIIQ.

This latest recorded increase in advances is partly the result of members locking in funding for mortgage portfolios that mature after January 1, 2000. Collectively, Federal

Home Loan Banks increased their investment portfolios by \$18.5 billion during the first nine months of 1999, offsetting a \$2.9 billion decline in 1998. The lion's share of funding for FHLB assets comes from the \$477.5 billion consolidated obligations of the FHLB System—bonds issued on behalf of the 12 Federal Home Loan Banks collectively. Member institutions' deposits and short-term borrowings provided another \$16.2 billion in funding, and equity capital supplied \$26.9 billion.

(continued on next page)

Federal Home Loan Banks (cont.)



a. Total capital ratio is calculated as capital stock plus retained earnings as a percent of total assets at period's end.

b. Net income.

c. Net interest margin is calculated as annualized net interest income as a percent of average earning assets.

d. Weighted average dividend rates are calculated by dividing annualized dividends paid in cash and stock by the daily average of capital stock eligible for dividends.

NOTE: Bars labeled 1998:IIIQ and 1999:IIIQ include data for the first three quarters of the year.

SOURCE: Federal Home Loan Bank System, *Quarterly Financial Report* for the nine months ended September 30, 1999.

The tremendous growth in FHLB assets has had a negative impact on profitability. Despite steady increases in net income from 1994 to 1998, return on assets has fallen steadily from 52 basis points (bp) in 1995 to 47 bp in 1998. This trend continued during the first nine months of 1999, as return on assets came in at 44 bp, down from 47 bp during the same period in 1998.

This decrease in profitability is due in part to deterioration of the net

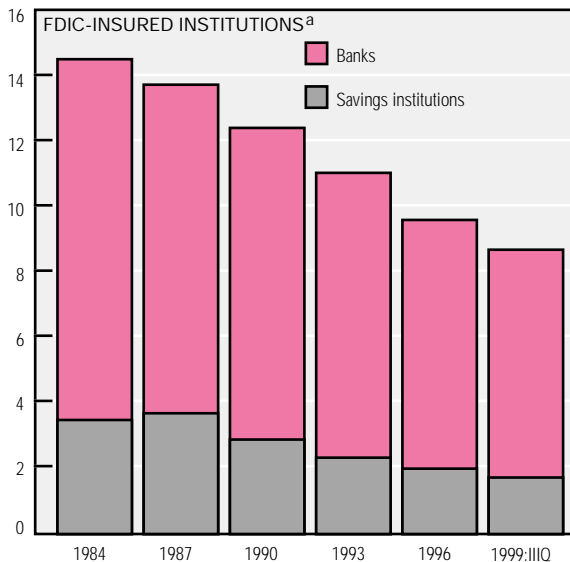
interest margin from 59 bp to 52 bp over the first nine months of 1998 and 1999, respectively. Asset growth has also lowered the capital-to-assets ratio from 5.8% in 1996 to 5.2% at the end of 1998. The capital ratio at the end of 1999:IIIQ stood at 5.1%, down from 5.4% at the end of 1998:IIIQ. Greater leverage is responsible for the increase in return on equity from 8.26% in 1996 to 8.73% in 1998. At 8.59%, however, the return on equity over the first

nine months of 1999 was off slightly from the same period in 1998. Finally, the weighted-average dividend mirrored the performance of return on equity—slightly lower over the first three quarters of 1999 than for the comparable period in 1998.

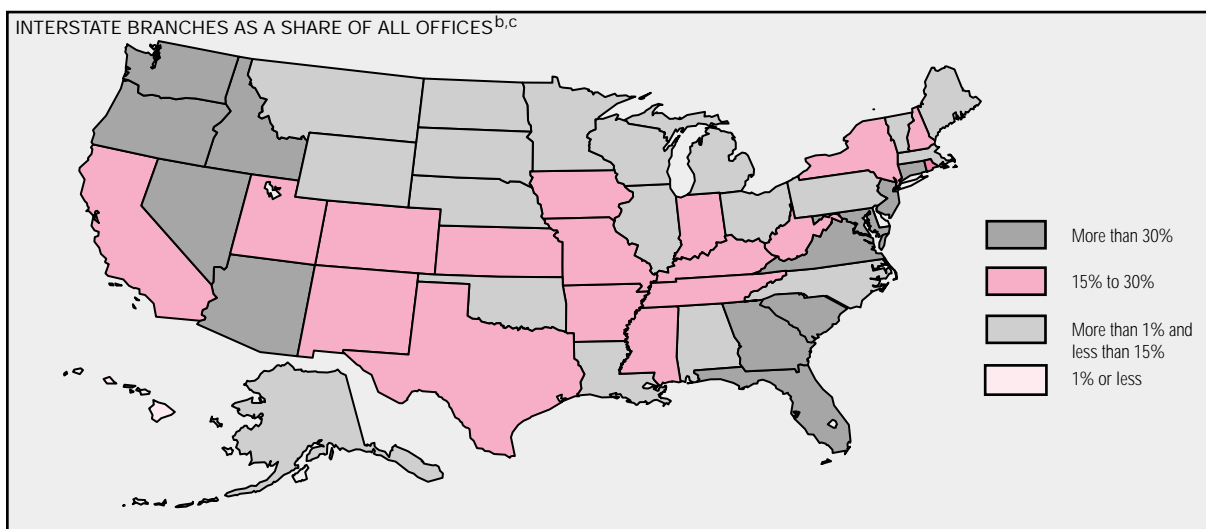
Overall, the Federal Home Loan Banks' performance last year suggests that they remain an important source of funding for the housing finance industry.

Banking Conditions

Thousands of institutions



Thousands of offices



a. Includes insured branches of foreign banks that file call reports.

b. Figures reflect percent of branches owned by out-of-state commercial banks and savings institutions.

c. Data as of September 30, 1999.

NOTE: Data include all FDIC-insured institutions.

SOURCE: Federal Deposit Insurance Corporation, *Quarterly Banking Profile*, third quarter 1999.

The passage of the Reigle–Neal interstate banking legislation in 1994 spurred on the consolidation of the depository institutions sector. The total number of FDIC-insured commercial banks and savings associations in the U.S. declined from 17,900 in 1984 to 10,019 at the end of 1999:IIIQ.

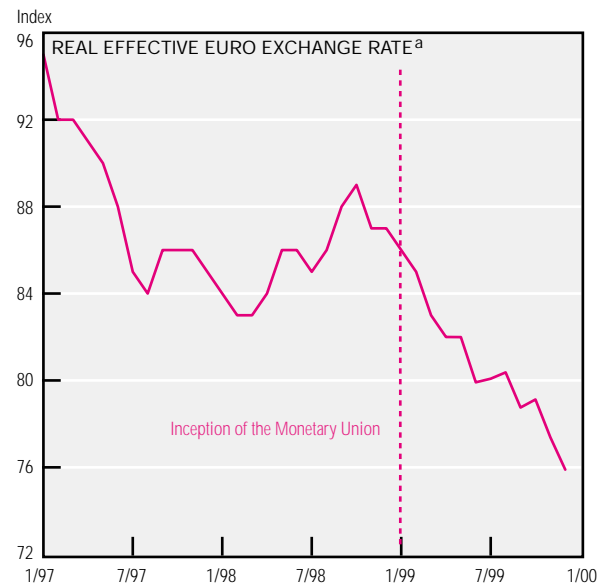
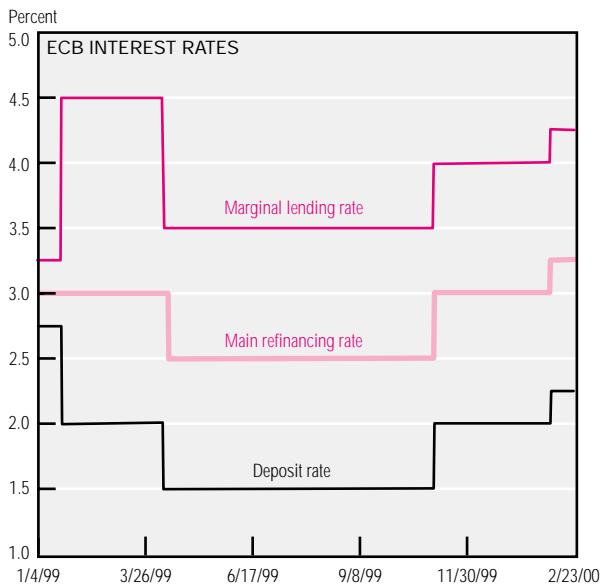
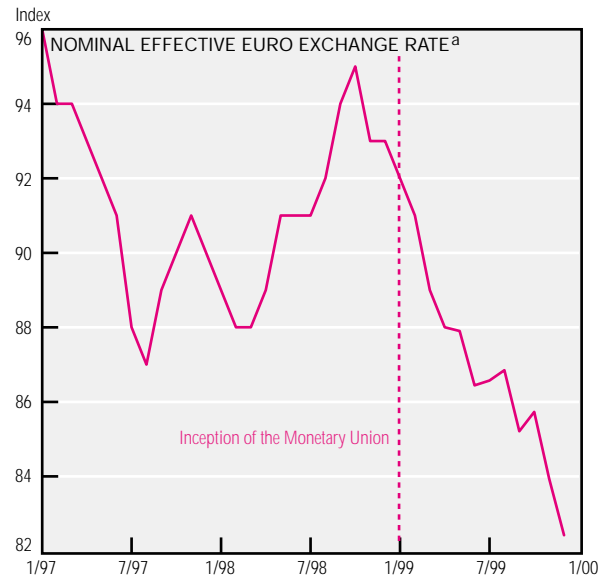
However, despite a sharp drop in the number of savings association offices (from 23,888 to 14,337) over the same period, the total number

of FDIC-insured depository institution offices increased slightly (from 80,220 to 84,917). These office numbers do not take account of other means of delivering banking services such as automated teller machines, telephone banking, and on-line banking. Hence, the reduction in the number of banks has decreased the availability of banking services for the average consumer.

Finally, the effect of interstate consolidation of the banking industry is

evident in the large number of states reporting that more than 15% of all their bank branches are offshoots of out-of-state banks. The number of states reporting that interstate branches exceed 15% of all branches will continue to grow as depository institutions, no longer distracted by Y2K compliance issues, will doubtless seek opportunities to enter new markets and lines of business through mergers and acquisitions.

The Euro



a. The International Monetary Fund constructs a synthetic dollar/euro exchange rate for the period prior to January 1999 by applying official conversion factors to the dollar exchange rates of individual participant countries. The nominal and real effective trade weights for the euro are based on the total foreign trade of the euro area. The real effective euro uses unit labor costs as inflation proxies.

SOURCES: Board of the Governors of the Federal Reserve System; European Central Bank, <http://www.ecb.int/>; and International Monetary Fund, *International Financial Statistics*.

The euro fell below one-to-one parity with the dollar on January 27, 2000, initiating calls for foreign-exchange-market intervention. On a nominal effective basis, the euro has depreciated about 11% since its inauguration on January 1, 1999.

The European Central Bank (ECB) has two choices for influencing the dollar/euro exchange rate. One option is to tighten monetary policy relative to the U.S. On February 3, 2000, the ECB raised interest rates 25 basis points, following a similar hike

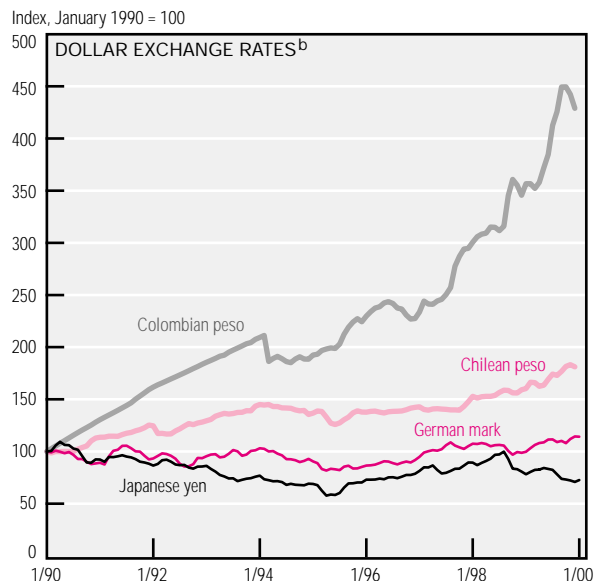
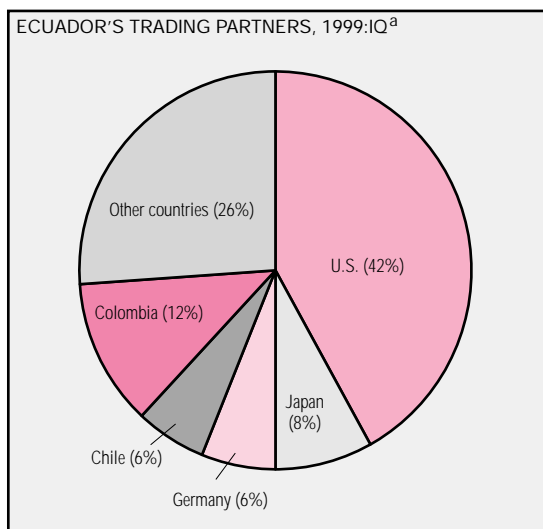
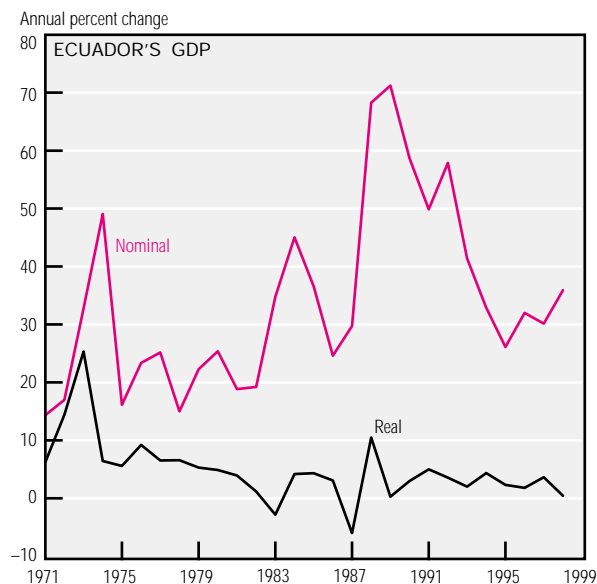
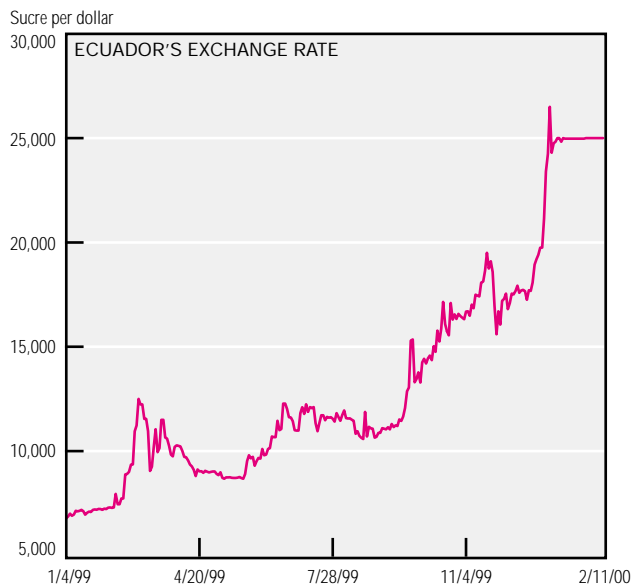
in the U.S. federal funds and discount rates on February 2.

A second option is to sell official dollar reserves without changing targeted interest rates. When central banks maintain interest-rate objectives—as do the ECB, the Federal Reserve, and the Bank of Japan—they automatically neutralize (or sterilize) any impact intervention might otherwise have on the target. Sterilized intervention does not alter relative money-growth rates, a key determinant of exchange rates. It

only influences exchange rates in the unlikely event that it affects market expectations or perceptions, so most economists regard sterilized intervention as largely ineffectual.

Neither intervention nor monetary policy has any lasting effect on nations' real exchange rates, which incorporate inflation differentials between countries. Since January 1, 1999, the euro has depreciated 12% on a real effective basis, an indication that its competitive position has improved.

Dollarization and Ecuador's Sucre



a. Total trade is the sum of exports and imports.

b. Units of foreign currency per dollar.

SOURCES: Board of Governors of the Federal Reserve System; and International Monetary Fund, *International Financial Statistics*.

On January 9, 2000, the president of Ecuador proposed official dollarization as a way to halt the rapid depreciation of the country's currency (the sucre), prevent hyperinflation, and establish economic stability.

Official dollarization occurs when a country adopts a foreign currency as legal tender, either exclusively or predominantly. Today, 13 of the 29 officially dollarized countries use the U.S. dollar as their predominant currency. By doing so, they relin-

quish monetary sovereignty and link their inflation rates to U.S. monetary policy. In return, these countries assure themselves a rate of inflation close to that of the U.S. Dollarization precludes governments in emerging markets from using inflation as a revenue source. Sound monetary policies improve the prospects for real economic growth.

The U.S. accounts for 42% of Ecuador's foreign trade. This is more than the U.S. share of foreign trade for Argentina (17%), which

maintains rigid links between the peso and the U.S. dollar, but smaller than the trade share for Mexico (80%), whose currency is not formally tied to the dollar. Linking the sucre to the dollar would expose Ecuador's trade to fluctuations in dollar exchange rates. A dollar appreciation could reduce the country's trade balance, forcing Ecuadorans to reduce prices and wages in order to reestablish their trade competitiveness.