## The Economy in Perspective

Man was born to be rich, or, inevitably grows rich by the use of his faculties; by the union of thought with nature. Property is an intellectual production. ... An infinite number of shrewd men, in infinite years, have arrived at certain best and shortest ways of doing, and this accumulated skill in arts, cultures, harvestings, curings, manufactures, navigations, exchanges, constitutes the worth of our world to-day.

—Ralph Waldo Emerson, "Wealth," in *The Conduct of Life* (1860)

Work in progress...Work in America is under scrutiny once again. Despite nearly two years of steady gains in U.S. production and income, total employment is still below the peak of the previous business cycle in March 2001. Manufacturing jobs seem particularly vulnerable, having declined by roughly 15 percent since the recession began. Workers have reportedly become less loyal to their employers because of downsizing and well-publicized corporate accounting scandals. Even retirees, who depend on former employers for pension income—and often for medical benefits—increasingly worry about their retirement security.

Unquestionably, work life in America is changing; but then again, it has been changing for quite some time. Over the past several decades, we saw men's labor force participation rate decrease and women's increase. We witnessed a rise in the number of self-employed and part-time workers, as well as employers' greater reliance on employment service companies to supply them with temporary help. We also saw declines in the percentages of people belonging to unions, working in the manufacturing sector, and staying with only one or two employers for most of their working lives. The value of learning increased, with the most educated people enjoying the highest incomes and the lowest unemployment rates.

Despite all of these changes, most Americans' real incomes rose during the past several decades, and each generation attained a higher standard of living than the one before. Employment rose dramatically during the last business cycle expansion—after a "jobless recovery"—and the unemployment rate fell so low that analysts feared a new round of wage hikes and inflation. Was the exceptional labor market performance of the past decade just a stroke of luck, or was it the result of the trends mentioned earlier? Put another way, have the many changes in U.S. labor markets helped American workers or harmed them? What further developments lie ahead, and how are they likely to affect our economic well-being?

These are "big picture" questions to be sure, and deserve more serious commentary and debate than this short essay can provide. Nevertheless, as we gear up for an election year that is likely to focus attention on manufacturing employment and global trade's impact on U.S. workers, some big picture thinking might provide a useful frame of reference.

The fact is that since its inception, this nation has been a work in progress, an experiment built on the premise that free people can govern themselves. As this experiment has lumbered forward through time, Americans have seen the benefits of thrift, education, and trade among nations. They have prospered because they have been free to challenge the status quo, to innovate, to acquire property, and to keep the benefits of their labor. Whenever prospects seemed brighter in another calling or another place, people pulled up stakes and moved on. Adaptation has been the soul of the pioneer spirit that still lives on.

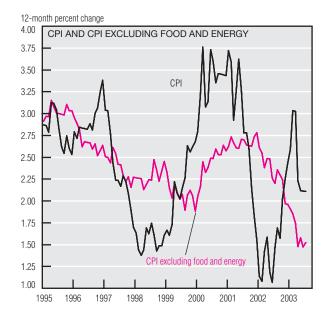
American society has changed profoundly during the nation's relatively short lifetime, but except for the most wrenching events, such as the Civil War and the Great Depression, the transformation has been gradual and driven forward by commerce. Much is made today of the notion that the United States is a nation of consumers, but historically speaking, we are more accurately described as a nation of business and a nation with confidence in the future. This confidence—persisting despite the recognition that the future demands certain breaks with the past—is what has encouraged Americans to embrace change.

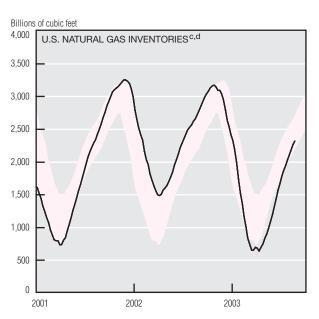
Ralph Waldo Emerson witnessed this country's transformation from 13 colonies to an immense landmass stretching from the Atlantic to the Pacific. He saw a nation rise on the bounty of nature, but soar on its willingness to allow the established order to retreat and make room for the future. His essay on wealth asks,

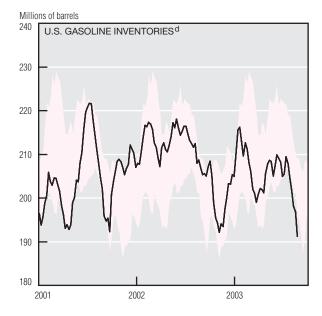
...how did our factories get built? how did North America get netted with iron rails, except by the importunity of ...orators, who dragged all the prudent men in? Is [theirs] the madness of many for the gain of a few? This speculative genius is the madness of few for the gain of the world....Wealth brings with it its own checks and balances. The basis of political economy is non-interference. The only safe rule is found in the self-adjusting meter of demand and supply. Do not legislate. Meddle, and you snap the sinews with your sumptuary laws. Give no bounties: make equal laws: secure life and property, and you need not give alms. Open the doors of opportunity to talent and virtue, and they will do themselves justice...

## Inflation and Prices

August Price Statistics					
	a a a a			2002 avg.	
Consumer prices					
All items	2.0	1.3	2.1	2.4	2.4
Less food and energy	2.5	1.9	1.5	2.2	2.0
Median <sup>b</sup>	2.7	2.0	2.1	2.9	3.0
Producer prices					
Finished goods	1.7	1.4	3.0	1.8	1.2
Less food and energy	2.4	0.8	0.2	0.9	-0.5







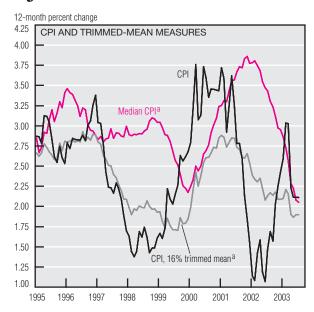
- a. Annualized.
- b. Calculated by the Federal Reserve Bank of Cleveland.
- c. Working gas in underground storage.
- d. The shaded band indicates the range between minimum and maximum values for weekly data from 1998 through 2002. SOURCES: U.S. Department of Labor, Bureau of Labor Statistics; U.S. Department of Energy, Energy Information Administration; and Federal Reserve Bank of Cleveland.

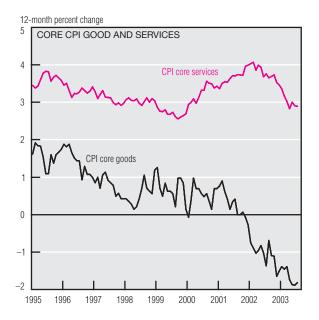
Consumer and wholesale prices rose at an annualized rate of about 2% in July, partly restrained by falling energy costs. Excluding food and energy goods, the Consumer Price Index (CPI) and the Producer Price Index (PPI) each rose about 2<sup>1</sup>/<sub>2</sub>%, both well above their 12-month growth trends.

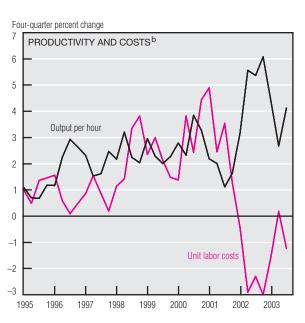
Despite their restraining influence on the major price statistics in July, energy costs have given a strong upward push to the aggregate price measures over the past year. And several sources indicate that energy costs may continue to exert pressure on consumers' pocketbooks and businesses' income statements in the immediate future. Certainly, spot prices for a wide range of energy goods rose sharply this summer, but over the past month or so, upward pressures have shown signs of relenting.

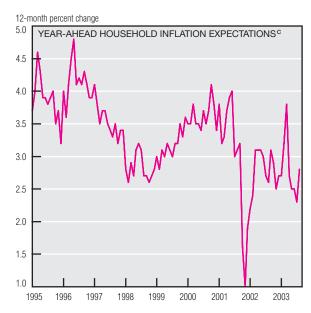
In June, Federal Reserve Chairman Greenspan testified before the House Committee on Energy and Commerce that "[t]oday's tight natural gas markets have been a long time in coming, and futures prices suggest that we are not apt to return to earlier periods of relative abundance and low prices anytime soon." He noted that unlike the market for crude oil, where "American refiners have unlimited access to world supplies" and can therefore adjust readily to any imbalance between domestic consumption and domestic supply, it is more difficult to meet domestic demand for natural gas by means of imports. Indeed, at the time of Chairman Greenspan's testimony, natural gas prices had risen from a low of \$2.55 (per million Btu) in July 2000, to \$3.65 in July 2002, and to \$6.31 in July 2003.

## Inflation and Prices (cont.)









- a. Calculated by the Federal Reserve Bank of Cleveland.
- b. Nonfarm business sector.
- c. Mean expected change in consumer prices as measured by the University of Michigan's Survey of Consumers.

SOURCES: U.S. Department of Labor, Bureau of Labor Statistics; Federal Reserve Bank of Cleveland; and University of Michigan.

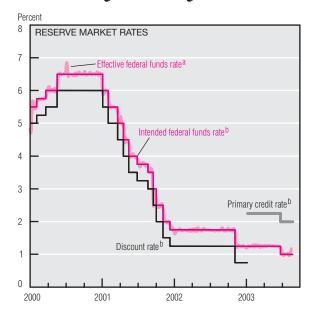
Since his testimony, pressures on the natural gas market seem to have eased somewhat; energy companies were reported to be replenishing reserves at a record pace. Natural gas inventories, though still somewhat low, have now come back within their five-year ranges and are more able to meet cold-weather demands.

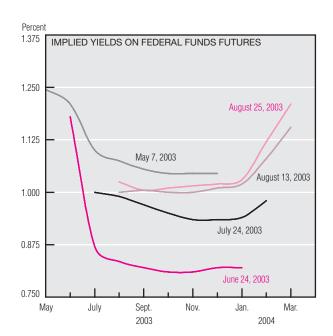
The market for gasoline has also been feeling some strain recently; U.S. fuel reserves are reportedly near a three-year low. Reduced supplies and the strong summer demand created by increased travel have combined to push gasoline prices up more than 50% between May and August, although futures markets indicate that as much as two-thirds of that rise could reverse itself by the end of the year.

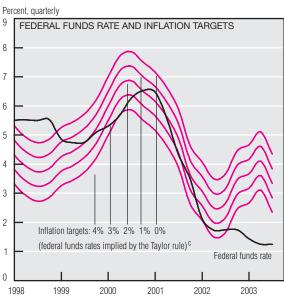
Inflationary patterns remain rather subdued overall but are still quite mixed by category. Goods prices continue to post outright declines, whereas services prices are rising at an annualized pace of about 3%. This large discrepancy between goods and services makes it difficult to discern the economy's underlying inflation trend. A recent surge in U.S. labor productivity, against a backdrop of

relatively modest growth in labor compensation, has put substantial downward pressure on the per-unit labor costs of U.S. output. (Unit labor costs have been on the decline for much of the past three years.) Inflationary expectations may also be trending lower, at least according to the University of Michigan's survey data, which show that U.S. households anticipate price increases of about 2<sup>3</sup>/<sub>4</sub>% over the next 12 months, about one percentage point lower than the rate they expected three years ago.

## Monetary Policy









- a. Weekly average of daily figures.
- b. Daily observations.
- c. The formula for the implied funds rate is taken from Federal Reserve Bank of St. Louis, *Monetary Trends*, January 2002, which is adapted from John B. Taylor, "Discretion versus Policy Rules in Practice," *Carnegie-Rochester Conference Series on Public Policy*, vol. 39 (1993), pp. 195–214.

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

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

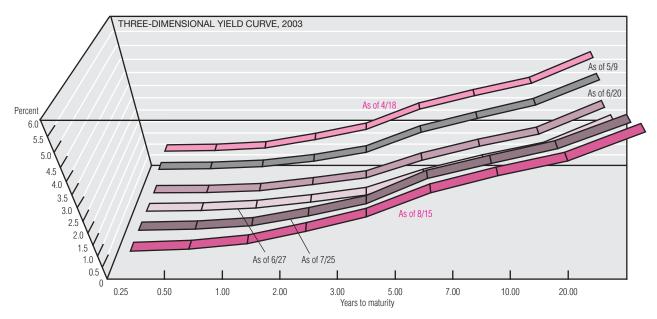
The Federal Open Market Committee made no change in its target for the federal funds rate at its August 12 meeting. The Board of Governors of the Federal Reserve System also left the primary credit rate unchanged. Before that meeting, market participants had believed there was some chance of the FOMC lowering the target rate, a possibility reflected in yields in the federal funds futures market. Since then, however, the thought of rates lower than 1% has diminished, and the market seems to

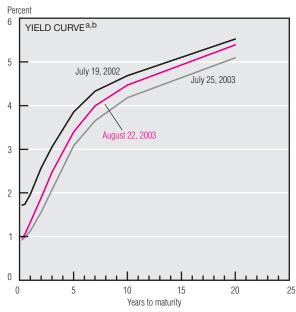
be entertaining the thought of rates increasing in early 2004.

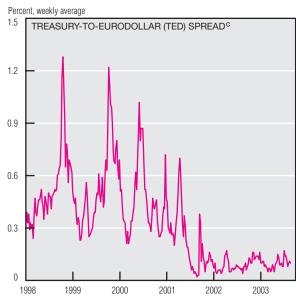
One popular benchmark for the federal funds rate is the Taylor rule, which posits that the FOMC chooses the target rate as a balanced response to weakness and inflation. The form of this rule depends on the weights given to inflation, output, and the assumed inflation target. Since fall 2002, rates have been well below those suggested by the Taylor rule, even assuming a rather high target inflation rate of 4%.

Another benchmark—whether the fed funds rate is "neutral" or "in line with the market"—is based on the ideas of Swedish economist Knut Wicksell. It compares the fed funds rate with other market rates. One logical comparison is with the yield on the two-year Treasury note, whose maturity is long enough to ensure that it is not just a reflection of immediate policy expectations. Although the spread between these two rates is now negative, it shows somewhat less easing than the Taylor rule benchmark would suggest.

### Money and Financial Markets







- a. Average for the week ending on the date shown.
- b. All yields are from constant-maturity series.
- c. Yield spread: three-month euro minus three-month constant-maturity Treasury bill.

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

The yield curve has steepened since last month, but this change represents more than a bounce-back from the summer's exceptionally low long-term rates; current yields show an increase over April and May as well. The 10-year, three-month spread, often cited as a predictor of future economic growth, stands at a robust 350 basis points (bp), up from 325 last month and 277 last year. Other spreads also look promising. The TED spread—the difference between

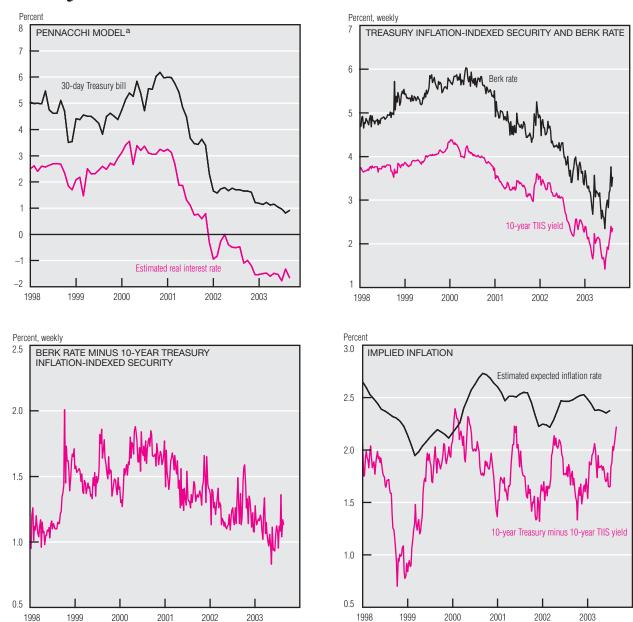
eurodollar deposits and Treasury bonds, widely thought to reflect concern over international tensions remains quite low by recent historical standards.

Although headlines usually focus on nominal interest rates, the economy is affected by real rates, that is, rates adjusted for inflation. Treasury inflation-indexed securities (TIIS), which adjust their principal and interest for inflation, provide a direct measure of real rates. Inflation expectations may also be used to estimate

real rates; the Pennacchi approach estimates 30-day real rates. Short rates have remained steadfastly negative throughout 2003. Although long rates have shown more variability, their current value is near its level at the beginning of the year.

Real interest rates matter because they influence investment. One must be careful to consider the appropriate real rate, however, since most projects implicitly embed a subtle option—the option to wait. If real rates rise, the

### Money and Financial Markets (cont.)



a. The estimated real interest rate is calculated using the Pennacchi model of inflation estimation and the median forecast for the GDP implicit price deflator from the Survey of Professional Forecasters. Monthly data.

SOURCES: Board of Governors of the Federal Reserve System, "Selected Interest Rates," Federal Reserve Statistical Releases, H.15; Bloomberg Financial Information Services; and Jonathan B. Berk, "A Simple Approach for Deciding When to Invest," American Economic Review, vol. 89 (1999), pp. 1319–26.

waiting option has two contrary effects: The present value of future profits is lower with higher interest rates, but delaying investment also looks worse. Thus, the increase in real rates has an ambiguous effect on investment.

One way to adjust for this problem is to use bonds that embed the option to wait. Fortunately, such "callable" bonds, which the issuer can buy back at a pre-specified price, do exist. The chart at the lower left takes a common callable bond, the

30-year Government National Mortgage Association bond, and subtracts, as an estimate of inflation, the yield difference between a 10-year Treasury bond and a 10-year TIIS. Both the 10-year TIIS rate and the optionadjusted rate (dubbed the "Berk rate," after the economist who developed these ideas) have been increasing lately, but the Berk rate has risen nearly 80 bp since early June, compared with the TIIS's 60 bp rise.

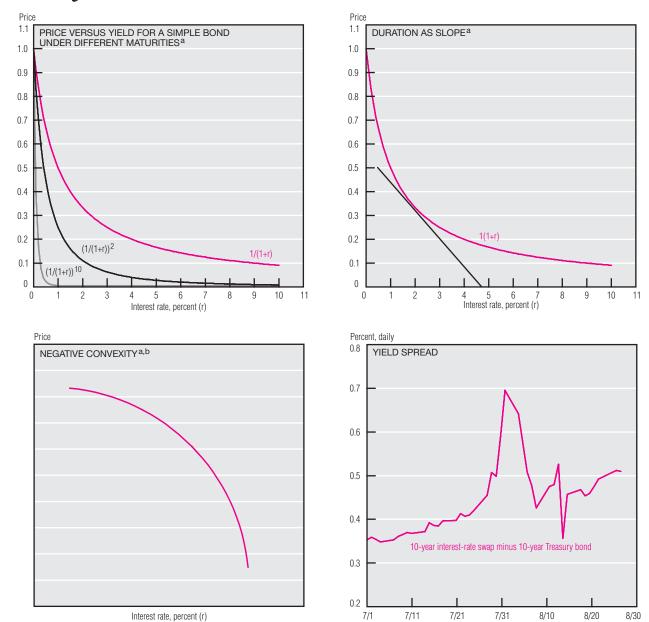
The counterpart to real rates is expected inflation. Although the

shorter-term measure from the Pennacchi model shows little movement, longer-term expectations have gone up more than 0.5% since early June.

Late July and early August saw increased volatility and a large spike in yields on interest rate swaps. The market has since settled down, but the event taught some useful lessons.

The price of a simple bond varies inversely with market interest rates. This makes sense because tomorrow's dollar is worth less today if the interest rate is higher. How much a bond's

## Money and Financial Markets (cont.)



a. Author's calculations.

b. As interest rates rise, the duration of a bond increases. SOURCE: Bloomberg Financial Information Services.

price changes when the interest rate changes depends on several things. A longer-maturity bond is more sensitive to interest rate changes because rates are compounded over time.

Most bonds are more complicated, with multiple payments and added features, but a version of the same relationship between price and interest rate still holds. Financial professionals call the relation between interest rates and a bond's price the duration. This is a weighted average of the maturity of

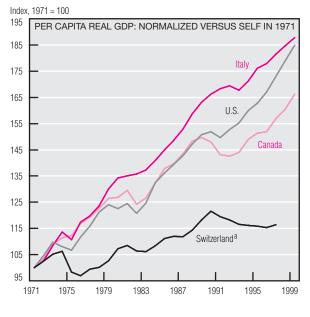
all payments, coupon and otherwise, that tells how much the price of a bond changes when interest rates change. It can be thought of as the slope of the price/interest rate curve, as shown in the chart at the upper right.

Duration itself depends on interest rates: The slope of the line is flat at high interest rates and steep at low interest rates. How duration changes depends on how "curvy" the line is, which is termed convexity. Most bonds have positive convexity—their price line bends inward. But some

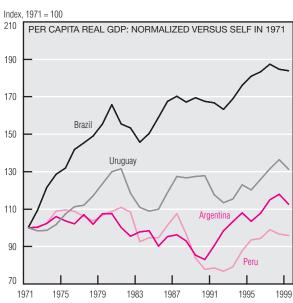
(many mortgage-backed securities, for example) have negative convexity—their curve bows outward. When interest rates started rising in late July and people stopped refinancing their mortgages, the duration of mortgage-backed securities began to increase. Financial managers realized that this increased their portfolios' sensitivity to interest rates and attempted to reduce duration (and sensitivity). This effort led them into the swaps market, provoking the spike.

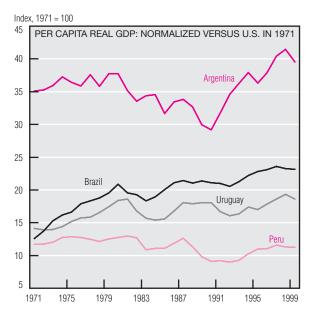
2003

## The Wealth of Nations









a. For Switzerland, 1997 was the last year for which data were available.

SOURCES: U.S. Department of Commerce, Bureau of the Census and Bureau of Economic Analysis; and United Nations, Department of Economic and Social Affairs.

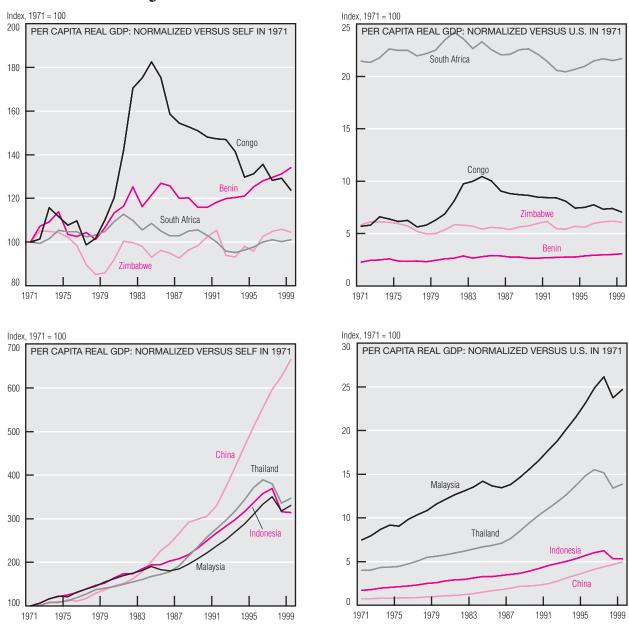
How does one measure the wealth of nations? One possibility is using per capital gross domestic product (GDP) to see how a particular nation's wealth has grown over time or to compare changes in the wealth of various nations.

Among Western developed countries, the U.S. and Italy had comparable growth rates between 1971 and 1999 (an annual average of about 2.2%). Over the same period, Canada's GDP growth rate (about 1.8%) lagged that of the U.S. and Italy,

but Switzerland's rate was only about 0.6%. On the basis of growth rates alone, one might conclude that the U.S. is more prosperous than Switzerland, but this would be incorrect. Calculating Switzerland's per capita GDP as a fraction of the U.S. figure shows that Switzerland is the wealthier of the two, but its advantage was eroded between 1971 and 1999. If both countries continue to grow at rates comparable to that period, it would take about 10 years—from 1999—for the U.S. to become as wealthy as Switzerland.

Comparing some South American countries' average annual GDP growth rates shows that Brazil is similar to the U.S., and Uruguay and Argentina are similar to Switzerland. Peru's annual average was negative over this period. Compared to the U.S., however, these countries are poor. At the end of the sample period, Brazil's wealth was less than 25%—and Peru's was slightly more than 10%—of U.S. wealth. Argentina is the richest in the South American group, but its wealth is only about 40% of the U.S.

## The Wealth of Nations (cont.)



SOURCES: U.S. Department of Commerce, Bureau of the Census and Bureau of Economic Analysis; and United Nations, Department of Economic and Social Affairs

In Africa, Congo showed tremendous GDP growth in the late 1970s and early 1980s but lost nearly all of it by the end of the 1977–99 period. Over the same period, the growth rates for Zimbabwe and South Africa were essentially zero. Comparison with the U.S. shows how very poor some African countries are. Benin's per capita GDP is only about 3% of the U.S. figure, and Zimbabwe's is about 6%.

A group of Asian countries experienced exceptional growth over the

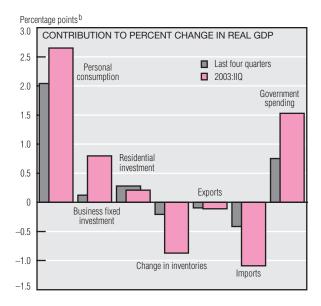
sample period. For example, China's wealth increased almost 600%, in contrast to the U.S.'s increase of about 85%. The Asian group's slowest growth occurred in Indonesia, which increased its wealth more than 200%. Compared to the U.S., however, these countries remain very poor. Per capita GDP in Malaysia, the richest of this group, was about a quarter of the U.S. figure. China is now the poorest in the group, but if its per capita GDP continues to grow at the sample period's

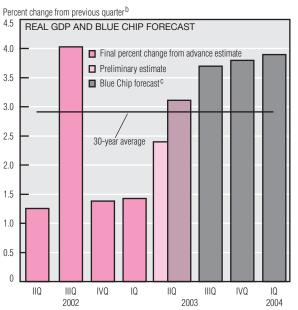
average annual rate, a phenomenal 7%, China would take about 55 years to match the U.S.'s 1999 wealth. If the U.S. continues to grow at its sample period rate, China would need about 80 years to catch up. Of course, China's ability to continue growing at a 7% rate is questionable.

One caveat: The annual average market exchange rates were employed to convert all series into U.S. dollars, and comparisons may be sensitive to the exchange rate used.

### Economic Activity

Real GDP and Components, 2003:IIQ <sup>a,b</sup> (Preliminary estimate)					
(Follimary Sources)		Annualiz percent char			
	billions of 1996 \$	Quarter	Four quarters		
Real GDP Personal consumption Durables Nondurables Services Business fixed	73.5	3.1 3.8 24.1 1.1 1.5	2.5 2.9 8.2 3.3 1.7		
investment Equipment Structures Residential investment Government spending National defense Net exports Exports Imports Change in business		8.0 8.2 7.2 4.5 8.2 45.9 — -1.2 7.9	1.2 4.0 -7.3 6.2 4.0 13.8 -1.0 2.9		
inventories	-25.7	_	_		







NOTE: All data are seasonally adjusted.

- a. Chain-weighted data in billions of 1996 dollars. Components of real GDP need not sum to the total because the total and all components are deflated using independent chain-weight indexes.
- b. Annualized
- c. Blue Chip panel of economists.

SOURCES: U.S. Department of Commerce, Bureau of Economic Analysis; Conference Board; University of Michigan; and Blue Chip Economic Indicators, August 10, 2003.

The preliminary estimate of real gross domestic product (GDP) for 2003:IIQthe first of two planned revisions to the advance estimate that the Commerce Department issued in Julyshows a greater increase in output growth than initially reported. The quarterly increase (3.1% at an annualized rate, 0.7 percentage point higher than the advance estimate), results primarily from revisions to personal consumption expenditures (up \$7.3 billion), net exports (up \$10.0 billion), and state and local government spending (up \$2.1 billion). These revisions were partly offset by a

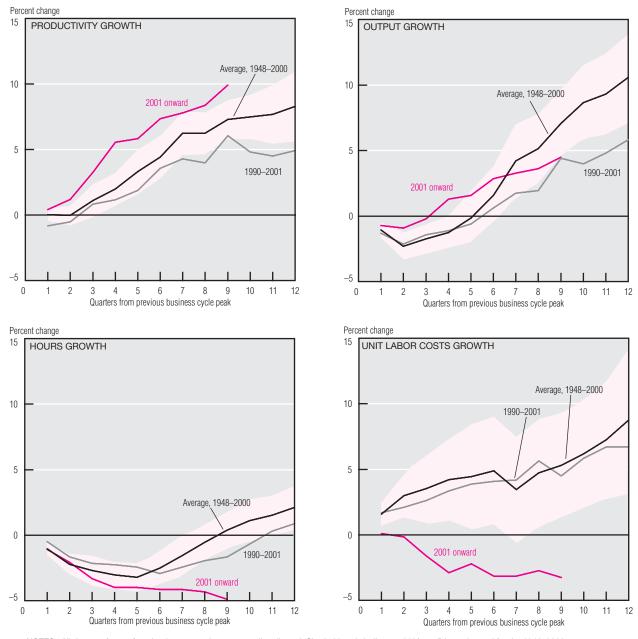
\$3.0 billion downward revision to private inventory investment.

The revisions did not affect which categories contributed most to the 2003:IIQ increase in real GDP, which continued to be personal consumption expenditures, federal defense spending, and nonresidential fixed investment. Inventory investment and imports continued to exert a significant drag on real output growth.

Survey measures of consumer expectations rebounded in 2003:IIQ, consistent with the improving economic environment suggested by the rising rate of output growth. However,

although the university of Michigan's *Survey of Consumer Sentiment* finds that consumer optimism has returned to its pre-recession level (consistent with the Blue Chip forecast of stronger growth in the second half of 2003), the Conference Board's *Survey of Consumer Confidence* suggests that Americans remain less sanguine about the economy than they were in early 2001. One explanation for the difference is that the Michigan survey asks respondents to look a year ahead, whereas the Conference Board asks them to look ahead only six months.

## Labor Productivity



NOTES: All data are for nonfarm businesses and are seasonally adjusted. Shaded bands indicate a 95% confidence interval for the 1948–2000 average. SOURCE: U.S. Department of Labor, Bureau of Labor Statistics.

Growth in labor productivity (non-farm business output per hour) has been phenomenal in this business cycle so far, much faster than in the 1990–2001 cycle. Cumulative growth in productivity is up 10% from the last peak, about three percentage points higher than the postwar average for this point in the cycle. The postwar average includes the "golden age of productivity growth," which boosted incomes in the 1950s and 1960s, as well as the period of slower growth

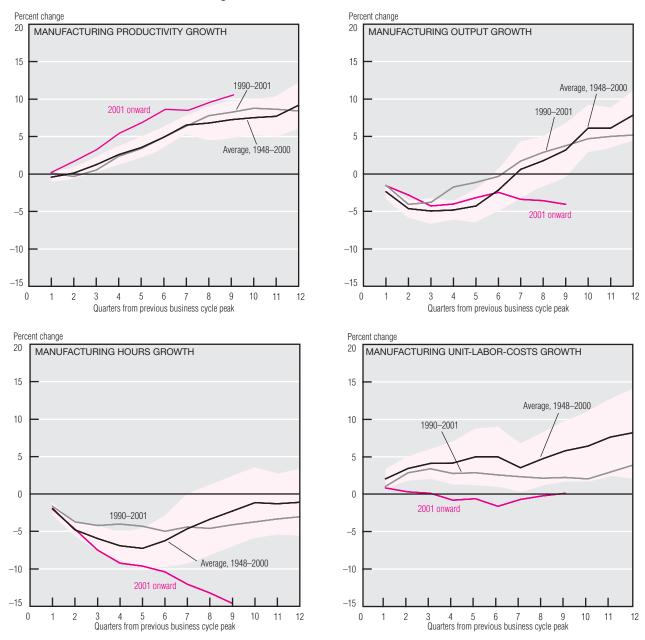
that followed the 1970s oil crisis. To judge just how well labor productivity has performed, consider that the current cycle's productivity growth would be at the high end of the range that typified the golden age from 1948 to 1973. What accounts for this strong performance?

This time around, nonfarm business output initially held up better than in the average postwar cycle, growing almost 5% from the last peak, but its performance over the

last three quarters has been less impressive. Output growth is now at the low end of the typical postwar range for this series, so it cannot be the driving force behind the strong productivity numbers.

In the calculation, this leaves hours, whose dramatic drop seems to be the main cause of the vigorous productivity numbers. Although the current business cycle started out in a fairly typical way, hours have continued to drift down. By comparison,

## Labor Productivity (cont.)



NOTES: All data are seasonally adjusted. Shaded bands indicate a 95% confidence interval for the 1948–2000 average. SOURCE: U.S. Department of Labor, Bureau of Labor Statistics.

total hours growth in the so-called jobless recovery of the early 1990s looks positively robust.

Productivity growth has an impact on firms' cost structures. Unit labor costs combine compensation figures with productivity data to measure how much a typical firm spends to produce its output. Unit labor costs have also performed atypically, falling about 3.25% instead of rising the usual 5% at this point in the cycle. All else equal, this should boost firms' profits.

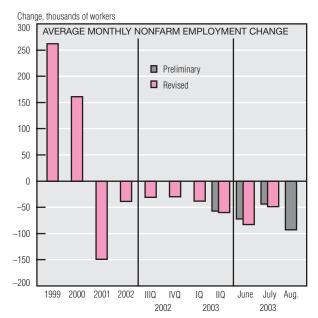
Labor productivity growth, up 12.4%, has been even stronger in manufacturing, where it is well above the range for a representative recovery. On the other hand, manufacturing output growth has been disappointing. The current cycle began fairly typically, but output growth has stalled over the past three quarters.

With output flat, the only way to achieve strong productivity growth is a drop in hours, and this is what has occurred. Manufacturing hours have declined about 15% since the last

business cycle peak, far more than the average postwar decline of about 4% for this point in the cycle.

Unlike overall nonfarm business, manufacturing's unit labor costs have hardly changed over this cycle, which implies that compensation growth has largely kept up with productivity growth. Nonetheless, manufacturing's unit labor costs are running below typical levels for this point in the business cycle.

#### Labor Markets



Labor Market Conditions					
	Average monthly change (thousands of employees) <sup>a</sup>				
	2000	2001	2002	JanJuly 2003	Aug. 2003
Payroll employment	161	-149	-39	-49	-93
Goods producing Construction Manufacturing Durable goods Nondurable goods	-1 7 -9 2 -11	-124 -1 -123 -88 -35	-64 -4 -57 -41 -16	-40	-26 19 -44 -19 -25
Service providing Information Financial activities <sup>b</sup> PBS <sup>c</sup> Education and health Leisure and hospitality <sup>d</sup> Government	162 15 6 40 32 22 22	-25 -15 7 -63 51 -2 46	25 -14 5 -10 37 7 16	-3 -11 12 11 18 4 -10	-67 -16 -1 -28 24 5 -26
	Average for period (percent)				
Civilian unemployment rate	4.0	4.8	5.8	6.0	6.1



Employment Change in U.S. and Fourth District States, March 2001 Peak to July 2003					
	Percent change in nonfarm employment	Percentage point change in unemployment rate			
U.S.	-2.0	2.0			
Ohio	-3.2	2.6			
Pennsylva	ınia –1.6	1.3			
West Virgi	nia –1.5	2.0			
Kentucky	-3.0	1.1			

NOTE: All data are seasonally adjusted.

- a. Data are according to the North American Industrial Classification System.
- b. Financial activities include the finance, insurance, and real estate sector and the rental and leasing sector.
- c. Professional and business services, including professional, scientific, and technical services, management of companies and enterprises, administrative and support, and waste management and remediation services.
- d. Leisure and hospitality includes arts, entertainment, and recreation, as well as accommodation and food service. SOURCE: U.S. Department of Labor, Bureau of Labor Statistics.

Nonfarm payroll employment fell 93,000 jobs in August. Net losses were revised from 44,000 to 49,000 jobs for July and from 72,000 to 83,000 jobs for June. Employment has declined about 900,000 jobs since the recovery began in December 2001; the drop from the previous peak is about 2.8 million.

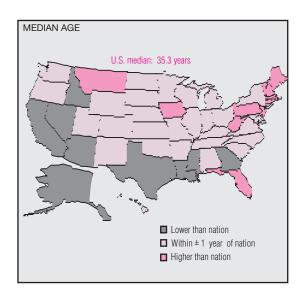
In August, declines were widespread in both sectors, goods-producing (down 26,000) and service-providing (down 67,000). In goods production, manufacturing employment dropped another 44,000 jobs. In the past three years, manufacturing has declined about 2.7 million jobs, including

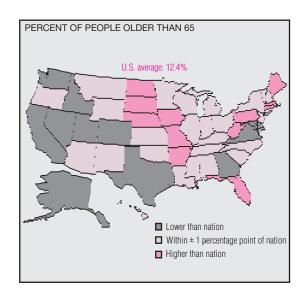
431,000 jobs this year alone. Construction remained strong, adding 19,000 jobs. Information services continued to shed jobs, 16,000 of them in August. Since its peak of 1.3 million jobs in March 2001, this industry has lost about 212,000 jobs. Professional and business services lost 28,000 jobs in August and 232,000 jobs since its March 2001 peak. Since February of this year, state and federal government has continued to shed jobs amounting to 131,000. Education and health services added 24,000 jobs; leisure and hospitality added 5,000, the third consecutive monthly gain this year.

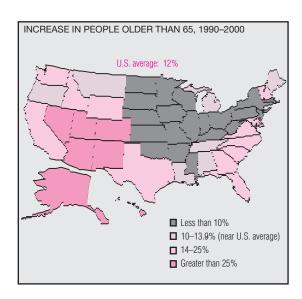
The unemployment rate inched down by 0.1 percentage point to 6.1% in August, and the employment-to-population ratio remained unchanged at 62.1%.

Ohio's nonfarm employment fell 3.2% between March 2001 and July 2003, farther than either the average U.S. drop of 2.2% or the drop in other Fourth District states. Similarly, Ohio's unemployment rate has jumped 2.6 percentage points since the 2001 peak, more than either the U.S. or the other Fourth District states.

## Elderly Americans







Places with the Highest Concentrations of Elderly People <sup>a</sup>				
	Percent of population over 65			
Clearwater, FL	21.5			
Cape Coral, FL	19.6			
Honolulu, HI	17.8			
St. Petersburg, FL	17.4			
Hollywood, FL	17.3			
Warren, MI	17.3			
Miami, FL	17.0			
Livonia, MI	16.9			
Scottsdale, AZ	16.7			
Hialeah, FL	16.6			

a. Places with populations of at least 100,000.
 SOURCE: U.S. Department of Commerce, Bureau of the Census.

As life expectancies have risen, meeting the needs of increasing numbers of older Americans has become a pressing concern. Medicare, prescription drug coverage, nursing homes, and other quality-of-life issues affecting the elderly have moved to the forefront of public policy debate. These issues affect states and cities alike throughout the country, but are more urgent in places with a higher level or a faster growth rate of elderly people.

In 2000, the median age in the U.S. was 35.3 years—half the people were

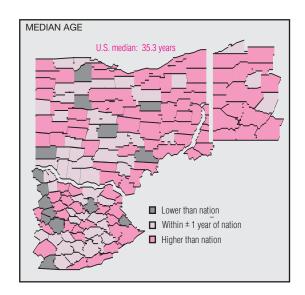
older and half were younger. In most states, the median age was close to the nation's; the median ranged from a low of 27.1 years in Utah to a high of 38.9 in West Virginia. In the New England states, along with West Virginia, Iowa, Montana, and Florida, median ages were above average; in many states in the South and West they were below average.

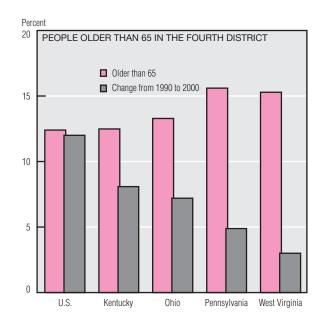
In the U.S. as a whole, 12.4% of the people were older than 65, the age the Census Bureau designates as "elderly." Higher-than-average shares of elderly people were concentrated in the Central region, in parts of

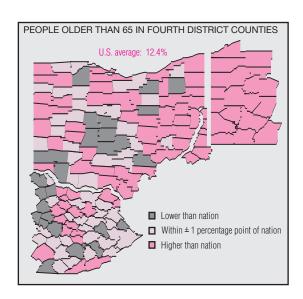
New England, and in Florida, the state with the highest share (17.6%). States with below-average shares were in the Mid-Atlantic region, most of the West, and Georgia, Texas, and Alaska, which was the state with the smallest share (5.7%).

Between 1990 and 2000, the number of elderly people increased 12%. In the New England, Midwest, and Central regions, the elderly population changed little during this time, but it grew rapidly in the Southwest and Southeast; in Nevada alone, the number increased more than 70%.

# Elderly Americans (cont.)







Concentrations of Elderly People in Fourth District Cities <sup>a</sup>			
	Percent of population over 65		
Pittsburgh, PA	16.4		
Erie, PA	15.4		
Akron, OH	13.5		
Toledo, OH	13.1		
Cleveland, OH	12.5		
Cincinnati, OH	12.3		
Dayton, OH	12.0		
Lexington, KY	10.0		
Columbus, OH	8.9		

a. Places with populations of at least 100,000.
 SOURCE: U.S. Department of Commerce, Bureau of the Census.

Most of the cities with the largest concentrations of elderly are located in the South, with Florida topping the list. Only two northern cities, Warren and Livonia, Michigan, made the list.

Most counties in the Fourth Federal Reserve District have median ages that exceed the U.S. average. They range from Athens County, Ohio (25.7 years), to Forest County, Pennsylvania (44.2 years). The few counties where the median age is lower than average are those with colleges or universities (such as Wood County, Ohio, or Rowan County, Kentucky), counties along the growing I-75 corridor in

Kentucky, and Holmes County, Ohio, with its large population of Amish. Counties whose median ages approximate the national average are located in other growing areas of southern Ohio.

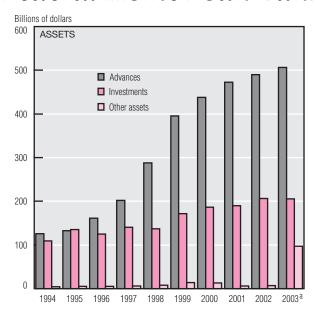
In every state of the Fourth District, the share of elderly residents exceeds the national average; both Pennsylvania and West Virginia have more than 15%; Kentucky and Ohio are closer to average. However, this age group grew at a much slower rate in the District than in the nation between 1990 and 2000.

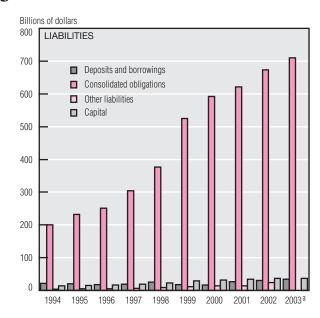
The region as a whole has much higher concentrations of elderly than

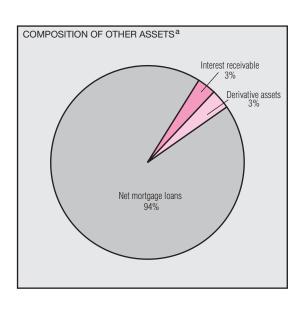
the national average; all Fourth District counties in West Virginia and Pennsylvania are above average (with Forest County, Pennsylvania, again highest at 20%). The below-average percentages of elderly are located in the Columbus, Cincinnati, and Lexington areas.

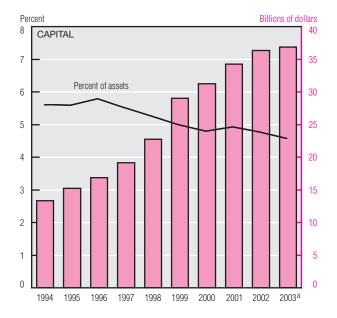
Of the nine largest cities in the District, three have concentrations of 13% or more; only two have 10% or less. Like the counties, the northern cities of Ohio and Pennsylvania have higher proportions of elderly than do the central and southern cities.

#### Federal Home Loan Banks









a. Data are through 2003:IIQ.
 SOURCES: Federal Home Loan Bank System, Quarterly Financial Report, August 13, 2003, and annual reports.

The 12 Federal Home Loan Banks are stock-chartered, governmentsponsored enterprises whose original mission was to provide short-term advances to member institutions, funded with those institutions' deposits. Membership was open to specialized housing-finance lenders, mostly savings and loan associations and mutual savings banks. With continued shrinkage of their traditional clientele and ongoing consolidation of the financial system, the FHLBs have been reinventing their role in financial markets. Their advances, which now represent an important source of funding for member

institutions' mortgage portfolios, rose to \$506 billion at the end of 2003:IIQ, far outstripping all their other investments and assets.

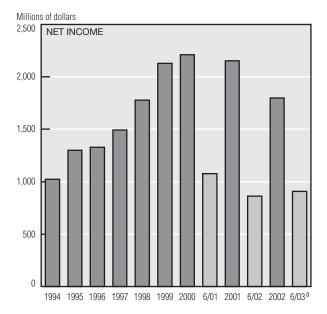
By far the largest share of FHLBs' assets came from the \$710 billion of consolidated obligations of the Federal Home Loan Bank System—bonds issued on behalf of the 12 FHLBs collectively. The market considers these bonds to be implicitly backed by the U.S. government; consequently, the FHLBs can raise funds at lower rates of return than AAA-rated corporations. Member institutions' deposits and short-term borrowings, along with other liabilities,

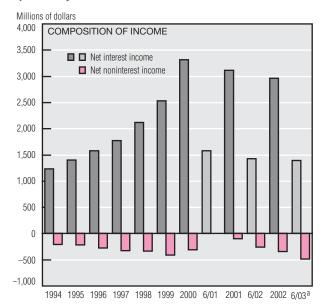
provided only a miniscule share of funds. The FHLBs have added to their capital as they have grown, but asset growth has outstripped capital growth; the capital-to-asset ratio fell from 5.8% in 1996 to 4.6% at the end of 2003:IIQ.

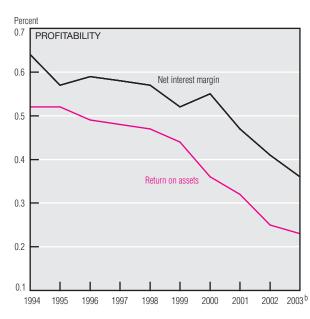
In 1997, the Chicago FHLB initiated the Mortgage Partnership Finance Program, through which it began investing directly in mortgages in addition to supporting members' own mortgage portfolios through advances. All FHLBs currently purchase mortgages directly from member institutions. The FHLBs now hold \$90 billion in mortgages, more than double what

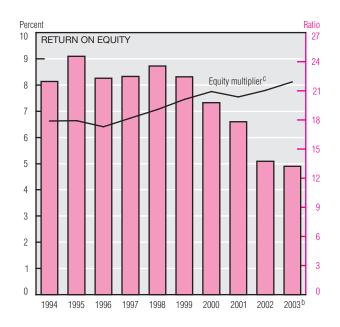
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### Federal Home Loan Banks (cont.)









- a. Data are through 2003:IIQ.
- b. Data for 2003:IIQ are annualized.
- c. The equity multiplier is the ratio of total assets to equity.

SOURCES: Federal Home Loan Bank System, Quarterly Financial Report, August 13, 2003, and annual reports.

they held a year ago, and mortgage portfolios are projected to be a major source of their asset growth in the future.

FHLBs' earnings grew steadily from 1994 through 2000 before declining in 2001 and 2002. However, their net income of \$907 million for the first six months of 2003 exceeds the \$862 for the same period in 2002.

FHLBs' net interest income (interest income less interest expense) rose from \$735 million in 1992 to \$3,311 million at the end of 2000. For the first six months of 2003, their net interest income of \$1,392 million was down

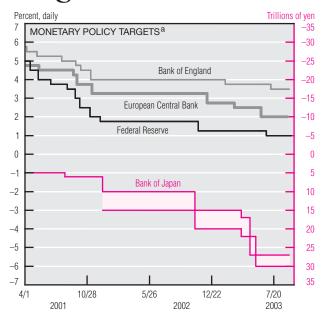
from \$1,433 million for the same period in 2002. The most important reason for the increasingly negative spread between non-interest income and non-interest expense since 1993 is a steady increase in FHLBs' operating expenses, especially for employee compensation and benefits.

Improvements in earnings and net interest income have resulted from strong asset growth rather than greater underlying profitability. Return on assets fell from 75 basis points (bp) in 1991 to 31 bp at the end of 2001. The annualized return on average assets through 2003:IIQ is 23 bp.

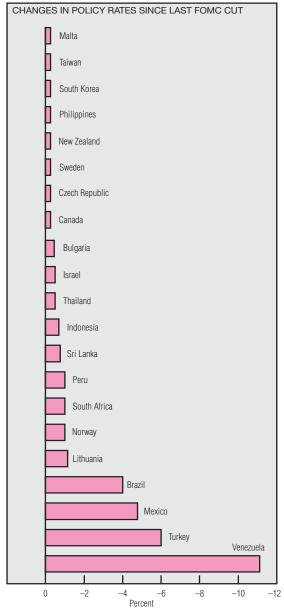
Profitability has been hurt by the net interest margin's decline from 45 bp at the end of 2001 to an annualized 36 bp for the first six months of 2003. Moreover, FHLBs' net interest margins are far lower than the 300 bp to 400 bp typical of depository institutions.

Finally, despite continued increases in leverage since 1996, return on average equity fell from 6.3% at the end of 2001 to 4.9% in the first six months of 2003. These persistently weak returns on assets and equity put further pressure on the FHLBs to undertake nontraditional lines of business in search of higher returns.

## Foreign Central Banks



k for Interna	tional
Hungary Iceland India	Saudi Arabia Singapore Slovakia Slovenia
Latvia Lithuania	South Africa South Korea Sweden
Malaysia Mexico	Switzerland Thailand
Poland Romania	Turkey United Kingdom United States Yugoslaviac
	Hungary Iceland India Japan Latvia Lithuania Macedonia Malaysia Mexico New Zealand Poland



- a. Federal Reserve: overnight interbank rate. Bank of Japan: a quantity of current account balances (since December 19, 2001, a range of quantity of current account balances). Bank of England and European Central Bank: two-week repo rate.
- b. European Central Bank plus each of its 12 constituent nations' central banks.
- c. Constitutional changes in February 2003 transformed the Federal Republic of Yugoslavia into the State Union of Serbia and Montenegro, with two separate central banks. The legal status of the Yugoslav issue of the capital of the Bank for International Settlements is currently under review.

  SOURCES: Board of Governors of the Federal Reserve System; Bank of Japan; European Central Bank; Bank of England; Wholesale Markets Brokers Association; and Bloomberg Financial Information Services.

None of the four major central banks has changed its operating target since July 10, when the Monetary Policy Committee of the Bank of England reduced its policy rate from 3.75% to 3.5%. On balance, since the Federal Open Market Committee's last rate reduction, most of the other rate-setting central banks tracked by Bloomberg also have lowered their operating targets at least 25 basis points.

A central bank typically acts as the bank for a nation's banks, which use central bank deposit transfers to settle their debts to one another. The Bank for International Settlements (BIS) is a central bank for central banks, established in 1930 to facilitate payment of international reparations from World War I. In addition to its banking functions, the BIS is an important center for economic and financial research that facilitates international discussion and helps coordinate decision making among central banks.

The Reserve Bank of New Zealand announced in August that it has accepted an invitation to join the BIS, becoming the sixteenth new member since 1996. The BIS has been

enlarging its membership to "underpin its increasingly global activities and the regional interests of its shareholding members." New Zealand's central bank says that it expects benefits to include "increased access to foreign currency funding, which in a crisis could enhance the Bank's capabilities to intervene in markets to maintain stability. Being a BIS shareholder also more generally strengthens the Reserve Bank's connections with the international central banking community, which in a period of financial stress could be very useful."