

The Economy in Perspective

by Mark Sniderman

The road not traveled... In the Monetary Policy Report the Federal Reserve submitted to Congress in February 2005, the FOMC projected that real GDP would increase at a rate of about $3\frac{1}{2}$ percent, inflation as measured by the core PCE would increase at a rate of roughly $1\frac{1}{2}$ to $1\frac{3}{4}$ percent, and the unemployment rate would register between 5 and $5\frac{1}{4}$ percent in the fourth quarter of this year. When the FOMC updated its 2006 projections in July 2005, it shaded down its judgment for real output to the range of $3\frac{1}{4}$ to $3\frac{1}{2}$ percent, edged up its estimate for core inflation into a range of $1\frac{3}{4}$ to 2 percent, and put the fourth quarter unemployment rate at 5 percent. The FOMC last revised its 2006 projections in the Monetary Policy Report of February 15, 2006. In this most recent view, the Committee widened its central tendency range for real GDP at the low end to 3 to $3\frac{1}{2}$ percent, kept its estimate of core PCE inflation at $1\frac{3}{4}$ to 2 percent, and lowered its range for the unemployment rate even further to $4\frac{3}{4}$ to 5 percent.

The picture that emerges from this sequence of projections is that the Committee has consistently expected the economy to grow at a rate close to $3\frac{1}{4}$ percent this year, has expected core PCE inflation to register roughly $1\frac{3}{4}$ percent, and has gradually lowered the unemployment rate thought to be consistent with its GDP projection by as much as half a percentage point during this period.

What the projections themselves fail to reveal is the extent to which they maintained their consistency in the face of extremely large increases in energy prices. In the 12 months ending in February 2006, the energy price component of the Consumer Price Index soared by 20 percent; in the 12 months before that, the energy component rose by 10 percent. In earlier periods that saw energy price increases of this magnitude, the U.S. economy proved vulnerable to slowdown and even recession. Yet, during the past two years, our economy has demonstrated a remarkable resilience.

What the FOMC's economic projections also do not reveal is the extent to which the federal funds rate path they ultimately traveled is similar to, or different from, the path they might have anticipated after the initial projections for 2006 were made. Nevertheless, even without this information, it seems fruitful to think less of a particular path for

the funds rate than a set of paths, each with a different probability of being chosen. Even when it gives some words of guidance about future policy actions, the Committee is always careful to note in its press releases that there are risks to the outlook and that it reserves the right to be flexible in responding to incoming economic information.

To the extent that the FOMC was surprised by economic conditions as they emerged during the past year, it would have had to adjust its policy settings to keep the economy on a path of maximum sustainable employment and price stability. We cannot assess how much the economy's evolution differed from what the FOMC expected, but we do know that the magnitude of the energy price shocks was unanticipated. We also know, from the most recent Monetary Policy Report, that the combination of rising valuations for stocks and housing in the past few years is thought to have provided important support for consumer spending in 2005, a period of comparatively weak growth in real income. Capital spending was robust as well. Similar conditions have prevailed so far this year.

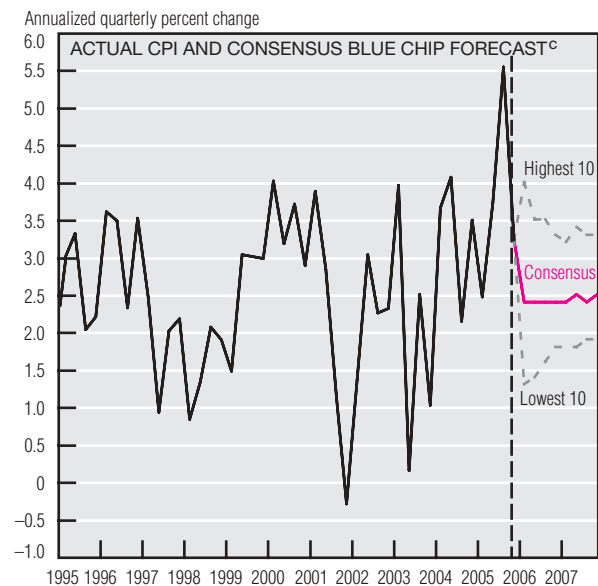
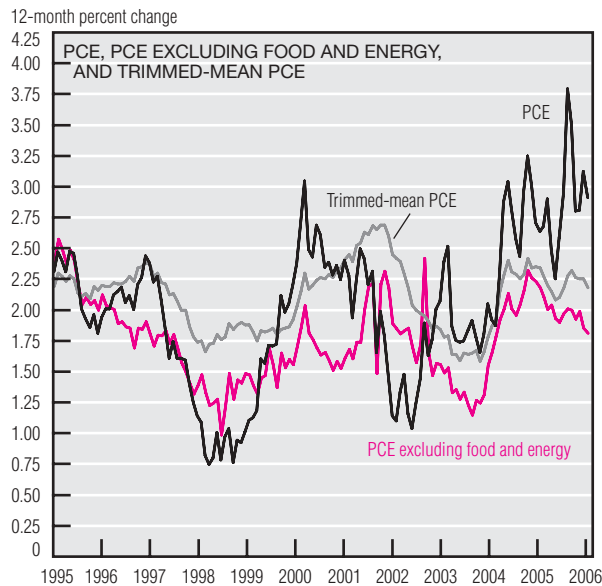
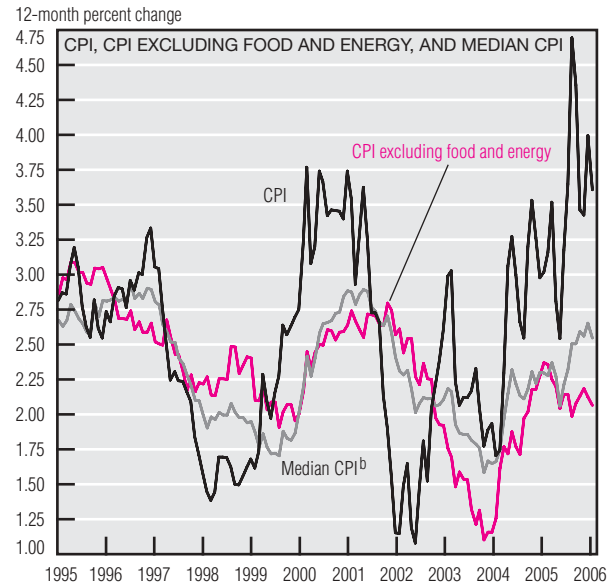
The energy price shocks certainly exerted a drag on economic activity but other factors emerged that not only offset the drag, but also supported enough additional activity to use a considerable amount available productive capacity. Last month, the nation's unemployment rate stood at 4.7 percent, already at the low end of the FOMC's projection for the year.

The most recent Monetary Policy Report, while noting that the FOMC gradually increased its federal funds rate target by 2 percentage points over the course of 2005, stated that this cumulative firming substantially exceeded what market participants expected at the start of the year. Financial market participants are now almost evenly divided in expecting the federal funds rate target to be set at either 5 or $5\frac{1}{4}$ percent after the FOMC's June meeting. Importantly, however, most professional forecasters expect the economy to turn in numbers this year that are similar to the FOMC's most recent projections.

Monetary policy should be judged on its ability to achieve price stability and maximum sustainable economic growth, not by where the funds rate might need to go to get us there.

Inflation and Prices

	Percent change, last:				2005 avg.
	1 mo. ^a	3 mo. ^a	12 mo.	5 yr. ^a	
February Price Statistics					
Consumer prices					
All items	0.6	2.7	3.6	2.5	3.6
Less food and energy	1.8	2.0	2.1	2.0	2.2
Median ^b	3.5	2.9	2.5	2.7	2.5
Producer prices					
Finished goods	-15.3	-2.0	3.7	2.2	5.8
Less food and energy	3.1	3.1	1.7	1.2	1.7



a. Annualized.

b. Calculated by the Federal Reserve Bank of Cleveland.

c. Blue Chip panel of economists.

SOURCES: U.S. Department of Labor, Bureau of Labor Statistics; U.S. Department of Commerce, Bureau of Economic Analysis; Federal Reserve Bank of Dallas; Federal Reserve Bank of Cleveland; and *Blue Chip Economic Indicators*, March 10, 2006.

The Consumer Price Index (CPI) rose a mere 0.6% (annualized rate) in February, after rising at a brisk annualized rate of 8.2% in January. Monthly growth in the core retail price measures was mixed: The CPI excluding food and energy rose 1.8% (annualized rate), whereas the median CPI was up a rather high 3.5% (annualized rate) during the month, exceeding its 12-month growth rate.

Longer-term trends in the core inflation measures are hovering at levels that some consider the high end of the

range associated with price stability. The 12-month growth rates were 2.1% for the core CPI and 2.5% for the median CPI; the core PCE and the trimmed-mean PCE were 1.8% and 2.2%, respectively. The consensus estimate from the Blue Chip panel of forecasters indicates that overall CPI growth over the next two years will be stable at 2.4%.

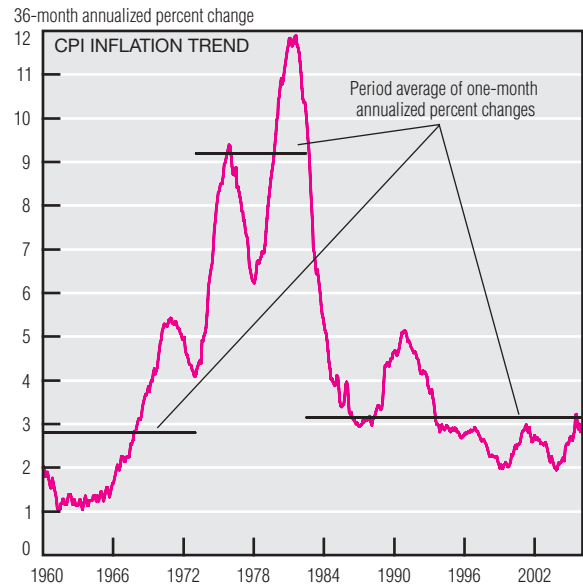
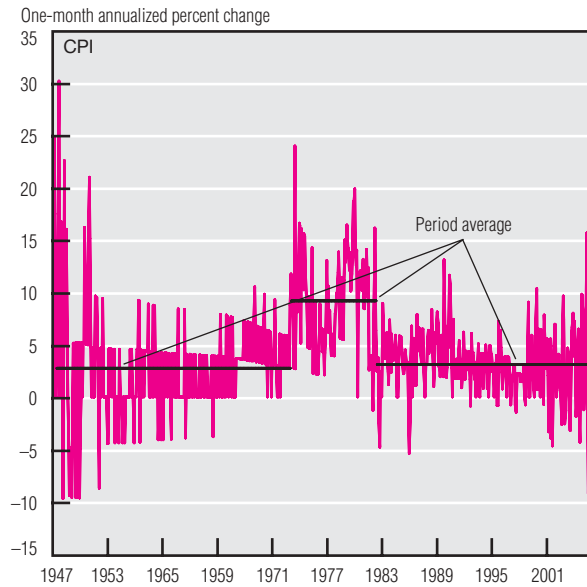
In recent months, questions about whether the economy has, or soon will, reach its potential seem to have become more urgent as policymakers and others decide whether

the Federal Reserve's cumulative policy actions have sufficed to keep the economy from pushing beyond a sustainable level and, presumably, fueling higher inflation.

Unfortunately, monitoring the data for signs of rising inflation is not easy. Price data fluctuate widely and obscure the underlying, more stable, inflation trend. Furthermore, monetary policy actions are usually assumed to influence underlying inflation with a substantial lag. This means that at any point, a policymaker's ability to

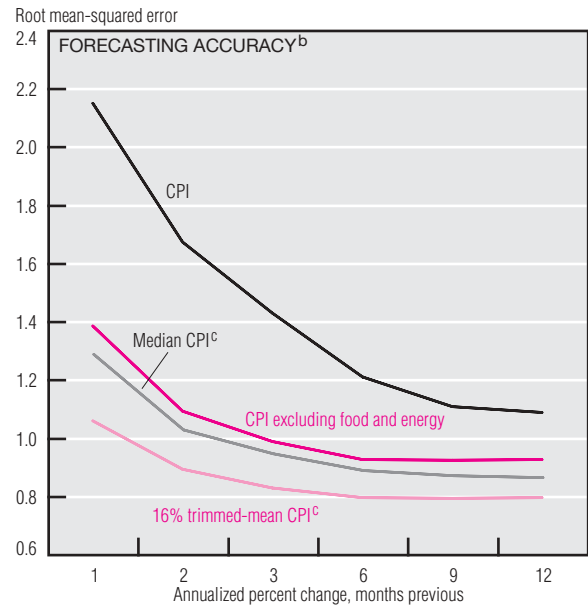
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Inflation and Prices (cont.)



Time-series Variance of Alternative Inflation Measures, January 1990–February 2006

	Annualized percent change, last				
	One month	Three months	Six months	Nine months	12 months
CPI	7.0	2.8	1.5	1.2	1.1
Core CPI	2.0	1.2	1.0	1.0	1.0
Median CPI	1.3	0.6	0.5	0.5	0.5
16% trimmed-mean CPI	1.2	0.8	0.7	0.7	0.7
PCE	4.5	1.9	1.1	0.9	0.8
Core PCE	2.6 ^a	1.1	0.9	0.8	0.8
Trimmed-mean PCE	0.6	0.4	0.3	0.3	0.3



a. The time-series variance is 2.3 after adjusting for insurance considerations arising from September 11.

b. Calculated using the root mean-squared error between the annualized one-, two-, three-, six-, nine-, and 12-month percent changes and the annualized percent change in the CPI over the next 36 months (January 1990–February 2003).

c. Calculated by the Federal Reserve Bank of Cleveland.

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

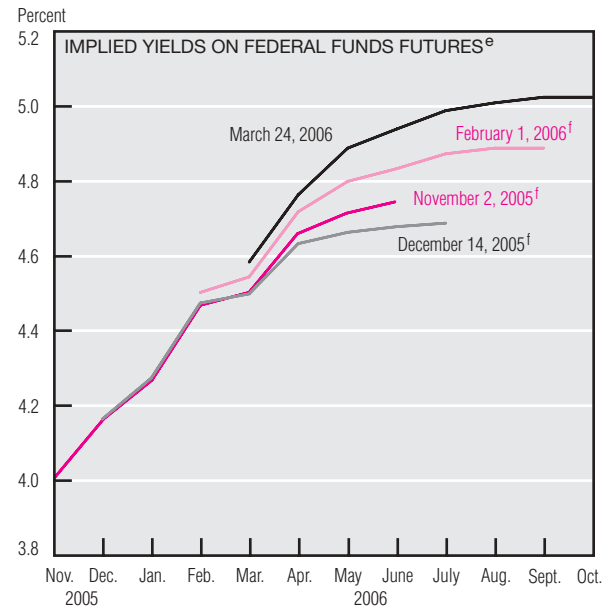
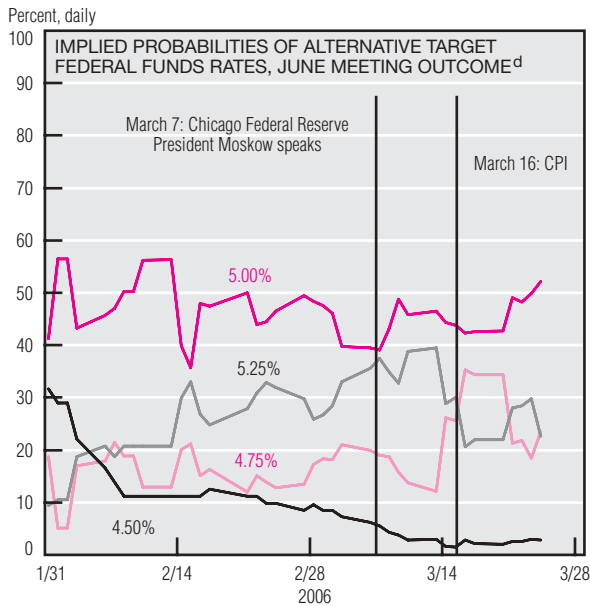
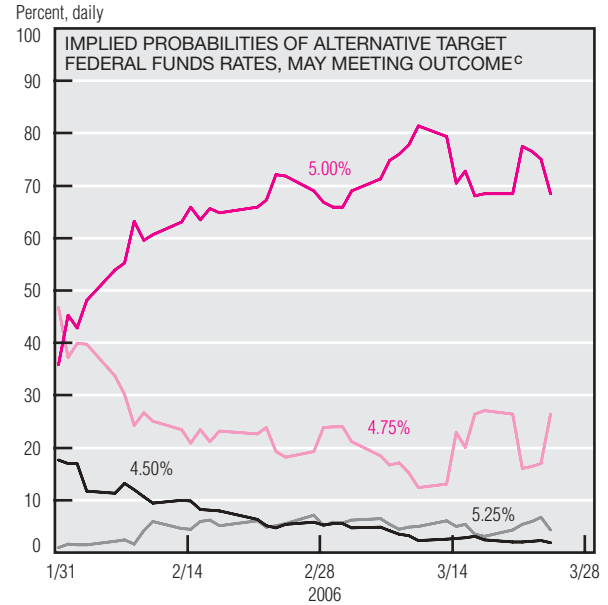
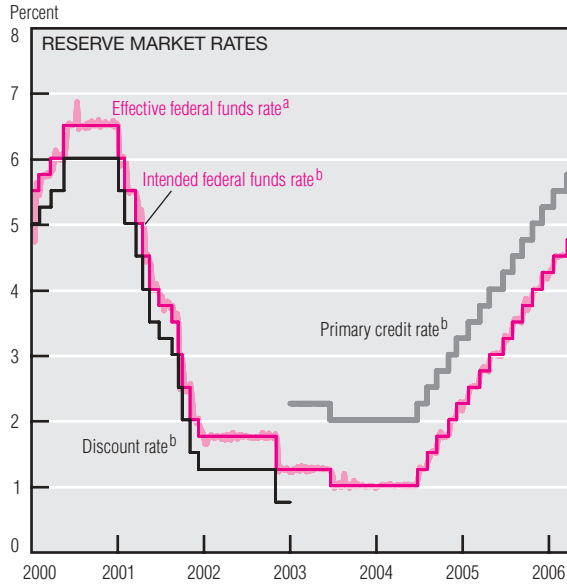
discern the inflation trend and anticipate its movement is imperfect at best.

Note the CPI's highly erratic monthly behavior from three distinct inflation trends over the past 60 years. Identifying changes in the inflation trend is generally only possible after long periods of time have passed. Moreover, methods to measure the underlying inflation pattern in the data, such as long-run averages, can reveal a shift in the inflation trend only well after that change has occurred.

To improve the inflation signal in the price data, economists have often appealed to so-called core inflation measures, like the CPI excluding food and energy items—goods notorious for causing transitory fluctuations in the aggregate price data. A more recent approach is the use of trimmed-mean estimates that systematically strip out the more extreme—and presumably most transitory—price changes. These measures have been shown to substantially reduce short-run variation in the inflation estimates

and, hopefully, give policymakers a quicker read on shifts in the inflation trend. Indeed, these estimates have predicted the long-term growth rate of the CPI better than either the CPI or the more traditional CPI excluding food and energy. For example, since 1990, monthly changes in the median CPI and the 16% trimmed-mean CPI have been about twice as effective as changes in the overall CPI for predicting the longer-term CPI inflation trend (that is, the 36-month annualized percent change).

Monetary Policy



a. Weekly average of daily figures.

b. Daily observations.

c. Probabilities are calculated using trading-day closing prices from options on May 2005 federal funds futures that trade on the Chicago Board of Trade.

d. Probabilities are calculated using trading-day closing prices from options on June 2005 federal funds futures that trade on the Chicago Board of Trade.

e. All yields are from the constant-maturity series

f. One day after the FOMC meeting.

SOURCES: U.S. Department of Commerce, Bureau of Economic Analysis; Board of Governors of the Federal Reserve System, "Selected Interest Rates," *Federal Reserve Statistical Releases*, H.15; Chicago Board of Trade; and Bloomberg Financial Information Services.

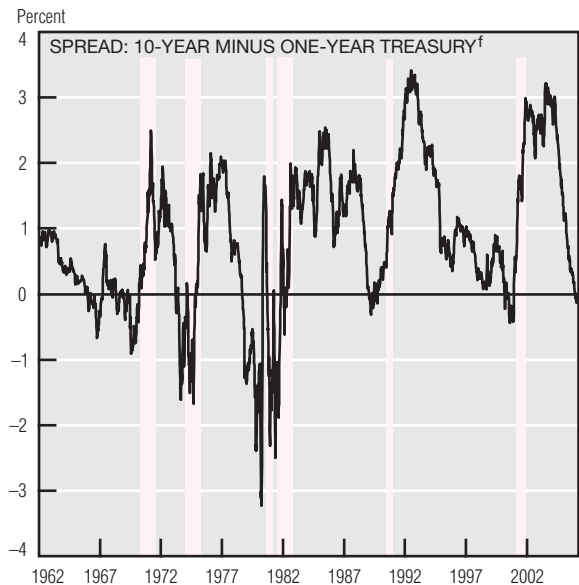
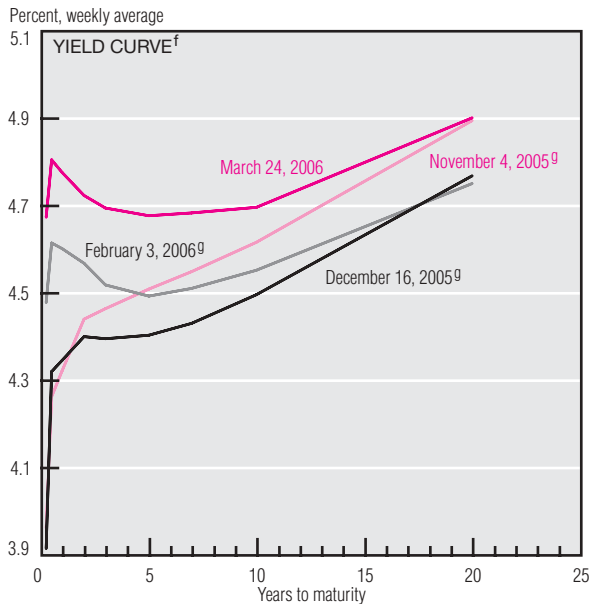
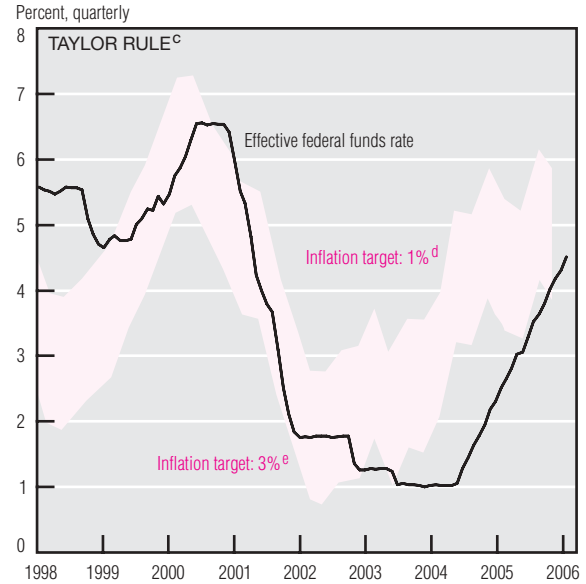
On March 28, the Federal Open Market Committee (FOMC) voted to raise the intended federal funds rate 25 basis points (bp) to 4.75%. This comes within 175 bp of its most recent high (6.50%), which it hit during the last business cycle peak in May 2000. The FOMC's March press release stated that "some further policy firming may be needed," although "the run-up in the prices of energy and other commodities appears to have had only a modest effect on core inflation."

Since the mid-February FOMC meeting, participants in the federal funds options market have been reasonably certain that the target rate will reach 5.00% at the May meeting, and they currently place nearly a 70% probability on that occurrence. However, the expected outcome of the June meeting is more doubtful. On March 7, Chicago Federal Reserve President Michael Moskow stated that monetary policy is "currently in this neutral range," but "even with the funds rate in the range of neutral,

further changes in policy may be appropriate." Soon after this remark, the probability that the FOMC would pause at 5.25% increased 10 percentage points to nearly 50%. The benign March CPI report, which showed an increase of only 0.1% in both total and core inflation in February, kept the likelihood of a 5.00% rate in June but decreased the likelihood of a 5.25% rate. Currently, options participants place a probability of more than 50% that the FOMC will pause after

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Monetary Policy (cont.)



a. Defined as the effective federal funds rate deflated by the core PCE.

b. Shaded bars represent periods of recession.

c. The formula for the implied funds rate is taken from the 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.

d. This line assumes an interest rate of 2.5% and an inflation target of 1%.

e. This line assumes an interest rate of 1.5% and an inflation target of 3%.

f. All yields are from the constant-maturity series.

g. Friday after the FOMC meeting.

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

the May meeting and only 25% that rates will continue to increase. Federal funds futures tell a similar story: They indicate that by July, the federal funds rate will plateau near 5.00%.

Since the current round of tightening began in June 2004, the target level has risen 375 bp. The inflation-adjusted federal funds rate currently stands at 2.5%, nearly 350 bp above its low in June 2004. The real federal funds rate has not increased 350 bp without interruption since 1992–95, after the 1990 recession.

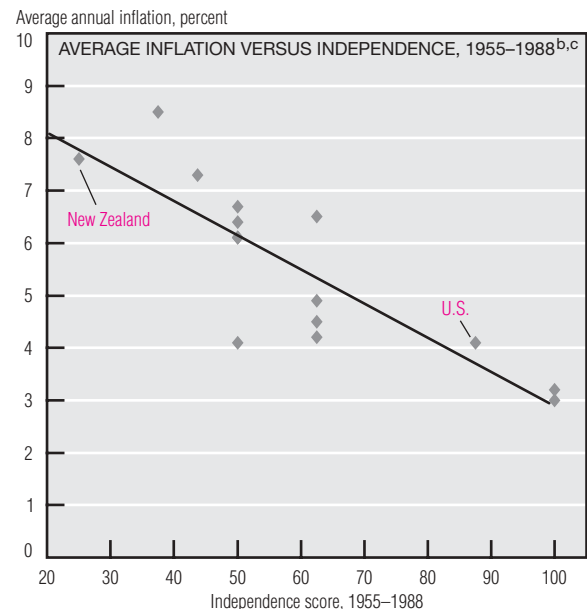
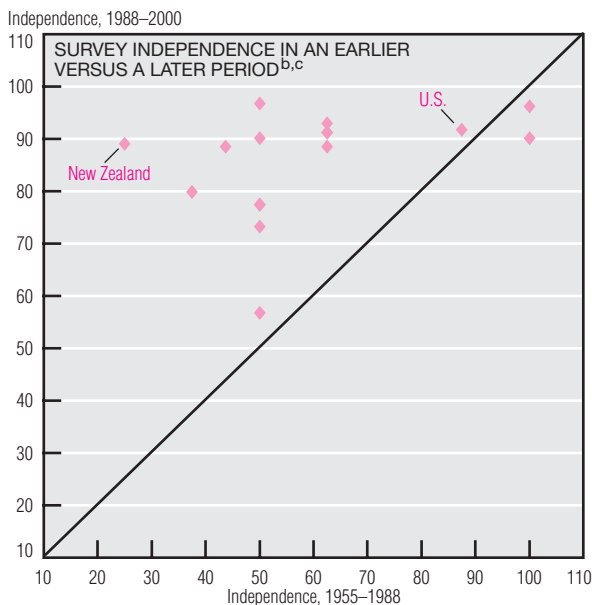
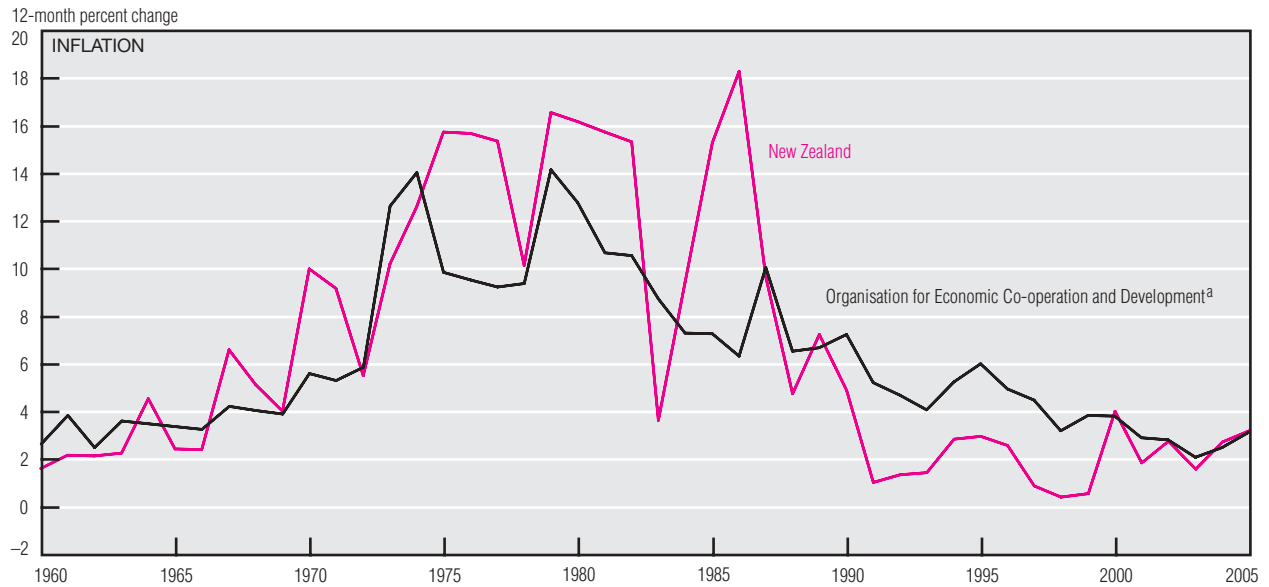
As the real federal funds rate has grown, the nominal federal funds rate has moved well within the range recommended by the Taylor rule. This rule views the rate as a reaction to the weighted average of the deviation of inflation from its estimated long-run target and the output gap, the difference between output and its potential.

The yield curve continued to flatten in March and became inverted in some ranges. On the Friday after the January 31 FOMC meeting, the 10-year Treasury bond was 5 bp lower

than the one-year Treasury note. By the end of March, the inversion had widened to 8 bp.

The state of the yield curve has become big news because yield curve inversions have often preceded recessions in the past. However, Chairman Bernanke has consistently stated, in his March 20 speech and during his February 15–16 testimony, that the current low long-term rates do not necessarily portend a major economic slowdown.

Central Bank Independence



a. All OECD countries except Turkey.

b. For New Zealand, Spain, Italy, Belgium, France, Norway, Australia, Sweden, U.K., Denmark, Japan, Netherlands, Canada, U.S., Germany, and Switzerland.

c. Independence data for 1955–88 are based on A. Alesina, and L. Summers (1993), "Central Bank Independence and Macroeconomic Performance: Some Comparative Evidence," *Journal of Money, Credit and Banking*, vol. 25, pp. 151–62. Independence data for 1988–2000 are from L. Mahadeva, and G. Sterne (eds.), *Monetary Policy Frameworks in a Global Context*. London: Routledge, 2000.

SOURCES: International Labor Organization; Organisation for Economic Co-operation and Development; and Bloomberg Financial Information Services.

New Zealand has succeeded dramatically in lowering inflation. Its annual average inflation rate over the 1955–88 period was 7.6%, but from 1989 to 2000, it averaged 2.7%. Once higher than other industrialized nations, it is now among the lowest. The critical development that made this change possible was the passage of the 1989 Reserve Bank of New Zealand Act, which instituted inflation targeting; perhaps more importantly, it granted the central bank more independence. Formerly considered the least independent, New Zealand's central

bank now ranks among the more independent ones. Other nations have also made their central banks more independent.

Central bank independence is very important in keeping inflation low over long periods. The idea is to limit the fiscal authority's ability to influence monetary policy because it may have more incentive than an independent central bank to inflate in order to achieve, say, a lower exchange rate, a higher output level, or a lower level of inflation-adjusted debt.

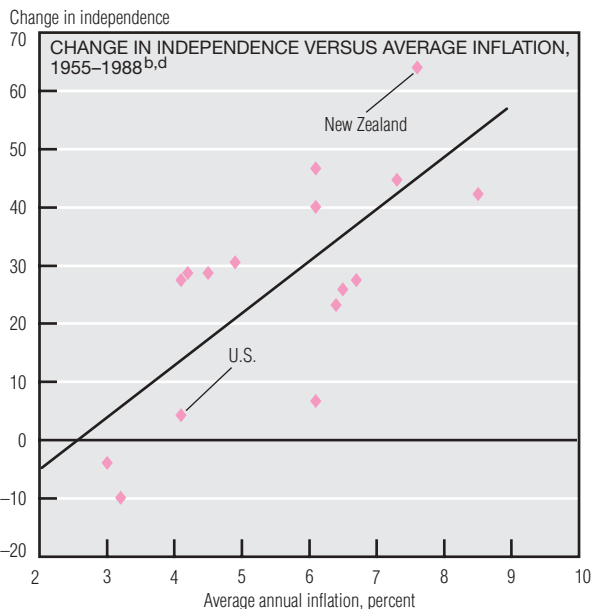
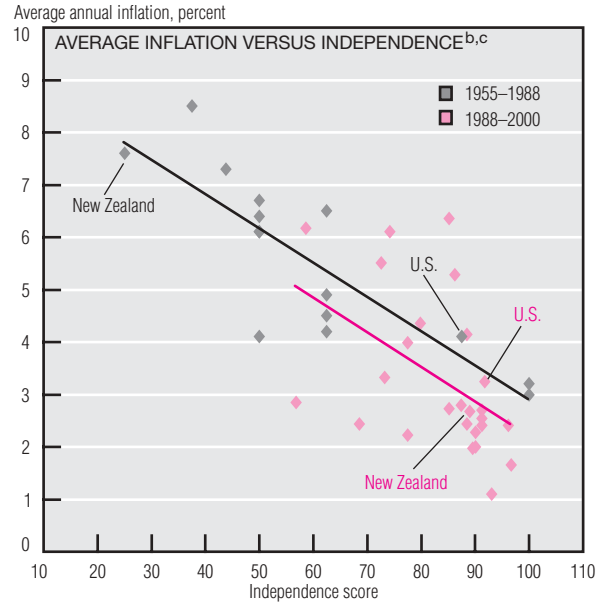
The data suggest that countries with more independent central banks

do have lower inflation rates. From 1955 to 1988, when New Zealand had one of the least independent central banks, it had one of the highest inflation rates. At the other extreme, Switzerland, with one of the most independent central banks, enjoyed a 3.2% inflation rate, one of the lowest.

The same relationship is apparent from 1988 to 2000. Iceland, one of the least independent central banks, has had the highest inflation rate (6.2%). Japan's central bank is considered among the most independent, and its

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Central Bank Independence (cont.)



Independence and Inflation^b

	1955-88		1988-2000		Change, 1955-88 to 1988-2000 ^f	
	Ind.	Infl.	Ind.	Infl.	Ind.	Infl.
New Zealand	25.0	7.6	89.0	2.7	64.0	-4.9
U.S.	87.5	4.1	91.8	3.3	4.3	-0.9
Average for (inflation) targeters ^e	45.8	6.6	84.6	3.1	38.8	-3.6
Average for non-targeters ^e	66.9	5.0	86.4	2.5	19.5	-2.4
Average for both groups	60.0	5.6	85.7	2.7	26.7	-2.9

a. For New Zealand, Spain, Italy, Belgium, France, Norway, Australia, Sweden, U.K., Denmark, Japan, Netherlands, Canada, U.S., Germany, Switzerland, Austria, Greece, Hong Kong, Iceland, Ireland, Korea, Portugal, Singapore, Taiwan, and Finland.

b. See footnote c, page 6.

c. Data for 1988-2000 are based on the countries listed in footnote a. Data for 1955-88 are based on the countries in footnote b, page 6.

d. For 1955-88 countries from footnote c.

e. The targeting nations are New Zealand, Spain, Australia, Sweden, U.K., and Canada. The non-targeters are Italy, Belgium, France, Norway, Denmark, Japan, Netherlands, U.S., Germany, and Switzerland.

f. Some numbers do not add up due to rounding errors.

SOURCES: International Labor Organization; Organisation for Economic Co-operation and Development; and Bloomberg Financial Information Services.

inflation rate has been the lowest. Clearly, other factors contribute to Japan's low (some would say too low) inflation rate.

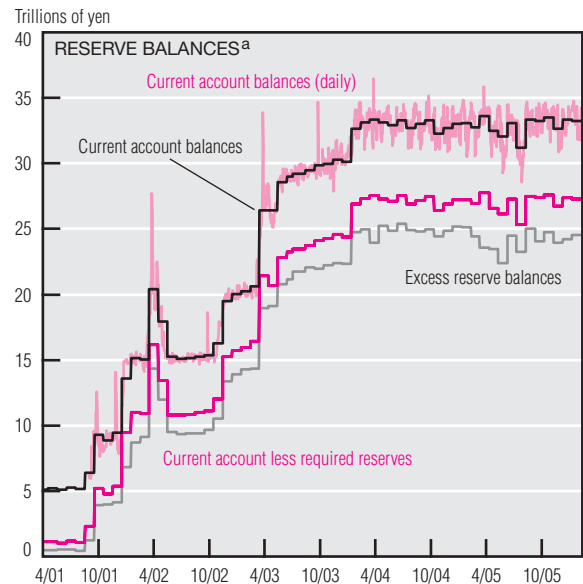
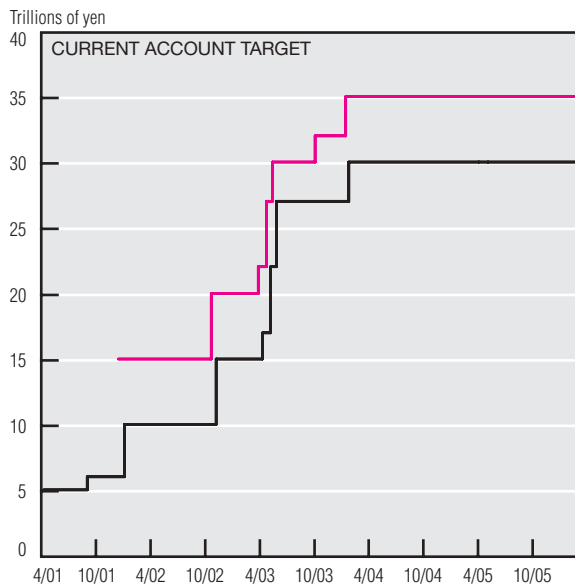
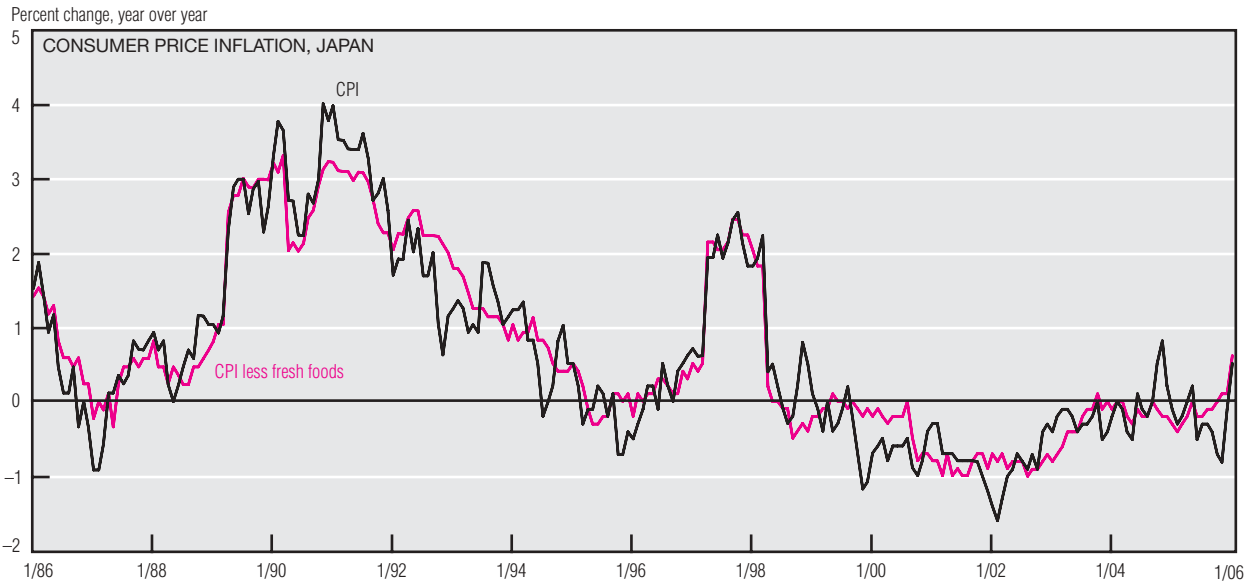
The impact of independence on inflation seems pretty stable across time. We can use linear relationships to deduce how much New Zealand's dramatic improvement in independence would be expected to have lowered its inflation. Holding everything else constant, its inflation rate would be expected to have improved by

4.2 percentage points; in fact, it improved by 4.9 percentage points. The evidence also suggests that increased independence is responsible for a decline of nearly 2 percentage points in inflation rates for the industrialized countries as a whole.

Inflation targeting has had a much smaller degree of success. During the 1990s, inflation-targeting nations had an average inflation rate of 2.5%, versus 2.9% for those with no explicit target. But we should be careful

about inferring causality from correlations. The nations that adopted inflation targeting and had the biggest gains in independence also had the highest inflation rates in the earlier period. This suggests that inflation targeting could be made more effective in lowering inflation than the data suggest. Similarly, the strong relationship between changes in independence and inflation suggests that independence may be even more effective than the data show.

Japan Ends Quantitative Easing



a. Current account balances at the Bank of Japan are required and excess reserve balances at depository institutions subject to reserve requirements plus the balances of certain other financial institutions not subject to reserve requirements.

SOURCES: Bank of Japan, Ministry of Internal Affairs and Communication; and Haver Analytics.

The Japanese economy may finally be awakening from its big sleep. Economic activity has picked up, the banking sector is strengthening, and overall confidence in the country's economic prospects is growing. The good news includes data suggesting that Japan's nearly eight-year stretch of price deflation is ending. Japan's core CPI (less fresh food) increased 0.6% on a year-over-year basis in January after gains of 0.1% in December and November. In response to the

favorable price pattern, the Bank of Japan announced, on March 9, 2006, that it was ending its quantitative easing policy.

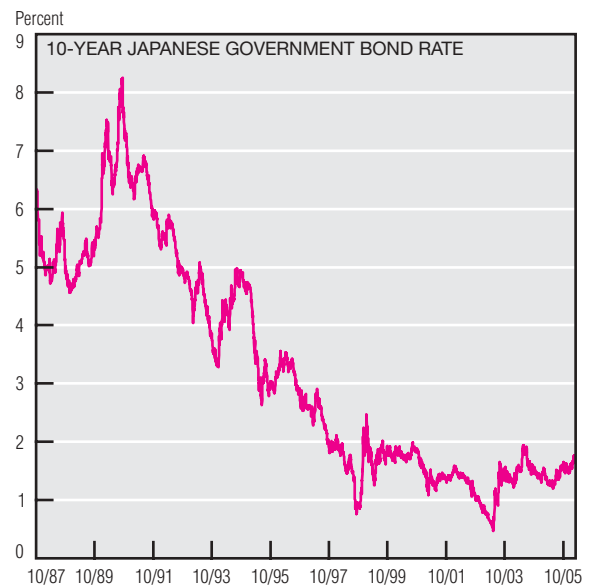
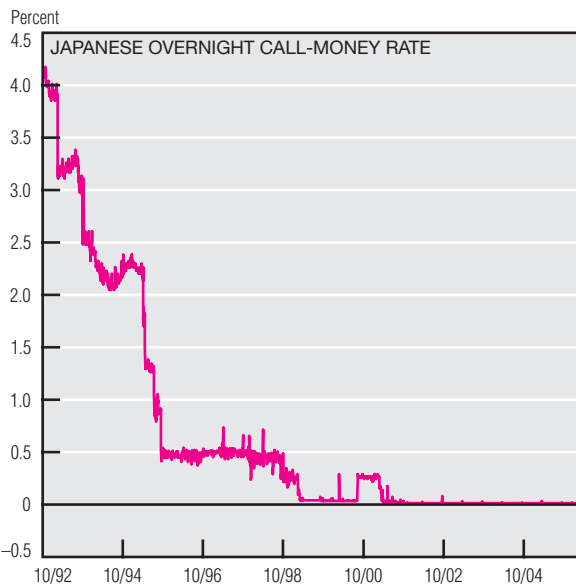
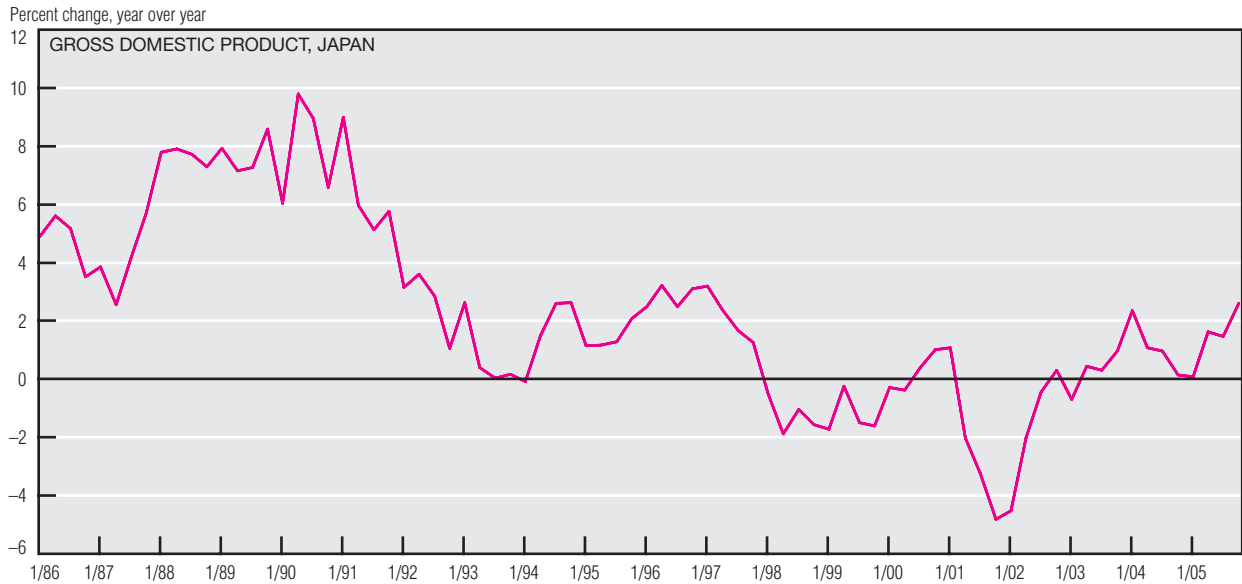
Under this policy, the Bank of Japan set a target for current account balances—essentially non-interest-earning reserve deposits that financial institutions maintain at the Bank of Japan—and purchased government securities and commercial bills until they hit the objective. Over the past two years, the target has been ¥30–¥35 trillion, substantially more

than the ¥6 trillion in required reserves that Japanese banks must hold against their deposit liabilities.

The Bank of Japan adopted its policy of quantitative easing in March 2001 to convince markets that it would end price deflation and to boost depositors' confidence in the financially distressed banking sector. After 1999, when overnight interest rates hit zero and prices generally started falling, short-term interest rates were no longer an effective operating target for monetary policy.

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Japan Ends Quantitative Easing (cont.)



SOURCES: Government of Japan, Cabinet Office; and Bloomberg Financial Information Services.

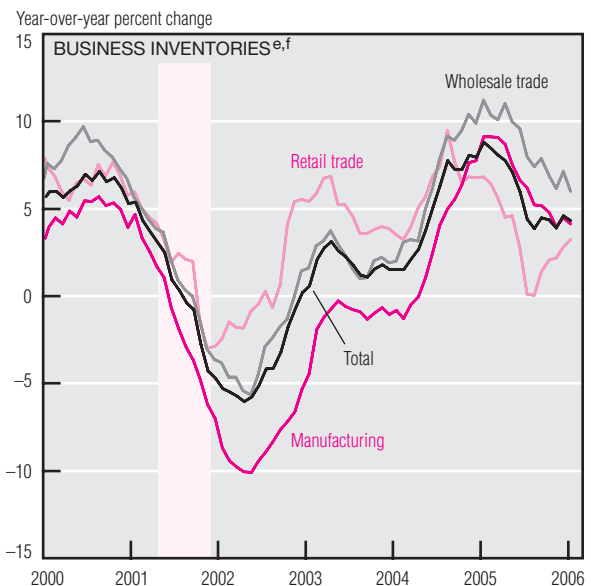
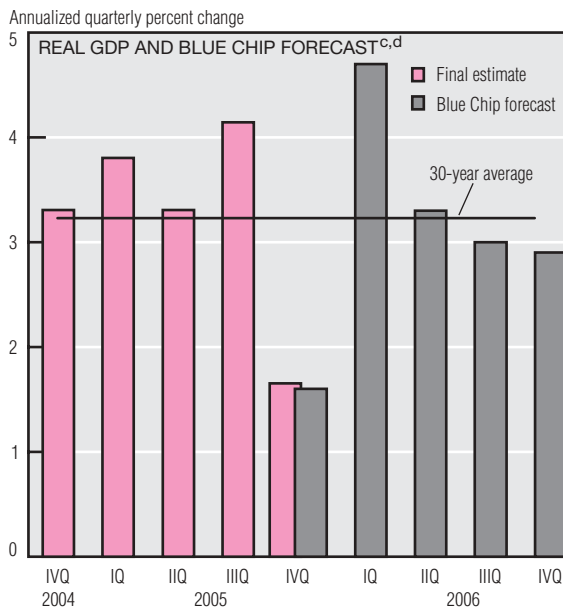
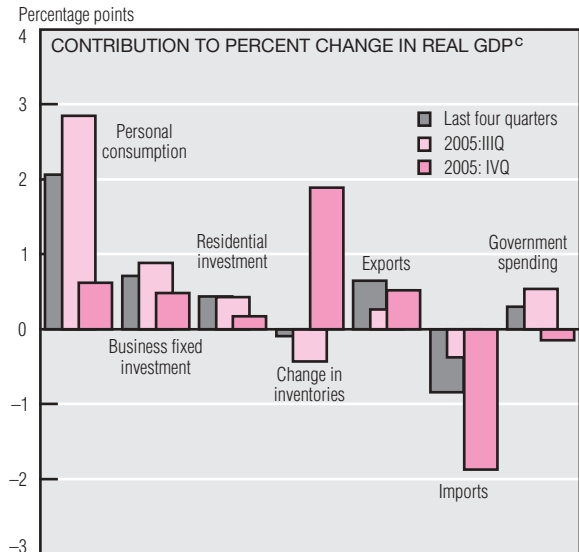
If the Bank of Japan is to revert to using the uncollateralized overnight call-money rate to guide day-to-day policy, it will need to drain roughly ¥30 trillion in excess reserves from the banking system. It will probably do so by rolling over its holdings of government and commercial bank bills as they mature, rather than selling off securities. This slow reduction of excess reserves in the banking system will keep short-term interest rates very low—as long as economic activity and inflation expectations

remain subdued. Over the past seven years, short-term interest rates have been essentially zero, and 10-year government bond rates have generally remained below 2%. After reducing its excess reserves, the Bank of Japan will be able to lift the overnight call-money rate away from zero, but it is not likely to do so without clear, persistent signs that economic activity is improving and prices are rising. Consequently, the Bank will maintain an accommodative policy stance for most of this year.

To provide some guidance as to how it will operate under a call-money-rate target, the Bank of Japan announced a reference range for price stability—its overarching policy goal—of 0% to 2% for core inflation. Presumably, Japanese monetary policy will be more accommodative when the inflation rate is below or in the lower part of this reference range. The Bank emphasized that this range was not a formal inflation target.

Economic Activity

	Change, billions of 2000 \$	Annualized percent change	
		Current quarter	Four quarters
Real GDP	46.0	1.7	3.2
Personal consumption	17.5	0.9	2.9
Durables	-52.0	-16.6	0.2
Nondurables	28.4	5.0	4.4
Services	29.1	2.6	2.8
Business fixed investment	14.5	4.5	6.8
Equipment	13.1	5.0	8.7
Structures	1.9	3.0	1.5
Residential investment	4.2	2.8	7.6
Government spending	-4.0	-0.8	1.6
National defense	-11.8	-8.9	1.7
Net exports	-37.7	—	—
Exports	14.9	5.0	6.4
Imports	52.7	12.1	5.3
Change in business inventories	51.2	—	—



a. Chain-weighted data in billions of 2000 dollars.

b. Components of real GDP need not add to the total because the total and all components are deflated using independent chain-weighted price indexes.

c. Data are seasonally adjusted and annualized.

d. Blue Chip panel of economists.

e. Seasonally adjusted.

f. The shaded bar represents the most recent recession.

SOURCES: U.S. Department of Commerce, Bureau of Economic Analysis; and *Blue Chip Economic Indicators*, March 10, 2006.

The Commerce Department's final reading of real GDP growth for 2005:IVQ was 1.7%, up 0.1 percentage point (pp) from February's preliminary reading. This was down substantially from the 2005:IIIQ estimate of 4.1%. The deceleration resulted primarily from slower growth in personal consumption and residential fixed investment, decreased government spending, and acceleration in imports. These factors were partly offset by growth in inventories and exports.

Most components' contributions to the change in real GDP decreased in

2005:IVQ. The two exceptions were changes in private inventories, which contributed an additional 2.3 pp, and exports, which added 0.3 pp more than in 2005:IIIQ. Imports subtracted 1.9 pp from GDP, after deducting only 0.4 pp in 2005:IIIQ. PCE, the component that traditionally makes the largest positive contribution to GDP, added only 0.6 pp, compared to 2.9 pp the previous quarter.

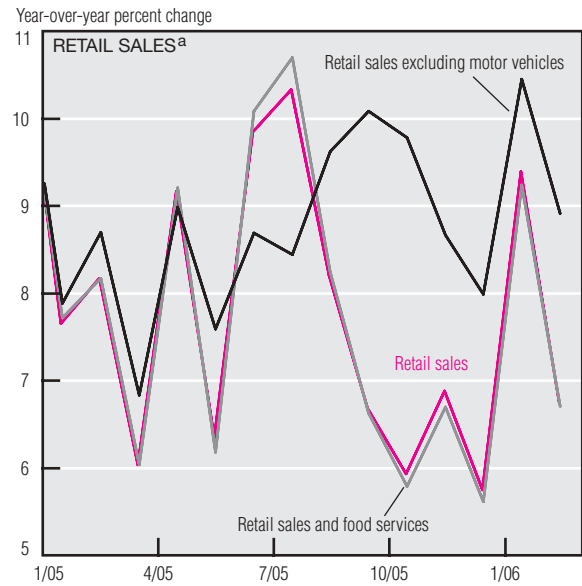
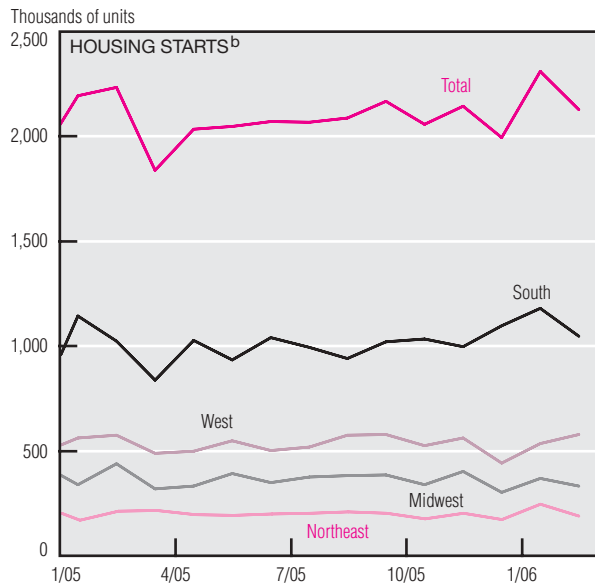
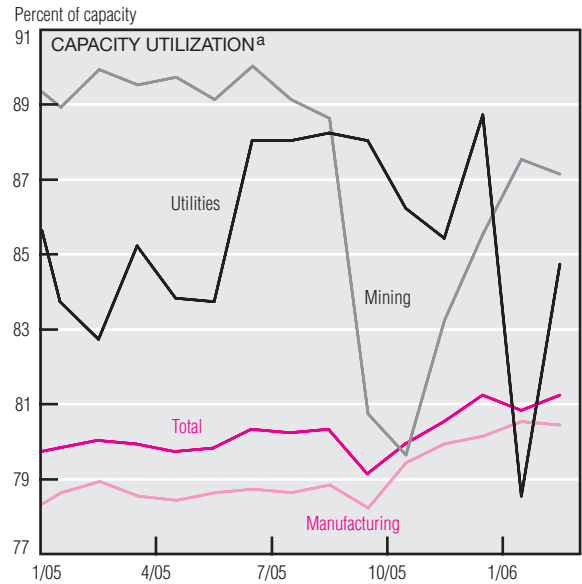
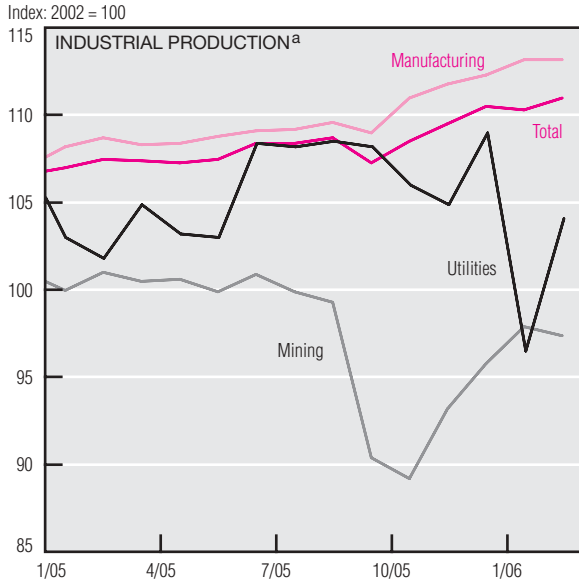
Over the past 30 years, GDP growth has averaged 3.2%, nearly twice the fourth quarter's final reading of 1.7%. However, real GDP growth is expected

to rebound. The March 10 edition of *Blue Chip Economic Indicators* predicts that 2006:IQ growth will be 4.7%, up 0.6 pp from its February estimate. For the remainder of 2006, they expect growth between 3.3% and 2.9%.

Business inventories have been growing at an annual rate of nearly 4.0% since July 2005. Manufacturing inventories, which tend to be more volatile than total inventories, have shown signs of leveling off at 4.0%. Although wholesalers' inventory

(continued on next page)

Economic Activity (cont.)



a. Seasonally adjusted.

b. Seasonally adjusted annualized rates.

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

growth has been slowing, its 5.9% year-over-year increase has continued to outpace all other businesses.

The economy's relatively tepid growth in 2005:IVQ has intensified the interest in incoming data for 2006:IQ. Industrial production fell in January and was below expectations. This drop resulted from declining production in the utilities sector, which can be attributed to the month's record-setting warm weather. The sector's capital utilization declined as well. February saw a rebound in utilities and resumed growth in industrial

production. Manufacturing, the largest sector, seems to have been unaffected by temperature. The mining sector also took a big hit in 2005:IVQ, but it has since recovered most of its losses.

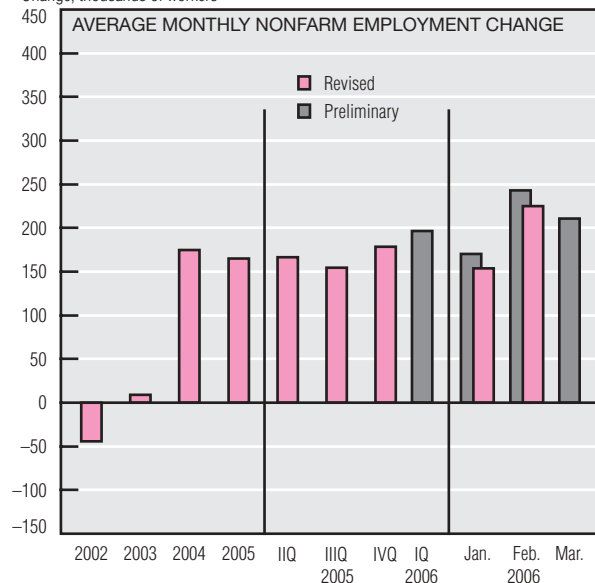
Housing starts are attracting attention because of recent conjectures of a housing price bubble. Increased housing starts in January have been widely attributed to the month's unseasonably high temperatures. Housing starts were up across all regions in January but fell in February, with the exception of the West. These data supply scant evidence of a housing market

slowdown that might foretell the end of a possible housing price bubble.

Another gauge of the economy's health is retail sales, which fell in February after growing vigorously in January, another change that was chalked up to the weather. The exception to this pattern in retail sales was the motor vehicles industry, which has been considerably strengthened by automotive companies' rebates and by gasoline prices. Averaging across January and February suggests that retail sales have picked up from 2005:IVQ.

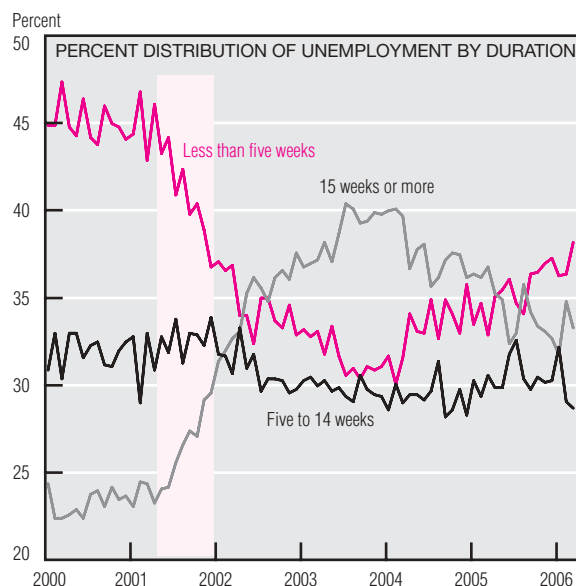
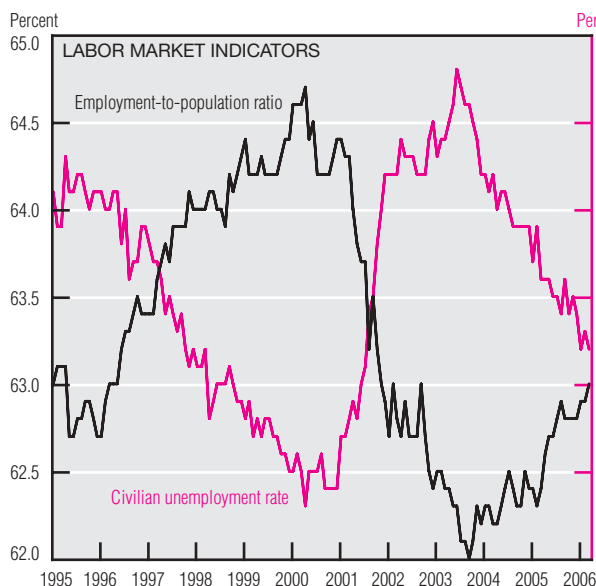
Labor Markets

Change, thousands of workers



Labor Market Conditions

	Average monthly change (thousands of employees, NAICS)				
	2002	2003	2004	2005	Mar. 2005
Payroll employment	-45	9	175	165	211
Goods producing	-76	-42	28	22	9
Construction	-8	10	26	25	7
Manufacturing	-67	-51	0	-6	-5
Durable goods	-48	-32	9	1	6
Nondurable goods	-19	-19	-9	-7	-11
Service providing	32	51	147	143	202
Retail trade	-9	-4	17	13	29
Financial activities ^a	6	7	8	12	16
PBS ^b	-17	23	40	41	52
Temporary help svcs.	2	12	13	14	16
Education & health svcs.	40	30	33	31	33
Leisure and hospitality	12	19	26	21	42
Government	21	-4	13	14	24
	Average for period (percent)				
Civilian unemployment rate	5.8	6.0	5.5	5.1	4.7



NOTE: All data are seasonally adjusted.

a. Financial activities include the finance, insurance, and real estate sector and the rental and leasing sector.

b. Professional and business services include professional, scientific, and technical services, management of companies and enterprises, administrative and support, and waste management and remediation services.

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

Nonfarm payrolls grew by 211,000 jobs in March, surpassing expectations of 190,000. Gains for January and February, however, were revised down by a combined 34,000 jobs. Over the last 12 months, monthly employment growth has averaged 174,000.

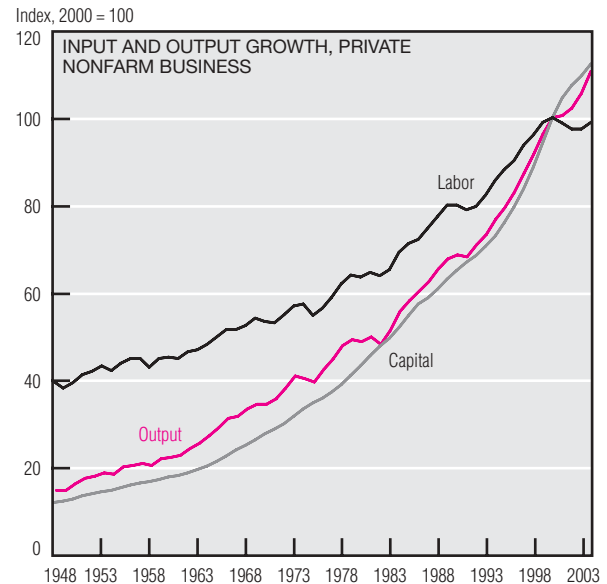
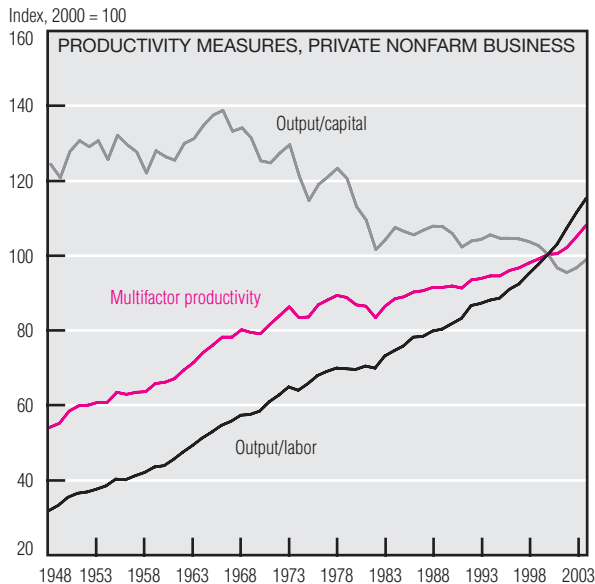
Service-providing industries added 202,000 jobs in March, spread over a wide range of industries. Gains were led by professional and business services (52,000), leisure and hospitality (42,000), education and health services (33,000), and retail trade (29,000). The goods-producing sector,

on the other hand, was subdued, adding 9,000 jobs over the month. After two months of strong gains, the construction industry added just 7,000 jobs. The manufacturing industry was also nearly unchanged.

The national unemployment rate was 4.7% in March, down from 4.8% one month earlier. Over the year, the unemployment rate has fallen 0.4 percentage point, down from 5.1%. The labor force participation rate (66.1%) and the employment-population ratio (63.0%) suggest that these series continue to increase slowly.

In an expanding economy, the share of the unemployed who are out of work for a short period of time is high, because it is relatively easy to find a job. At the same time, the share of those unemployed for longer durations is typically low, for the same reason. When a recession hits, those who are unemployed have difficulty finding a job, and the duration of unemployment may rise. These effects were felt in the last recession; it is only over the past few years that our economy has regained its footing and unemployment durations have fallen.

Productivity Measures



	Average annual growth rate, percent						
	1987–2004	1987–90	1990–95	1995–2000	2000–04	2002–03	2003–04
Output per hour	2.3	1.5	1.6	2.5	3.5	3.9	3.4
Contribution of capital intensity ^b	0.9	0.6	0.6	1.1	1.2	0.8	0.3
Contribution of information processing equipment and software	0.6	0.4	0.5	0.9	0.6	0.4	0.4
Contribution of all other capital services	0.2	0.1	0.1	0.2	0.5	0.4	0.0
Contribution of labor composition ^c	0.4	0.4	0.4	0.3	0.5	0.3	0.1
Multifactor productivity ^d	1.0	0.5	0.6	1.2	1.9	2.7	2.9
Contribution of R&D to multifactor productivity	0.2	0.2	0.2	0.2	0.3	0.3	0.3

a. Excludes government enterprises. The sum of multifactor productivity and the contributions may not equal output per hour due to independent rounding.

b. Growth rate in capital services per hour times capital's share of current dollar costs.

c. Growth rate of labor composition (the growth rate of labor input less the growth rate of hours of all persons) times labor's share of current dollar costs.

d. Output per unit of combined labor and capital inputs.

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

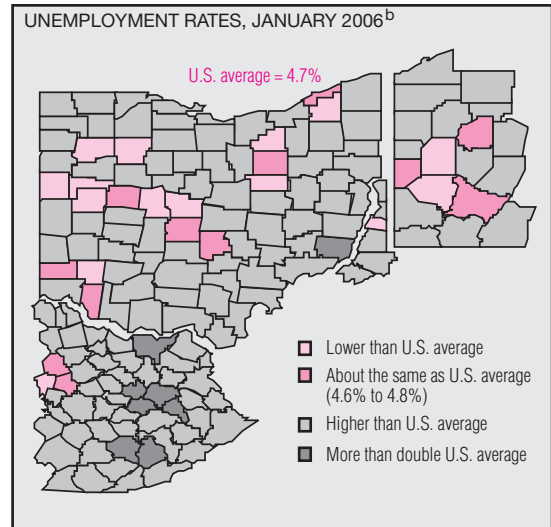
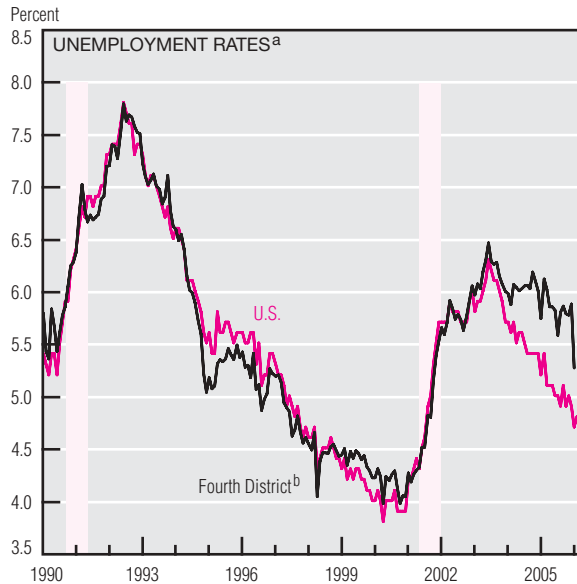
Multifactor productivity (MFP) reflects output changes that are not accounted for by changes in capital and labor. It represents the effects on output growth of many factors, including new technologies, economies of scale, managerial skill, and changes in the organization of production. As such, MFP, also known as the Solow residual, is often considered a measure of technological progress.

Labor productivity, that is, output per unit of labor, is affected by capital

deepening (increases in the ratio of capital to labor), labor composition, and MFP. In fact, over the past decade, MFP has often accounted for a major part of labor productivity growth. Both labor productivity and MFP have risen substantially over the past 50 years or so. Capital deepening (or capital intensity), which boosts labor productivity by providing more and better capital for workers, accounted for over a third of labor productivity growth in 2000–04. Labor composition improvements, such as work

experience and increased educational attainment, accounted for nearly 15% of labor productivity growth over the same period, while MFP accounted for more than 50%. The slowdown in labor productivity growth in 2003–04 reflects deceleration in capital deepening (in capital services other than information processing equipment and software) and a slower rate of growth in labor quality, which more than offset the acceleration in MFP that occurred over the period.

Fourth District Employment



Payroll Employment by Metropolitan Statistical Area

12-month percent change, February 2006

	Cleveland	Columbus	Cincinnati	Dayton	Toledo	Pittsburgh	Lexington	U.S.
Total nonfarm	-0.2	0.9	1.7	0.1	0.8	1.0	1.8	1.6
Goods-producing	-1.4	0.9	1.8	-0.4	-0.2	0.0	1.7	1.6
Manufacturing	-0.5	-0.6	1.5	-1.0	-0.4	-0.5	0.9	-0.3
Natural resources, mining, and construction	-5.1	4.2	2.5	2.2	0.8	1.0	4.3	5.4
Service-providing	0.0	0.9	1.6	0.3	1.0	1.1	1.8	1.6
Trade, transportation, and utilities	-2.0	0.2	-0.1	-1.3	0.0	0.5	3.6	0.9
Information	-2.1	0.0	-3.1	0.0	-2.5	-3.9	2.2	0.3
Financial activities	-1.1	0.3	2.3	-2.1	1.5	0.6	0.9	2.0
Professional and business services	2.2	2.0	3.3	1.7	2.2	0.3	2.4	2.8
Education and health services	1.3	2.0	2.5	1.7	2.9	2.0	1.0	2.5
Leisure and hospitality	2.4	1.6	4.5	2.8	2.3	6.3	4.8	2.0
Other services	-0.2	1.3	0.7	0.0	0.0	-0.2	-1.0	0.2
Government	-1.3	0.0	0.1	-1.2	-0.6	-0.7	-0.7	0.7
January unemployment rate (percent)	5.3	4.6	5.0	6.0	6.5	4.5	4.9	4.7

a. Shaded bars represent recessions.

b. Seasonally adjusted using the Census Bureau's X-11 procedure.

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

In January, the Fourth District's unemployment rate was 5.3%. This was lower than December 2005, but the comparison is muddled because the January estimate reflects an annual revision process that has not yet been incorporated into historical figures. The U.S. rate, which has been revised historically, rose from 4.7% in January to 4.8% in February.

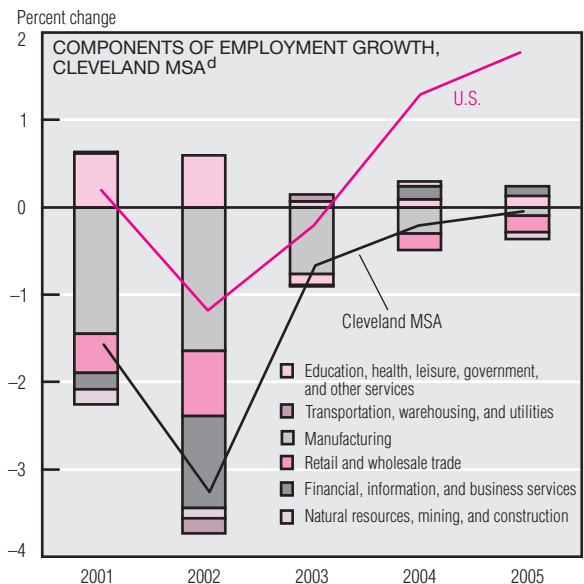
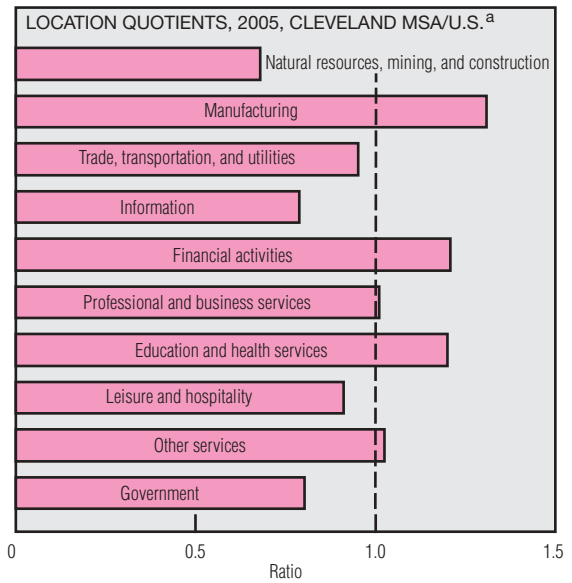
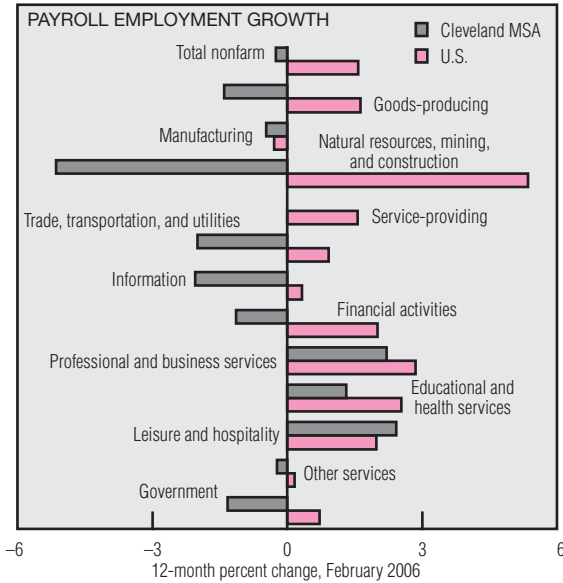
Unemployment rates in Fourth District counties generally remained higher than the U.S. average in January. In fact, only 27 District counties

had unemployment rates that were below or about the same as that average, while 142 had rates that exceeded it. Eight counties had unemployment rates that were more than double the U.S. rate of 4.7%.

Some District metropolitan areas, like Cincinnati and Lexington, kept pace with national year-over-year employment growth; the rest had weaker growth than the U.S. Even so, Cleveland was the only major metropolitan area in the District that did not post an annual employment gain.

Although Columbus's employment growth lagged the nation's, it was positive in every industry except one: The manufacturing sector failed to add jobs over the year. Growth in service-providing industries across the District was strong. Specifically, professional and business services, education and health services, and the leisure and hospitality industries have all added employment in each of the District's major metropolitan areas since February 2005.

Employment in the Cleveland Metropolitan Area



NOTE: The Cleveland-Elyria-Mentor, OH, metropolitan statistical area consists of Cuyahoga, Geauga, Lake, Lorain, and Medina counties.
 a. The location quotient is the simple ratio between two locations of a given industry's employment share.
 b. Seasonally adjusted.
 c. Lines represent total employment growth for the U.S. and the Cleveland MSA.
 SOURCE: U.S. Department of Labor, Bureau of Labor Statistics.

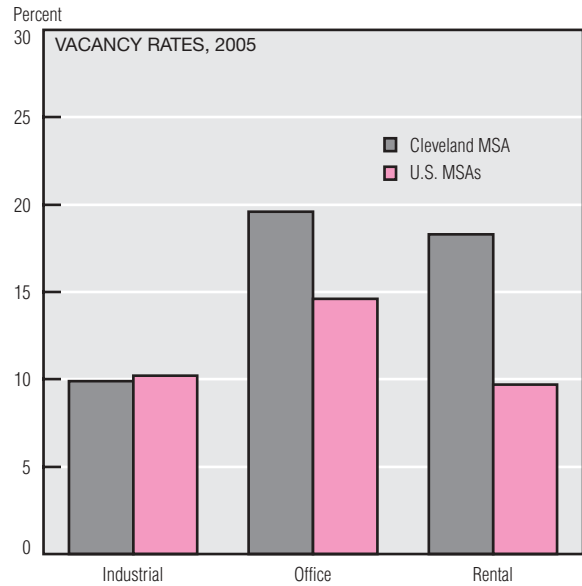
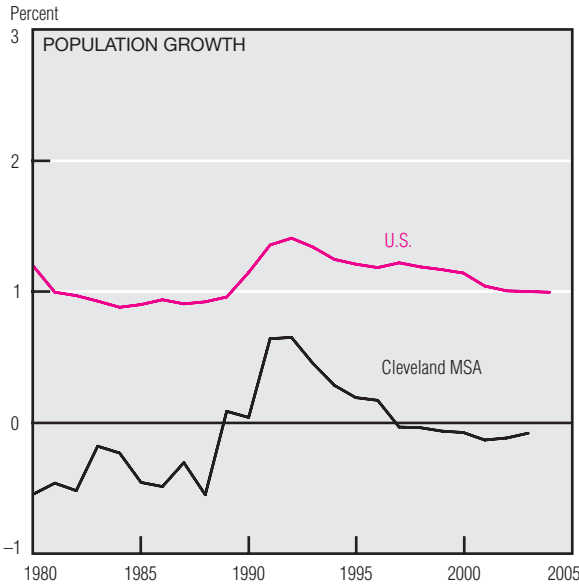
The Cleveland-Elyria-Mentor, OH, metropolitan statistical area (MSA) had 2.14 million residents in 2003, making it Ohio's most populous MSA. Over the past year, Cleveland has lost 0.2% of its total employment, compared to the nation's 1.6% gain. The MSA's employment growth trailed the nation's in every industry but leisure and hospitality. And, although manufacturing employment

growth in the Cleveland MSA has been improving, it lost 0.5% over the year, exceeding the U.S. loss of 0.3%. Cleveland's employment composition differs from the U.S. in several respects: In the MSA, manufacturing's share of total employment was 1.3 times larger than in the U.S., but the share of jobs in the information and the natural resources, mining, and construction industries was far smaller than in the U.S.

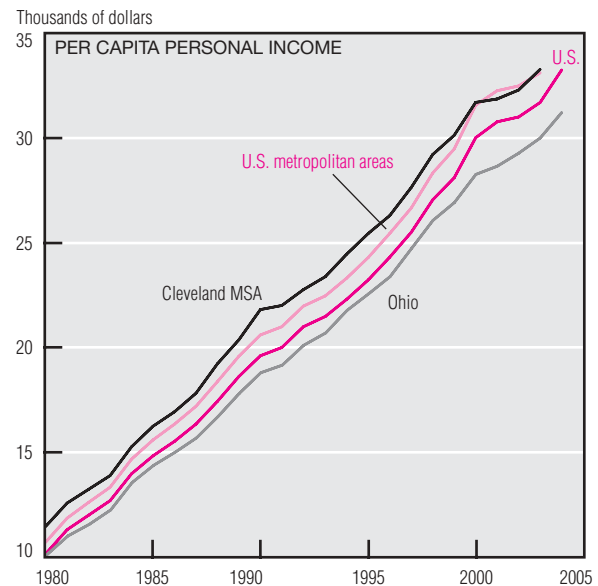
Perhaps Cleveland's industrial composition of employment, which is heavily weighted in manufacturing, has hampered its total employment growth over the last business cycle. Breaking down employment growth by component reveals that manufacturing has had a negative effect in each of the last five years. It subtracted 1.4% from total jobs growth in 2001, 1.6% in 2002, and

(continued on next page)

Employment in the Cleveland Metropolitan Area (cont.)



Selected Demographics, 2004			
	Cleveland MSA ^a	Ohio	U.S.
Total population	2.2	11.2	285.7
Percent by race			
White	77.9	85.7	77.3
Black	19.4	12.3	12.8
Other	2.8	1.9	9.9
Percent by age			
0-19	27.1	26.7	27.9
20-34	17.7	19.1	20.3
35-64	41.4	39.9	39.8
65 or older	13.7	12.5	12.0
Percent with bachelor's degree or higher	25.8	23.3	27.0
Median age	38.5	37.5	36.2



NOTE: The Cleveland-Elyria-Mentor, OH metropolitan statistical area consists of Cuyahoga, Geauga, Lake, Lorain, and Medina counties.
 a. Includes Ashtabula County.
 SOURCES: U.S. Department of Commerce, Bureau of the Census and Bureau of Economic Analysis; and CB Richard Ellis.

0.8% in 2003. During the same period, the education, health, leisure, government, and other services industries made positive contributions to total employment growth, except in 2003.

Part of Cleveland's weak overall employment growth also results from its slow population growth. The MSA's population growth generally has mirrored the nation's but has trailed it by an average of 1.1% since

1980. Since 1997, the MSA has been losing residents.

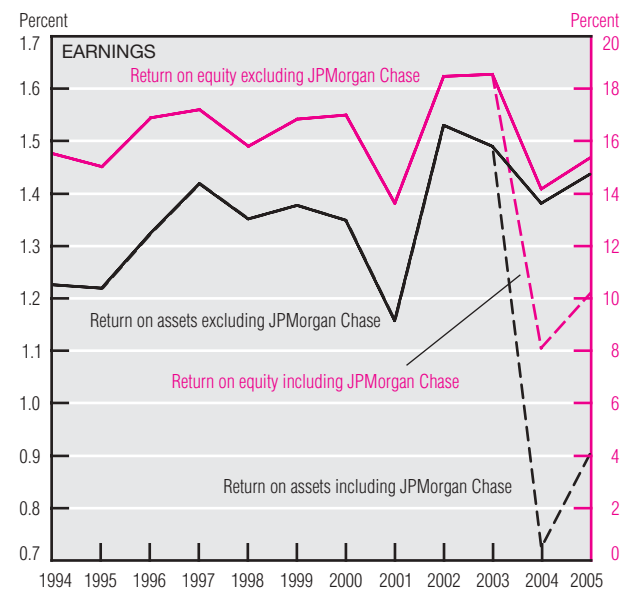
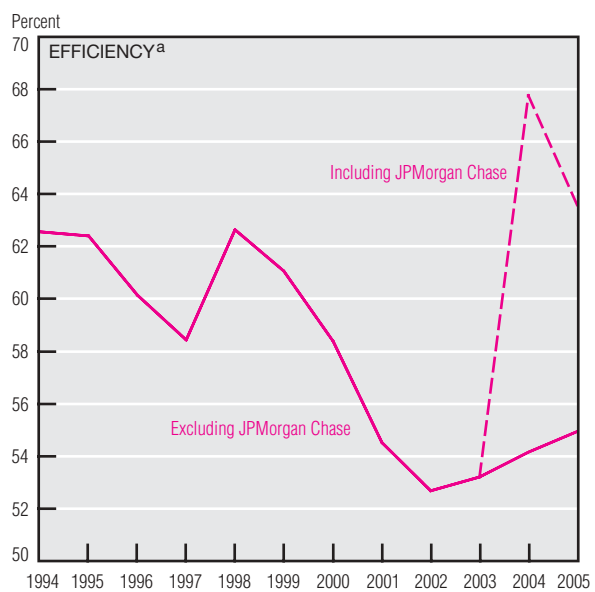
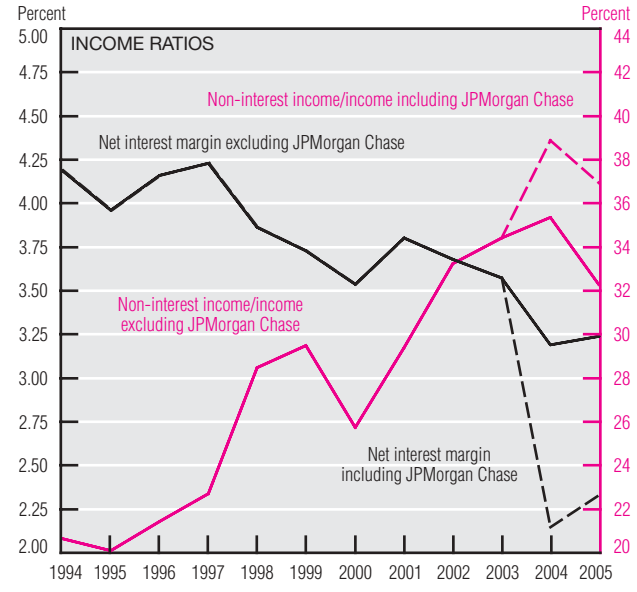
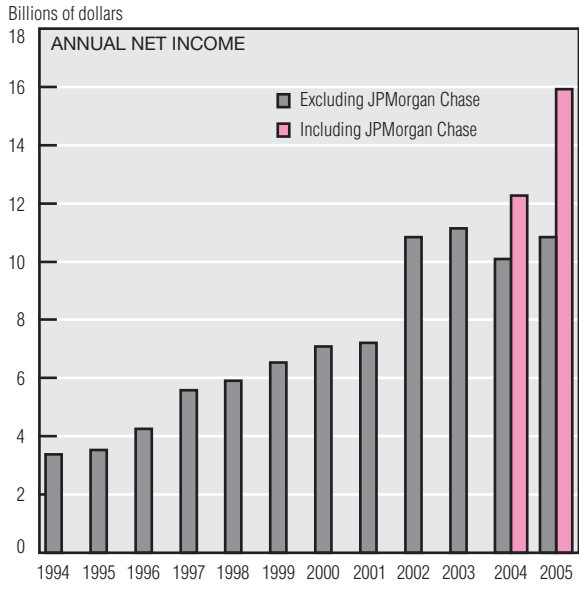
The MSA's low or negative population growth may also contribute to its relatively high office and rental vacancy rates. In 2005, its rental vacancy rate was 18.3%, nearly double the nation's 9.7%.

The Cleveland MSA's population is older than that of both Ohio and the U.S. Its median age and its share of population aged 65 and older

exceeded the state's and the nation's. As for education, the MSA's 25.8% share of people holding a bachelor's degree was higher than Ohio's 23.3% but lower than the nation's 27.0%.

These differences in social and demographic characteristics may help explain Cleveland's per capita personal income, which looks a lot like other U.S. metropolitan areas but exceeds that of Ohio and of the U.S. as a whole.

Commercial Banks



a. Efficiency is operating expenses as a percent of net interest income plus non-interest income.
 SOURCE: Author's calculation from Federal Financial Institutions Examination Council, *Quarterly Bank Reports of Condition and Income*.

FDIC-insured commercial banks headquartered in the Fourth Federal Reserve District posted net income of \$10.84 billion in 2005, a 7.3% increase from 2004. (JPMorgan Chase, chartered in Columbus in 2004, is not included in this discussion because its assets are mostly outside the District and its size—roughly \$1 trillion—dwarfs other District institutions.) For the same period, the U.S. banking industry as a whole posted earnings of \$125.57 billion, 6.1% more than in 2004.

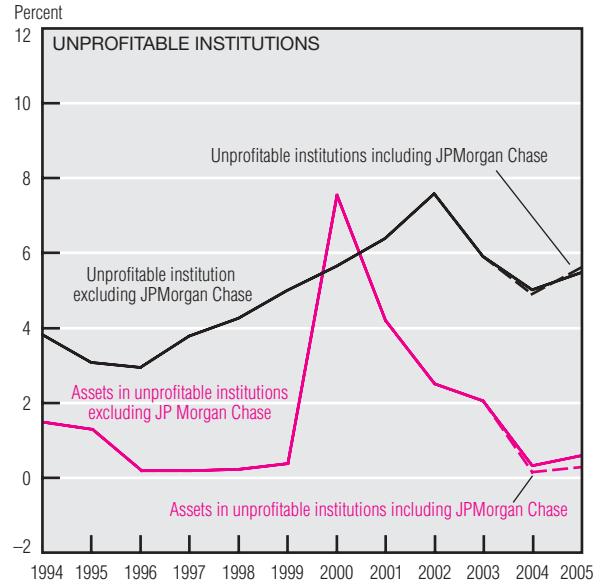
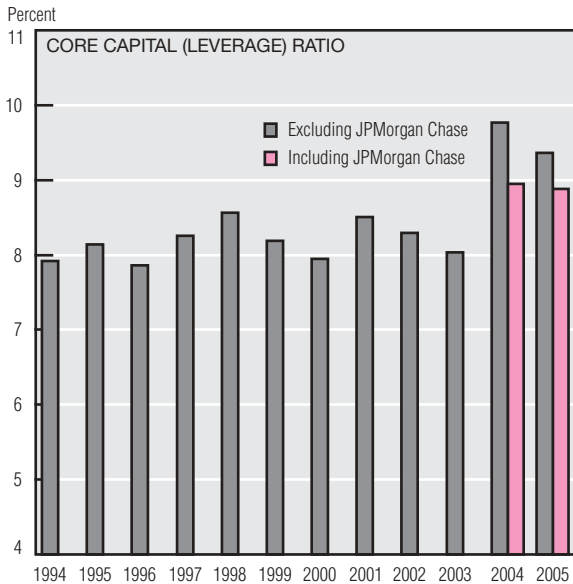
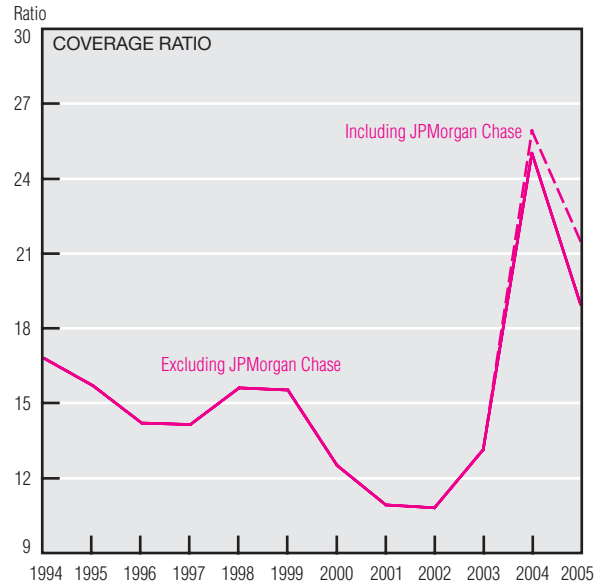
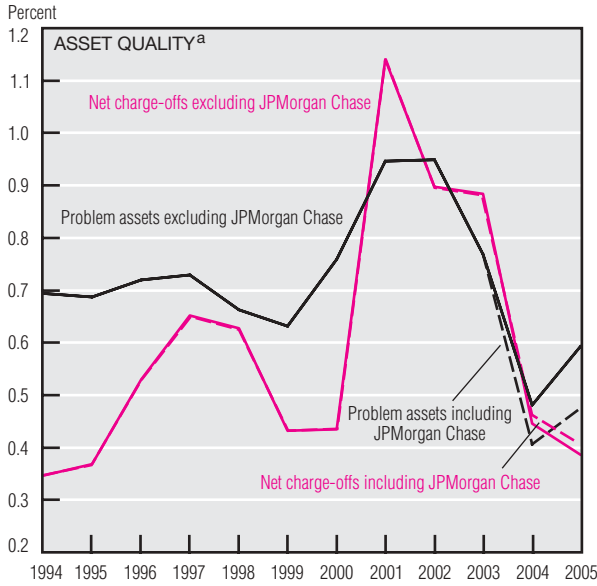
At the end of 2005, Fourth District banks' net interest margin (a measure of core profitability computed as interest income minus interest expense divided by average earning assets) had risen slightly to 3.23%, exceeding the 3.03% U.S. average. Non-interest income, however, fell to 32.21% of total income, the first such decline in five years. Nationwide, net interest margin was slightly down from the end of 2004, and non-interest income dropped to 31.99% of total income.

By the end of 2005, Fourth District banks' efficiency (operating expenses as a percent of net interest income plus non-interest income) had deteriorated to 54.88% from the 52.64% record set in 2002. (Lower numbers correspond to greater efficiency.) Nationwide, efficiency improved slightly, declining to 56.40% from 56.62% at the end of 2004.

At the end of 2005, District banks posted a 1.43% return on assets (up from 1.38% at the end of 2004) and a 15.32% return on equity (up from

(continued on next page)

Commercial Banks (cont.)



a. Problem assets are shown as a percent of total assets, net charge-offs as a percent of total loans.
 SOURCE: Author's calculations from Federal Financial Institutions Examination Council, *Quarterly Bank Reports on Condition and Income*.

14.12% at the end of 2004). The District's performance was better than the nation's: At the end of 2005, the U.S. banking industry's return on assets declined to 1.08% (from 1.12% at the end of 2004) while return on equity was nearly unchanged at 11.55% (from 11.56% at the end of 2004).

Fourth District banks' overall financial indicators point to fairly strong balance sheets in 2005. Net charge-offs (losses realized on loans and leases currently in default minus recoveries on previously charged-off loans and leases) represented 0.38%

of total loans (down from 0.44% at the end of 2004), much better than the national average of 0.46% (down from 0.53%). But problem assets (nonperforming loans and repossessed real estate) as a share of total assets increased to 0.59% from 0.48% at the end of 2004, worse than the national average of 0.45% of assets (down from 0.52%).

Fourth District banks held \$18.89 in equity capital and loan loss reserves for every dollar of problem loans, well above the recent coverage-ratio low of 10.75 at the end of 2002, but below the record high of 24.97 at the end

of 2004. Equity capital as a share of Fourth District banks' assets (the leverage ratio) fell to 9.36% from the record high of 9.76% at the end of 2004.

The share of unprofitable banks in the Fourth District rose from 4.97% at the end of 2004 to 5.43% at the end of 2005. The average size of such banks also increased, from 0.27% of District banks' assets to 0.56%. Industrywide, the share of unprofitable banks grew from 6.07% at the end of 2004 to 6.28%. Their asset size increased from 0.62% at the end of 2004 to 1.13% at the end of 2005.