The Economy in Perspective

by Mark Sniderman

*Don't sweat the small stuff…*By the time you read this, the August 8 FOMC meeting will be history, but as I write, the event looms ahead. Today, after the July employment report was released, financial market participants laid 80 percent odds that there would be no change in the FOMC's funds rate target at the August meeting. Before the report, which indicated that employment expanded somewhat less than the markets had anticipated, the odds were much closer to a 50-50 split between no change and a hike of 25 basis points.

Financial market participants' views about the August meeting have been unsettled for some time. The odds of no change have been both above and below the odds for an increase over the past several months, wavering with data releases, comments by various Federal Reserve officials, and world events. And the August meeting is by no means unique: Expectations about likely FOMC actions at several meetings this year have been subject to shifting odds, driven by the uncertainties prevailing at the time.

Considering all the energy that goes into speculating about the FOMC's next action, one might wonder just how important 25 basis points really are, in the grand scheme of things, to the success or failure of monetary policy. Given all the uncertainties involved in the policy process, it would seem nearly impossible to determine that 25 or even 50 basis points one way or another in the setting of the funds rate target makes a crucial difference. For example, after the FOMC's 1994 decision to increase the funds rate from 3 percent to 6 percent, inflation stayed on an even keel. Although the pace of economic activity slowed in 1995, growth was fairly strong for the balance of the decade. Clearly, the FOMC's strategy to prevent inflationary pressures from building early in the decade was successful, but can anyone say with authority that a rate of $5^{1}/_{2}$ percent would have failed to arrest inflation's momentum, or that $6^{1}/_{2}$ percent would have tipped the economy into a recession? It seems unlikely.

The fact is, despite the optimal policy paths cranked out by economic models, there is little reason to think that the funds rate must attain some magical value at particular points in time, including peaks and troughs. That is why the more useful policy models provide confidence intervals that run above and below the optimal policy path.

Some financial market participants might be interested in forecasting the funds rate because they enjoy the sport of speculation. Others might be holding positions in related markets and use option contracts on fed funds futures to hedge those positions. A third group of participants might have their own views on what the FOMC should do in order to achieve its inflation and economic growth objectives, and they compare their own projections against the FOMC's actual decisions. These forecasters care less about the funds rate as such than about the outlook for economic activity and inflation.

For this group, small deviations in the funds rate from their calculated paths are not likely to be distressing, but large cumulative deviations could signal trouble. At times when the FOMC puts the funds rate at a greater distance above or below where a forecaster thinks it ought to be, that forecaster is going to reexamine his model closely. He will conclude either that his model is wrong (and revise his view of the future) or that the FOMC will produce an outcome that drifts away from what the forecaster understood the FOMC's objectives to be. In this latter case, the forecaster would like to know whether it has misunderstood the FOMC's objectives, or whether the Committee itself will be surprised by its forecasting error.

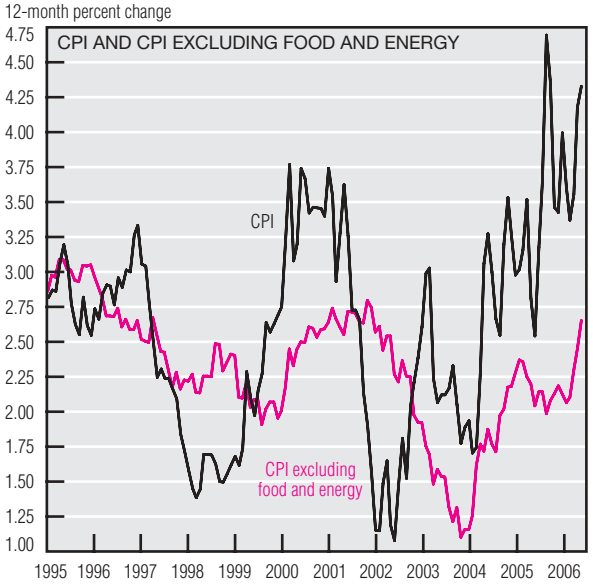
When financial market traders bet among themselves on the funds rate decision at an upcoming FOMC meeting, we might regard the process as neutral from society's perspective: for every loser there is a winner. The existence of relatively large discrepancies between private forecasts of the funds rate path and its actual trajectory would be a matter for monetary policy makers to think about.

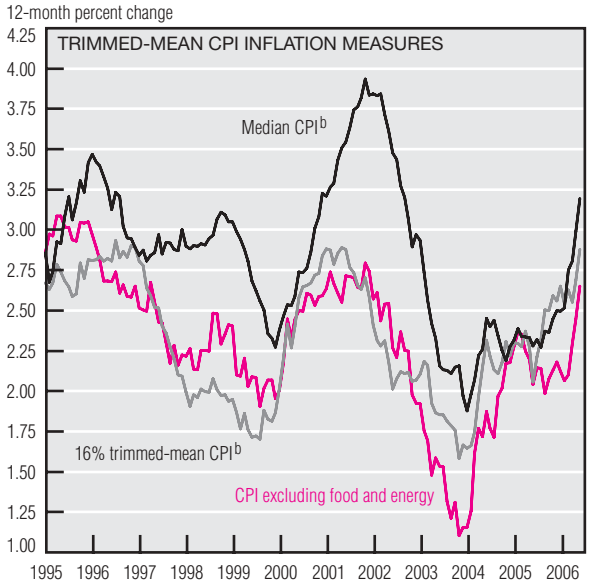
At the moment, most private forecasters appear to think that the pace of economic activity and the rate of inflation will continue to develop in a way that is consistent with maximum sustainable growth and price stability. If there are voices decrying a monetary policy that is already too restrictive, or demonstrably lax, they are muted. Perhaps that is why the voices we do hear belong to those who are, indeed, sweating the small stuff. Compared with the big stuff, perhaps that's not so bad.

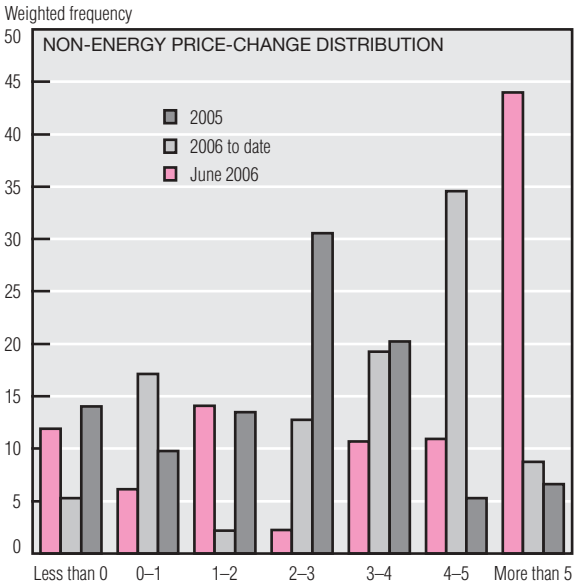
Inflation and Prices

June Price Statistics

	Percent change, last: 1 mo.[a]	3 mo.[a]	12 mo.	5 yr.[a]	2005 avg.
Consumer prices					
All items	2.4	5.1	4.3	2.6	3.6
Less food and energy	3.6	3.6	2.6	2.1	2.2
Median[b]	4.6	4.1	3.2	2.7	2.5
Personal consumption Expenditure Price Index					
All items	2.1	4.1	3.5	2.3	3.0
Less food and energy	2.9	2.8	2.4	1.9	2.1







a. Annualized.
b. Calculated by the Federal Reserve Bank of Cleveland.
SOURCES: U.S. Department of Labor, Bureau of Labor Statistics; U.S. Department of Commerce, Bureau of Economic Analysis; and Federal Reserve Bank of Cleveland.

Inflation remained elevated in June. The Consumer Price Index (CPI) rose 2.4% (annualized rate) during the month, following a 5.5% (annualized rate) advance in May. Nevertheless, monthly growth in the "core" retail price measures continued to exceed longer-term trends: The CPI excluding food and energy jumped 3.6% (annualized rate) for the second consecutive month, while the median CPI surged at a 4.6% annualized rate.

Longer-term growth trends in retail price measures were still accelerating in June, reaching levels unseen since late 2002 at least. The 12-month growth rate in the CPI excluding food and energy inched up to 2.6%, while the 12-month growth rate in the 16% trimmed-mean CPI ticked up to 2.9% and the median CPI rose to 3.2%.

The intensity of retail price increases continues to be rather persistent and broad-based. In 2005, about one-third of non-energy CPI components posted average monthly increases of 2% to 3%, while prices of only one-third of these components rose over 3%. Since the beginning of this year, a majority of the non-energy components has risen at average monthly rates exceeding 3%, while nearly 70% rose 3% or more in June. Indeed, nearly 45% of non-energy CPI components rose 5% or more in June for the second consecutive month.

Short-term household inflation expectations have also been elevated in the last few months, perhaps in response to upward retail price pressure. July survey data from U.S.

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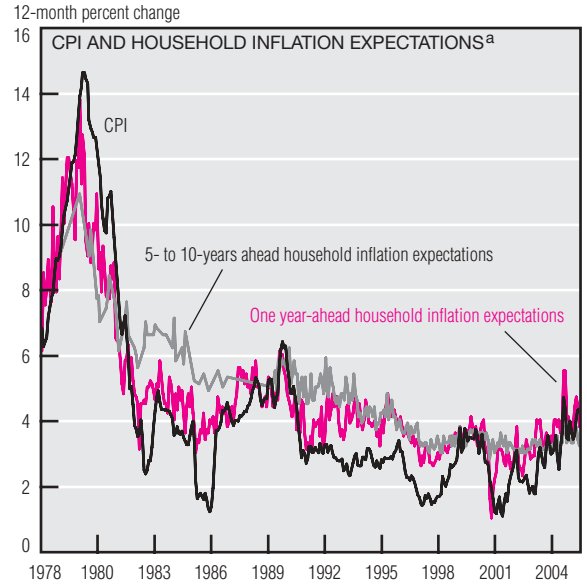
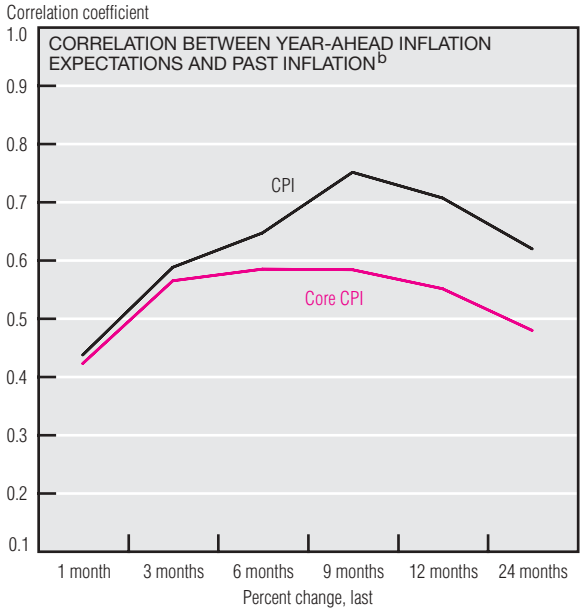
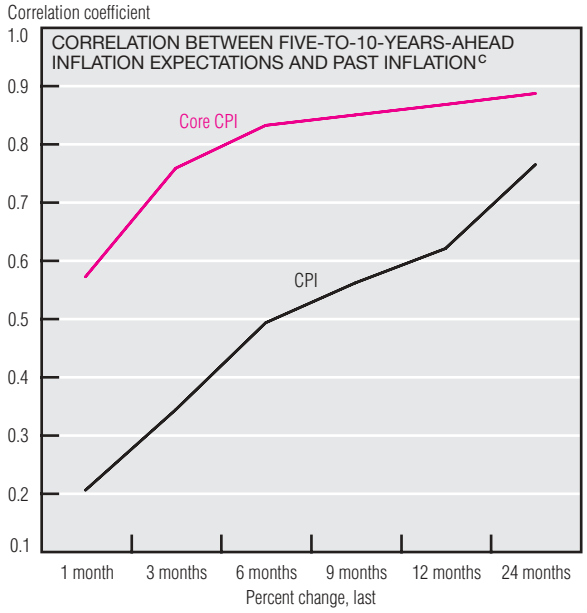
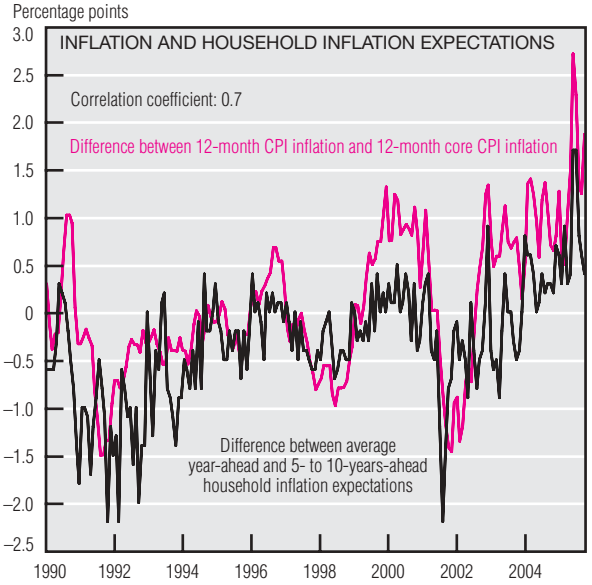
Inflation and Prices (cont.)







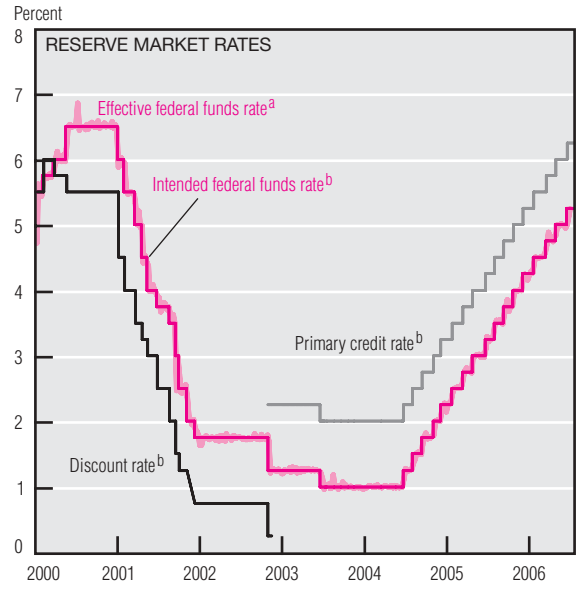


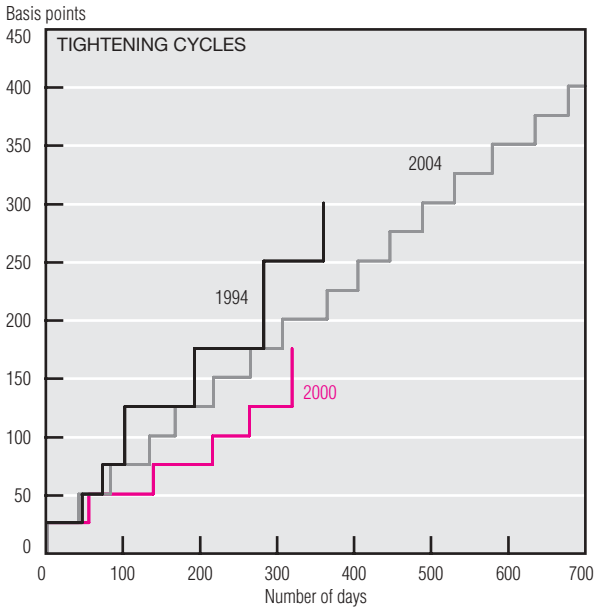
a. Mean expected change as measured by the University of Michigan's *Survey of Consumers*.
b. Correlations between the year-ahead household inflation expectations and 1-, 3-, 6-, 9-, 12-, and 24-month percent changes in the CPI and core CPI (lagged by one month), April 1990 to June 2006.
c. Correlations between the 5- to 10-year-ahead household inflation expectations and 1-, 3-, 6-, 9-, 12-, and 24-month percent change in the CPI and core CPI (lagged by one month), April 1990 to June 2006.
SOURCES: U.S. Department of Labor, Bureau of Labor Statistics; University of Michigan; and Federal Reserve Bank of Cleveland.

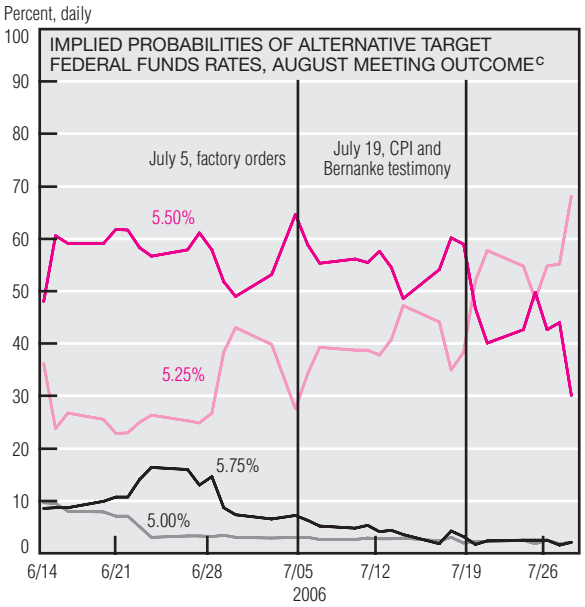
households show they expect retail prices in the next 12 months to rise 3.8%—down a bit from recent levels, but still on the high end of the rather narrow range in which they have fluctuated over much of the past decade. Meanwhile, longer-term inflation expectations are holding steady, with households anticipating a 3.2% rise in retail prices over the next five to 10 years.

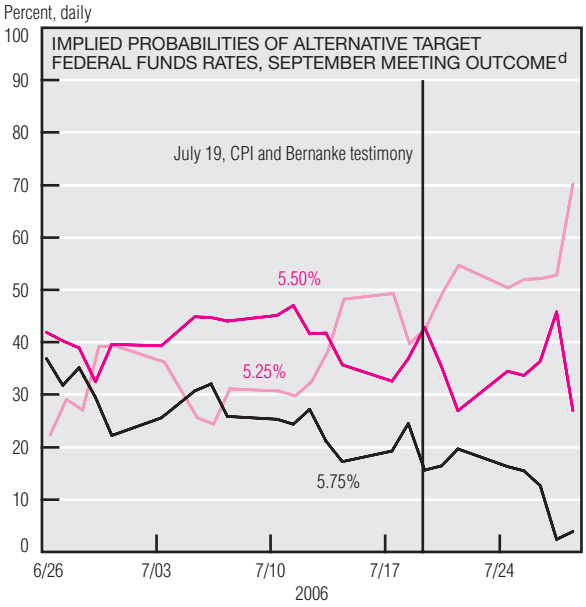
What information households base their inflation expectations on is the topic of frequent academic debate. Rather crude correlations, which examine the relationship between realized inflation rates and households' expectations, indicate that their year-ahead expectations are most closely correlated with the headline CPI inflation rate, and are especially sensitive to this measure over longer time horizons. Interestingly, expectations for the inflation rate over the next five to 10 years are more closely correlated with the core CPI inflation rate than with headline CPI. The correlation also grows stronger as the underlying core CPI inflation trend becomes more persistent. Indeed, the divergence between short- and long-term inflation expectations is correlated to the divergence between headline and core CPI inflation rates; this may indicate that households see through the same transitory fluctuations in prices that the core inflation measure is designed to isolate.

Monetary Policy









a. Weekly average of daily figures.
b. Daily observations.
c. Probabilities are calculated using trading-day closing prices from options on August 2006 federal funds futures that trade on the Chicago Board of Trade.
d. Probabilities are calculated using trading-day closing prices from options on September 2006 federal funds futures that trade on the Chicago Board of Trade.
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.

Markets suggest that we may be nearing the first pause after federal funds rate increases of 25 points (bp) at each of 17 consecutive FOMC meetings. After the June 28–29 meeting, the rate stood at 5.25%, which represented an increase of 425 bp from the recent low of 1% in June 2004. The current tightening cycle has lasted longer than both the 1994 and the 2000 tightening cycles.

Participants in the federal funds options market currently place a probability of roughly 70% on maintaining the 5.25% target rate at the August meeting. A 25 bp increase has around a 30% probability. On July 19, the CPI release showed that core inflation (excluding food and energy) exceeded expectations by posting a 3.6% (annualized) increase. This would ordinarily have been expected to strengthen the probability of a rate hike, but the release coincided with the Semi-annual Monetary Policy Report to Congress, in which Federal Reserve Chairman Ben Bernanke stated, "FOMC participants project that the growth in economic activity should moderate to a pace close to that of the growth of potential both this year and next. Should that moderation occur as anticipated, it should help to limit inflation pressures over time." On the whole, his statement signaled to futures market participants that a pause is more likely.

The probability of a pause at both the August and September meetings is roughly 70%; the probability of a 25 bp hike at one of these meetings is approximately 30%.

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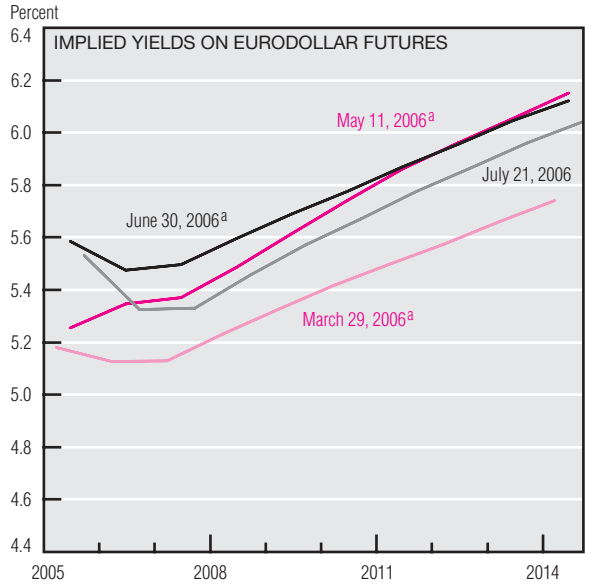
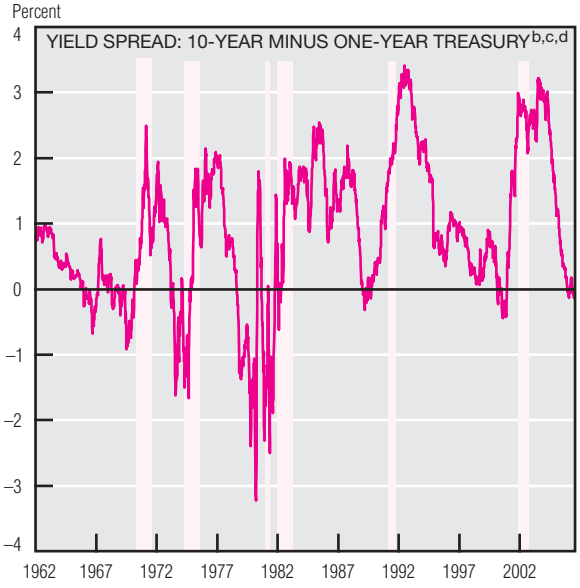
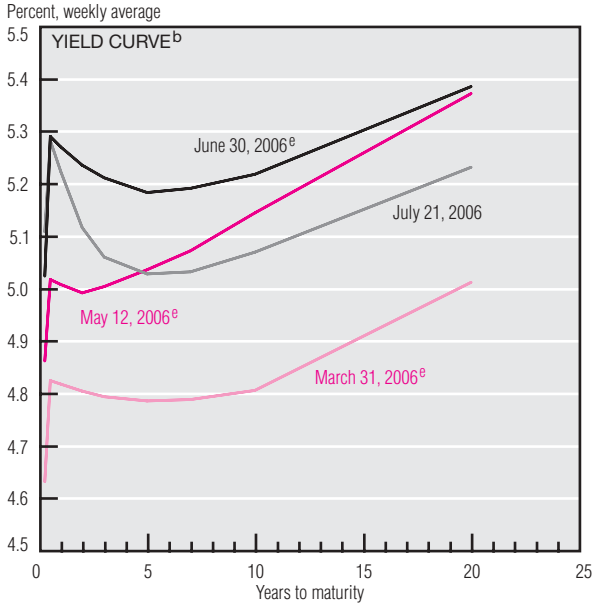
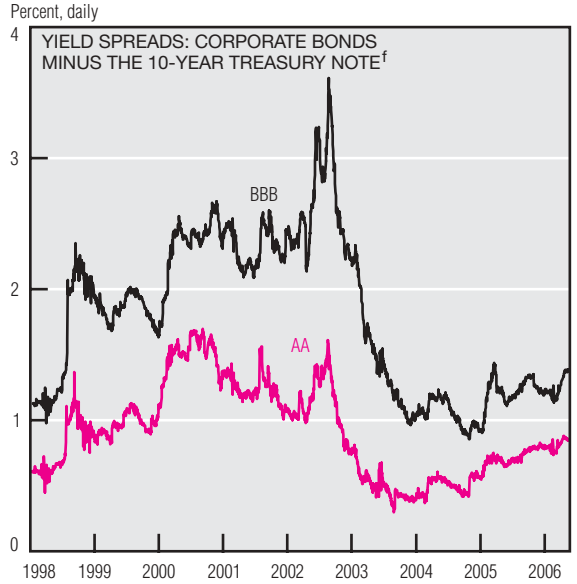
Monetary Policy (cont.)









a. One day after the FOMC meeting.
b. All yields are from constant-maturity series.
c. Shaded bars represent periods of recession.
d. Yields are calculated weekly.
e. Friday after the FOMC meeting.
f. Merrill Lynch AA and BBB indexes, each minus the yield on the 10-year Treasury note.
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.

Implied yields from Eurodollar futures gauge expected policy actions over a longer period. These futures suggest that there may be a pause in the short term before another increase of 50 bp. But the yields often overpredict the federal funds rate and, like most forecasts, become less accurate as they extend farther out.

Future policy rates, along with inflation expectations, help determine the yield curve. Parts of the yield curve are inverted. Rates more than six months out are uniformly lower than the six-month rate. To some, this inversion portends a slowdown in GDP. The spread compared to the three-month rate is not inverted, however. The Friday after the June FOMC meeting, the spread between the three-month and one-year rates was 25 bp; by July 21, that spread had decreased to 12 bp.

An inversion of the rates on the 10-year and one-year Treasury notes is considered one of the best recession predictors. On June 30, the Friday after the FOMC meeting, the 10-year Treasury note was 5 bp lower than the one-year note. By July 21, that spread had widened to –15 bp. The yield on the one-year Treasury note fell from 5.27 to 5.22 over the same period, and the 10-year note fell from 5.22 to 5.07.

The spread between safe and risky bonds is also thought to indicate current and future GDP. There have been slight upticks in the 10-year Treasury's spreads with two indexes, the BBB (35 bp) and the AA (83 bp).

Taylor Rules and Monetary Policy

a. The target Taylor rule 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.
b. Effective federal funds rate on the last day of each quarter.
c. The partial-adjustment Taylor rule is the weighted average of the last two quarters' federal funds rate and the target Taylor rule.
d. The real federal funds rate is defined as the difference between the nominal federal funds rate and core PCE inflation.
e. Treasury inflation-protected securities.
f. Ten-year, TIPS-derived expected inflation, adjusted for the liquidity premium on the market for the 10-year Treasury note.
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.

Monetary policy is often described as a rule or strategy for changing the federal funds rate. No rule captures the FOMC's decisionmaking process perfectly, but the Taylor rule roughly describes its past behavior, offering a benchmark for how it might behave in the future. This rule posits that the Fed raises the funds rate when inflation rises or real output growth exceeds the estimated growth of potential and lowers the rate when inflation falls or real output growth lags the estimated growth of potential.

An estimated Taylor rule of this sort provides a "target" that the FOMC can be thought to approach over time. The current number suggests that the FOMC has tightened more than it has under similar economic conditions in the past. There is evidence, however, that the FOMC only slowly tries to adjust the funds rate to its assumed target; a "partial-adjustment Taylor rule" maps the funds rate's movements extremely closely.

But any rule depends implicitly on the Fed's long-term inflation target and the economy's long-term average real interest rate. The real ex post (after inflation) interest rate is lower today than it was in the mid- to late 1990s. This rate can also be gleaned from the yield on Treasury inflation-protected securities (TIPS), which measures what the market expects real interest rates to average over the next 10 years. The TIPS yield also suggests that real interest rates may have fallen. If the long-term real funds rate has dropped below the

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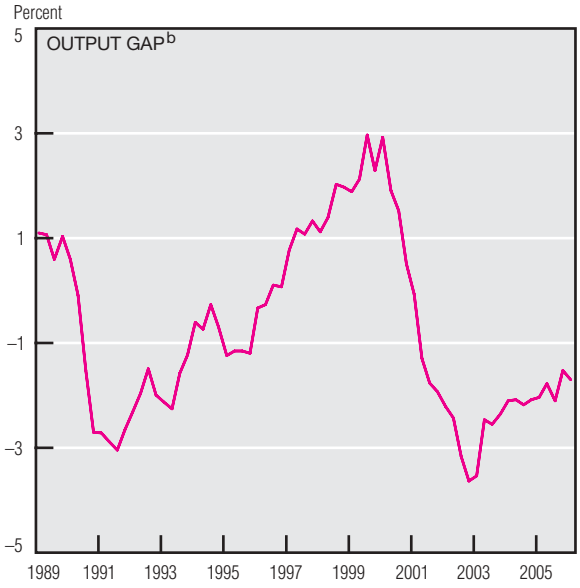
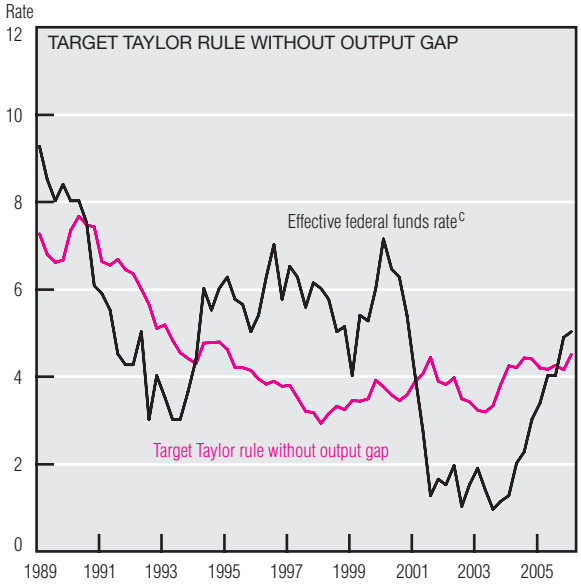
Taylor Rules and Monetary Policy *(cont.)*





Taylor Rule with Alternative Inputs, 2006:IIQ

	Target Taylor rule	Partial-adjustment Taylor rule
Baseline Taylor rule	2.58	4.69
Target inflation (1.5%)	2.98	4.77
Long-run real rate (1.5%)	1.78	4.51
Previous quarter's output gap growth	4.12	5.02
Previous quarter's inflation rate	3.45	4.88

a. Personal consumption expenditures less food and energy.
b. The output gap is defined as the natural log of real gross domestic product less the natural log of potential gross domestic product, taken from Congressional Budget Office data.
c. Effective federal funds rate on the last day of each quarter.
SOURCES: U.S. Department of Commerce, Bureau of Economic Analysis; Board of Governors of the Federal Reserve System; and Bloomberg Financial Information Services.

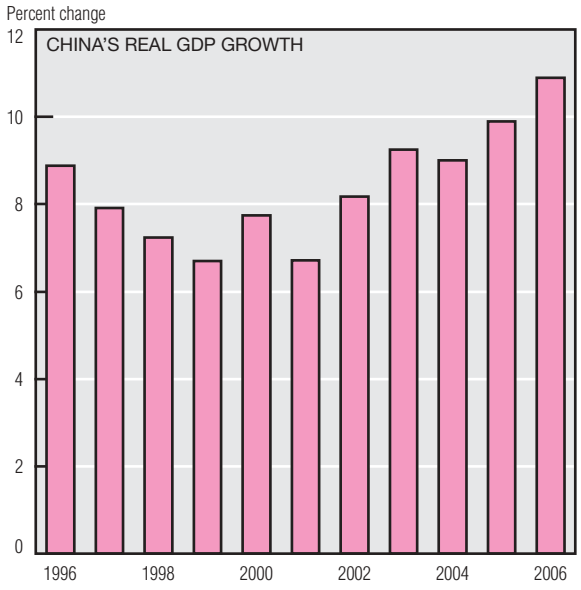
2.3% estimated in the above rule, the target Taylor rule would be lower than the chart suggests.

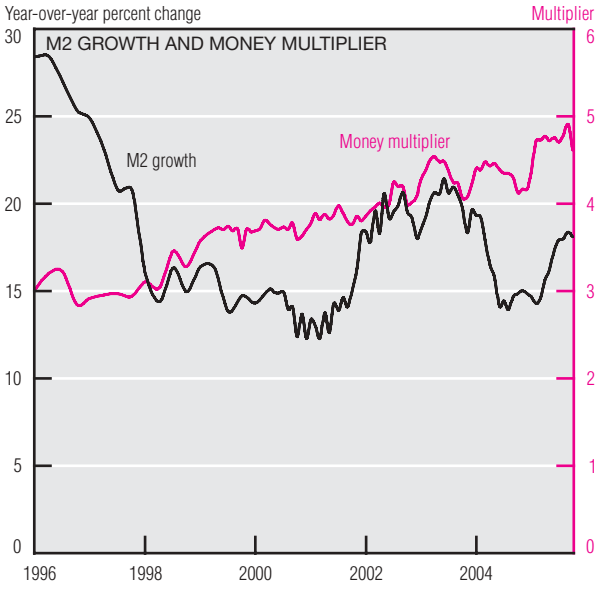
The FOMC's implicit long-term inflation target also influences the Taylor rule, which assumes that the implicit inflation target for core PCE inflation is 2.4%. It is likely, however, that this implicit target has fallen since the late 1980s and is slightly above 1.5%. TIPS provides another clue to the Fed's implicit long-term inflation target. Since TIPS protects against inflation over the next 10 years, inflation should equal the 10-year yield on nominal Treasury bonds minus the real TIPS yield. This calculation suggests that CPI inflation over the next 10 years should average 2.3%. Since PCE inflation has averaged around $\frac{1}{2}$ percentage point below CPI inflation, the Fed's implicit long-term inflation target might be between 1.5% and 2%. This implies a higher target Taylor rule than the chart suggests.

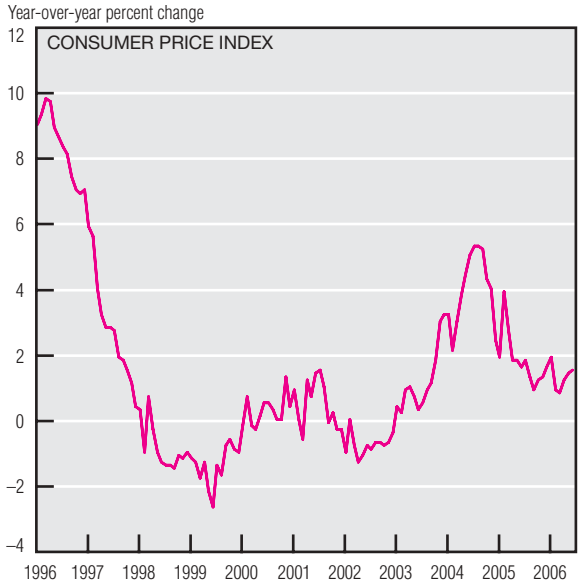
Another important input to the rule is the output gap, but estimating it entails substantial error. The most recent estimate suggests that although output is below potential, it is nearly stable, but that estimate is heavily influenced by the 2006:IIQ slowdown in GDP. This may be an aberration, however. If the gap were shrinking at the same rate as in previous quarters, the target Taylor rule would be nearly 150 basis points above the current estimate of 2.6%.

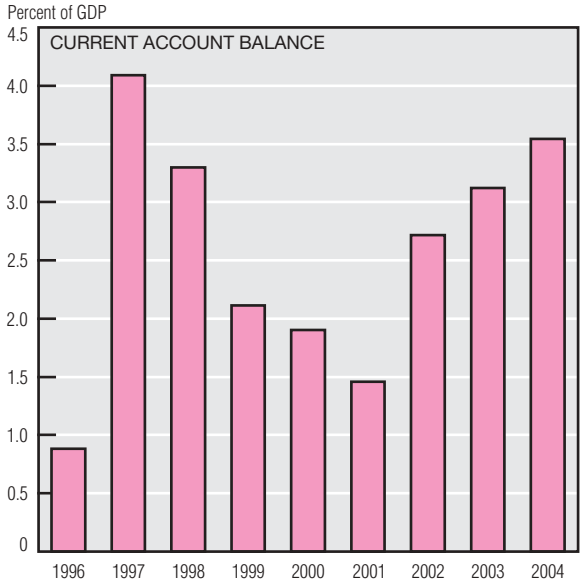
Yet another estimate of where the target Taylor rule might head can be made by assuming that inflation over the next three quarters will be 2.84%, as in the most recent quarter. This suggests that the target Taylor rule might be 90 basis points above its current level.

China and the Inflation Threat









SOURCES: International Monetary Fund, *International Financial Statistics*, July 2006; People's Bank of China; and National Bureau of Statistics of China.

There's smoke…China's GDP advanced 11.3% on a year-over-year basis in 2006:IIQ, mostly thanks to vigorous exports and very strong investment spending. China's trade surplus reached a record $174 billion (annual rate) in May, and investment spending this year is advancing at a 30% clip. The strong second-quarter showing brought economic growth to 10.9% for the first half of the year. Economists, who earlier projected that the country's real economic growth would advance only modestly more than 9%, are ramping up their forecasts for this year to roughly $10^{1}/_{2}$%. Rapid money growth is accommodating this brisk expansion. The standard broad measure of money, M2, is reportedly exceeding its 2005 growth rate this year and significantly overshooting the 16% target set by the People's Bank of China.

But no fire! Although the economy is heating up, strong growth and rapid money expansion have not yet ignited an inflationary flame. Chinese consumer prices rose just 1.5% on a year-over-year basis in June. Producer prices have shown somewhat more spark, rising 3.5% for the year ending in June, but producer prices do not seem to forecast inflation at the consumer level.

China's central government has been trying to prevent the economy from overheating. They have relied partly on selective credit controls designed to restrict certain types

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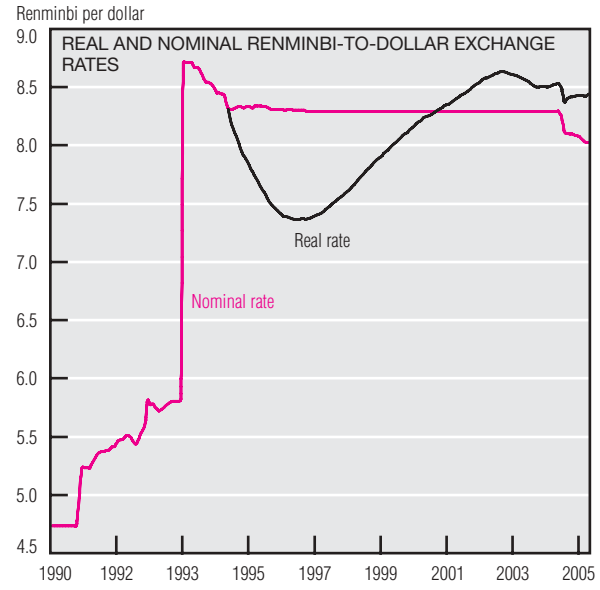
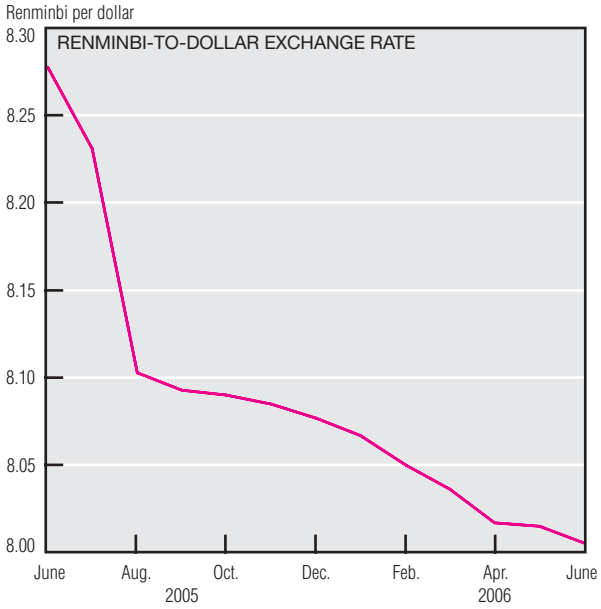
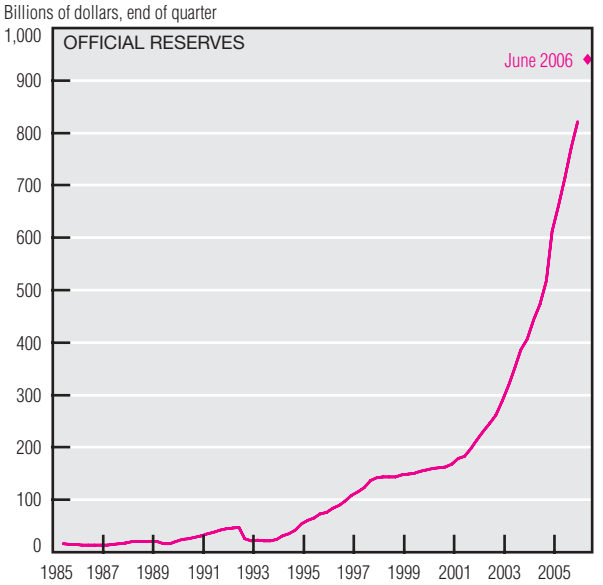
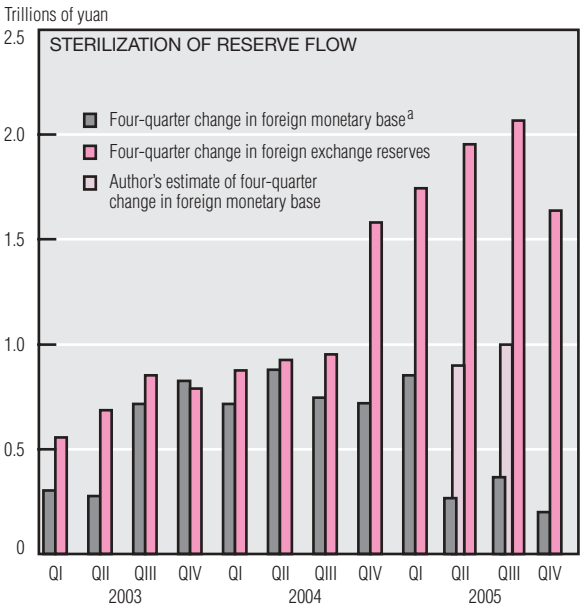
China and the Inflation Threat (cont.)









a. The four-quarter change in the foreign monetary base for 2005:IIQ–2005:IVQ seems to be based on incomplete information; the author's estimates for that period are also shown.
SOURCES: International Monetary Fund, *International Financial Statistics*, July 2006; and People's Bank of China.

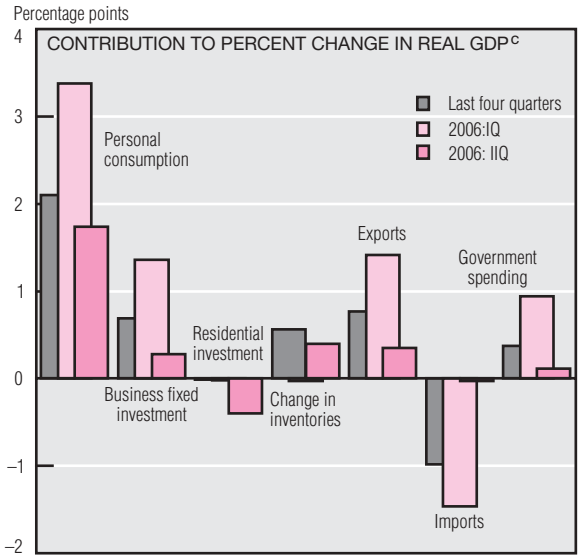
of investment, notably in the steel, aluminum, and cement industries. Local officials, who focus on employment and local development, have been less than fully cooperative. The People's Bank also raised reserve requirements in June and July, and increased its one-year benchmark lending rate in April for the first time since October 2004. Damping down economic activity through the banking sector may prove difficult because the country's banks are weak, and firms rely heavily on retained earnings to finance investment.

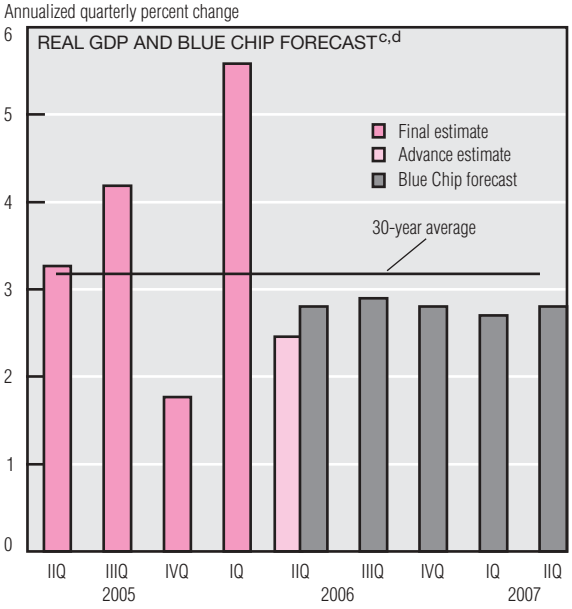
But China's most powerful weapon in the fight against inflation is rarely mentioned. The country manages its exchange rate closely, imposes tight restrictions on financial outflows, and requires firms to remit much of their foreign exchange earnings. As a result, the People's Bank accumulates huge reserve holdings and pays out Chinese renminbi in the process. All else being constant, China's monetary base should keep pace with its very rapid accumulation of foreign exchange reserves. Its central bank, however, offsets at least half the impact of its foreign exchange interventions by selling special bonds to the market. How long can it keep this up? To conduct an independent monetary policy, China needs a flexible exchange rate.

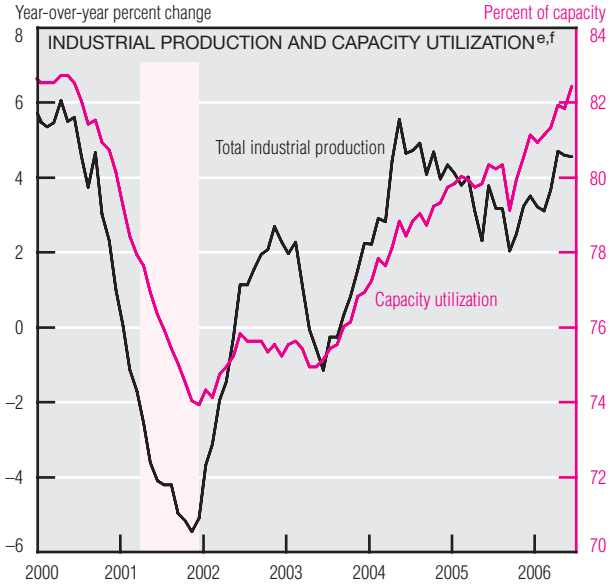
Economic Activity

Real GDP and Components, 2006:IIQ[a,b]
(Advance estimate)

	Change, billions of 2000 $	Annualized percent change: Current quarter	Annualized percent change: Four quarters
Real GDP	68.9	2.5	3.5
Personal consumption	49.2	2.5	3.0
Durables	–1.4	–0.5	3.3
Nondurables	9.6	1.6	3.7
Services	38.7	3.5	2.6
Business fixed investment	8.7	2.7	6.8
Equipment	–2.6	–1.0	6.9
Structures	7.9	12.7	6.3
Residential investment	–10.0	–6.3	–0.2
Government spending	2.9	0.6	1.9
National defense	–1.3	–1.1	2.0
Net exports	9.5	—	—
Exports	10.3	3.3	7.4
Imports	0.8	0.2	6.1
Change in business inventories	11.4	—	—







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. Shaded bar represents recession.
SOURCES: U.S. Department of Commerce, Bureau of Economic Analysis; and *Blue Chip Economic Indicators*, July 10, 2006.

Real GDP increased at an annualized rate of 2.5% in 2006:IIQ, according to the Commerce Department's advance estimate. This was a sharp decrease from the previous quarter's annualized growth rate of 5.6% and somewhat less than was generally expected. (The Blue Chip forecast for 2006:IIQ growth was 2.8% as of July 10.) The slowdown between 2006:IQ and 2006:IIQ was evident in all major components of GDP except imports. The advance estimate is consistent with other evidence that the economy slowed in 2006:IIQ.

Contributions from almost all components of the change in real GDP decreased significantly over the quarter. Residential investment caused a decrease of 0.40 percentage point (pp) in GDP, compared to a drop of 0.02 pp in 2006:IQ. Personal consumption, which was $49.2 billion (chained 2000 dollars), contributed 1.74% pp to the quarterly change in real GDP. By comparison, personal consumption contributed 3.38 pp in 2006:IQ and 2.10 pp over the past four quarters. Change in inventories contributed 0.40 pp to growth in 2006:IIQ, after adding almost nothing in 2006:IQ. One bright spot is imports, which exerted virtually no drag on the U.S. economy in 2006:IIQ, compared with –1.46 pp the previous quarter.

Total industrial production rose 4.52% from June 2005 to June 2006 and was up 0.80% from May 2006. Capacity utilization has increased steadily since June 2003, reaching 82.4% of capacity in 2006:IIQ, the first time in six years that it has exceeded 82%.

Per capita personal income differs across states. Furthermore, the states'

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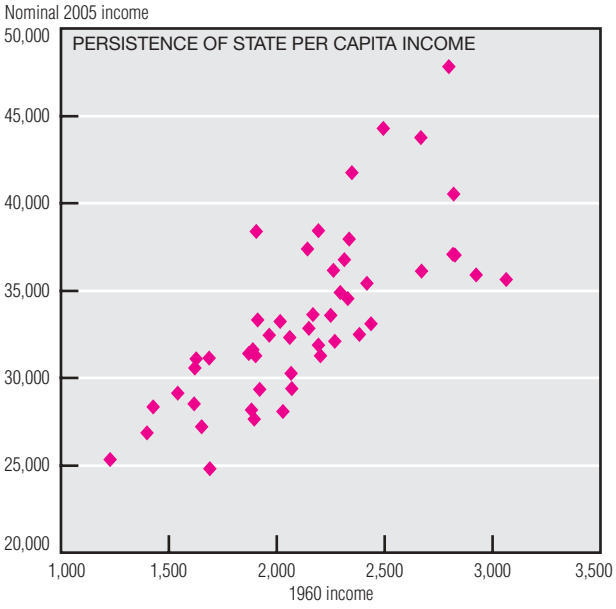
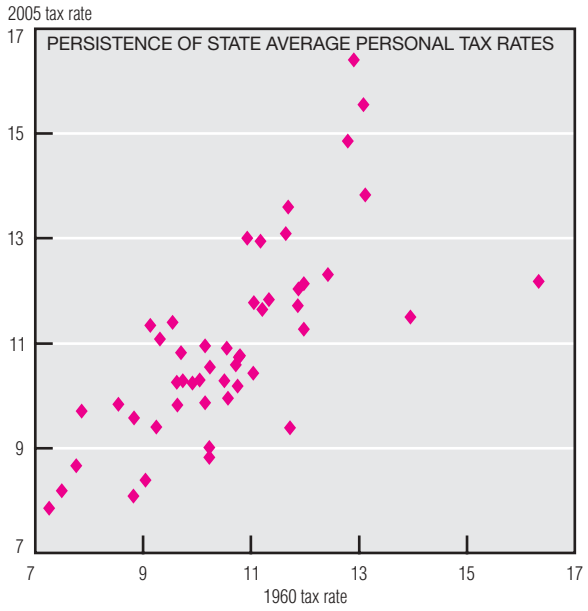
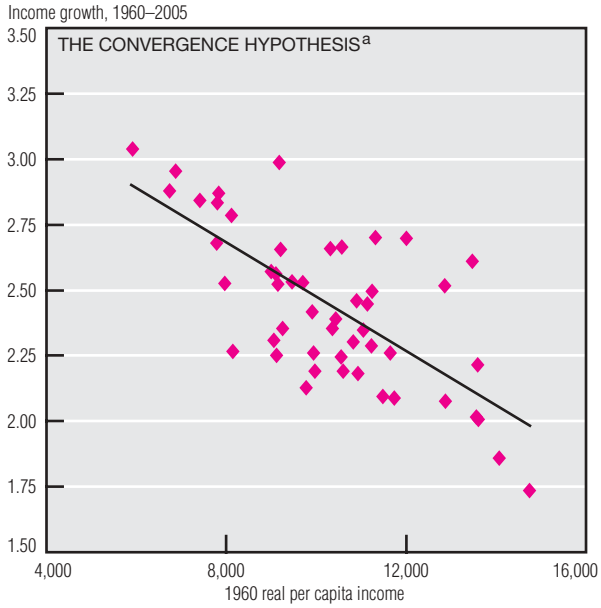
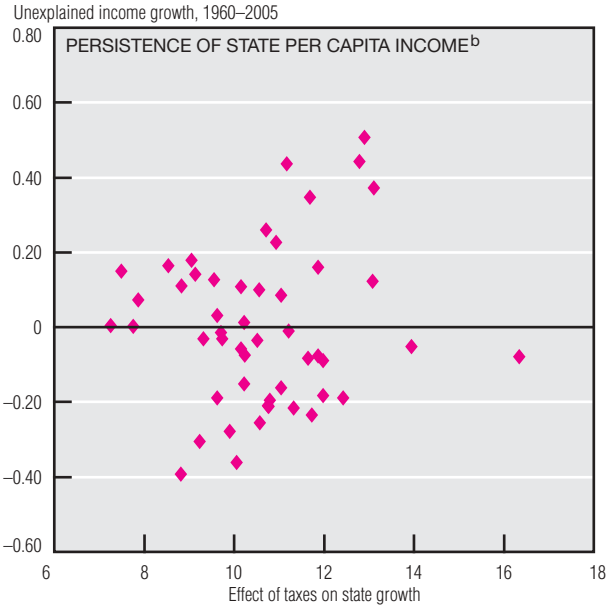
Economic Activity *(cont.)*









a. Annualized data
b. Unexplained growth calculated from OLS regression: 1960–2005 growth rate on 1960 real per capita income.
SOURCES: U.S. Department of Commerce, Bureau of Economic Analysis; and Haver Analytics.

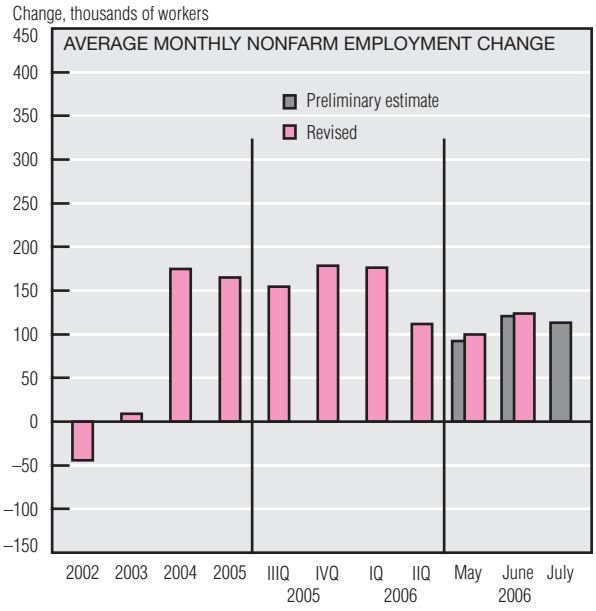
relative rankings are persistent: A scatter plot shows that states with low per capita incomes in 1960 also had (relatively) low per capita incomes in 2005. In other words, states do not show much mobility with respect to per capita income: If they did, the scatter plot would look more like a shotgun blast pattern.

Average personal tax rates, computed from the difference between personal income and personal disposable income, likewise display great persistence. States with high tax rates in 1960 tended to have high tax rates in 2005 as well (the scatter plot lines up roughly along an upward-sloping line).

Along with persistence in states' per capita income rankings, there is also evidence of income convergence. States with low per capita income in 1960 exhibited, on average, faster real growth in 1960–2005 than those with high income in 1960, implying that the low-income states are catching up. In fact, economic theory predicts such convergence.

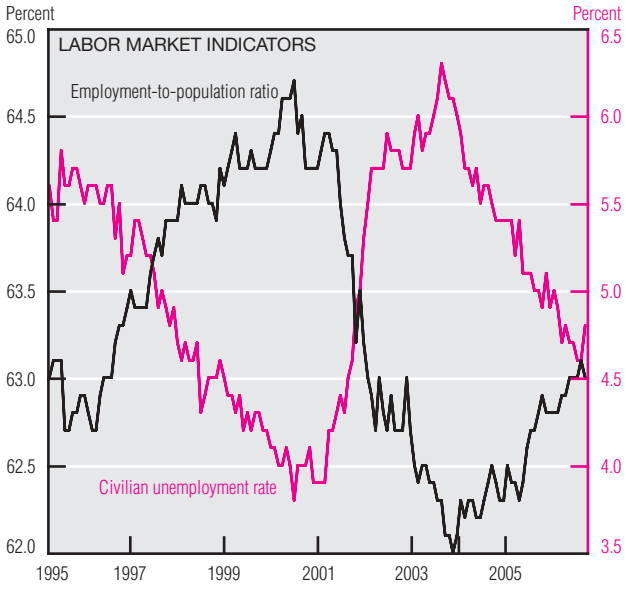
One might think that high taxes inhibit growth by discouraging capital accumulation. Do the data support this view? To control for the effect of initial income on growth, we can define "unexplained growth" as the difference between actual 1960–2005 growth and the best-fit line of growth against initial income. A scatter plot of unexplained growth against 1960 tax rates reveals no obvious pattern. One explanation is that average personal tax rates are not relevant; the tax rates on business income might be better measures but are difficult to construct using available data. Alternatively, states may use tax revenues partly to enhance growth, perhaps through improved infrastructure or workforce quality.

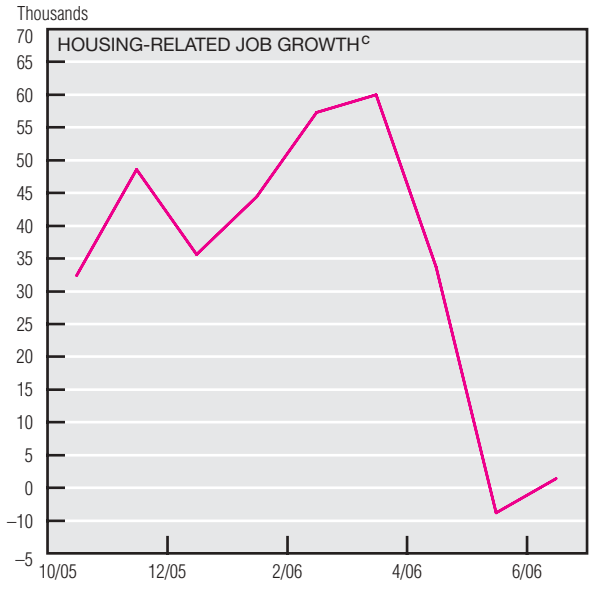
Labor Markets



Labor Market Conditions

	Average monthly change (thousands of employees, NAICS)				
	2003	2004	2005	Jan.–June 2006	July 2006
Payroll employment	9	175	165	144	113
Goods producing	–42	28	22	25	–2
Construction	10	26	25	14	6
Manufacturing	–51	0	–6	6	–15
Durable goods	–32	9	1	11	–10
Nondurable goods	–19	–9	–7	–5	–5
Service providing	51	147	143	120	115
Retail trade	–4	17	13	–13	0
Financial activities[a]	7	8	12	15	6
PBS[b]	23	40	41	32	43
Temporary help svcs.	12	13	14	–4	–2
Education & health svcs.	30	33	31	33	24
Leisure & hospitality	19	26	21	23	42
Government	–4	13	14	10	0
	Average for period (percent)				
Civilian unemployment rate	6.0	5.5	5.1	4.7	4.8





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.
c. Three-month moving average of change in total employment in 10 housing-related industries.
SOURCES: U.S. Department of Labor, Bureau of Labor Statistics; "U.S. Housing-Related Employment Growth Continues to Soften," www.dismalscientist.com, July 21, 2006.

Employment has grown steadily over the past three months. In July, nonfarm payrolls increased by 113,000, which was less than the average monthly increase for 2005 (165,000), but in line with the 112,000 average monthly gain for 2006:IIQ.

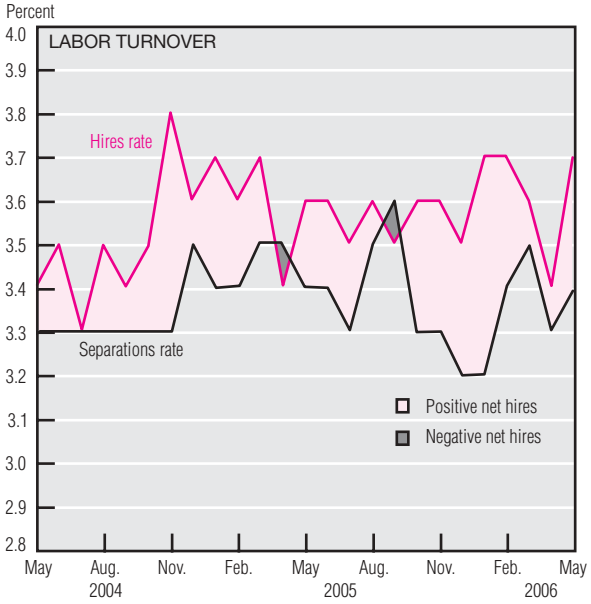
Service-providing industries drove the increase in employment, adding 115,000 jobs.

The strongest gains were in professional and business services (43,000), education and health services (24,000), and leisure and hospitality (42,000). Manufacturing created most of the drag on employment growth, decreasing by 15,000 jobs in July and largely offsetting its 22,000 increase in June.

The civilian unemployment rate increased from 4.6% to 4.8% in July. The labor force increased by 213,000, while the participation rate remained unchanged. The employment-to-population ratio remained largely unchanged at 63.0%.

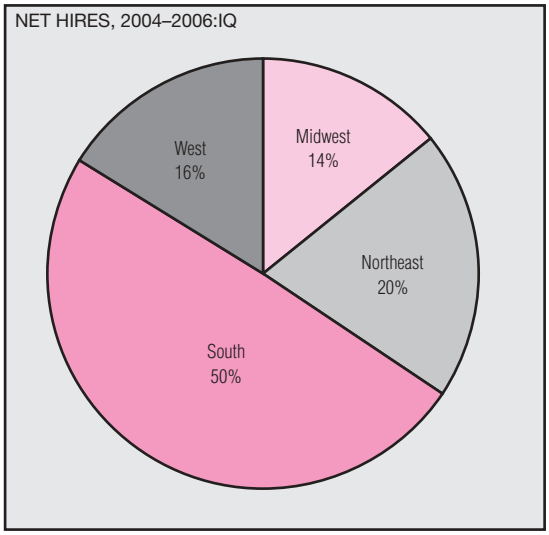
Weakness in the housing market may be filtering through to the labor market. Housing-related employment growth—comprised of 10 construction, retail and wholesale, finance, and service industries that are sensitive to housing market trends—has slowed dramatically in the last two months.

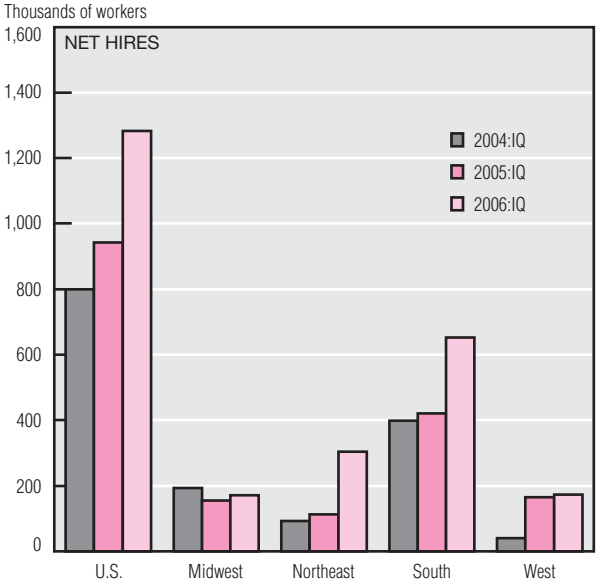
Job Openings and Labor Turnover



Average Net Hires Rates by Industry, 2004–May 2006

	Percent		
	Hires	Separations	Net hires
Total private	3.93	3.71	0.22
Mining	3.39	2.96	0.43
Construction	5.63	5.43	0.20
Manufacturing	2.48	2.99	–0.51
TPU[a]	3.91	3.80	0.11
Information	2.36	2.45	–0.09
FIRE[b]	2.36	2.21	0.14
PBS[c]	5.08	4.57	0.51
Education and health services	2.60	2.32	0.28





a. Transportation and public utilities.
b. Finance, insurance, and real estate.
c. Professional and business services.
SOURCE: Author's calculations from U.S. Department of Labor, Bureau of Labor Statistics, *Job Openings and Labor Turnover Survey*, May 2006.

The Job Openings and Labor Turnover Survey measures the number of unfilled jobs, an important component of unmet labor demand. The survey, begun in 2001, provides data on employment, job openings, hires, quits, layoffs, discharges, and other separations, which are useful in analyzing the health of the labor market.

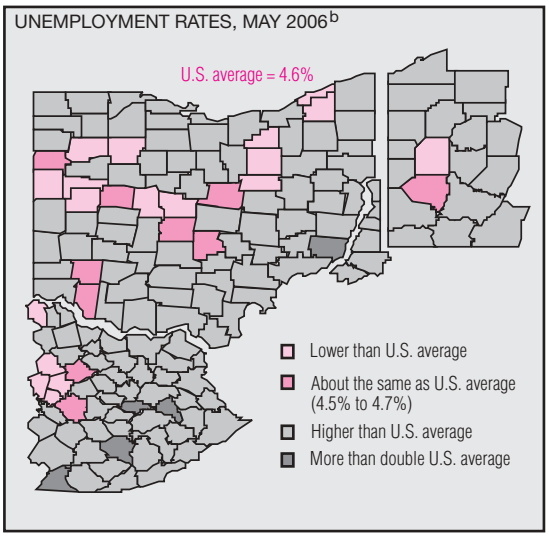
Current data show that the net hires rate is positive, a sign of growing demand for labor. Rates of job openings and total separations were unchanged in May; this created a positive net hires rate for the nation, continuing a trend that began in September 2005.

Professional and business services drove the increase, with an average net hires rate of 0.51% since 2004. Positive hires rates were also reported for mining (0.43%) and education and health services (0.28%). Manufacturing offset some of those gains with a net hires rate of –0.51% over the two-year period.

Most of the growth occurred in the South, which has accounted for half of net hires since 2004. The rest of the nation shared the other half of net hires, with the Northeast claiming 20%, the West 16%, and the Midwest 14%.

In each of the last three years, the first quarter followed the trend of increasing net hires across the U.S. In 2006:IQ, the South and Northeast regions reported the most dramatic increases. Although the Midwest increased its number of net hires, it was the only region where the net hires rate did not rise.

Fourth District Employment



Payroll Employment by Metropolitan Statistical Area

	12-month percent change, June 2006							
	Cleveland	Columbus	Cincinnati	Dayton	Toledo	Pittsburgh	Lexington	U.S.
Total nonfarm	0.2	0.9	1.1	–0.3	0.9	0.8	1.4	1.4
Goods-producing	–0.8	0.8	0.3	–1.9	0.3	0.1	–1.0	1.3
Manufacturing	–0.3	0.9	–0.5	–2.5	0.2	–2.2	–2.0	0.2
Natural resources, mining, and construction	–2.4	0.7	2.0	0.6	0.6	4.0	1.5	3.3
Service-providing	0.4	0.9	1.3	0.1	1.1	0.9	2.0	1.4
Trade, transportation, and utilities	–0.7	0.4	–0.3	–1.8	0.0	0.3	2.4	0.5
Information	–3.1	0.0	–0.6	–3.5	–4.9	–3.0	0.0	–0.1
Financial activities	–0.1	–0.7	0.5	–2.1	4.3	0.4	0.9	2.5
Professional and business services	1.8	2.5	3.1	1.9	2.4	0.8	1.7	2.6
Education and health services	2.5	3.0	2.1	0.5	2.2	2.1	1.6	2.2
Leisure and hospitality	1.7	0.2	2.1	1.0	1.4	3.7	4.7	1.5
Other services	0.0	1.1	1.1	–1.2	–1.3	–1.0	0.0	0.2
Government	–2.0	0.1	0.8	1.2	0.4	–0.5	1.6	0.8
May unemployment rate (percent)	4.6	4.6	5.2	5.6	5.9	5.1	4.3	4.6

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.

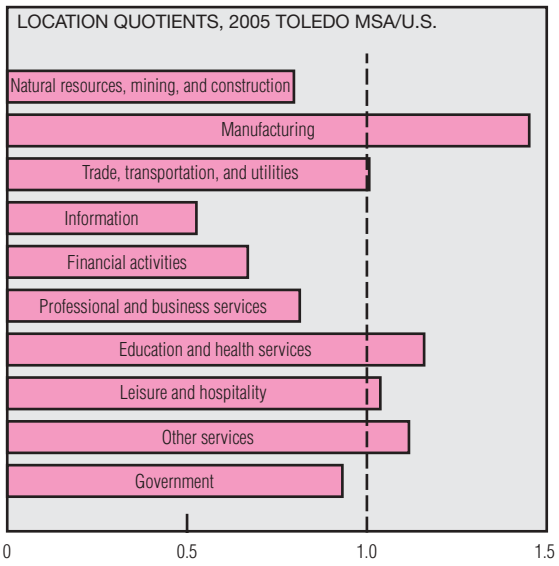
The Fourth District's unemployment rate fell to 5.2% in May, down from 5.5% in April. Over the month, employment increased 0.1%, the number of unemployed people fell 4.7%, and the labor force shrank 0.1%. Nationally, the unemployment rate was 4.6% in both May and June.

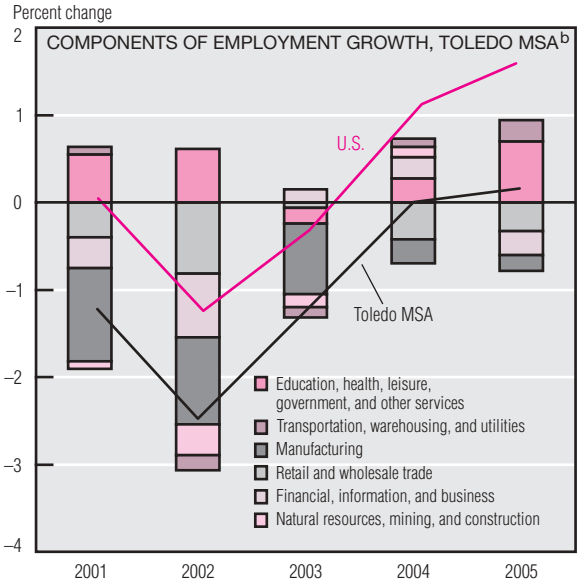
Although unemployment rates in Fourth District counties generally exceeded the national average—145 of the District's 169 counties had unemployment rates above 4.6% in May—many counties' rates fell from April to May. In fact, 135 counties' unemployment rates fell, 12 remained the same, and only 22 worsened.

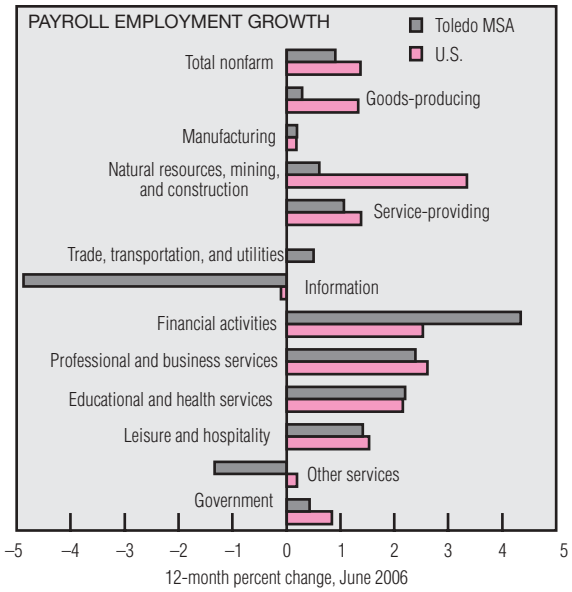
Rates in most of the District's metropolitan areas likewise dropped over the month. In Cleveland, Columbus, Cincinnati, Dayton, Toledo, and Lexington, rates fell by at least 0.2 percentage point; this brought rates in Cleveland, Columbus, and Lexington down to the national average or below.

Over the year, employment growth in Cleveland (0.2%) and Dayton (–0.3%) was weak compared to the nation's (1.4%). This resulted partly from goods-producing industries' poor employment growth in Cleveland (–0.8%) and Dayton (–1.9%). By comparison, U.S. employment in those industries gained 1.3% over the year. Like Cleveland and Dayton, Lexington lost goods-producing employment to the tune of 1.0%; however, its total employment change matches the U.S. gain of 1.4%.

The Toledo Metropolitan Area







NOTE: The Toledo metropolitan statistical area consists of Fulton, Lewis, Ottawa, and Wood counties.
a. Seasonally adjusted.
b. Lines represent total nonfarm employment growth for the U.S. and the Toledo MSA.
SOURCE: U.S. Department of Labor, Bureau of Labor Statistics.

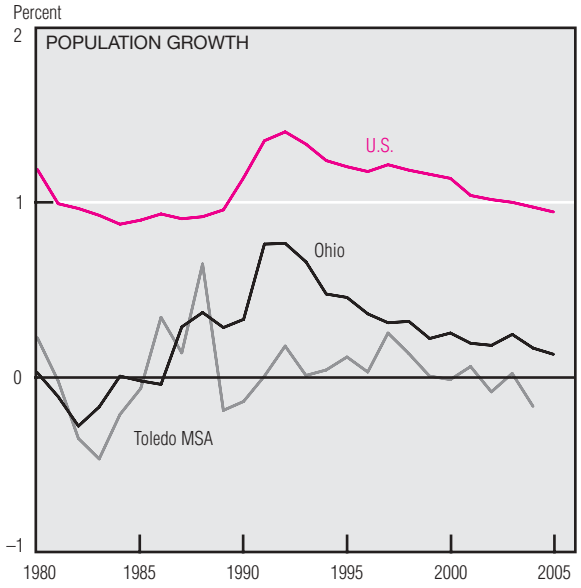
Toledo, Ohio, had 331,000 jobs in 2005, which made it the Fourth District's seventh-largest metropolitan statistical area in terms of employment. Its industrial composition is quite different from that of the U.S., as measured by its location quotient—the simple ratio of an industry's share of total employment in an area to that industry's share of total U.S. employment. In the Toledo area, the manufacturing industry's share of total employment is nearly 1.5 times larger than in the U.S.; the information industry's share in the area is only half as large as in the nation.

Toledo's strong manufacturing presence may be one reason it has not yet rebounded to its pre-recession employment level of March 2001, whereas the nation took less than four years to do so. Toledo still has 3% fewer jobs than it had before the recession. Indeed, the metropolitan area's manufacturing industry subtracted from its total employment growth in each of the last five years. The industries that added to the area's total growth were education, health, leisure, government, and other services, which rose in four of the last five years.

The metropolitan area's nonfarm employment grew by 0.9% between June 2005 and June 2006; during that

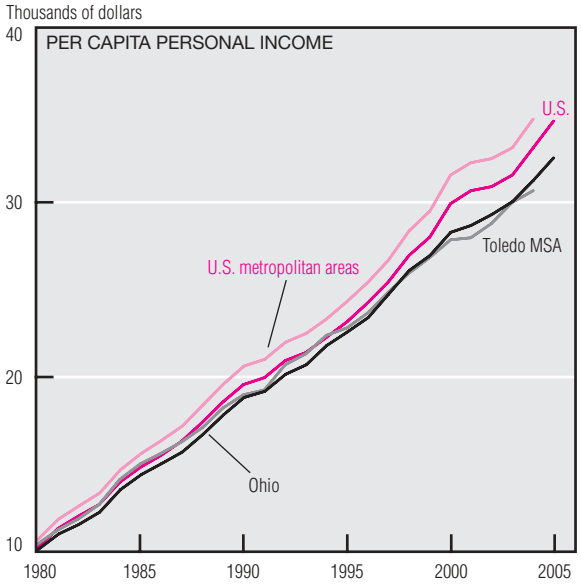
(continued on next page)

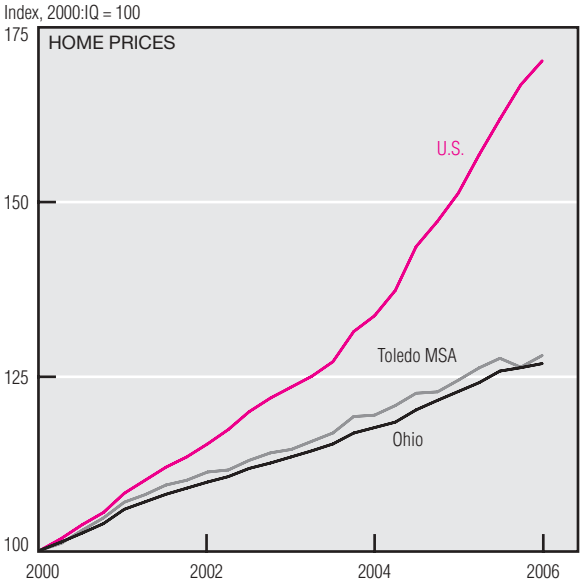
The Toledo Metropolitan Area *(cont.)*



Selected Demographics, 2004

	Toledo MSA[a]	Ohio	U.S.
Total population (millions)	0.6	11.2	285.7
White	82.5	85.7	77.3
Black	14.3	12.3	12.8
Other	3.3	1.9	9.9
0–19	27.5	27.2	27.9
20–34	21.7	19.4	20.3
35–64	39.1	40.6	39.8
65 or older	11.7	12.8	12.0
Percent with bachelor's degree or higher	22.3	23.3	27.0
Median age	35.8	37.5	36.2





NOTE: The Toledo metropolitan statistical area consists of Fulton, Lewis, Ottawa, and Wood counties.
a. Does not include Ottawa County.
SOURCES: U.S. Department of Commerce, Bureau of the Census and Bureau of Economic Analysis; and U.S. Department of Housing and Urban Development, Office of Federal Housing Enterprise Oversight.

period, U.S. jobs increased by 1.4%. Toledo's goods-producing and service-providing sectors both underperformed the nation. The area's financial activities industry expanded its employment considerably (4.3%) over the year; however, the information industry shed nearly 5% of its jobs.

As of 2004, the metropolitan area's population was 658,000. With almost no growth over the last 10 years, Toledo has added population at a rate far below that of Ohio and the U.S. While its racial composition resembles Ohio's, the area has a lower median age and a smaller percentage of residents with a bachelor's degree than either the state or the nation.

The Toledo area's lower education level probably contributes to its below-average per capita personal income. Although residents of metropolitan areas earn more than the U.S. per capita income on average, residents of Toledo earn less; their average per capita personal income is closer to Ohio's than to the nation's.

In 2000, the median home value in the Toledo metro area was $96,800, about $23,000 less than the nation and $7,000 less than the state. Since that time, the area's home prices are estimated to have risen by about 25%. Home prices in Ohio rose by a similar percent, but both the metro area and the state significantly trailed the U.S. average home-price appreciation of 66%.

Industrial Loan Corporations

a. Through 2006:IQ. Data for 2006 are annualized.
SOURCE: Author's calculation from Federal Financial Institutions Examination Council, *Quarterly Bank Reports of Condition and Income*.

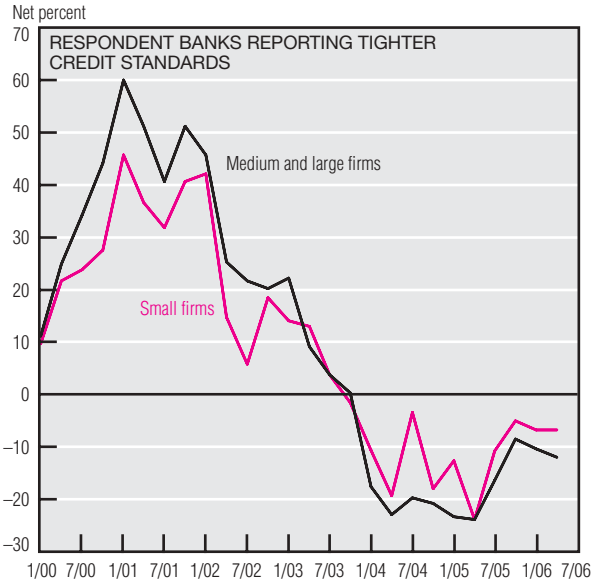
Industrial loan corporations and industrial banks (collectively known as ILCs) are FDIC-insured, state-chartered depository institutions. Unlike traditional commercial banks, they can be owned by nonfinancial firms, such as Target and General Motors. Recent applications by Wal-Mart and Home Depot to acquire an ILC have thrust this once-sleepy little industry into the spotlight.

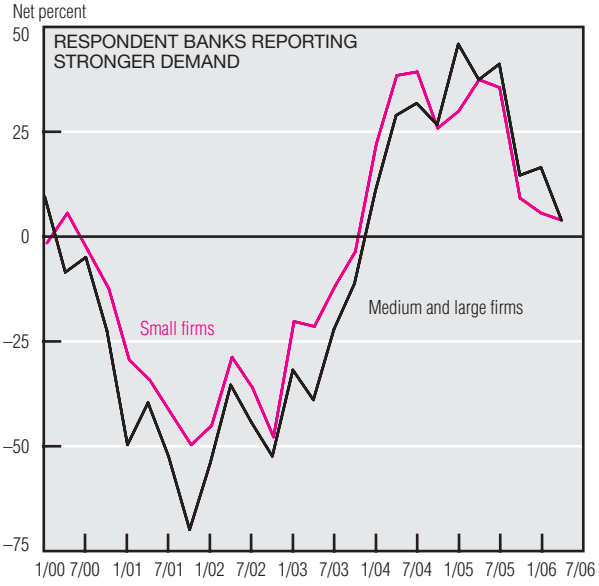
Although the number of ILCs fell slightly from 65 at the end of 1995 to 61 in 2006:IQ, their assets increased 12-fold, from around $13 billion to more than $155 billion. The five largest ILCs hold 76% of industry assets; the largest of all ranks in the top 25 depository institutions in terms of total assets.

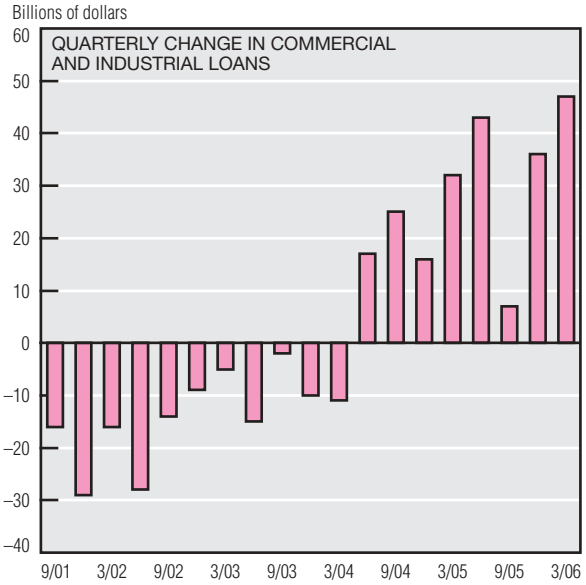
The acceleration of asset growth that started in 1999 depressed the industry's performance temporarily, and return on assets (ROA), return on equity (ROE), and the core capital ratio (common equity to assets) all fell. The impact of growth on these performance indicators abated in 2003, and they now exceed those of the 1990s. Moreover, ILCs' core capital ratio of 14% in 2006:IQ compares favorably to the 8.25% average for all FDIC-insured institutions.

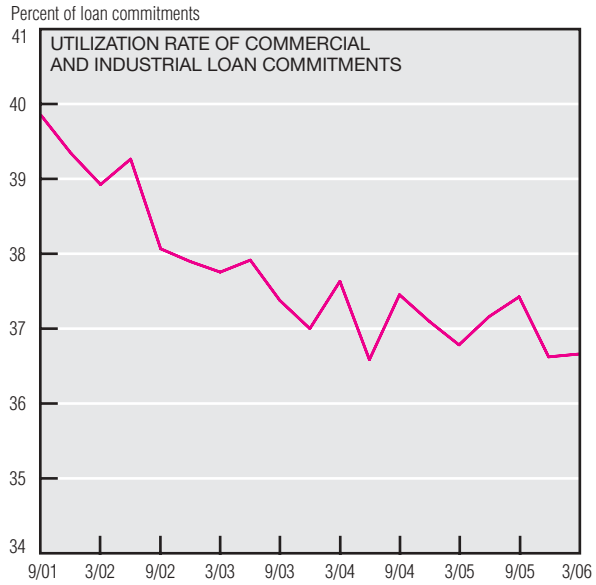
Although the share of unprofitable ILCs has dropped from a recent high of nearly 24% to 16%, it still exceeds the 6% for all FDIC-insured institutions. But unprofitable ILCs carry little weight because they tend to be small; in fact, they hold less than 1% of the ILC industry's assets.

Business Loan Markets









SOURCES: Board of Governors of the Federal Reserve System, Senior Loan Officer Survey, May 2006; and Federal Deposit Insurance Corporation, *Quarterly Banking Profile*.

For most of the past year, the Federal Reserve Board's Senior Loan Officer Survey has shown continued improvement in credit availability for businesses. For the survey covering February, March, and April 2006, respondent banks reported further easing their lending standards for commercial and industrial loans to borrowers of all sizes, narrowing their lending spreads, and reducing the cost of credit lines. They attribute this to stronger competition (from other banks and other sources of business credit) and greater liquidity of business loans resulting from a deeper secondary market. Lending standards have relaxed despite a reported increase in demand for commercial and industrial loans by large and small businesses; this indicates that a plentiful supply of business credit is allowing prices to drop despite greater demand.

The relaxation of bank lending standards since the end of 2003 continues to be reflected in increased bookings of commercial and industrial loans by depository institutions. The $47 billion increase in banks' and thrifts' holdings of business loans in 2006:IQ marks the eighth consecutive quarter of growth, which is a strong reversal of the three-year trend of quarterly declines in commercial and industrial loan balances on the books of FDIC-insured institutions. The increase in booked credits coincides with a steady utilization rate of business loan commitments (credit lines extended by banks to commercial and industrial borrowers) since September 2004, further evidence of the increased supply of business credit.