

# Economic Trends

June 2007

(Covering May 15, 2007, to June 19, 2007)

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## Same numbers, different stories...

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06.19.07

by Mark Sniderman

### Looks Like a Soft Landing

The latest data on the economy suggest that it handily weathered the first-quarter storm. Indeed, one could easily argue that the underlying pace of economic growth has been fairly solid for the past year and that observed weakness has resulted primarily from temporary problems in the housing sector.



The same could be said of inflation concerns. Sure, the headline inflation numbers have been unacceptably high, but one needn't go very far beneath the surface to see that the CPI reports on inflation excluding food and energy have been improving over the past few months.



Let's consider each of these elements of the economic outlook in turn, beginning with the real economy.



Real GDP advanced at a 3.3 percent rate in 2006: Without the poor performance of the residential investment sector, which declined at a rate of 4.2 percent, it would have grown by 3.8 percent. Labor market conditions were also solid in 2006: The unemployment rate averaged 4.6 percent for the year as a whole and remained virtually unchanged for the last half of the year. These numbers indicate that the economy was fundamentally sound heading into 2007.



What should we make of the paltry 0.6 percent growth rate reported for the first quarter? Not much,

### It's Still a Bumpy Ride

The latest data on the economy suggest that it still has a way to go before we can say that it has regained a firm footing. Indeed, one could easily argue that the first-quarter storm simply illustrated that the underlying pace of economic growth has been somewhat questionable for the past year, largely because of ongoing problems in the housing sector.



The same could be said of inflation concerns. Sure, the CPI reports on inflation excluding food and energy have been improving over the past few months, but one should not forget that the headline inflation numbers have been unacceptably high.



Let's consider each of these elements of the economic outlook in turn, beginning with the real economy.



Real GDP advanced at a 3.3 percent rate in 2006, but the growth picture was not balanced over the year. First-quarter growth swelled at an annual rate of 5.6 percent, then promptly settled back into the 2.0 percent–2.5 percent range for the rest of the year, largely because of poor performance in the residential investment sector. The unemployment rate averaged 4.6 percent for the year as a whole and remained virtually unchanged for the last half of the year. However, the rate of net employment change actually peaked at mid-year and has been slowing ever since. These numbers indicate that the economy had shifted onto a slower growth track heading into 2007.



What should we make of the paltry 0.6 percent growth rate reported for the first quarter? Confirmation of

because GDP growth was held down by two factors, the ongoing correction in the housing markets and a significant inventory swing, each of which depressed GDP growth by nearly a full percentage point. Without these temporary disturbances, the economy would have expanded at a rate close to 2.5 percent—no barn burner but certainly respectable.



And the good news is that the most recent capital spending reports have improved, along with business sentiment, which augurs well for a sector that has been a drag on growth despite the strength of corporate profits and balance sheets.



Turning to inflation, the last several reports have been favorable. Yes, the headline CPI numbers indicate that overall inflation has not improved very much during the last 12 months (2.6 percent), compared with its longer-term average (2.8 percent during the last five years). But the CPI excluding food and energy has been coming in at annualized rates of 2.0 percent for the last six months, 1.9 percent for the last three, and 2.1 percent for the last month. That should ease the concerns of inflation worriers.

the slower growth track, perhaps. Once again, GDP growth was held down by two factors, the ongoing correction in the housing markets and a significant inventory swing, each of which depressed GDP growth by nearly a full percentage point. Yet even without these temporary disturbances, the economy would have expanded at a rate close to 2.5 percent—about the same as its underlying pace for over a year now.



Fortunately, capital spending appears to have improved recently, along with business sentiment. Nevertheless, capital spending still seems subpar, considering the strength of corporate profits and balance sheets.



Turning to inflation, the last several reports have continued to be problematic. The headline CPI numbers indicate that overall inflation has not improved much during the last 12 months (2.6 percent), compared with its longer-term average (2.8 percent during the last five years). Yes, the CPI excluding food and energy has been coming in at annualized rates of 2.0 percent for the last six months, 1.9 percent for the last three, and 2.1 percent for the last month. But other core measures, ones that do not automatically disregard energy prices, still place the underlying inflation rate closer to 3 percent. That should continue to trouble inflation worriers.

# April Price Statistics

06.07.07

by Michael F. Bryan and Linsey Molloy

## April Price Statistics

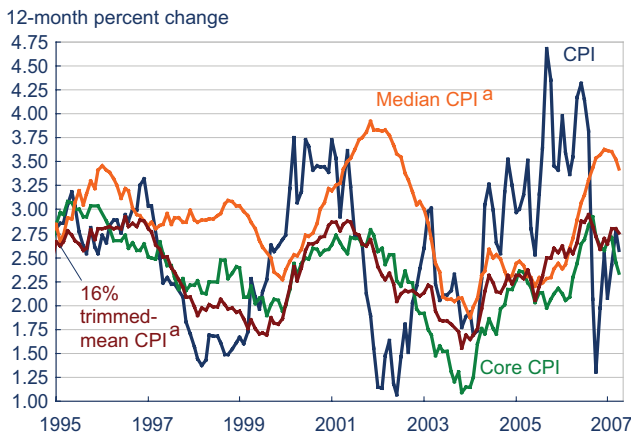
	Percent change, last:					2006 avg.
	1 mo. <sup>a</sup>	3 mo. <sup>a</sup>	6 mo. <sup>a</sup>	12 mo.	5 yr. <sup>a</sup>	
<b>Consumer Price Index</b>						
All items	5.1	5.7	4.2	2.6	2.8	2.6
Less food and energy	2.1	1.9	2.0	2.3	2.0	2.6
Median <sup>b</sup>	2.1	3.0	3.0	3.4	2.6	3.6
16% trimmed mean <sup>b</sup>	2.5	3.1	2.8	2.8	2.3	2.7
<b>Producer Price Index</b>						
Finished goods	9.1	12.8	10.0	3.2	3.6	1.6
Less food and energy	0.0	1.5	3.2	1.5	1.4	2.1

a. Annualized.

b. Calculated by the Federal Reserve Bank of Cleveland.

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

## CPI, Core CPI, and Trimmed-Mean CPI Measures



a. Calculated by the Federal Reserve Bank of Cleveland.

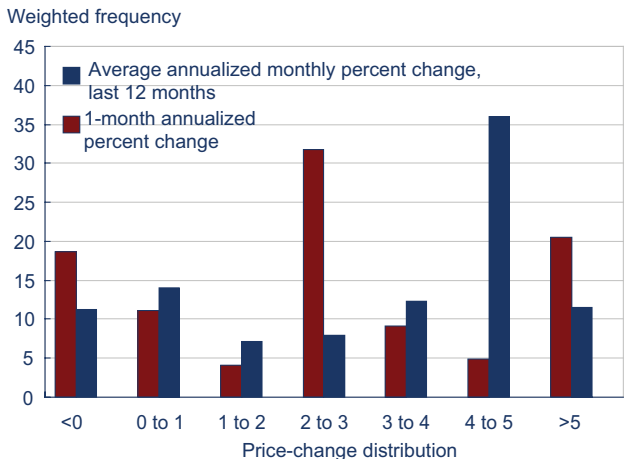
Sources: U.S. Department of Labor, Bureau of Labor Statistics, and Federal Reserve Bank of Cleveland.

While the April price report was a bit more favorable, retail price data on balance continues to suggest that the inflation trend is a bit north of 2 percent. The Consumer Price Index remained elevated in April, rising at a 5.1 percent annualized rate. The CPI excluding food and energy rose a more modest 2.1 percent, a bit above its 3- and 6-month trends but below its 12-month trend of 2.3 percent. The alternative core measures revealed that monthly growth in retail prices decelerated from longer-term trends. The median CPI, which had risen 3 percent or more in five of the past six months, rose a more moderate 2.1 percent, while the 16 percent trimmed-mean rose 2.5 percent.

Longer-term trends in the retail price measures generally indicate that the inflation rate lies between 2¼ and 2¾ percent. The CPI component monthly price-change distribution reveals that in fact, almost one-third of the index is rising at rates similar to the overall inflation trend, while an additional one-third of the index rose at rates exceeding three percent. This is an improvement from the average monthly inflation rates over the past 12 months, when nearly two-thirds of the index's components rose at rates exceeding 3 percent.

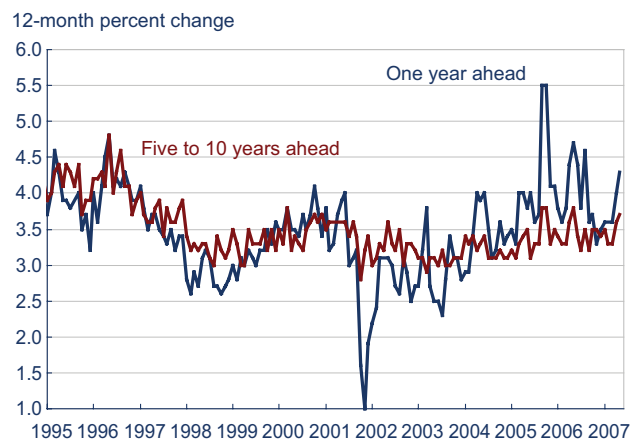
Meanwhile, year-ahead inflation expectations continue to rise, reaching their highest level since last summer, revealing that households expect a 4.3 percent rise in retail prices over the next year. Longer-term inflation expectations among households, which are correlated with movements in core inflation, reached 3.7 percent, a bit above the 3 percent–3½ percent range in which they've generally fluctuated for nearly decade.

## CPI Component Price-Change Distributions



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

## Household Inflation Expectations\*



\*Mean expected change as measured by the University of Michigan's Survey of Consumers.  
Source: University of Michigan.

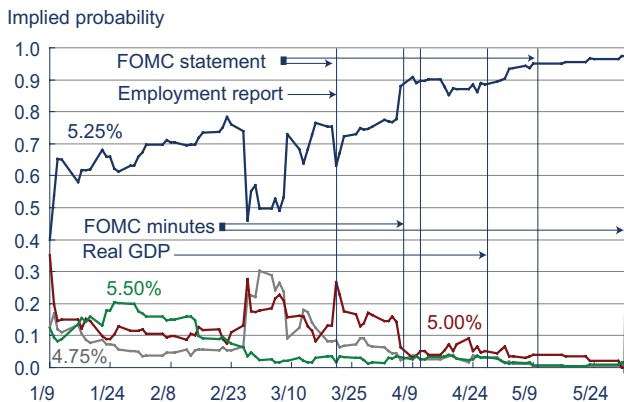
## Money, Financial Markets, and Monetary Policy

### Monetary Policy: Holding Steady

06.05.07

by Bruce Champ and Bethany Tinlin

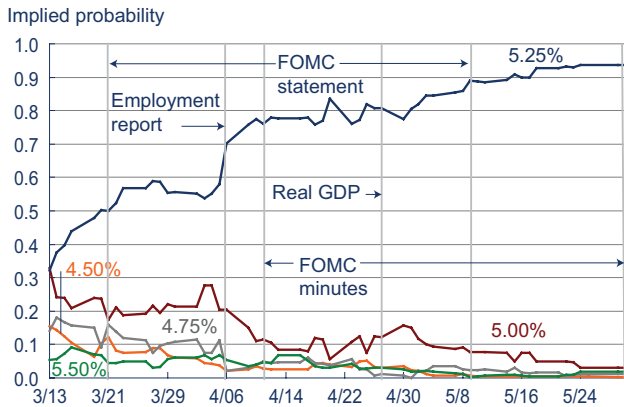
### Implied Probabilities of Alternative Target Federal Funds Rates, June Meeting Outcome\*



\*Probabilities are calculated using trading data settlement prices of federal funds futures and options on that futures contract.  
SOURCES: Chicago Board of Trade; and Bloomberg Financial Services.

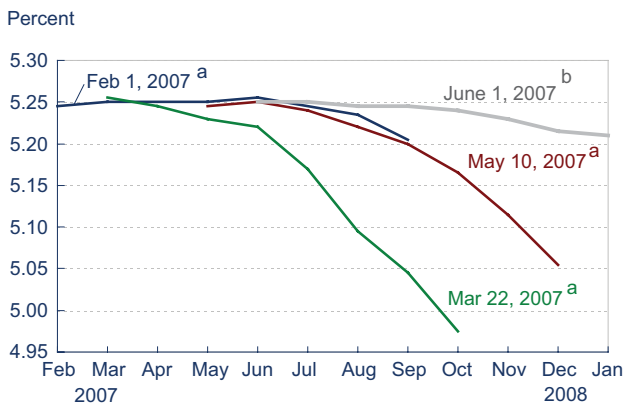
On May 30, the Federal Reserve Open Market Committee (FOMC) released the minutes from its May 9 meeting. The minutes noted that the economy had expanded “at a below-trend pace in recent months.” The committee commented on weak demand in the housing market, a slowdown in consumer spending, and “subdued” business fixed investment. However, the staff forecasted a pickup in economic activity “to a rate a little below that of the economy’s long-run potential for the remainder of this year.” The committee also expects core inflation to “slow gradually” but recognizes there is “considerable uncertainty” regarding that judgment. Inflation remains the predominant concern in the committee’s view, and “some noted that a failure of inflation to moderate could entail significant costs particularly if it led to an upward drift in inflation expectations.”

## Implied Probabilities of Alternative Target Federal Funds Rates, August Meeting Outcome\*



\*Probabilities are calculated using trading data settlement prices of federal funds futures and options on that futures contract.  
SOURCES: Chicago Board of Trade; and Bloomberg Financial Services.

## Implied Yields on Federal Funds Futures\*



\*All yields are from the constant maturity series.  
a. One day after FOMC meeting.  
b. Last Friday.  
SOURCE: Bloomberg Financial Information Services.

## Implied Yields on Eurodollar Futures



a. One day after FOMC meeting.  
b. Last Friday.  
SOURCE: Bloomberg Financial Information Services

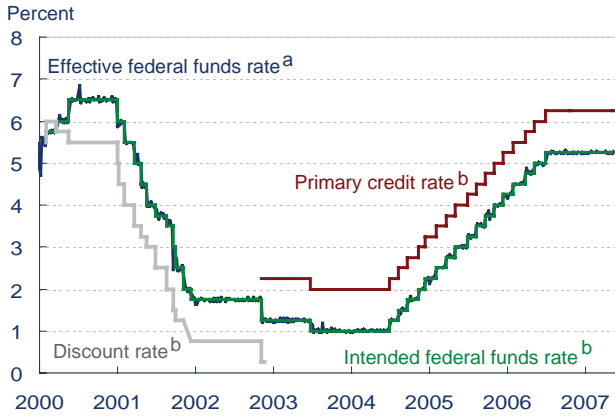
The release of the minutes did not have substantial impact on market participants' views of the future course of monetary policy. Currently, participants place over a 97 percent probability on the committee maintaining the federal funds rate at 5.25 percent at the June meeting. This probability has steadily increased over the past month. Looking further ahead toward the August meeting, participants overwhelmingly expect no change in policy.

Participants in the market for federal funds futures currently expect some possibility of future rate cuts but not until the later part of the year. Eurodollar futures provide a longer-run perspective on the expected course of monetary policy. These, too, indicate expectations of an upcoming round of rate cuts.

In implementing monetary policy, the Trading Desk of the New York Fed conducts open market operations in order to influence the supply of nonborrowed bank reserves. By affecting the supply of reserves, the Desk attempts to maintain the federal funds rate near the target set by the FOMC. Typically, the effective daily rate remains close to the target. In 2006, the average absolute deviation of the effective daily rate from target was only 3 basis points. Furthermore, the funds rate normally displays little intraday variability. For 2006, the average intraday standard deviation of the rate was only 7 basis points.

There are some noticeable patterns in the behavior of the funds rate. Fund rate volatility tends to be greater on high payment flow days—the first and last business days of the month as well as the first business day after the 14th of each month. In fact, the largest intraday range of the federal funds rate during 2006 occurred on June 30, when the high-low spread of the funds rate reached 5 percentage points. The funds rate also tends to trade above the target for several days before anticipated increases in the rate at FOMC meetings.

## Reserve Market Rates

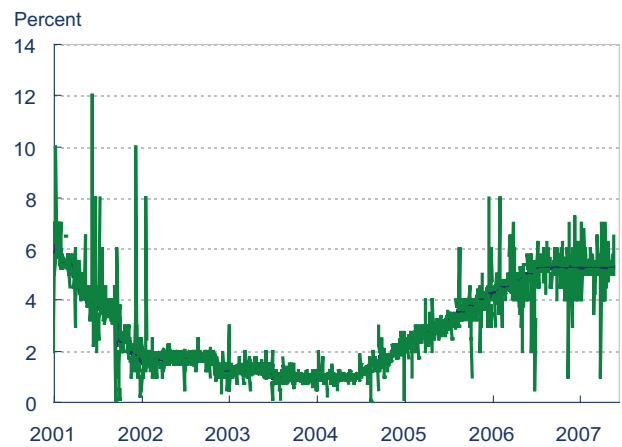


a. Weekly average of daily figures.

b. Daily observations.

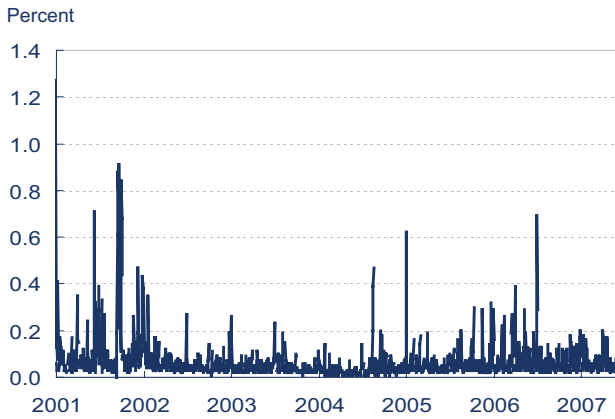
SOURCE: Board of Governors of the Federal Reserve System, "Selected Interest Rates," *Federal Reserve Statistical Releases*, H.15.

## High and Low Federal Funds Rate



SOURCE: Federal Reserve Bank of New York.

## Standard Deviations of the Federal Funds Rate

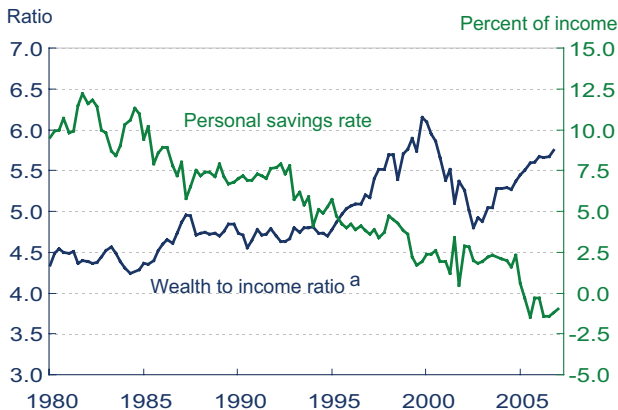


SOURCE: Federal Reserve Bank of New York.

## Money, Financial Markets, and Monetary Policy

### Household Financial Conditions

#### Household Financial Position



a. Wealth is defined as household net worth; income is defined as personal disposable income.

Sources: U.S. Department of Commerce, Bureau of Economic Analysis; and Board of Governors of the Federal Reserve System.

05.21.07

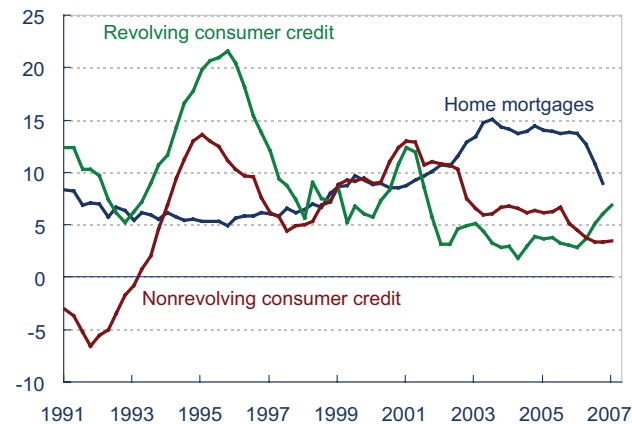
by Bruce Champ and Bethany Tinlin

Since mid-2005, the personal saving rate has been negative, implying levels of aggregate consumer spending that outstrip disposable income. The personal saving rate stood at  $-1.0$  percent in the first quarter of 2007. Despite such low personal saving rates, the wealth-to-income ratio has trended upward since early 2003. Although gains from rising house prices slowed in 2006, rising equity prices contributed strongly to increases in household wealth.



## Outstanding Debt

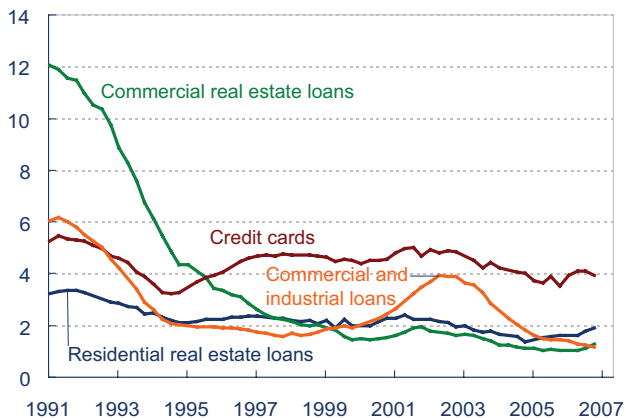
Four-quarter percent change



Source: Board of Governors of the Federal Reserve System.

## Delinquency Rates

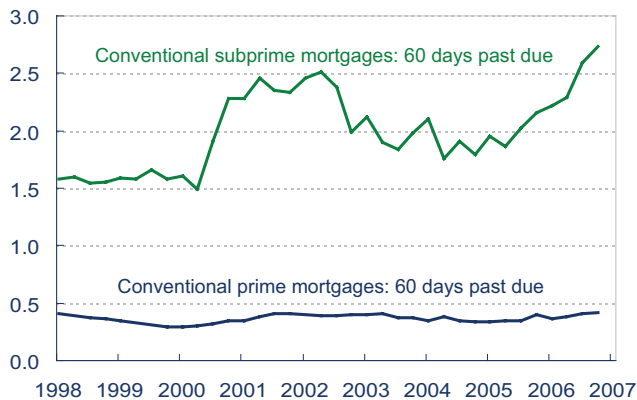
Percent of average loan balances



Source: Board of Governors of the Federal Reserve System.

## Mortgage Delinquencies: Subprime and Prime

Percent, seasonally adjusted



Source: Mortgage Bankers Association.

Growth in home mortgage debt moderated in the fourth quarter of 2006, after having grown at double-digit rates since late 2001. Total consumer credit growth rose in the first quarter of 2007, fueled mainly by an increase in revolving credit. Most of this increase was attributed to strong retail sales (other than for autos) and rising gasoline prices. Purchases of these kinds often are made with credit cards.

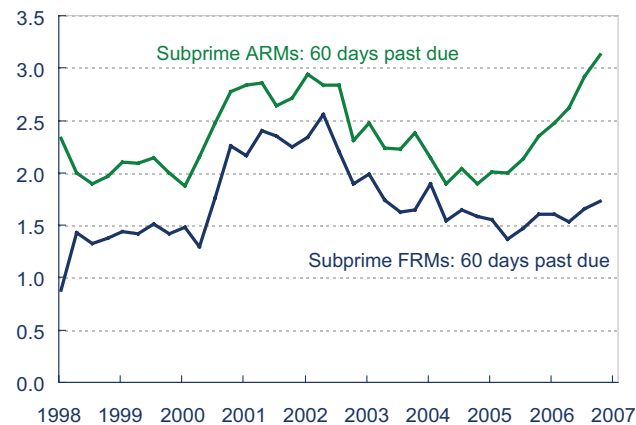
Despite the high levels of consumer debt, delinquency rates on most forms of consumer debt remain low. However, relatively high delinquency rates in the subprime mortgage market have received much attention recently. More than half of the foreclosures reported in the fourth quarter of 2006 were associated with subprime mortgages. The subprime market consists of mortgage loans made to borrowers viewed as having high credit risk, due to little credit history or higher default probabilities. Most dramatic was the increase in delinquency rates for subprime mortgages with adjustable rates (ARMs) in 2006. Problems are likely more acute for subprime ARMs partly because decelerating house prices have made it difficult for subprime borrowers to refinance in advance of rising interest rates.

On May 17, Federal Reserve chairman Ben Bernanke delivered a speech on the subprime mortgage market at a conference at the Chicago Fed. He noted that there have already been “signs of self-correction in the market” and that, as of yet, there has been “no serious spillover” of problems in the subprime market to federally insured financial institutions. Bernanke also stated that although “we are likely to see further increases in delinquencies and foreclosures this year and next...we do not expect significant spillovers from the subprime market to the rest of the economy or to the financial system.”

After reaching its highest level since 9/11 in February, the Conference Board’s Index of Consumer Confidence fell in March and April. The present situation component of the index played an important role in the decline, although the expectations component also suffered a modest decrease. Contributing to the decline was a deterioration in household perceptions of current job conditions and rising energy prices.

## Mortgage Delinquencies: ARM vs. FRM

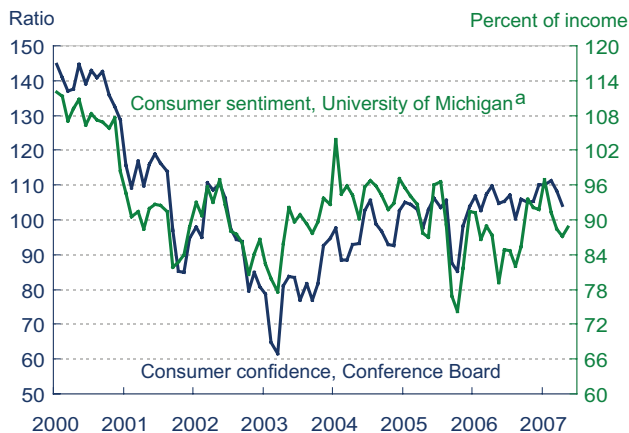
Percent, seasonally adjusted



Source: Mortgage Bankers Association.

The University of Michigan Consumer Sentiment Index also declined moderately in April, reaching its lowest level since last September. The expectations component of the index fell, countered by a small increase in the current conditions component. Despite the overall decline in the index during April, it witnessed a rebound in the last two weeks of the month, as gasoline prices leveled off and equity prices rose. The index's preliminary May release also indicates a modest improvement.

## Consumer Attitudes



a. Data are not seasonally adjusted.

Sources: University of Michigan; and the Conference Board.

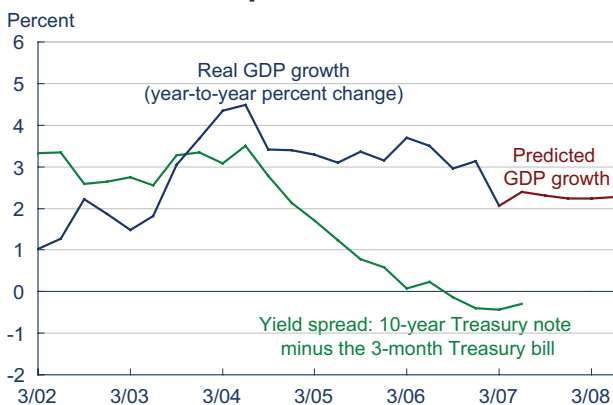
## Money, Financial Markets, and Monetary Policy

### The Yield Curve's Prognosis for Economic Growth

05.16.07

by Joseph G. Haubrich and Brent Meyer

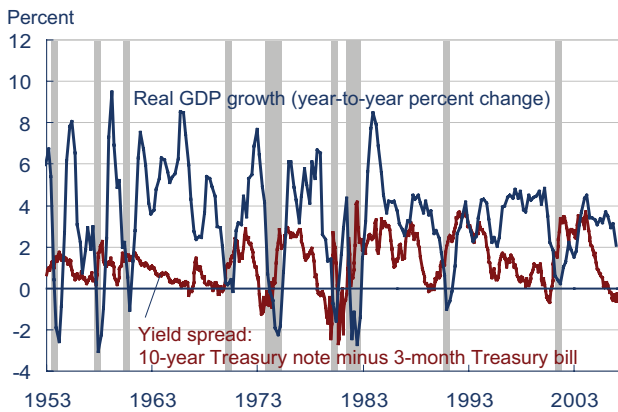
#### Predicted GDP Growth and the Yield Spread



Sources: U.S. Department of Commerce, Bureau of Economic Analysis; the Board of Governors of the Federal Reserve System; and authors' calculations.

In its limited capacity as a simple forecaster of economic growth, the slope of the yield curve has been giving us a rather pessimistic view for a while now. Though rates have fallen since last month, the spread remains negative: with 10-year Treasury bond rate at 4.65 percent and the 3-month Treasury bill rate at 4.88 percent (both for the week ending May 11), the spread stands at a negative 23 basis points, not quite as negative as a month ago. Projecting forward using past values of the spread and GDP growth suggests that real GDP will grow at about a 2.4 percent rate over the next year. This prediction is on the low side of other forecasts.

## Yield Spread and Real GDP Growth\*

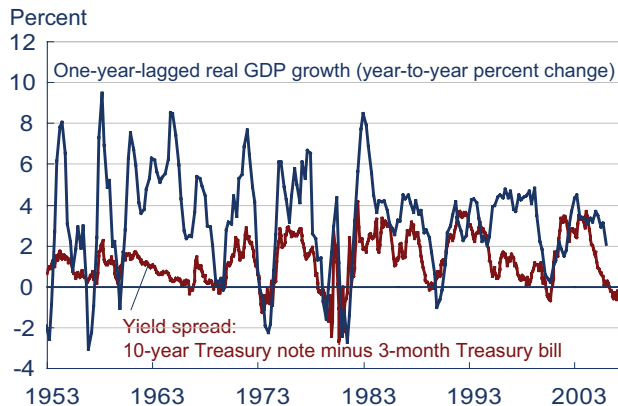


\*Shaded bars indicate recessions.

Sources: U.S. Department of Commerce, Bureau of Economic Analysis; and Board of Governors of the Federal Reserve System.

The rule of thumb for using the slope of the yield curve to forecast economic growth is that an inverted yield curve (short rates above long rates) indicates a recession in about a year. Yield curve inversions have preceded each of the last six recessions (as defined by the NBER, very flat yield curves preceded the previous two, and there have been two notable false positives: an inversion in late 1966 and a very flat curve in late 1998. More generally, though, a flat curve indicates weak growth, and conversely, a steep curve indicates strong growth. One measure of slope, the spread between 10-year bonds and 3-month T-bills, bears out this relation, particularly when real GDP growth is lagged a year to line up growth with the spread that predicts it.

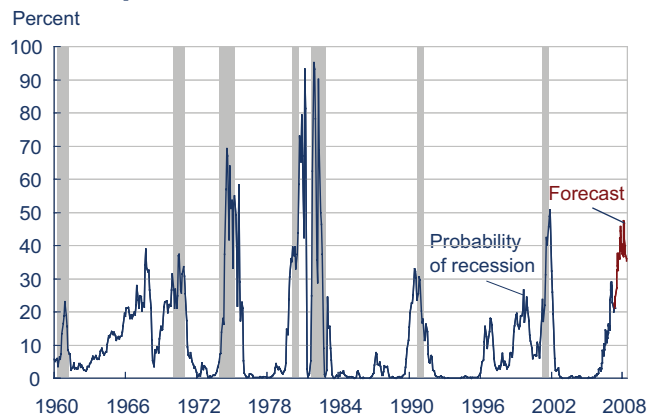
## Yield Spread and Lagged Real GDP Growth



Sources: U.S. Department of Commerce, Bureau of Economic Analysis; and Board of Governors of the Federal Reserve System.

The expected chance of a recession in the next year based on statistical modeling of the yield curve and GDP is 35 percent, down a bit from last month's value of 38 percent and March's 46 percent. The 35 percent is quite a bit higher than the 16.9 percent calculated by James Hamilton over at Econbrowser, but close to the one-third chance seen by Alan Greenspan. To be fair to Econbrowser, we are calculating different events: Our number gives a probability that the economy will be in recession over the next year; Econbrowser looks at the probability that the fourth quarter of 2006 was in a recession.

## Probability of Recession Based on the Yield Spread\*



\*Estimated using probit model. Shaded bars indicate recessions.

Sources: U.S. Department of Commerce, Bureau of Economic Analysis; Board of Governors of the Federal Reserve System; and authors' calculations.

Of course, it might not be advisable to take our number quite so literally, for two reasons. First, the probability is itself subject to error, as is the case with all statistical estimates. Second, other researchers have postulated that the underlying determinants of the yield spread today are materially different from the determinants that generated yield spreads during prior decades. Differences could arise from changes in international capital flows and inflation expectations, for example. The bottom line is that yield curves contain important information for business cycle analysis, but, like other indicators, should be interpreted with caution.

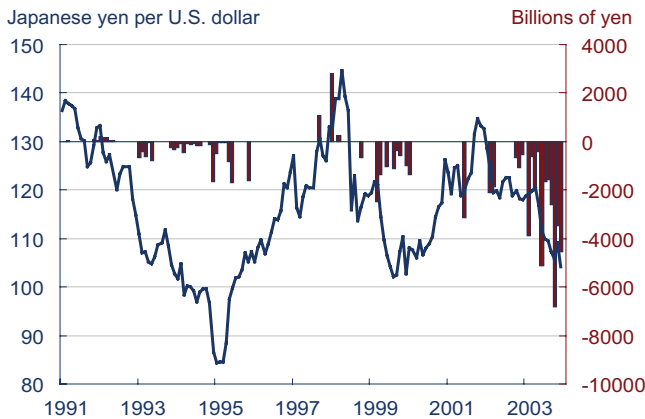
For more detail on these and other issues related to using the yield curve to predict recessions, see the April 2006 *Economic Commentary* "Does the Yield Curve Signal Recession?" < <http://www.clevelandfed.org/Research/Commentary/2006/0415.pdf> >.

# Is Foreign Exchange Intervention a Good Idea?

06.06.07

by Owen F. Humpage and Michael Shenk

## Japanese Interventions against U.S. Dollars



Sources: Japanese Ministry of Finance; Bloomberg Financial Services.

## Were Official Japanese Dollar Purchases Successful?

May 13, 1991, through March 16, 2004

Associated with ...	Total	Actual successes	Expected <sup>1</sup> successes	Statistically different? <sup>1,2</sup>
a dollar appreciation	307	140	152	No
a more moderate dollar depreciation	307	56	36	Yes
either of these criteria	307	196	188	No

1. Assumes that successes are a hypergeometric random variable.  
 2. Tests whether actual successes are greater than expected success.

According to a recent article in the *Financial Times*,<sup>1</sup> U.S. Senate leaders are considering legislation to mandate that the U.S. Treasury intervene in foreign-exchange markets when currencies become fundamentally misaligned. Intervention refers to official purchases or sales of foreign currencies that are intended to influence exchange-rate behavior. To be sure, foreign-exchange intervention can sometimes temporarily affect exchange-rate movements, notably when markets are uncertain about evolving economic conditions and policy developments. Unfortunately, because foreign-exchange intervention never alters prices, interest rates, or other variables on the economic short-list of exchange-rate fundamentals, it does not provide policymakers with a means of determining longer-term exchange-rate movements. While monetary policy certainly could guide exchange rates, doing so would almost certainly conflict with domestic goals, notably price stability.

Except for the instruments involved, the mechanics of an intervention are exactly like those of an open-market operation, and like open-market operations, foreign-exchange interventions have the potential to alter the amount of reserves in the banking system. When the Federal Reserve Bank of New York buys foreign exchange either for the U.S. Treasury or for the Federal Reserve System's own portfolio, it pays for that foreign exchange by crediting the appropriate commercial banks' reserve accounts. Likewise, when it sells foreign exchange, it debits banks' reserve accounts. To avoid any conflict with the domestic objectives of monetary policy, central banks typically offset (or sterilize) the impact of any foreign-exchange intervention on bank reserves. In this way, they also prevent intervention from affecting a key macroeconomic determinant of exchange rates—money growth. Any central bank that conducts its monetary policy by targeting an overnight reserve-market interest rate, as the United States does, will automatically sterilize any operation that threatens its operating target.

1. "Senate Bill Would Allow U.S. to Intervene in Currency Markets" By Eoin Callan and Peter Garnham, May 31, 2007. <<http://www.ft.com/cms/s/943f845c-0f13-11dc-b444-000b5df10621.html>>.

Economists believe that sterilized intervention, which has no effect on money growth or other fundamental macroeconomic determinants of exchange rates, can nevertheless sometimes convey useful information about those fundamentals and improve price discovery in the foreign-exchange market. Because information is costly, market participants do not all continuously possess the same information about exchange rates. Large foreign-exchange dealers have better information than their smaller counterparts and other market participants because of their broader customer base and market networks. In markets with such information asymmetries, nonfundamental forces like bandwagon effects, overreaction to news, technical trading, and excessive volatility may sometimes underlie short-term exchange-rate dynamics. Any traders—including monetary authorities—who the market suspects of having superior information could conceivably improve the allocative efficiency of exchange rates, if market participants observed their trades.

If intervention is to systematically influence exchange rates, monetary authorities must routinely have better information about market fundamentals than private traders. Empirical studies do frequently find a connection between foreign-exchange intervention and day-to-day exchange-rate movements. Studies using data at an even higher frequency often find that exchange rates respond within minutes of an official operation. Large interventions, especially those undertaken with two or more central banks transacting in concert, are more likely to affect exchange rates in the desired direction than small, unilateral operations. Nevertheless, the empirical results are not robust across currencies, time periods, or empirical techniques, indicating that intervention is more of a hit-or-miss event than a sure bet.

Among the major developed countries, Japan is the only one to intervene with any frequency and force in recent years, and it is the current poster country for advocates of intervention. But, what exactly has Japan achieved through its operations?

On 307 days between May 13, 1991, and March 16, 2004, the Japanese Ministry of Finance bought approximately \$577 billion, presumably to slow or to reverse a depreciation of the dollar relative to the yen. Of these many transactions, only 64 percent were associated with movements in the yen-dollar rate that an observer might reasonably associate with success. But given the day-to-day variation in the exchange rate, this success rate is exactly what chance predicts. Overall, then, the outcome was not very impressive.

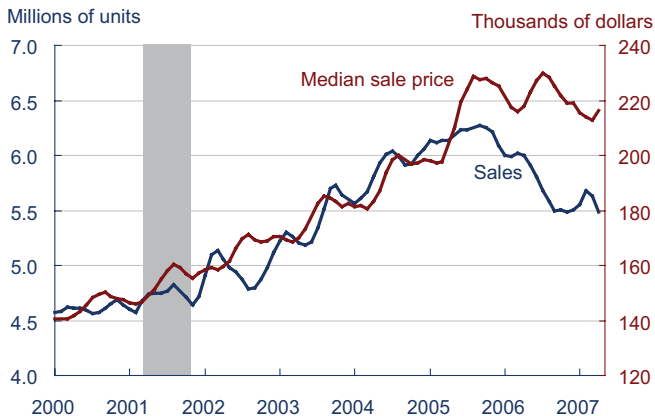
Yet if one squints a bit, more favorable results appear. The correspondence between official Japanese purchases of dollars and a moderation in the dollar's rate of depreciation, for example, was much greater than chance could explain. Still, only 18 percent of the transactions fit this pattern. Also, over some individual subperiods, the success counts were substantially higher than over the entire period.

Even if you allow that interventions like these sometimes send exchange rates off along new paths, they do not necessarily change the ultimate outcome. Macroeconomic fundamentals seem to guide exchange rates over the long term, but over the short term, exchange rates demonstrate a curious zig-zag pattern as the market learns about evolving fundamentals and forms expectations about future developments. If a central bank intervenes, providing the market with new information pertinent to the pricing of foreign exchange but without changing the underlying macroeconomic fundamentals, the exchange rate will jump and begin moving along an alternative path. The new path, however, will be consistent with the fundamentals. In the end, despite the Japanese Ministry of Finance's \$577 billion investment, the dollar depreciated 21 percent against the yen.



# Housing

## Existing Single-Family Homes, Three-Month Moving Average



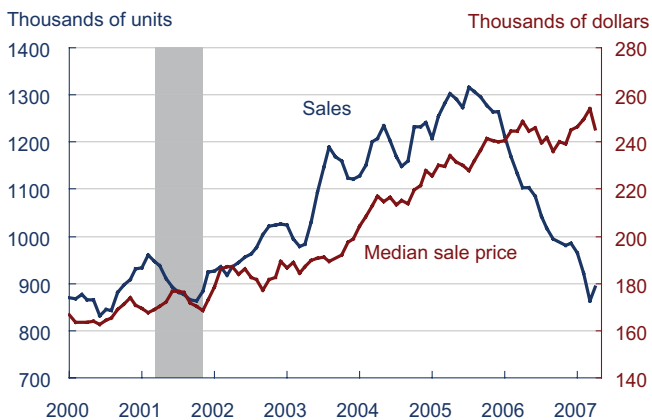
Source: National Association of Realtors.

## Existing Single-Family Homes, Three-Month Moving Average



Source: National Association of Realtors.

## New Single-Family Homes, Three-Month Moving Average



Note: Shaded area indicates a recession.  
Source: Census Bureau.

06.14.07

By Ed Nosal and Michael Shenk

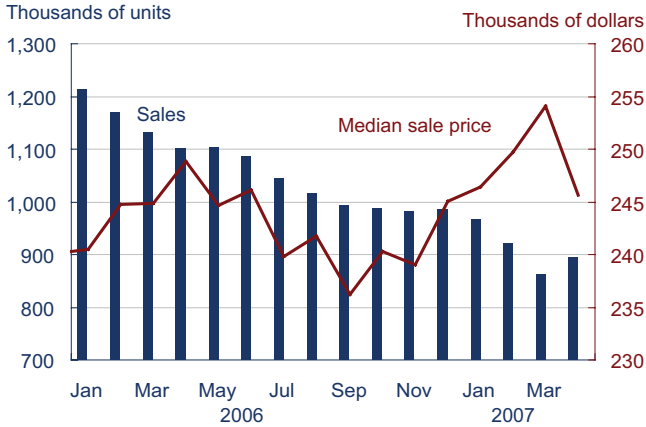
This month's release of new home sales numbers (for April) once again brought hope for the housing market, but that hope faded a day later with the release of existing home sales numbers. It might at first seem surprising that new and existing home numbers would move in different directions, since one might expect new and existing homes to be nearly perfect substitutes for one another. But monthly numbers can be pretty volatile, and it might not be that unusual for the two series to move in opposite directions in any given month. However, if we smooth the two series by creating three-month moving averages for each, we might expect them to be more strongly correlated.

But it turns out that smoothing monthly fluctuations does not increase the correlation between the two series. Existing single-family home sales were actually fairly stable over the eight months ending in April, while median prices were falling in the period's final months. Throughout the same period, new single-family home sales continued to fall, but their median prices rose in the period's final months. Moreover, new home sales were down about 32 percent from their peak in mid-2005, while existing home sales dropped only about 12.5 percent from their peak around the same time.

These data may lead us to question whether new and existing homes really are close substitutes for one another. In several aspects, they are quite dissimilar. For instance, there are many quality issues: New homes have modern plumbing, electrical wiring, and insulation, whereas existing homes are likely to have more dated systems. There is also a location factor: New homes generally are built much farther from city centers, while existing homes are closer in.

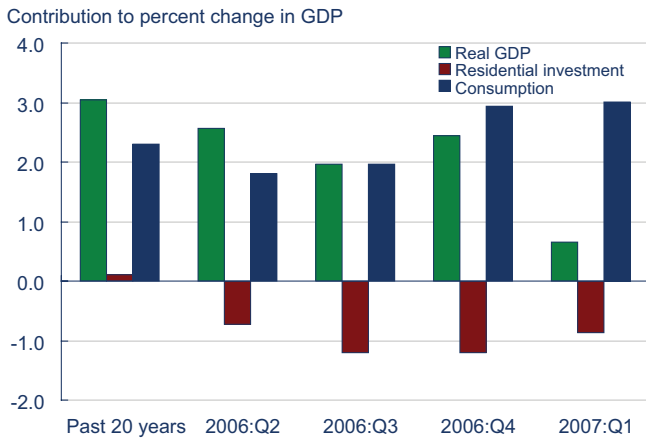
Furthermore, as an investment, one would expect new home sales to be more strongly affected by the business cycle than existing home sales. The construction and sale of a new home represents an

## New Single-Family Homes, Three-Month Moving Average



Source: Census Bureau.

## GDP and Residential Investment



Source: Bureau of Economic Analysis.

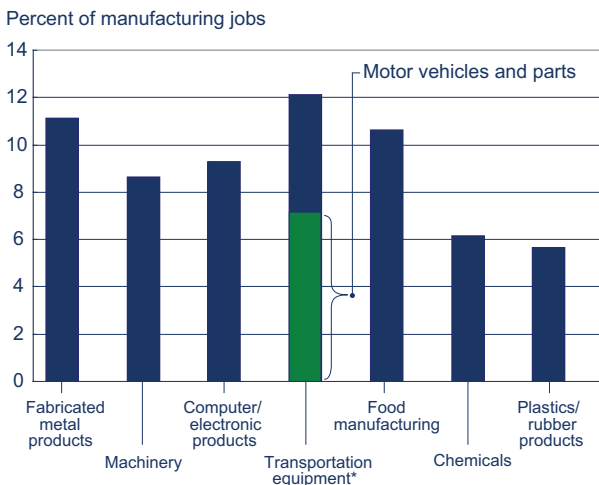
investment at the macro level and so has an important impact on GDP. Over the past 20 years, residential investment has contributed only 0.1 percent on average to real GDP growth; but over the past four quarters, it subtracted 1.0 percent from real GDP growth. In contrast, selling an existing home, which simply transfers ownership of existing capital, has a very small impact on GDP (consisting of the realtor's commission). For all these reasons, existing and new home sales might not be highly correlated in the medium term.

The housing market can also have an indirect influence on GDP. Since the typical American household holds a very large proportion of its wealth in the form of housing capital, a change in home prices creates a wealth effect, which can in turn affect households' consumption decisions. However, we have not yet seen any sign that the decrease in wealth caused by the weak housing market is spilling over into reduced consumption (that is, into a lower growth rate of consumption). Of course, there is no guarantee that continued weakness in the housing market will not affect consumption spending in the future.

## Economic Activity and Labor

### Manufacturing Employment

#### Top Manufacturing Employment Sectors



\*Employment for motor vehicles and parts is included in transportation equipment. Source: U.S. Department of Labor, Bureau of Labor Statistics.

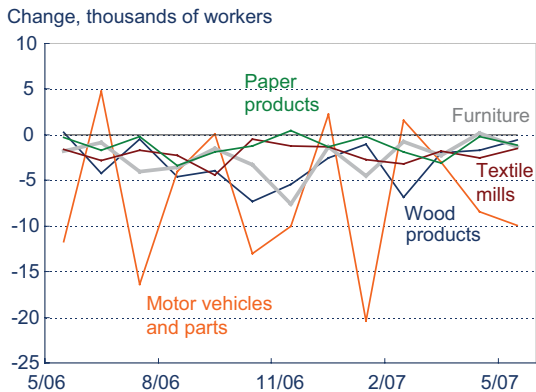
06.07.07

By Peter Rupert and Cara Stepanczuk

The goods-producing industry lost 19,000 jobs in May, which was traced to weakness in durable goods manufacturing. The motor vehicles and parts sector, which employs 7 percent of all manufacturing workers, was responsible for 10,000 job cuts alone.

Compared to other sectors in the manufacturing industry, motor vehicles and parts has been the most volatile over the last 12 months. It has distinguished itself even among the five weakest sectors (motor vehicles and parts, paper products, textile mills, furniture, and wood products) as the largest

## Manufacturing Job Losses, May 2006–May 2007

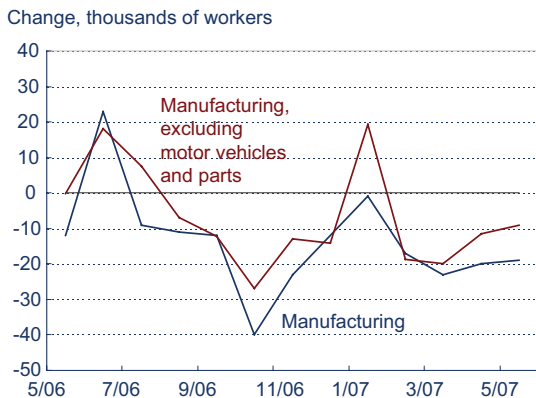


Source: U.S. Department of Labor, Bureau of Labor Statistics.

contributor to recent job losses. In fact, from May 2006 through May 2007, motor vehicles and parts shed a total of 76,400 jobs (46.6 percent of the decline in manufacturing employment); the remaining sectors in the manufacturing industry—which account for about 93 percent of the industry—lost just 87,600 jobs combined.

Comparing the employment trends in total manufacturing and manufacturing without motor vehicles and parts reveals the impact of the most troublesome category. Without the weight of the losses in motor vehicles and parts, manufacturing payrolls would have been slightly elevated in the last year.

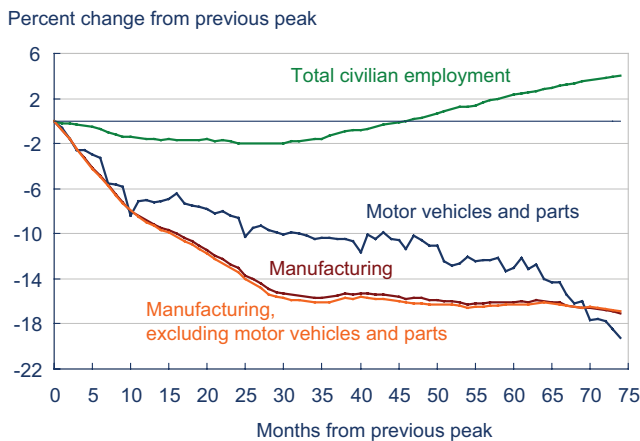
## Manufacturing Job Losses, with and without Motor Vehicles and Parts



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

Employment in the motor vehicles and parts sector dropped sharply at the turn of the century and has been steadily declining since the start of the last recession. While total civilian employment reached its pre-recession employment level after 47 months, employment in motor vehicles and parts—as well as manufacturing as a whole—has not yet reached the bottom of its employment trough. Motor vehicles and parts employment held up overall manufacturing employment until the end of last year (70 months after the start of the recession). The recent downturn in motor vehicles and parts employment has started to drag on manufacturing, and manufacturing excluding automobiles has fared better than manufacturing as a whole in the last five months.

## Business Cycle Pattern: Employment by Industry



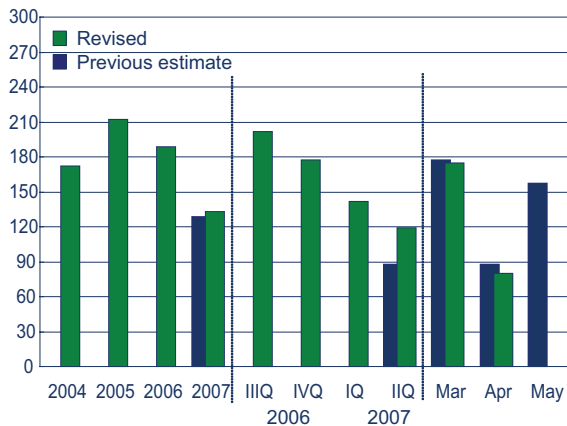
Source: U.S. Department of Labor, Bureau of Labor Statistics.



# The Employment Situation

## Average Monthly Nonfarm Employment Change

Change, thousands of workers



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

06.05.07

By Peter Rupert and Cara Stepanczuk

Nonfarm payroll employment's May increase of 157,000 was much stronger than expected and higher than the ADP report for May employment (+97,000). Revisions for March and April were minimal (-10,000), which was better than the recent pattern. So far, the average monthly gain in 2007 is 133,000 jobs, but it continues to lag behind last year's average monthly gain of 189,000 jobs.

Employment growth in service-providing industries increased sharply in May (+176,000), after a lackluster April (+119,000). Most of the service sector gains came from education and health services (+54,000), leisure and hospitality (+46,000), and professional business services (+32,000). May's service sector payroll growth mirrored last year's healthy monthly average of +179,000.

Goods-producing industries continued to soften, losing 19,000 jobs, all of them in the manufacturing sector (construction employment was flat). Job cuts in manufacturing resulted directly from weakness in the motor vehicles and parts sector, which was in line with recent trends: Almost half of manufacturing payroll reductions in the last 12 months (-164,000) have come from motor vehicles and parts.

## Labor Market Conditions

Average monthly change (thousands of employees, NAICS)

	2004	2005	2006	Jan-Apr 2007	May 2007
Payroll employment	172	212	189	127	157
Goods-producing	28	32	9	-16	-19
Construction	26	35	11	-3	0
Manufacturing	0	-7	-7	-15	-19
Durable goods	8	2	0	-14	-15
Nondurable goods	-9	-9	-6	-2	-4
Service-providing	144	180	179	142	176
Retail trade	16	19	-3	14	-5
Financial activities <sup>a</sup>	8	14	16	0	2
PBS <sup>b</sup>	38	57	42	16	32
Temporary help services	11	18	-1	-6	-9
Education and health services	33	36	41	46	54
Leisure and Hospitality	25	23	38	22	46
Government	14	14	20	26	22
Average for period (percent)					
Civilian unemployment rate	5.5	5.1	4.6	4.5	4.5

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

b. PBS is professional business services (professional, scientific, and technical services, management of companies and enterprises, administrative and support, and waste management and remediation services).

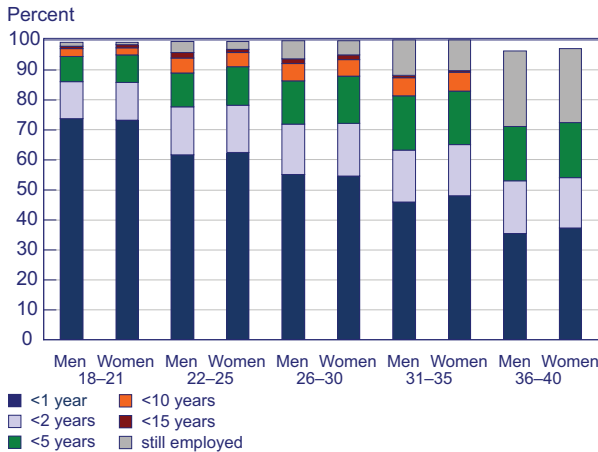
Source: U.S. Department of Labor, Bureau of Labor Statistics.

# The Youngest Baby Boomers' Experience in the Labor Market

05.25.07

by Murat Tasci and Laura Kleinhenz

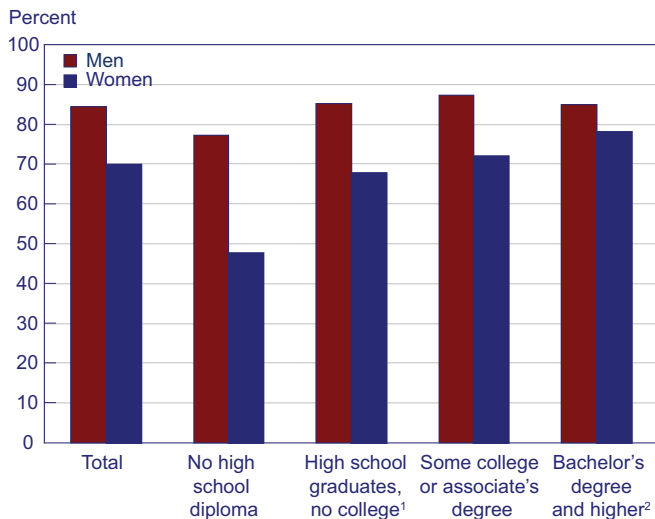
## Duration of Job with a Single Employer, 1978–2004



Notes: Includes all jobs started at age 18–40. There were no members of the sample who had started a job at age 36–40 and who had completed 10 to 15 years of work by 2004.

Source: U.S. Department of Labor, Bureau of Labor Statistics, *Number of Jobs Held, Labor Market Activity, and Earnings Growth Among the Youngest Baby Boomers: Results from a Longitudinal Survey*, August 25, 2006.

## Weeks Individuals Aged 18-40 Employed, 1978-2004



1. Includes persons with a high school diploma or equivalent.

2. Includes persons with a bachelor's, master's, professional, and doctoral degrees.

Source: U.S. Department of Labor, Bureau of Labor Statistics, *Number of Jobs Held, Labor Market Activity, and Earnings Growth Among the Youngest Baby Boomers: Results from a Longitudinal Survey*, August 25, 2006.

Having just one job in a lifetime seems to be a thing of the past. The youngest of the baby boomers, those born between 1957 and 1964, have held an average of 10.5 jobs between the ages of 18 and 40, according to the latest data from National Longitudinal Survey of Youth (NLSY) released by the Bureau of Labor Statistics. The survey participants, who represent the youngest cohort of U.S. baby boomers (those born between 1946 and 1964), were first interviewed in 1979 when they were between the ages of 14 and 22. As these younger boomers have aged, they have changed jobs less frequently: Between the ages of 18 and 21, they held 3.8 jobs on average, but between 36 and 40, the average fell to 2.

Overall, only 1.2 percent of these workers were in the same job after 2004 that they had started when they were between 18 and 21. This percentage rises for workers who were older when they started the job. That is, as the age at the start of the job increases, the fraction of those in the same job after 2004 increases. On the other hand, even middle-aged workers tend to hold some jobs for only a short time. For instance, 36.4 percent of the jobs started by workers when they were between 36 and 40 did not last more than a year.

Job duration as a function of how old a worker is when starting a job is similar for men and women. Even though men and women had similar job duration patterns in the NLSY data once they were employed, men spent more time employed on average than women. The gap between them, however, decreases as education level increases. The difference between men and women is most likely due to the fact that women spent a considerable percentage of weeks between 1978 and 2004 out of the labor force—25.4 percent as opposed to 9.8 percent for men. Once again, highly educated women tended to spend less time out of the labor force.

## Growth in Inflation-Adjusted Hourly Earnings, 1978–2004

	Average annual percent growth in hourly earnings				
	Age 18–21	Age 22–25	Age 26–30	Age 31–35	Age 36–40
Total	6.3	6.5	4.0	3.6	2.5
Less than a high school diploma	4.6	3.7	2.3	3.0	2.3
High school graduates, no college <sup>1</sup>	7.0	4.4	2.7	3.2	2.0
Some college or associate degree	6.3	5.4	4.4	3.3	2.8
Bachelor's degree and higher <sup>2</sup>	5.7	11.6	6.4	4.7	3.0
Men	6.7	6.7	4.1	3.6	2.2
Less than a high school diploma	4.0	3.7	1.8	2.3	1.7
High school graduates, no college <sup>1</sup>	7.9	4.8	2.6	3.1	1.2
Some college or associate degree	7.9	5.8	4.8	3.0	2.6
Bachelor's degree and higher <sup>2</sup>	5.0	12.3	7.1	5.6	3.5
Women	5.8	6.2	4.0	3.5	2.9
Less than a high school diploma	6.0	3.6	3.1	4.2	3.2
High school graduates, no college <sup>1</sup>	6.0	4.0	2.9	3.3	3.0
Some college or associate degree	5.0	5.0	4.1	3.6	3.0
Bachelor's degree and higher <sup>2</sup>	6.3	10.9	5.8	3.6	2.4

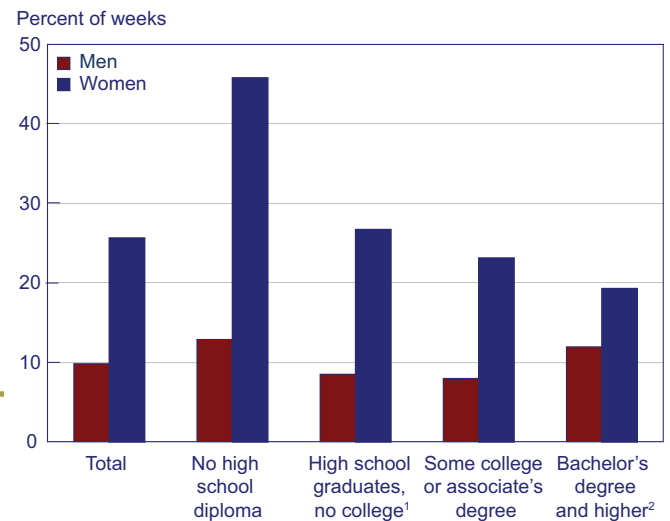
Source: U.S. Department of Labor, Bureau of Labor Statistics, Number of Jobs Held, Labor Market Activity, and Earnings Growth Among the Youngest Baby Boomers: Results from a Longitudinal Survey, August 25, 2006.

1. Includes persons with a high school diploma or equivalent.

2. Includes persons with a bachelor's, master's, professional, and doctoral degrees.

The overall growth rate in earnings seems to decline as workers get older. Average annual percent growth in inflation-adjusted hourly earnings from 1978 to 2004 seems to be fastest for the workers between the ages of 18 and 25. Finally, even though earnings grow faster for men than women when workers are young, the growth rate of women's earnings catches up with men's between the ages of 31 and 35 and surpasses it later on.

## Weeks Individuals Aged 18-40 Not in the Labor Force, 1978-2004

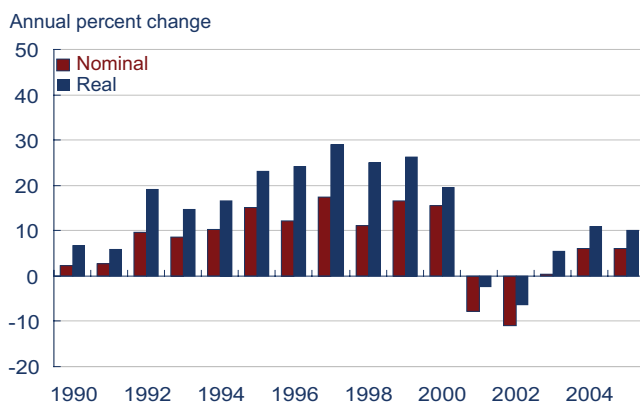


1. Includes people with a high school diploma or equivalent.

2. Includes people with a bachelor's, master's, professional, and doctoral degrees.  
Source: U.S. Department of Labor, Bureau of Labor Statistics, Number of Jobs Held, Labor Market Activity, and Earnings Growth Among the Youngest Baby Boomers: Results from a Longitudinal Survey, August 25, 2006.

## Economic Activity and Labor Technology Investment

### Nominal and Real IT Investment Growth



Source: U.S. Department of Commerce, Bureau of Economic Analysis.

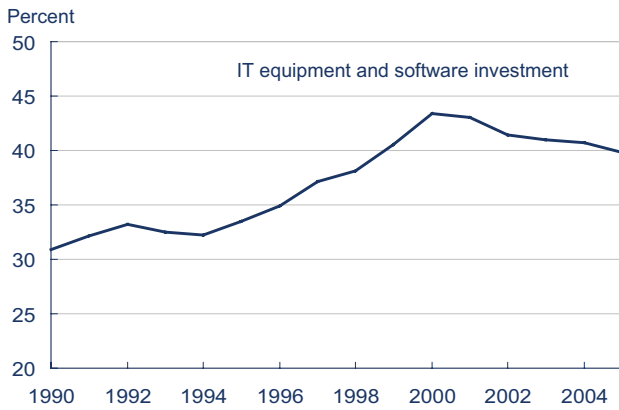
05.22.07

by Tim Dunne and Brent Meyer

As is well known, spending on capital equipment, particularly information technology (IT) equipment, grew rapidly in the 1990s. In fact, growth in real IT expenditures exceeded that of other non-IT-equipment expenditures by roughly four times during the 1990s, according to a 2004 study. By 2000, IT spending represented over 40 percent of total equipment and software expenditures for business.

Then IT investment spending faltered. In the 2001-2002 period, it declined in both real and nominal terms. Particularly hard hit was communications equipment, which fell more sharply than

## IT Share of Equipment and Software Investment

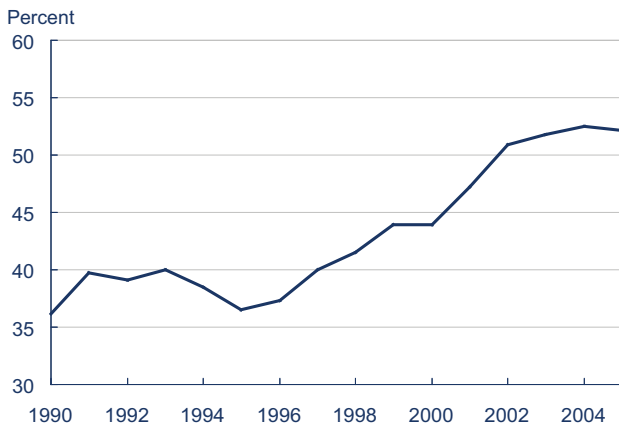


Source: U.S. Department of Commerce, Bureau of Economic Analysis.

either software or computers in real terms. Since then, IT spending has rebounded, but growth rates have been relatively mild compared to those of the 1990s. Among types of IT investments, software expenditures have risen the fastest (in nominal terms), with software accounting for over 50 percent of IT investment spending in 2005.

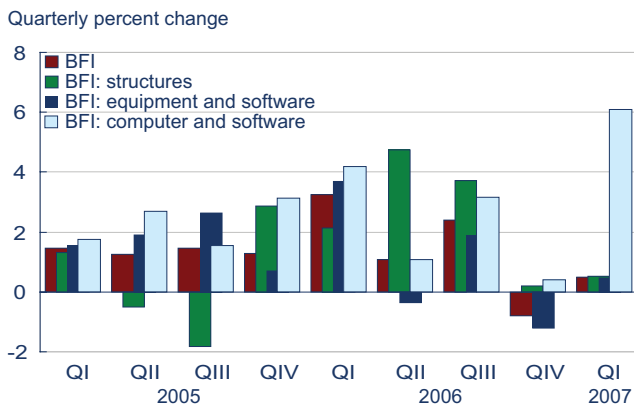
The first quarter of 2007, however, showed some strength in IT spending, as real investment in computers and software jumped. This was coming off a relatively flat fourth quarter of 2006. Both the weak fourth quarter of 2006 and the strong first quarter of 2007 may be due, in part, to firms delaying their 2006 computer purchases until the release of Microsoft's new Vista operating system. Still, spending on non-IT equipment was relatively anemic, so that even with the first-quarter rise in IT investment, overall equipment and software investment spending edged up only slightly.

## Software's Share of IT



Source: U.S. Department of Commerce, Bureau of Economic Analysis.

## Real Business Fixed Investment Growth



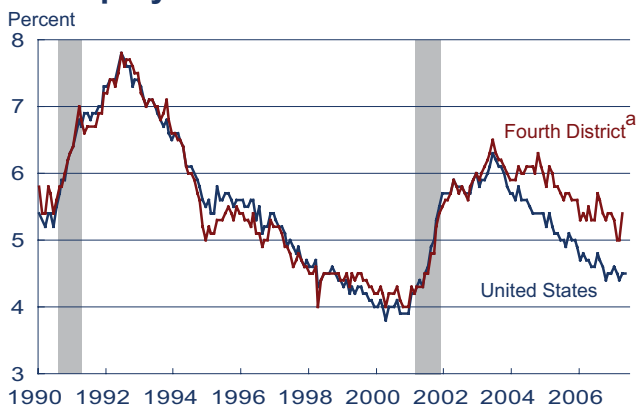
Source: U.S. Department of Commerce, Bureau of Economic Analysis.

## Fourth District Employment Conditions (April)

06.14.07

by Tim Dunne and Cara Stepanczuk

### Unemployment Rates\*

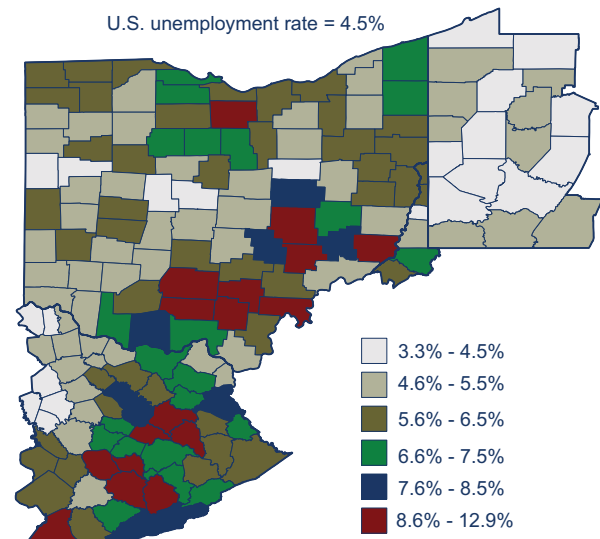


\*Shaded bars represent recessions. Some data reflect revised inputs, reestimation, and new statewide controls. For more information, see <http://www.bls.gov/lau/launews1.htm>.

a. Seasonally adjusted using the Census Bureau's X-11 procedure.  
Source: U.S. Department of Labor, Bureau of Labor Statistics.

April's employment report showed slowing conditions in the District's labor markets. The Fourth District's unemployment rate jumped 0.4 percentage point in April to 5.4 percent. This compares to a much smaller national rise of 0.1 percentage point. The rise in unemployment reflects a 6.8 percent increase in the number of unemployed people and a decline in the number employed of -0.3 percent over the month. On a year-over-year basis the news is somewhat better. Since last April, District employment increased by 0.7 percent as the labor force grew (+0.6 percent), and the number of persons unemployed fell by -1.2 percent. To be sure, the year-over-year performance of the District's labor markets still lags national growth. In May, the national unemployment rate was 4.5 percent, which was unchanged from April.

### Unemployment Rates, April 2007\*



\*Data are seasonally adjusted using the Census Bureau's X-11 procedure.  
Source: U.S. Department of Labor, Bureau of Labor Statistics.

Of all the District's counties, 19 had an unemployment rate below the national average in April and 150 had a higher rate; the comparative rates were slightly worse than last month. The labor market in Pennsylvania was relatively strong, as the unemployment rate inside the District's Pennsylvania borders was below the national unemployment rate (4.3 percent and 4.5 percent, respectively). Both Fourth District Kentucky and Ohio unemployment rates (6.4 percent and 5.7 percent, respectively) were much higher than the national rate. Moreover, unemployment rates varied markedly across the District's major metropolitan areas. While Pittsburgh and Lexington had unemployment rates below the national rate—each averaging 4.1 percent—other District metro areas had rates as much as 1.7 percentage points higher than the national average (Toledo, at 6.2 percent).

With a 12-month employment growth rate of 2.0 percent, Lexington was the only major metropolitan area in the District to increase employment by over 0.5 percent during the year, and it even outpaced the national employment growth rate (1.5 percent). Since last April, nonfarm employ-

## Payroll Employment by Metropolitan Statistical Area

	12-month percent change, April 2007							
	Cleveland	Columbus	Cincinnati	Dayton	Toledo	Pittsburgh	Lexington	U.S.
Total Nonfarm	-0.4	0.5	0.3	-0.8	0.2	0.4	2.0	1.5
Goods-producing	-2.1	-1.8	-1.3	-2.4	-0.5	-1.3	0.2	-0.2
Manufacturing	-2.7	-1.5	-0.8	-2.8	-1.4	-1.3	0.0	-0.7
Natural resources, mining, and construction	0.5	-2.4	-2.4	-0.7	2.7	1.5	0.8	0.8
Service-providing	0.0	0.8	0.7	-0.4	0.3	0.7	2.4	1.8
Trade, transportation, and utilities	0.0	0.7	-0.1	-3.3	0.0	-0.2	-0.7	0.9
Information	0.0	-2.1	-3.2	0.9	5.0	-0.9	8.7	0.8
Financial activities	-0.8	-0.8	-1.1	1.0	-0.8	-1.9	2.7	1.6
Professional and business services	-0.1	2.1	0.5	-0.2	0.9	1.2	3.0	2.2
Education and health services	1.0	0.8	3.4	-0.2	1.2	2.4	1.0	2.7
Leisure and hospitality	0.0	2.1	1.3	2.2	0.3	0.3	5.7	3.3
Other services	1.4	-1.1	1.4	-0.6	-2.0	-0.2	-2.0	0.6
Government	-1.3	0.7	-0.3	0.0	0.2	0.9	4.7	1.3
April unemployment rate (seasonally adjusted, percent)	5.6	4.8	5.0	5.8	6.2	4.1	4.1	4.5

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

ment dropped in Cleveland (-0.4 percent) and Dayton (-0.8 percent), the weakest-performing major metropolitan areas in the District. Goods-producing employment fell in the major District metro areas and nationally, except for Lexington. Service-providing employment fared better and increased in five of the seven major metro areas. Again, Lexington (2.4 percent) was the only area to outpace national growth (1.8 percent) in the service-providing sector. The education and health services industry posted job gains in all major District metro areas, except for Dayton (-0.2 percent), and the professional and business services sector posted job gains in all major District metro areas, except for Cleveland (-0.1 percent) and Dayton (-0.2 percent). The leisure and hospitality industry was either flat or growing in all metro areas in the District over the past year, and it was particularly strong in Lexington.

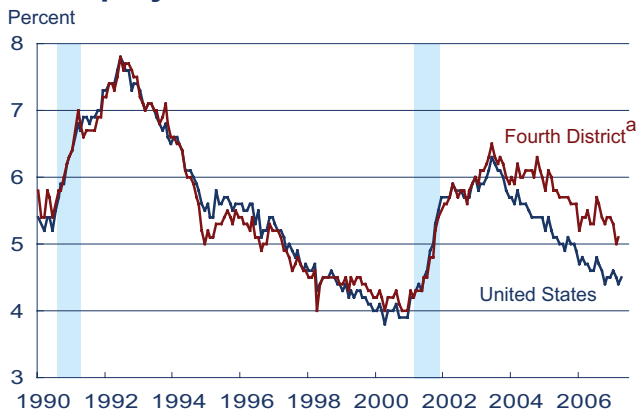


## Fourth District Employment Conditions (March)

05.17.07

by Paul Bauer and Brian Rudick

### Unemployment Rates\*

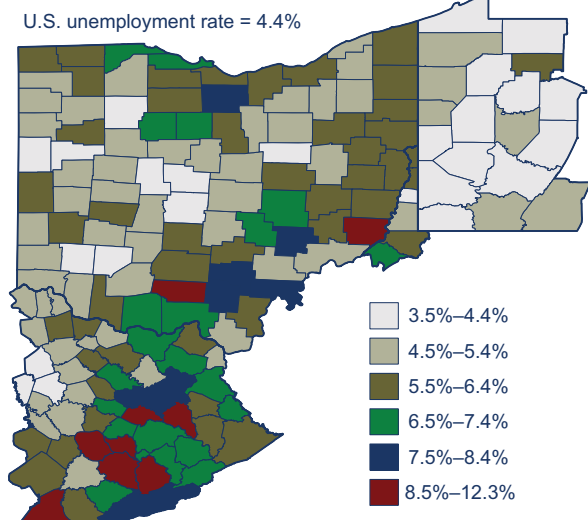


a. Seasonally adjusted using the Census Bureau's X-11 procedure.  
 \*Shaded bars represent recessions. Some data reflect revised inputs, reestimation, and new statewide controls. For more information, see <http://www.bls.gov/lau/launews1.htm>.  
 Source: U.S. Department of Labor, Bureau of Labor Statistics.

The Fourth District's unemployment rate rose 0.1 percentage point in March to 5.1 percent. The change reflects a 2.1 percent increase in unemployment, and nearly unchanged labor force and employment levels (which both increased 0.1 percent over the month). Since this time last year, District employment has risen 1.0 percent, the labor force has increased 0.7 percent, and unemployment has fallen 4.9 percent. In March, the national unemployment rate was 4.4 percent; it rose to 4.5 percent in April.

Of the 169 counties in the Fourth District, 21 had an unemployment rate below the national average in March, 4 had a rate equal to it, and 144 had a higher rate. Counties in Pennsylvania that are a part of the District were particularly strong—the unemployment rate of these together was 4.0 percent. In the District's major metropolitan areas, unemployment rates varied. Whereas Pittsburgh and Lexington both had rates of 4.0 percent, other District metro areas had rates as much as 1.9 percentage points higher than the national average (for example, Toledo, at 6.3 percent).

### Unemployment Rates, March 2007\*



\*Data are seasonally adjusted using the Census Bureau's X-11 procedure.  
 Source: U.S. Department of Labor, Bureau of Labor Statistics.

Over the past year, nonfarm employment has declined in Cleveland (–0.4 percent), Dayton (–0.5 percent), and Toledo (–0.2 percent), whereas national employment grew 1.5 percent. Lexington was the only major District metropolitan area to outpace national employment growth relative to this time a year ago. Goods-producing employment fell in the major District metro areas, except in Cincinnati. Service-providing employment, on the other hand, grew in most major metro areas, although Lexington (at 2.5 percent) was the only area to outpace national growth (1.8 percent). The professional and business services industry posted job gains in all major District metro areas, and the education and health services did the same, except for in Dayton, where employment in this sector fell 0.5 percent.

# Payroll Employment by Metropolitan Statistical Area

12-month percent change, March 2007

	Cleveland	Columbus	Cincinnati	Dayton	Toledo	Pittsburgh	Lexington	U.S.
Total Nonfarm	-0.4	0.3	0.3	-0.5	-0.2	0.6	1.9	1.5
Goods-producing	-1.8	-1.8	0.1	-2.0	-0.2	-0.3	-0.6	-0.2
Manufacturing	-2.4	-1.9	1.0	-2.1	-0.4	-0.8	-0.9	-0.7
Natural resources, mining, and construction	0.5	-1.6	-2.2	-1.4	0.7	5.8	0.0	0.8
Service-providing	0.0	0.6	0.4	-0.2	-0.2	0.7	2.5	1.8
Trade, transportation, and utilities	-0.3	0.8	0.0	-2.4	-0.3	-0.5	-2.0	0.9
Information	-2.6	-2.1	-2.5	0.0	5.0	0.0	8.7	0.8
Financial activities	-0.6	-0.3	-0.6	0.5	-2.3	-0.7	1.8	1.6
Professional and business services	0.3	2.1	0.5	0.4	0.6	1.4	4.3	2.2
Education and health services	1.4	0.5	2.8	-0.5	0.2	2.8	1.9	2.7
Leisure and hospitality	0.1	0.6	-0.4	3.3	-1.6	-0.2	6.9	3.3
Other services	0.7	0.0	0.5	-1.2	0.7	0.4	-3.0	0.6
Government	-1.4	0.0	-0.2	0.2	0.0	0.3	4.7	1.3
March unemployment rate (seasonally adjusted, percent)	5.5	4.3	4.6	5.3	6.3	4.0	4.0	4.4

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

## Financial Institutions

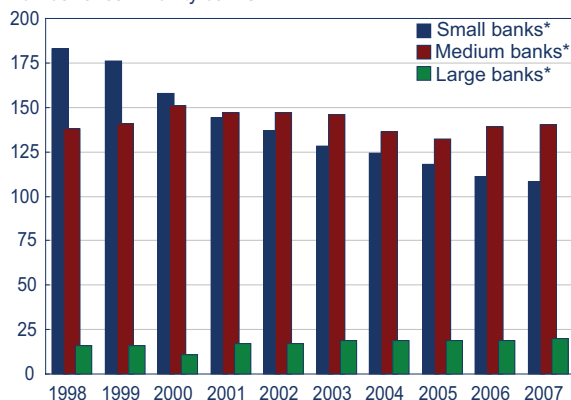
### Fourth District Community Banks

05.30.07

by James B. Thomson and Cara Stepanczuk

#### Fourth District Community Banks by Asset Size

Number of community banks



\*Small banks have assets less than \$100 million; medium banks have assets between \$100 million and \$500 million; and large banks have assets between \$500 million and \$1 billion.

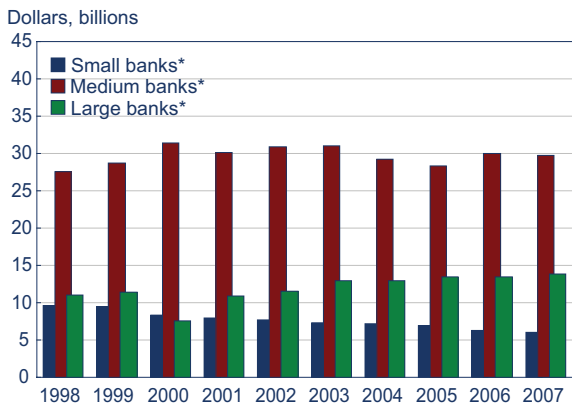
Source: Authors' calculation from Federal Financial Institutions Examination Council, *Quarterly Banking Reports of Condition and Income*, first quarter, 2007.

Of the 292 banks headquartered in the Fourth Federal Reserve District as of March 31, 2007, 268 are community banks—commercial banks that have less than \$1 billion in total assets. The number of community banks headquartered in the Fourth District has declined rapidly in recent years as a result of bank mergers; in 1998, there were 337 such banks in the district. The structure of the market with respect to asset size has also changed. Before 2000, the majority of community banks in the district had less than \$100 million in total assets. Since then, banks in the mid-size category (\$100 million to \$500 million) have constituted the majority.

Mid-size banks also hold the largest amount of as-

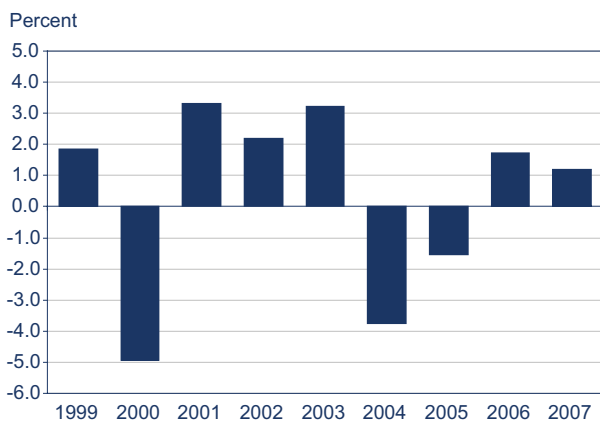


## Total Assets Held by Fourth District Community Banks



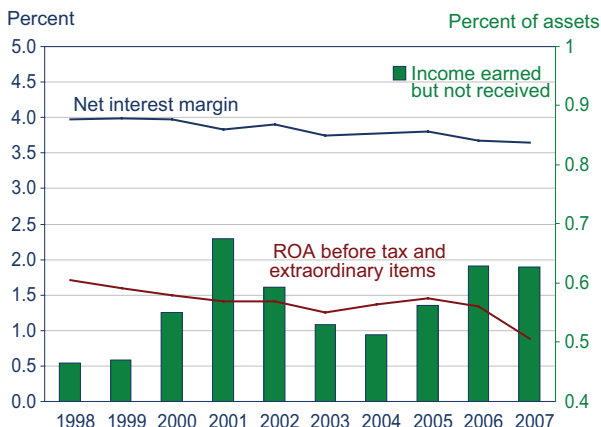
\*Small banks have assets less than \$100 million; medium banks have assets between \$100 million and \$500 million; and large banks have assets between \$500 million and \$1 billion.  
Source: Authors' calculation from Federal Financial Institutions Examination Council, *Quarterly Banking Reports of Condition and Income*, first quarter, 2007.

## Annual Asset Growth\*



\*Data for 2007 are annualized.  
Source: Authors' calculation from Federal Financial Institutions Examination Council, *Quarterly Banking Reports of Condition and Income*, first quarter, 2007.

## Income Stream\*



\*Data for 2007 are annualized.  
Source: Authors' calculation from Federal Financial Institutions Examination Council, *Quarterly Banking Reports of Condition and Income*, first quarter, 2007.

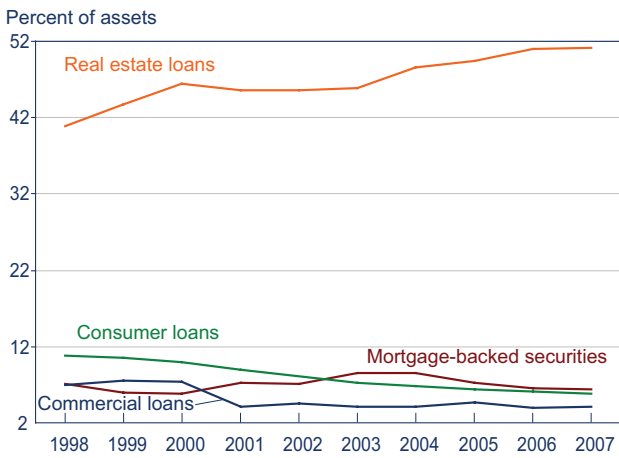
sets in the Fourth District (almost 60 percent). The shift in assets from the smallest community banks to the largest community banks in the Fourth District reflects the continued consolidation of the industry.

Total asset growth for Fourth District community banks increased at a 1.2 percent annualized rate in 2007:IQ, but has fluctuated in the last few years. Community banking assets declined sharply in 2000 and 2004. Note that the decline in assets does not necessarily mean that the banks closed shop and left the district. A bank may disappear from our radar because it is acquired by an out-of-state bank holding company (which could change which Federal Reserve district the bank and branch offices belong to) or because it merges with another Fourth District bank and the total assets of the merged institution push it above the \$1 billion cutoff. For example, the two years in which annual growth rates for assets were the lowest are those in which the greatest number of institutions consolidated or left the population of Fourth District community banks.

The income stream of Fourth District community banks has shown some slight deterioration in recent years. The return on assets (ROA) deteriorated from 1.7 percent in 1998 to 0.8 percent in 2007:IQ. (ROA is measured by income before tax and extraordinary items, because one bank's extraordinary items can distort the averages in some years.) The decline is in part due to weakening net interest margins (interest income minus interest expense divided by earning assets). Currently at 3.64 percent, the net interest margin is at its lowest level in over eight years.

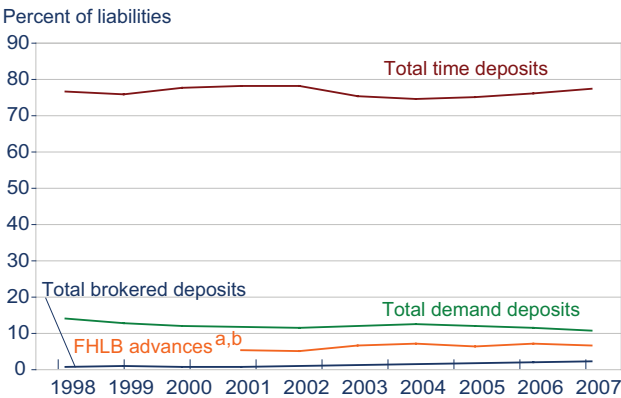
One issue which may become a cause for concern in the future is the elevated level of income earned but not received; at 0.63 percent, this figure remains at its highest level since 2001. If a loan agreement allows a borrower to pay an amount that does not cover the interest accrued on the loan, the uncollected interest is booked as income even though there is no cash inflow. The assumption is that the unpaid interest will eventually be paid before the loan matures. However, if an economic slowdown forces an unusually large number of borrowers to

## Balance Sheet Composition



Source: Authors' calculation from Federal Financial Institutions Examination Council, *Quarterly Banking Reports of Condition and Income*, first quarter, 2007.

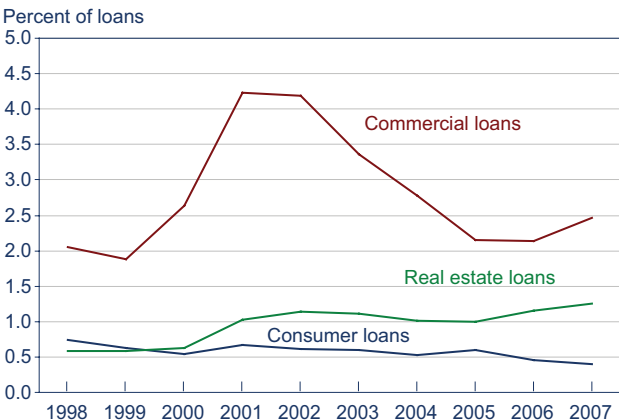
## Liabilities



a. Federal Home Loan Bank advances.  
b. Data start in 2001.

Source: Authors' calculation from Federal Financial Institutions Examination Council, *Quarterly Banking Reports of Condition and Income*, first quarter, 2007.

## Problem Loans



Source: Authors' calculation from Federal Financial Institutions Examination Council, *Quarterly Banking Reports of Condition and Income*, first quarter, 2007.

default on their loans, the bank's capital may be impaired unexpectedly.

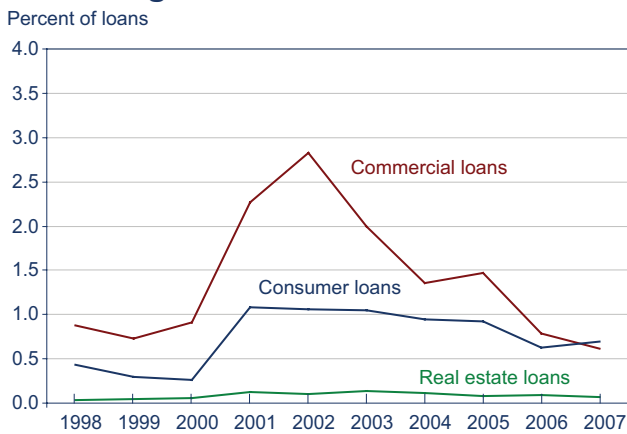
Fourth District community banks are heavily engaged in real estate related lending. At the beginning of 2007, 51 percent of their assets were in loans secured by real estate. Including mortgage-backed-securities, the share of real estate-related assets on the balance sheet was 57.6 percent.

Fourth District community banks finance their assets primarily through time deposits (77 percent of total liabilities). Brokered deposits—a riskier type of deposit for banks because it chases higher yields and is not a dependable source of funding—are seldom used. Federal Home Loan Bank (FHLB) advances are loans from the FHLBs that are collateralized by the bank's small business loans and home mortgages. Although they have gained some popularity in recent years, FHLB advances are still a small fraction of community banks' liabilities (6.6 percent of total liabilities) and remain an important source of backup liquidity for most Fourth District community financial institutions.

Problem loans include loans that are past due for more than 90 days but are still receiving interest payments as well as loans that are no longer accruing interest. With the exception of a sharp rise in 2001, problem commercial loans have returned to their 1998–2000 levels in recent years, thanks to the strong economy. Currently, 2.47 percent of all commercial loans are problem loans. Problem real estate loans are only 1.25 percent of all outstanding real estate-related loans, but they are at the highest level since 1998. Problem consumer loans continued their decline in 2007:1Q. Currently, 0.40 percent of all outstanding consumer loans (credit cards, installment loans, etc.) are problem loans.

Net charge-offs are loans that are removed from the balance sheet because they are deemed unrecoverable minus the loans that were deemed unrecoverable in the past but are recovered in the current year. As with the problem loans, there was a sharp increase in the net charge-offs of commercial loans in 2001 and 2002. Consumer loans followed a similar path but have remained slightly elevated since the recession. Fortunately, the charge-off level for commercial loans has returned to its pre-reces-

## Net Charge-offs\*



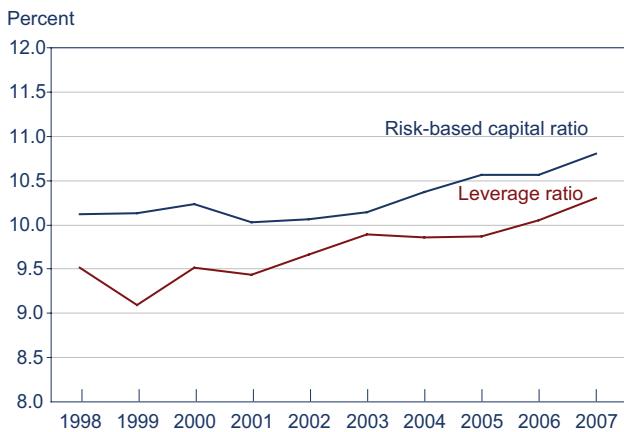
\*Data for 2007 are annualized.  
Source: Authors' calculation from Federal Financial Institutions Examination Council, *Quarterly Banking Reports of Condition and Income*, first quarter, 2007.

sion level. Net charge-offs in 2007:1Q were limited to 0.61 percent of outstanding commercial loans, 0.69 percent of outstanding consumer loans, and 0.07 percent of outstanding real estate loans.

Capital is a bank's cushion against unexpected losses. The recent trends in the capital ratios indicate that Fourth District community banks are protected by a large cushion. The leverage ratio (balance sheet capital over total assets) was above 10 percent, and the risk-based capital ratio (a ratio determined by assigning a larger capital charge on riskier assets) was above 10.5 percent at the beginning of 2007. The growing ratios are signs of strength for community banks.

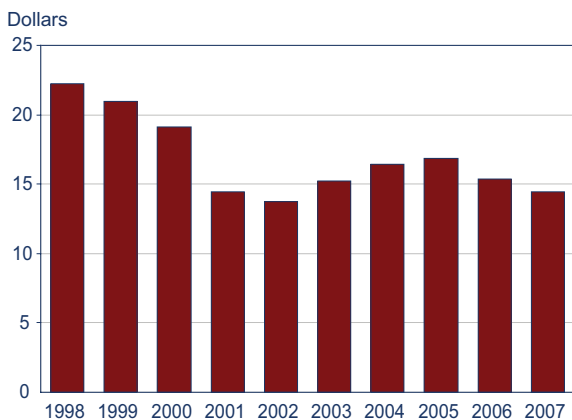
An alternative measure of balance sheet strength is the coverage ratio. The coverage ratio measures the size of the bank's capital and loan loss reserves relative to its problem assets. As of 2007:1Q, Fourth District community banks had almost \$15 in capital and reserves for each \$1 of problem assets. While the coverage ratio declined considerably following the high charge-off periods of the early 2000s, balance sheets are still strong.

## Capitalization



Source: Authors' calculation from Federal Financial Institutions Examination Council, *Quarterly Banking Reports of Condition and Income*, first quarter, 2007.

## Coverage Ratio\*



\*Ratio of capital and loan loss reserves to problem assets.  
Source: Authors' calculation from Federal Financial Institutions Examination Council, *Quarterly Banking Reports of Condition and Income*, first quarter, 2007.