March 2008

(Covering February 15, 2008, to March 13, 2008)

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January Price Statistics

January Price Statistics

	Percent change, last						
	1mo.a	3mo.a	6mo.a	12mo.	5yr.a	2007 avg.	
Consumer Price Index							
All items	4.8	6.8	4.7	4.3	3.0	4.2	
Less food and energy	3.8	3.1	2.7	2.5	2.1	2.4	
Median ^b	4.2	3.7	3.4	3.2	2.6	3.1	
16% trimmed mean ^b	4.3	3.5	3.1	3.0	2.4	2.8	
Import Price Index							
All commodities	22.9	19.8	13.3	13.7	5.9	11.3	
Nonpetroleum imports Export Price Index	8.0	6.5	4.2	3.6	2.5	2.9	
All commodities	15.0	10.6	7.9	6.7	4.1	6.0	

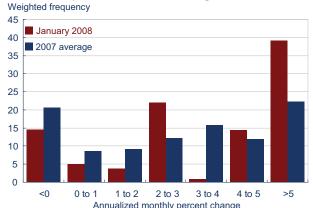
a. Annualized.

CPI, Core CPI, and Trimmed-Mean CPI Measures



a. Calculated by the Federal Reserve Bank of Cleveland.

CPI Component Price Change Distributions



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

03.11.08 by Michael F. Bryan and Brent Meyer

The Consumer Price Index (CPI) rose at an annualized rate of 4.8 percent in January, following a 4.4 percent increase in December, outpacing its 6-month, 12-month, and 5-year trends. The usual suspects (energy and food) contributed to the increase in the headline number, rising at annualized rates above 8 percent, but were not the only culprits, as the CPI excluding food and energy (core CPI) advanced 3.8 percent during the month. There is evidence of broad-based price pressure, as the core CPI, the 16 percent trimmed-mean CPI, and the median CPI outpaced all of their respective longer-term trends. In fact, the core CPI saw its largest monthly jump since March 2004, and the last time the 16 percent trimmed mean was above 4.0 percent was September 2005. Import prices have been elevated lately, rising almost 20 percent (annualized rate) over the past three months, and we may be seeing some pass-through onto retail prices.

The 12-month growth rate in the CPI shot up to 4.4 percent in January from a recent low in August 2007 of 1.9 percent. The core CPI and trimmedmean measures have exhibited a similar upward trend (to a lesser extent), and are now ranging between 2.5 percent and 3.2 percent.

Core services prices increased 4.6 percent in January, their largest monthly increase since October 2005, and pushed the 12-month growth rate to 3.4 percent. Core goods prices rose 1.9 percent during the month, after remaining virtually unchanged in December. The 12-month growth rate in core goods prices ticked up to 0.2 percent.

Looking forward, household inflation expectations for the year ahead ticked down slightly from January's reading of 4.0 percent to 3.9 percent, according to the latest Survey of Consumers (University of Michigan). Expectations over the longer term (5-10 years) remained unchanged at 3.4 percent. Since 1995, both the year-ahead and the 5-10 year-ahead inflation expectations figures have averaged 3.5 percent.

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.

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

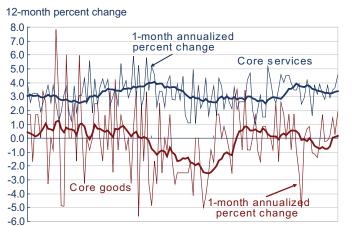
Household Inflation Expectations*



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

Source: University of Michigan.

Core CPI Goods and Core CPI Services



2004

2006

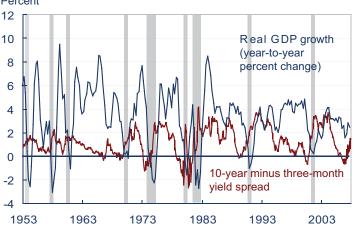
2008

2002 Source: U.S. Department of Labor, Bureau of Labor Statistics.

Money, Financial Markets, and Monetary Policy

What Is the Yield Curve Telling Us?

Yield Spread and Real GDP Growth*



*Shaded bars represent recessions

Sources: Bureau of Economic Analysis: Federal Reserve Board.

02.20.08

2000

1998

Joseph G. Haubrich and Katie Corcoran

Since last month, the yield curve has gotten steeper, with long-term interest rates rising and short-term interest rates falling. One reason for noting this is that the slope of the yield curve has achieved some notoriety as a simple forecaster of economic growth. The rule of thumb is that an inverted yield curve (short rates above long rates) indicates a recession in about a year, and 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.

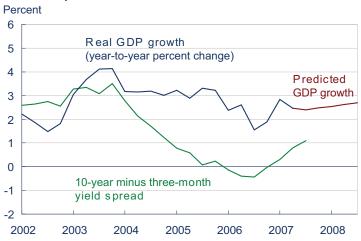
The yield curve has continued to get steeper, although long rates have now started to rise. The spread remains positive, with the 10-year rate rising

Yield Spread and Lagged Real GDP Growth



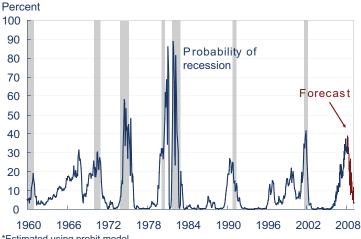
Sources: Bureau of Economic Analysis; Federal Reserve Board.

Yield Spread and Predicted GDP Growth



Sources: Bureau of Economic Analysis; Federal Reserve Board.

Probability of Recession Based on the Yield Spread*



*Estimated using probit model.

Note: Shaded bars represent recessions

Sources: Bureau of Economic Analysis; Federal Reserve Board; and author's

to 3.72 percent and the 3-month rate dropping to 2.28 percent (both for the week ending February 15). Standing at 144 basis points, the spread is above January's 127 basis points and December's 120 basis points. Projecting forward using past values of the spread and GDP growth suggests that real GDP will grow at a rate of about 2.7 percent over the next year. This is on the high side of other forecasts.

While such an approach predicts when growth is above or below average, it does not do so well in predicting the actual number, especially in the case of recessions. Thus, it is sometimes preferable to focus on using the yield curve to predict a discrete event: whether or not the economy is in recession. Looking at that relationship, the expected chance of the economy being in a recession next February stands at 3.7 percent, down a bit from January's already low 4.8 percent and December's 5 percent.

The probability of recession is below several recent estimates, and perhaps seems strange in the midst of recent financial concerns, but one aspect of those concerns has been a flight to quality, which lowers yields on Treasury securities, and a reduction in both the federal funds target rate and the discount rate by the Federal Reserve, which tends to steepen the yield curve. Furthermore, the forecast is for where the economy will be next February, not earlier in the year.

To compare our 3.7 percent to some other probabilities and learn more about different techniques for predicting recessions, head on over to the Econbrowser blog.

Of course, it might not be advisable to take our number quite so literally, for two reasons. First, this 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 Commentary "Does the Yield Curve Signal Recession?"

International Markets

Are We Importing Inflation?

January CPI Statistics

	_	Annualized percent change, last:						
	_	1mo.	3mo.	6mo.	12mo.	2007 avg.		
Consumer Price Index								
All items	4	1.8	6.8	4.7	4.4	2.9		
Less food a energy	and 3	3.8	3.1	2.7	2.5	2.3		
Median	4	1.2	3.7	3.4	3.2	3.1		
Trimmed m	iean ⁴	1.3	3.5	3.1	3.0	2.7		

Source: The Bureau of Labor Statistics

Import Prices

	Average annual percentage chang 2/02-1/08							
CPI		3.0						
Imports								
	All	5.8						
	Foods	6.5						
	Industrial materials	17.0						
	Capital goods	-0.6						
	Automotive	1.0						
	Consumer	0.7						
	Petroleum	26.8						
	Nonpetroleum	2.2						

Source: The Bureau of Labor Statistics.

03.07.08

Owen F. Humpage and Michael Shenk

Headline and core price indexes recently have been rising at a disconcertingly fast pace, reflecting the direct and secondary pass-through effects of record oil prices, rapidly rising agricultural prices, and the dollar's depreciation. Some observers, noting the international lineage of these price patterns, wonder if world economic development and the integration of global markets have doomed the United States to a permanently higher rate of inflation. This question reflects a very common misunderstanding of what price indexes tell us and of the true nature of inflation. To be sure, greater global claims on scarce world resources will raise our cost of living, but inflation has everywhere and always been a homegrown, central-bank problem.

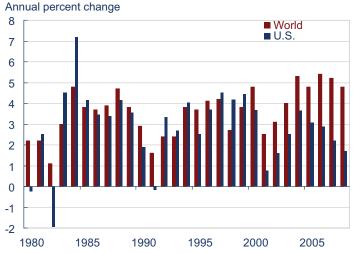
Inflation refers to the deterioration in the purchasing power of money that results when a central bank creates more money than the public wants to hold. Inflation manifests itself as a rise in all prices and wages-in fact, anything denominated in dollars. If the public's demand for money grows at 3 percent per year and if the central bank creates money at 5 percent per year, then prices will eventually rise at 2 percent per year, and they will keep climbing as long as the disparity between the supply and demand for money continues. While the rate of inflation is ultimately under the control of central banks, the speed with which an inflationary monetary impulse filters through to wages and prices seems to depend on many things, including the amount of slack in an economy, whether the public anticipated the inflation, and the degree of price competitiveness throughout the economy. When the economy is operating at full tilt, when people generally anticipate inflation, and when

Export Prices

	Average annual percentage change: 2/02- 1/08					
CPI		3.0				
Exports						
	All	3.6				
	Foods	10.1				
	Industrial materials	9.1				
	Capital goods	0.2				
	Automotive	1.0				
	Consumer	1.3				
	Agriculture	9.9				
	Nonagriculture	3.0				

Source: The Bureau of Labor Statistics.

Real GDP Growth



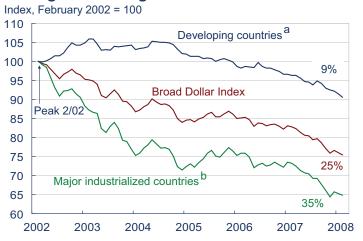
Source: The Bureau of Economic Analysis; The International Monetary Fund, World Economic Outlook Database, October 2007.

firms and workers operate in a highly competitive environment, monetary excesses are likely to translate quickly into higher prices and wages.

Inflation is not the only type of price pressures that an economy experiences. Individual prices adjust continually to the ebb and flow of supply and demand pressures. Economists often refer to these as relative (or sometimes real) price adjustments. Although they hit our price indexes much like inflation, relative prices adjustments are fundamentally different. For one thing, relative price changes convey important information about the relative scarcities of goods and services. A rising relative price indicates that demand has outstripped supply (or that supply has fallen short of demand), while a falling price denotes just the opposite. Relative price changes also help stabilize the economy. A rising relative price induces consumers to conserve on a specific good and to look for substitutes. A rising relative price also entices producers to bring more of the good to market. Relative price changes are vital for the smooth functioning of any market economy; inflation, however, contributes no information useful to our consumption, production, and labor choices.

Currently, petroleum and agricultural goods are experiencing very strong upward relative price pressures. Two factors seem to account for this. First, the world has experienced what seems to be unprecedented economic performance in recent years according to IMF data. Between 2004 and 2007, the world economy grew at an exceptionally strong 5.1 percent average annual rate, and nearly all nations have shared in this expansion. Emerging market countries in Southeast Asia, notably China and India, have led the way. As these nations develop, they place greater demands on world food stuffs, petroleum supplies, and other resources. Also putting upward pressure on many prices has been the dollar's depreciation. Since early 2002, the dollar has depreciated more than 25 percent on a broad, trade-weighted basis. A dollar depreciation reduces the foreign-currency prices of dollar-denominated goods and thereby shifts world demand toward those goods. Because of the dollar's role as the key international currency, most of the world's commodities, like oil and agricultural goods, are de-

Foreign Exchange Indexes



a: Other Important Trading Partners Index

b: Major Currencies Index

Source: Board of Governors of the Federal Reserve System

nominated in dollars. The prices of U.S. foods and industrial-materials exports, for example, are rising at or near double-digit levels.

Although relative price pressures can be broad based, their impact on the overall price level in an economy is by nature transitory. Petroleum and agricultural products enter the production process of a very wide range of other goods. Consequently, higher prices of these basic commodities tend to pass through into the prices of other producer and consumer goods. Nevertheless, as long as the central bank is not creating an excessive amount of money, this pass-through effect is limited. As consumers spend more money on higher-priced petroleum and agricultural goods—the quantity demand of these items seems fairly unresponsive to price changes—then they eventually must have less money to spend on other goods and services. Other relative prices must then fall, so that over the intermediate to long term, the average rate of the price rise tends to equal the underlying inflation rate as determined by monetary policy. People's cost of living certainly will rise, their incomes will buy less, and their economic well-being will be diminished. Nevertheless, these relative price pressures do not generate inflation.

One wrinkle in this story has to do with the dollar's depreciation. Since early 2006, the depreciation seems to reflect international portfolio diversification, rather than excessive U.S. money growth. Over the past 25 years, the U.S. has financed its current account deficits by issuing financial claims to the rest of the world. Economists have long expected that, at some point, foreign investors both private and official—would become reluctant to hold additional dollar-denominated assets and at this point the dollar would depreciate. Of course, concerns about future inflation could motivate portfolio diversification and dollar depreciation, but to date, direct measures provide little evidence of rising inflation expectations. We are not importing inflation through the dollar's depreciation.

Real GDP 2007: Fourth-Quarter Preliminary Estimate

Real GDP and Components 2007: Fourth-Quarter Advance Estimate

Annualized percent change, last:

	Quarterly change (billions of 2000\$)	Quarter	Four quarters
Real GDP	18.2	0.6	2.5
Personal consumption	39.1	1.9	2.5
Durables	7.1	2.3	4.3
Nondurables	8.3	1.4	1.5
Services	24.1	2.1	2.6
Business fixed investment	23.2	6.9	7.3
Equipment	8.7	3.3	3.6
Structures	10.8	14.6	15.7
Residential investment	-32.5	-25.2	-18.6
Government spending	11.1	2.2	2.4
National defense	-0.4	-0.3	1.5
Net exports	26.3	_	_
Exports	17.0	4.8	7.9
Imports	-9.3	-1.9	0.9
Change in business inventories	-40.7	_	_

Source: Bureau of Labor Statistics.

Contribution to Percent Change in Real GDP

Percentage points



Source: Bureau of Economic Analysis.

03.07.07 Brent Meyer

Real GDP remained unchanged from the advance estimate, growing at an annualized rate of 0.6 percent in the fourth quarter of 2007. Downward revisions to private investment and personal consumption were balanced by a positive improvement in net exports. Exports were adjusted up 0.9 percentage point, from 3.9 percent to 4.8 percent, while imports (which subtract from GDP growth) were revised down, from 0.3 percent to -2.2 percent. Personal consumption of durable goods was adjusted down from 4.2 percent growth in the advance estimate to 2.3 percent in the preliminary estimate. Business inventories showed a slightly greater contraction than previously estimated, falling \$40.7 billion during the quarter. On net, private inventories lost \$33.7 billion in 2007.

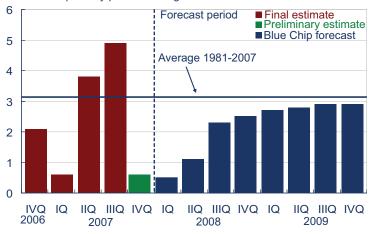
Personal consumption contributed 1.3 percentage points to the percent change in real GDP, compared to the 1.4 percentage points of the advance fourth-quarter estimate. Consumption has added 1.7 percentage points to growth over the past four quarters. The contribution of real exports was revised up from 0.5 percentage point to 0.6 percentage point, while imports, which had subtracted 0.1 percentage point in the advance estimate, are now adding 0.3 percentage point. Private investment and inventories (together) subtracted 2.0 percentage points off of real GDP growth, compared with a 0.5 percentage point reduction over the past four quarters.

Looking forward, the Blue Chip Panel of economists expect below-trend real GDP growth of 2.2 percent in 2008. Of the 45 panelists, 19 have downgraded their 2009 forecast since last month. Recent data releases have been somewhat weak, hinting that first-quarter growth will be slow. Indeed, the Blue Chip panel expects first-quarter growth to be 0.5 percent, before steadily rising closer to trend growth by 2009.

Another signal about the near-term growth outlook

Real GDP Growth

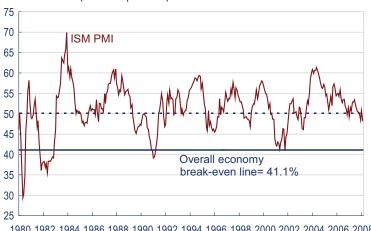
Annualized quarterly percent change



Source: Blue Chip Economic Indicators, February 2008; Bureau of Economic Analysis.

ISM Manufacturing PMI

Diffusion Index (+50 = expansion)



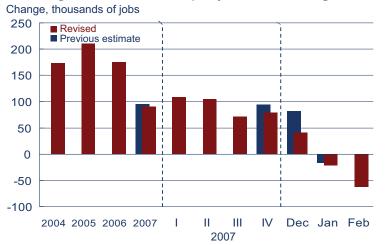
1980 1982 1984 1986 1988 1990 1992 1994 1996 1998 2000 2002 2004 2006 2008

Source: Bureau of Economic Analysis

Economic Activity and Labor Markets

The Employment Situation

Average Nonfarm Employment Change



Source: Bureau of Labor Statistics

Nonfarm payroll employment declined by 63,000 in February, coming in below expectations of a 25,000 gain. January's loss (initially 17,000) was revised downward to a loss of 22,000. Payroll declines were last seen in August 2003, and this report brings the second consecutive monthly decline. December's gains were also cut in half to just 41,000 jobs. Somewhat surprisingly, the unemployment rate dipped slightly, from 4.9 percent to 4.8 percent, but this was because of a decline of 450,000

by Yoonsoo Lee and Beth Mowry

03.10.08

comes from the Purchasing Managers Index (PMI), calculated by the Institute for Supply Management (ISM). In February, the PMI posted a value of 48.3, a slight contraction in the manufacturing sector (values greater than 50 indicate manufacturing sector expansion, based on survey responses). In their Report on Business, the ISM stated that, while an index level of 50 is the break-even point for the manufacturing economy, "A PMI in excess of 41.1 percent, over a period of time, indicates that the overall economy, or gross domestic product (GDP), is generally expanding; below 41.1 percent, it is generally declining." Taken at face value, that would seem a reassuring sign, as it would indicate some GDP growth. However, over time that relationship seems to be losing some explanatory power, either because the last three recessions have been relatively mild, or because of an underlying structural change. Regardless, the ISM manufacturing index is correlated with real GDP, with a correlation coefficient of 0.66. Coming out monthly, the PMI gives economic observers a quicker read.

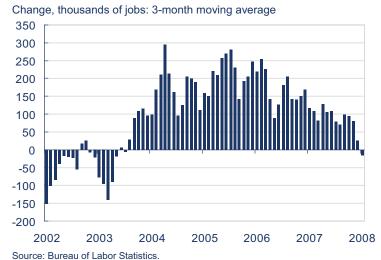
Labor Market Conditions

_	Average	monthly chan	ge (thousands	of employees, NA	AICS)	
	2004	2005	2006	2007 YTD	Feb 2008	
Payroll employment	173	211	175	91	-63	
Goods-producing	26	32	3	-38	-89	
Construction	25	35	13	-19	-39	
Heavy and civil engineering	1	4	3	-1	-5	
Residential ^a	10	11	-2	-10	-26	
Nonresidential ^b	2	4	7	1	-9	
Manufacturing	-1	-7	-14	-22	-52	
Durable goods	8	2	-4	-15	-40	
Nondurable goods	-9	-8	-10	-7	-12	
Service-providing	148	179	172	132	26	
Retail trade	16	19	5	7	-34	
Financial activities ^c	8	14	9	-8	-12	
PBS ^d	39	56	46	27	-20	
Temporary help svcs.	11	17	1	-7	-28	
Education and health svcs.	33	36	39	45	30	
Leisure and hospitality	26	23	32	30	21	
Government	14	14	16	19	38	
Local educational svcs.	9	6	6	5	11	
	Average for period (percent)					
Civilian unemployment rate	5.5	5.1	4.6	4.6	4.8	

a. Includes construction of residential buildings and residential specialty trade contractors.

Source: Bureau of Labor Statistics.

Private Sector Employment Growth



jobs in the labor force, not a rise in employment. Subtracting out the government's contribution of 38,000 jobs, private sector payrolls fell by a significant 101,000.

Goods-producing industries lost 89,000 workers in February. The manufacturing sector led the way with a 52,000 loss, its largest since July 2003 and the twentieth straight month of decline. Within manufacturing, durable goods lost 40,000 jobs and nondurable goods lost 12,000. In production manufacturing, 59,000 jobs were cut, the largest loss this category has experienced since July 2003. Construction continued its shedding trend for the eighth consecutive month, losing 39,000 jobs. Within construction, residential construction faced the largest losses (14,000), but nonresidential construction also lost 3,700 jobs.

Service sector employment rose by just 26,000

b. Includes construction of nonresidential buildings and nonresidential specialty trade contractors.

c. Includes the finance, insurance, and real estate sector and the rental and leasing sector.

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

Labor Market Conditions and Revisions

Average monthly change (thousands of employees, NAICS)

	Average monunity change (thousands of employees, NA						
	Dec current	Revision to Dec	Jan current	Revision to Jan	Feb 2008		
Payroll employment	41	-41	-22	-5	-63		
Goods-producing	-73	-12	-54	-3	-89		
Construction	-55	-10	-25	2	-39		
Heavy and civil engineering	-5.2	0	-5.3	-2	-5		
Residential ^a	-36.9	-5	-29.7	-2	-28		
Nonresidential ^b	-13.5	-5	10.1	1	-9		
Manufacturing	-22	-2	-31	-3	-52		
Durable goods	-2	-5	-19	-7	-40		
Nondurable goods	2	3	-12	4	-12		
Service-providing	114	-29	32	-2	26		
Retail trade	-25	-13	0	-11	-34		
Financial activi- ties ^c	-8	-7	-8	-6	-12		
PBS ^d	52	-18	-9	2	-20		
Temporary help svcs.	-5	2	-11	-2	-28		
Education and health svcs.	46	10	49	2	30		
Leisure and hospitality	7	-15	11	-8	21		
Government	55	27	4	22	38		
Local educa- tional svcs.	17	3	0	5	11		

a. Includes construction of residential buildings and residential specialty trade contractors.

Source: Bureau of Labor Statistics.

workers last month, its weakest gain since October 2005. Even with the government's 38,000 payroll boost to the total services figure, private services lost 12,000. Within services, leisure and hospitality continued a positive streak, adding 21,000 to their payrolls, and health services added 36,800. Food services continued to go strong, adding 19,900 employees. Professional business services, which lost 9,000 jobs in January, experienced its second straight month of decline with a loss of 20,000 jobs. Temporary help fell the most within professional business services, with a loss of 27,600. Financial service activities also fell by 12,000, in line with a year of fairly consistent and comparable decline.

The three-month moving average of private sector employment growth dipped into negative territory for the first time since August 2003. This measure can provide a cleaner read of labor market conditions because it removes some of the monthly volatility and the consistent boost provided by the government.

Overall, this month's employment report points to further weakening in labor markets. However, it is worth noting that monthly numbers are volatile and subject to revision. The Bureau of Labor Statistics (BLS) revised January's initial loss of 17,000 jobs to a slightly larger loss of 22,000 in this month's report. December's gain of 82,000 was also trimmed back to a gain of 41,000. Payroll gains (or losses in this case) for January and February are subject to revision in the next report.

Includes construction of nonresidential buildings and nonresidential specialty trade contractors.

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

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

Housing Doldrums

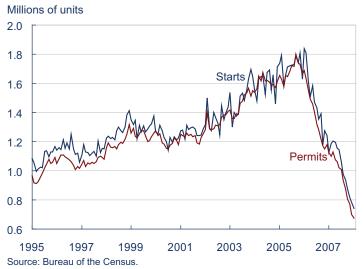
Housing Price Indexes



New Single-Family Home Sales

Millions of units Thousands of dollars 1.3 260 240 1.2 1.1 220 200 1.0 0.9 180 Median sales price 0.8 160 0.7 140 120 0.6 0.5 100 2001 2003 2005 2007 1997 1999 1995 Source: Bureau of the Census.

Single-Family Starts and Permits



03.12.08 O. Emre Ergungor

The deterioration in the housing market shows no sign of abating. The S&P/Case-Shiller house price index registered a 9 percent year-over-year drop in the final quarter of 2007, the sharpest decline in its 21-year history. The Office of Federal Housing Enterprise Oversight (OFHEO) price index also moved into negative territory for the first time in its 17-year history. While both indexes show downward pressure on home prices, the magnitude of the decline differs significantly between the two indexes. The reason is that OFHEO tracks only homes with mortgages below Fannie Mae and Freddie Mac's conforming loan limit (\$417,000 in 2006 and 2007), while the S&P/Case-Shiller index tracks home sales in all price ranges and is therefore more affected by the pricey housing of the coastal areas. (OFHEO's limit has been temporarily raised to \$729,000 or 125 percent of an area's median home price, whichever is lower.)

The decline in prices has not translated into higher volumes just yet. The number of new single-family homes sold has dropped 58 percent since 2005, reaching 588,000 units in January. The median sales price, now at \$216,000, has declined almost 18 percent since March 2007.

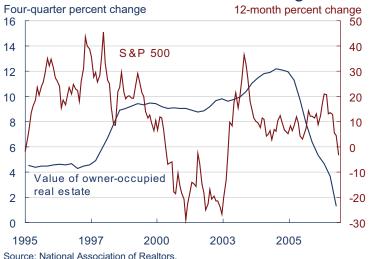
In parallel with the weakening of demand and the decline in prices, residential investment has slowed sharply in recent quarters. Construction permits, which signal building activity going forward, have declined sharply, from 1.8 million units per year in the fall of 2005 to 673,000 units in January 2008.

The sharp decline in new home sales and the high levels of inventory suggest that the weakness in this market is likely to stay with us for some time. At the current sales pace, it would take about 10 months to move the existing inventory. This pace represents a significant deterioration from its level early in the decade and is worse than when it bottomed out at the end of the previous housing downturn in 1991.

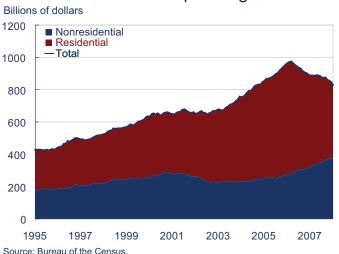
New Single-Family Homes for Sale



Stock Market and Value of Housing



Private Construction Spending



A concern for economic observers is that a home is the most important asset in the household portfolio, comprising more than 30 percent of total assets. When the stock market dropped sharply in the 2000–2003 period, the strength in home values cushioned the blow from falling stock prices and allowed households to keep spending. The slow-down in appreciation over recent months suggests that housing may not be there to pick up the slack in the next downturn.

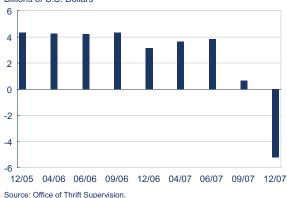
The deterioration in the housing industry and its impact on the nation's economic output are visible in construction spending. While nonresidential construction spending (commercial buildings and shopping malls) has increased rapidly in the last two years, its contribution to the economy could not make up for the sharp decline in residential construction activity. As residential construction continues to deteriorate, whether the demand for commercial buildings will remain strong remains to be seen.

As the housing situation continues to deteriorate, mortgage-related losses are taking a big bite out of the profits of mortgage lenders. The earnings of thrifts—FDIC-insured depository institutions that specialize in mortgage lending—dropped sharply in the fourth quarter of 2007, a loss of almost \$5 billion from a profit of around \$4 billion earlier in the year.

The deterioration in earnings does not appear to be widespread, but the institutions at which the deterioration is concentrated are among the largest in the industry. The chart below shows the total assets of unprofitable thrifts as a fraction of total industry assets in a particular size category. (Year-end data up until the end of 2006 are separated into different categories of asset size and represented by different lines. Data for 2007 appear in the bars and are divided into four quarters. For example, the green line expresses the assets of unprofitable thrifts with total assets of more than \$1 billion as a fraction of the total assets of all large thrifts.) In 1990, almost 50 percent of large-thrift assets were owned by unprofitable large thrifts. When 2007 began, this ratio was 3.5 percent and it declined to 1.8 percent in the second quarter. Fast forward two quarters

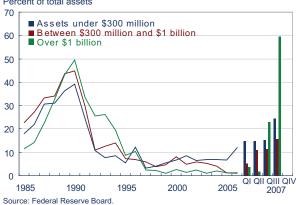
Thrift Industry Earnings

Billions of U.S. Dollars



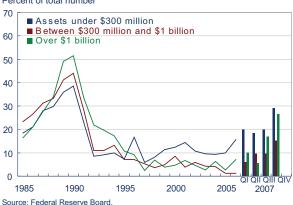
Assets of Unprofitable Thrifts

Percent of total assets



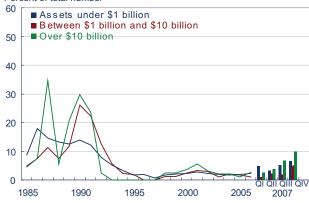
Unprofitable Thrifts

Percent of total number



Unprofitable BHCs and FHCs

Percent of total number



Source: Federal Reserve Board

to December 2007, and 60 percent of large-thrift assets are owned by unprofitable large institutions, which exceeds the level during the thrift crisis of the late 1980s. Note that asset sizes have not been adjusted for inflation. Therefore, a \$1 billion thrift in 1990 was an economically bigger institution than a \$1 billion thrift today.

The charts below show the number of unprofitable institutions in each size category. In the first quarter of 2007 (bars), about 20 percent of thrifts with assets less than \$300 million and 10 percent of thrifts with assets greater than \$1 billion were unprofitable. Those numbers jumped to 29 and 27 percent, respectively, at the end of 2007. These numbers are well below the levels they reached in late 1980s. What these numbers suggest is that compared to 20 years ago, we have fewer troubled institutions, but those that are troubled are the largest ones.

Bank holding companies and financial holding companies (BHCs and FHCs) seem to have fared better in these difficult times. BHCs and FHCs are holding companies that own a diverse set of financial institutions, ranging from depository institutions to insurance companies and investment banks. While the number of unprofitable institutions has increased, the industry as a whole has created enough profit to absorb the losses from the unprofitable institutions. Overall industry profits were still positive and strong in the last quarter of 2007.

BHC and FHC Earnings



Source: Federal Reserve Board.

Preliminary Employment Data Might Miss a Recession Onset

Nonfarm Employment Change Over the Past Eighteen Months

Monthly change, thousands of workers^a



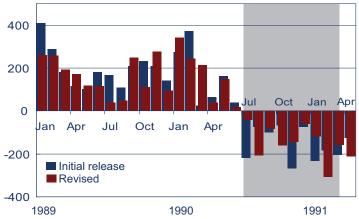
a. Seasonally adjusted.

Note: The shaded bar indicates the recession period.

Source: Bureau of Labor Statistics.

Nonfarm Employment Change 1990-1991 Recession

Monthly change, thousands of workers^a



a. Seasonally-adjusted

Note: The shaded bar indicates the recession period.

Source: Bureau of Labor Statistics.

03.18.08

by Yoonsoo Lee and Beth Mowry

As we move further into 2008, concerns are growing about the U.S. economy heading toward recession. The Employment Situation reports released by the Bureau of Labor Statistics have received a lot of attention in recent months, as economists try to determine the extent to which housing troubles may have spilled over to the broader economy. This month's Employment Situation reported a decline of 63,000 two nonfarm payrolls in February and a revised loss in January, which increased the initial tally of 17,000 job losses to one of 22,000. The last time two consecutive months of decline occurred was in June 2003.

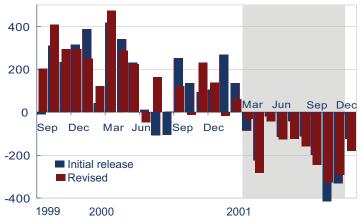
While the timely information provided by preliminary numbers can help us to assess labor market conditions, those numbers are subject to two monthly revisions after they are first released, as well as annual revisions every February. These revisions can be substantial and are sometimes even larger than the payroll changes themselves. The graph below, showing initial releases and revised numbers, demonstrates how significant revisions for any given month can be. January's report this year, for example, initially reported a gain in December of just 18,000 nonfarm jobs but was revised up in the following report to a gain of 82,000. In August last year a payroll loss was initially reported, but with the revision the net change moved into positive territory.

Historically, payroll numbers usually dip sharply during or prior to recessions. But it important to note that this observation is based on revised numbers. The data initially reported might have shown a different picture at the time. To get an idea of how much this picture might change from initial release to revision, we prepared graphs of both sets of employment numbers around the two most recent recessions.

Around the 2000–2001 recession, both initial and revised data indicate a slowing labor market ap-

Nonfarm Employment, Change 2001 Recession

Monthly change, thousands of workers^a



a. Seasonally-adjusted

Note: The shaded bar indicates the recession period.

Source: Bureau of Labor Statistics.

proaching July, although the initial data show a somewhat steeper descent. Despite the slowing trend in nonfarm employment growth in early 1990, growth continued to average about 200,000 jobs per month over the year. Payroll growth sharply turned negative in July, the official starting point of the recession. However, July's loss of 219,000 jobs ended up being revised to a loss of just 89,000 later.

Revisions appear to have been more dramatic leading up to the 2001 recession than the 1990–1991 recession. The initial data show slowing, but employment gains looked solid right up to the onset of the recession in March. However, the revised data paint a much less optimistic picture, twice crossing negative territory in the two quarters preceding the recession. Employment gains of 268,000 in January and 135,000 in Feburary were revised down to -16,000 and 61,000.

As of January 2001, labor indicators such as payroll employment, the unemployment rate, and the employment-to-population ratio all looked to be holding strong. Reports based on the initial releases of early 2001 thus painted a relatively positive picture of the labor market. Even the Cleveland Fed's January Economic Trends assessed labor markets as "holding steady, albeit with slower job growth than earlier in 2000, despite signs of weakening in the overall economy." However, with April's employment report (of March activity), negative change was posted, the unemployment rate edged up 0.1 percent, the employment-to-population ratio decreased 0.1 percent, and the percentage of the civilian labor force unemployed for 15 weeks or longer increased slightly. The author of the Trends article's commented that, "While variations in these labor market series are common, even during periods of robust economic growth, their recent simultaneous movements seem atypically strong and suggest that first-quarter economic activity slowed considerably."

In both recessions, payrolls declined in the first month of the recession. While it seems as though payroll numbers might be insightful turning-point indicators, there are some notable exceptions as well. For example, initial releases for July and

August 2000 showed respective declines of 108,000 and 105,000. However, these numbers were later revised upward, revealing increases of 163,000 and 3,000 jobs.

Three-Month Moving Average of Employment Changes

Three-month moving averages can remove some of the volatility of preliminary data and provide a more tempered trend of payroll employment. A moving average is useful because it takes into account both the latest preliminary data and past months' revisions. However, the diluted nature of moving averages also delays their response to turning points in economic activity. In the 2001 graph, for instance, a three-month moving average smoothes out the peaks and troughs of the monthly change data, but it also shifts the start of the decline to after the start of the recession.

The current three-month moving average of payroll change declined 55,000 to 42,000 between December and January.

Nonfarm Employment Change, 2001 Recession



a. Seasonally-adjusted

b. The 3-mo. moving average represents real-time data, whereas the revised series represents the most current data.

Note: The shaded bar indicates the recession period

Source: Bureau of Labor Statistics.

Nonfarm Employment Change, over the Past Eighteen Months



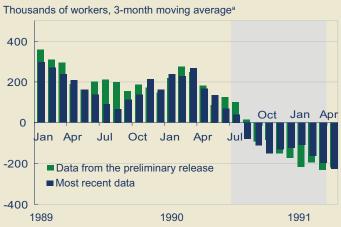
a. Seasonally-adjusted

b. The 3-mo. moving average represents real-time data, whereas the revised series represents the most current data.

Note: The shaded bar indicates the recession period.

Source: Bureau of Labor Statistics

Nonfarm Employment Change, 1900-1991 Recession



a. Seasonally-adjusted.

b. The 3-mo. moving average represents real time data, whereas the revised series represents the most current data.

Note: The shaded bar indicates the recession period

Source: Bureau of Labor Statistics.

Home Price Indexes

OFHEO average

1980

"S&P/Case-Shiller average

1985

-9

-12

1975

Real Home Price Indexes

Percent change, year over year

15
12
9
6
3
0
-3
-6

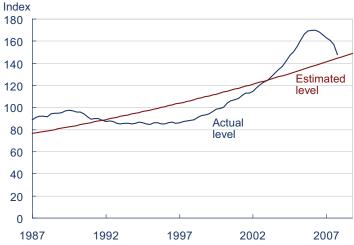
Sources: The Bureau of Economic Analysis; Office of Federal Housing Enterprise Oversight (OFHEO); and S&P, Fiserv, and MacroMarkets LLC.

1995

2000

2005

Case-Shiller Real Home Price Index



Sources: The Bureau of Economic Analysis; and S&P, Fiserv, and MacroMarkets LLC

03.18.08 by Michael Shenk

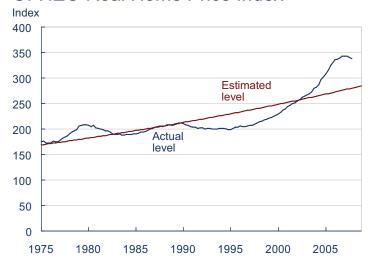
According to most major measures, home prices are declining—and if market commentators are right, prices may continue to fall in the near future. This decline may be hard to stomach for recent home buyers, home sellers, or those in need of refinancing, but should it really have been so unexpected?

Over the past 30 years, and presumably even before that (we don't have much data prior to the mid-1970s) nominal home prices have risen steadily. According to the data we do have, prices have risen approximately 2-2.5 percent annually on average after adjusting for inflation. Of course, price growth isn't within this range every year, but prices do seem to dance around it. Growth of this sort is often referred to as mean reverting since the series fluctuates in the short term but always seems to return to the average rate of growth in the long term. If home price growth is in fact mean reverting, one would expect periods of above-average growth to be followed by periods of slow growth—barring any fundamental shift in the market. For instance, one of the many factors that influences the price of homes is population growth; if population growth were to fall permanently from its long-term average of 1.3 percent to, say, 0.8 percent (the long-range growth forecast of the Census Bureau), we would expect the average growth rate of home prices to permanently shift down as well.

In reality, it is difficult to tell whether changes in price appreciation are the result of fundamental changes in the market or just short-term changes due to speculation or varying economic conditions. If we assume for the sake of argument that there hasn't been a fundamental shift in the market, we should be able to get a good idea of how much farther home prices might fall by looking at the price levels warranted by their average long-term growth rate.

To calculate this estimate of where home prices "should" be, we need to make a few additional

OFHEO Real Home Price Index



Sources: The Bureau of Economic Analysis; and Office of Federal Housing Enterprise Oversight (OFHEO).

assumptions. The first assumption is that home prices grow at a constant rate over time. The second assumption is that all of the available data are valid and consistent with the first assumption. This means we won't exclude periods where the growth might seem atypical. Using a basic loglinear regression, we get the following two pictures of our estimates.

According to these rough estimates, homes prices are still above the levels warranted by their average growth rates and therefore seem likely to fall somewhat in the future. Just how much they are likely to fall depends on the index one looks at and how much one expects the market to compensate for the above-average growth of the past few years. As the charts show, housing prices seem to be mean-reverting: Periods in which prices are above their "expected" levels are generally followed by periods in which prices are below these levels. Keep in mind that these are real figures and that any future inflation reduces the amount by which home prices are likely to fall.

Regional Activity

Fourth District Employment Conditions

Unemployment Rates*



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

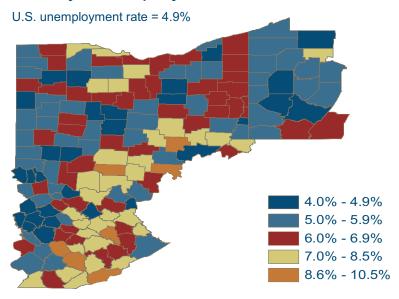
* Shaded bars represent recessions. Some data reflect revised inputs, reestimation, and new statewidecontrols. For more information, see http://www.bls.gov/lau/launews1.htm Source: U.S. Department of Labor, Bureau of Labor Statistics.

02.22.08 by Tim Dunne and Kyle Fee

The district's unemployment rate jumped 0.5 percent to 5.7 percent for the month of December. The increase in the unemployment rate can be attributed to an increase in the number of people unemployed (10.4 percent), as well as a decrease in the number of people employed (-0.6 percent) with no change to the labor force. December's sharp rise in the district's unemployment rate cancels out the large drop in the rate seen in November. We discussed the recent fluctuations in regional unemployment statistics last month in "The Ups and Downs in Regional Employment Statistics."

Compared to the national unemployment rate, the district's rate stood 0.7 percent higher in December and has been consistently higher since early 2004. From the same time last year, the Fourth District's unemployment rate increased 0.3 percentage point,

County Unemployment Rates



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

whereas the national unemployment rate increased 0.5 percentage point.

County-level unemployment rates differ significantly across the district. Of the 169 counties in the Fourth District, 25 had an unemployment rate below the national average in November and 144 had a higher rate. Rural Appalachian counties continue to experience high levels of unemployment. Conversely, Fourth District Pennsylvania has 8 counties with unemployment rates below the national rate. Unemployment rates for the District's major metropolitan areas ranged from a low of 4.2 percent in Lexington to a high of 6.6 percent in Toledo.

Lexington and Akron are the only large metropolitan statistical areas (MSAs) to have comparable nonfarm employment growth with the nation over the past 12 months (0.7 percent, 0.7 percent, and 0.9 percent, respectively). By contrast, Dayton and Toledo were the only large MSAs to see declines in nonfarm employment. Employment in goods-producing industries increased in Akron (0.6 percent), while all other Fourth District metropolitan areas all lost goods-producing jobs. Nationally, goods-producing employment declined by 2.0 percent.

Employment in service-providing industries saw its largest gains in Lexington (1.2 percent) and Columbus (0.9 percent). On the national level, employment in service-providing industries increased 1.4 percent. Nationally, employment in trade, transportation and utilities services increased 0.9 percent since last December; however, no large metro area in the Fourth District experienced change in employment in these industries. Professional and business services employment grew faster than the nation's 2.0 percent in Columbus (2.8 percent) and Akron (2.2 percent). Compared to the nation's 2.8 percent increase in education and health services employment over the past 12 months, Lexington's 5.8 percent growth in these industries is noteworthy.

Labor Market Conditions

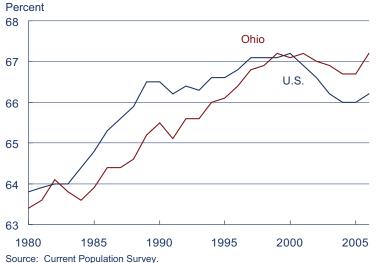
12- month percent change, December 2007

	Cleveland	Columbus	Cincinnati	Pittsburgh	Dayton	Toledo	Akron	Lexington	U.S.
Total nonfarm	0.0	0.5	0.3	0.1	-1.4	-0.2	0.7	0.7	0.9
Goods-producing	-0.2	-1.8	-1.9	-1.8	-1.0	-3.2	0.6	-1.3	-2.0
Manufacturing	-0.2	-1.9	-1.2	-2.1	-1.3	-4.0	0.2	-2.5	-1.8
Natural resources, mining, and construction	0.0	-1.5	-3.5	-1.2	0.0	-0.7	2.1	2.4	-2.3
Service-providing	0.1	0.9	0.7	0.4	-0.2	0.5	0.7	1.2	1.4
Trade, transportation, and utilities	-0.3	-0.5	-0.1	-0.2	-1.1	-0.9	0.0	-1.3	0.9
Information	0.5	05	-3.2	-3.0	0.0	2.4	2.2	2.1	-0.7
Financial activities	-0.4	-1.1	-1.1	0.0	1.5	1.6	0.0	-0.9	-1.2
Professional and business services	-0.9	2.8	0.4	1.4	-0.6	1.1	2.2	-7.4	2.0
Education and health services	0.8	0.5	3.3	1.0	0.2	1.9	1.1	3.8	2.9
Leisure and hospitality	-0.2	2.3	2.7	0.3	-0.5	0.0	-0.3	5.8	2.8
Other services	-0.2	-1.3	-0.5	-0.9	1.8	0.7	0.0	-1.0	8.0
Government	1.3	1.8	-0.2	0.4	-0.3	0.4	0.6	6.3	1.1
December unemployment rate, seasonally adjusted	6.3	5.1	5.2	4.7	6.2	6.6	5.6	4.2	5.0

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

Labor Force Participation in the United States and Ohio

Labor Force Participation Rates



Labor Force Participation Rates

	U.S	S.	Ohio		
Age	2000	2006	2000	2006	
16 to 19	52.2	43.7	58.9	53.0	
20 to 24	77.9	74.6	81.3	77.1	
25 to 34	84.6	83.0	85.3	84.5	
35 to 44	84.8	83.8	85.1	85.1	
45 to 54	82.6	81.9	83.2	82.1	
55 to 64	59.2	63.7	57.3	64.1	
65+	12.8	15.4	12.4	14	
Total	67.2	66.2	67.1	67.2	

Source: Current Population Survey.

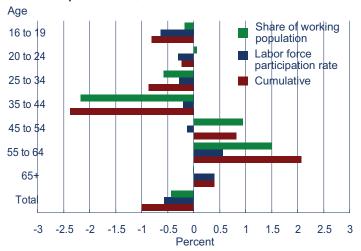
03.12.08 by Tim Dunne and Kyle Fee

A key determinant of the size of the labor force is the labor force participation rate. The labor force participation rate is the fraction of the working age population (16-year olds and up) that is currently employed or actively looking for employment. Changes in the labor force participation rate along with the growth in the population determine the growth in the labor force. For the nation as a whole, the labor force participation rate has risen markedly since World War II. This rise is well documented and is due primarily to the increased participation of women in the labor force and the U.S. baby boom after WWII.

Ohio has also experienced a substantial rise in its labor force. Closing out the last century, the gains in Ohio's rate of labor force participation were similar to those of the nation as a whole. From 1980 through 2000, the U.S. rate rose 3.4 percentage points, and Ohio's rose 3.7 percentage points. However, from 2000 to 2006, the national labor force participation rate dropped 1 percent to 66.2 percent, while Ohio's edged up 0.1 percent to 67.2.

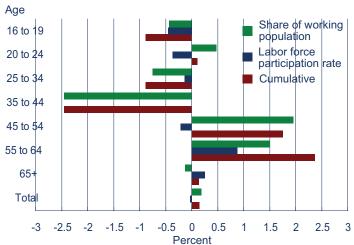
What is behind these recent patterns in labor force participation rates? Several studies have noted that important shifts in the labor force participation rates of specific age groups have affected overall labor force participation rates. The table below illustrates this observation by disaggregating labor force participation rates into different age groups for the years 2000 and 2006. For workers under the age of 55, labor force participation rates fell or held steady in the United States as well as in Ohio. For workers over the age of 55, participation rates rose. Somewhat surprisingly, labor force participation for individuals in the 16 to 19 age group drops quite a bit. Nationally, the labor force participation rate of these younger workers fell 8.5 percentage points, roughly 16 percent—a very large downward shift for this group. Ohio has also experienced a relatively large drop in labor force participation for this age group, though not as large as the U.S. decline. Al-

U.S. Labor Force Participation Rate Decomposition, 2000 - 2006



Source: Current Population Survey.

Ohio Labor Force Participation Rate Decomposition, 2000 - 2006



Source: Current Population Survey.

ternatively, older workers have markedly increased their participation rates. Workers aged 55 to 64 increased their labor force participation by 4.5 percentage points across the United States and by 6.8 percentage points in Ohio. This rise in the labor force participation of older workers is a more recent phenomenon, having begun in the mid-1990s.

In order to see which age groups of workers have had the largest impact on changes in labor force participation rates over the 2000-2006 period, we do a decomposition analysis. The analysis separates the changes in overall labor force participation rates into two sources: one is that the participation rates of different age groups could be changing, and two is that the share of workers in each group could be growing or shrinking. For example, the labor force participation rates for age groups could hold steady but if the share of workers in high labor-force-participation groups fell (age groups 25 through 54), then overall labor force participation rates could fall. For each age group, the charts below decompose the contribution to the overall change into the part that is due to changes in labor force participation rates for the group and the part that is due to changes in the age group's share of workers. Bars that extend out from the center to the left indicate a negative impact on the labor force participation rate and bars that extend out to the right show a positive effect. Green bars show the impact of a change in the share of workers in an age group, blue bars show the effect of change in the labor force participation rate for the group, and red bars show the effect of the aggregate effect.

The U.S. decomposition shows that the largest negative impact on the labor force participation rate comes from the 35 to 44 age group. Driving the negative effect is the share of workers (the long green bar). While the participation rates of workers aged 35 to 44 are very high, their falling share of the overall labor force has acted to lower the overall labor force participation rate. The youngest age group also has a substantial negative effect on overall labor force participation. However, its effect is driven by the fact that the labor force participation rate has fallen sharply for this group, while the change in the share of workers makes less of a contribution. On the positive side, the rise in the share

of workers aged 45 through 64 has acted to increase the nation's labor force participation. On balance, though, the overall effect (the last set of bars on the chart) is negative, with both changes in shares and labor force participation rates acting to lower the overall U.S. labor force participation rate.

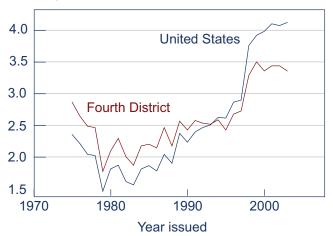
In the case of Ohio, the patterns are roughly similar with a few key differences. The share of workers in the 45–54 age group grew strongly in Ohio, and this accounted for a substantial fraction of the rise in the labor force in Ohio. While this group behaved in the same way in the nation as a whole, its impact was much weaker. A difference between Ohio and the U.S. emerges in the 20–24 age group, which had a slight positive impact on labor force participation in Ohio but a net negative effect for the nation. Finally, similar to the national story, changes in labor force participation patterns for the youngest group of workers exerted an overall drag on Ohio's labor force participation rate.

Regional Activity

Patent Trends in the Fourth District

Patents in the U.S. and the Fourth District

Patents per 10,000 residents



Note: The Fourth District includes Ohio, eastern Kentucky, western Pennsylvania, and the panhandle of West Virginia.

Source: U.S. Department of Commerce, Patent and Trademark Office.

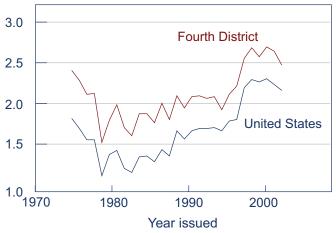
03.14.08 by Robert J. Sadowski

Education and innovation contributed more to income growth at the state level than other potential factors, according to research conducted at the Federal Reserve Bank of Cleveland. Educational attainment, for example, increased a state's average per capita personal incomes relative to other states by 8 percent, but innovation—measured by patents per capita—boosts personal income nearly 20 percent. Given the importance of innovation to economic performance, we investigate patenting activity in the Fourth District and compare District trends with those across the nation.

Until the mid-1990s, patenting in the Fourth District exceeded that in the U.S. on a per capita basis. However, in the late 1990s, patenting rates began to accelerate across the nation and within the District, but the acceleration at the national level

Patents Excluding Electronics, U.S. and the Fourth District

Patents per 10,000 residents



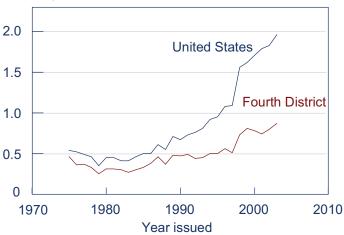
Note: The Fourth District includes Ohio, eastern Kentucky, western Pennsylvania, and the panhandle of West Virginia.

Source: U.S. Department of Commerce, Patent and Trademark

Electronics Patents, U.S. and the Fourth District

Patents per 10,000 residents

Office.



Note: The Fourth District includes Ohio, eastern Kentucky, western Pennsylvania, and the panhandle of West Virginia. Source: U.S. Department of Commerce, Patent and Trademark Office.

was greater. One industry—electronics—is primarily responsible for the surge. Because electronics is so highly concentrated in a few geographic areas—primarily California, Texas, and the Boston to New York corridor—the gap in patents per capita between the nation and the Fourth District has widened over time. If patents in the electronics industry are excluded from the comparison, the Fourth District actually has more patents per capita than the United States as a whole from 1975 through 2003. (The curiously steep decline in patents during the late 1970s was brought about by budget constraints at the United States Patent and Trade Office (USPTO). These constraints had caused a three-month patent printing backlog by the end of 1979.)

Electronic patents began trending upward in 1984. Nationally, the number of electronic patents issued from 1975 through 1983 was relatively flat, averaging 9,900 per year. This average increased to 18,400 between 1984 and 1997 and climbed even further to 48,000 from 1998 through 2003. Growth was nonuniform across different subgroups of the industry. The share of patents in computer hardware and peripheral equipment increased from 15 percent between 1975 and 1983 to 30 percent between 1998 and 2003, while at the same time patents for instrumentation declined from 43 percent to 28 percent. The share of patents in communications equipment and electronic components held steady at about 38 percent between 1975 and 2003.

From 1984 to 2003, the nation's average annual per capita growth in electronic patents exceeded that of the Fourth District by two percentage points. Further, 36 percent of all patents issued nationally were in electronics compared to 20 percent in the District. California led the nation in electronic patents, having garnered 25 percent of those issued between 1975 and 2003. Other leading states include New York, Texas, Massachusetts, and New Jersey. Among companies, IBM was assigned the highest number of electronic patents with almost six percent of the total. Other high-patenting companies include Motorola, Eastman Kodak, Xerox, and AT&T. Within the Fourth District, inventors living in the southwestern area—from Dayton

south through Lexington—were awarded the highest number of electronic patents. The Cleveland-Akron area received the second-highest number, followed by the Pittsburgh metro area. Leading District organizations for electronic patents include Westinghouse, General Electric, Lexmark, Proctor & Gamble, and the U.S. Air Force.

Electronic patents are highly concentrated in 18 counties across the United States. These counties—are found primarily in the five states cited earlier. Inventors living in the high-tech counties were awarded 39 percent of all electronic patents issued between 1975 and 2003, while inventors residing in the 168 counties of the Fourth District received 3.6 percent. On a per capita basis, electronic patenting in the high-tech counties stood at 81 per 10,000 residents compared to 14 in the District and 17 in the remainder of the United States.

Fourth District patenting activity remains vigorous. As mentioned earlier, the District has a higher per capita patent rate than the nation across the entire 1975–2003 period when electronics industry patents are excluded from the comparison. Although the District lags the U.S. average in electronics patents, it nonetheless remains highly competitive in innovation across most broad-based industry groups, especially chemicals and machinery

Banking and FInancial Markets

Business Loan Markets

Domestic Banks Reporting Tighter Credit Standards

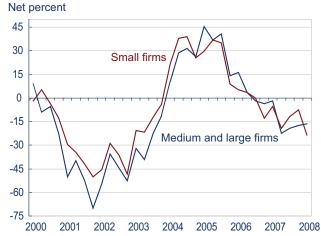


Sources: Senior Loan Officer Opinion Survey on Bank Lending Practices, Board of Governors of the Federal Reserve System, January 2008.

02.22.08 by Joseph G. Haubrich and Saeed Zaman

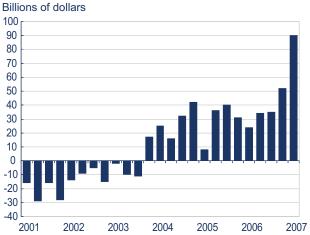
The Federal Reserve Board's January 2008 survey of senior loan officers (covering the months of October 2007 through December 2007) found considerable tightening of credit standards for commercial and industrial loans since the last survey. About one-third of all domestic banks and two-thirds of all foreign banks surveyed reported having tightened standards for these types of loans for small as well as large and medium-sized firms. The remaining fraction of banks reported little change. The

Domestic Banks Reporting Stronger Demand



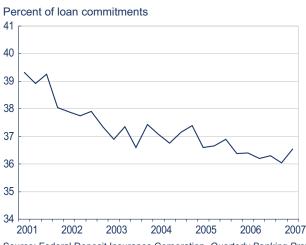
Source: Senior Loan Officer Opinion Survey on Bank Lending Practices, Board of Governors of the Federal Reserve System, January 2008.

Quarterly Change in Commercial and Industrial Loans



Source: Federal Deposit Insurance Corporation, Quarterly Banking Profile, Third Quarter 2007.

Utilization Rate of Commercial and Industrial Loan Commitments



Source: Federal Deposit Insurance Corporation, Quarterly Banking Profile, Third Quarter 2007

reasons cited for tightening included a less favorable economic outlook, a reduced tolerance for risk, and worsening of industry-specific problems. A large fraction of domestic and foreign banks increased the cost of credit lines and the premiums charged on loans to riskier borrowers. About two-fifths of the domestic banks and nearly eight-tenths of the foreign banks surveyed raised lending spreads (loan rates over the cost of funds).

Demand for commercial and industrial loans continued to weaken over the period surveyed, though the fraction of large domestic banks reporting weaker demand is relatively unchanged from the previous survey. About 35 percent of small domestic banks and 40 percent of foreign banks reported weaker demand. Those who reported weaker demand cited decreased investment in inventories, plants and equipment, and a decrease in customers' need to finance mergers and acquisitions as reasons.

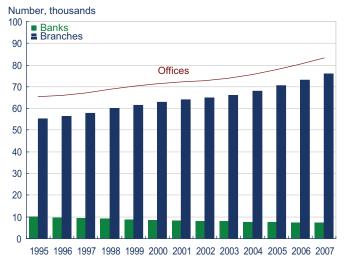
Bank balance sheets have yet to reflect the decline in businesses' appetite for bank loans in the face of tightening credit standards. The \$90 billion increase in bank and thrift holdings of business loans in the third quarter of 2007 is one of the biggest quarterly increases ever, and it marks the fourteenth consecutive quarterly increase in the bank and thrift holdings of commercial and industrial loans. The sharp reversal in the trend of quarterly declines in commercial and industrial loan balances on the books of FDIC-insured institutions prior to the second quarter of 2004 is still going strong.

The utilization rate of business loan commitments (draw downs on prearranged credit lines extended by banks to commercial and industrial borrowers) held at 36.53 percent of total commitments. It held steady despite the fact that recent financial turmoil has made access to capital markets more difficult, which suggests the possibility of lower demand by borrowers.

Banking and FInancial Markets

Banking Structure

Commercial Bank Offices

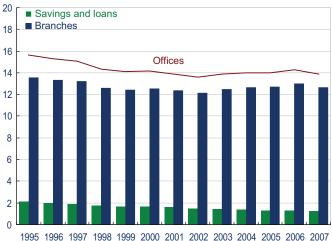


Note: Annual Figures, reported in June of each year.

Source: Federal Deposit Insurance Corporation, Summary of Deposits, 2007.

Savings Association Offices

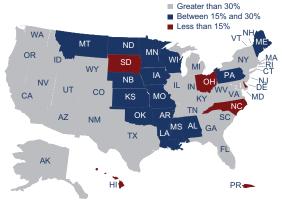
Number, thousands



Note: Annual Figures, reported in June of each year.

Source: Federal Deposit Insurance Corporation. *Summary of Deposits*. 2007.

Interstate Branches as a Percent of Total Offices*



*Figures reflect percent of branches owned by out-of-state commercial

Source: Federal Deposit Insurance Corporation, Summary of Deposits, 2007

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Passage of the 1994 Reigle–Neal Act, which regulates interstate banking, has spurred the consolidation of depository institutions. The number of FDIC-insured commercial banks fell from 10,166 in the middle of 1995 to 7,350 in the middle of 2007, a decline of more than 27 percent. The total number of banking offices, however, increased nearly 28 percent over that period, from 65,321 to 83,358.

The number of FDIC-insured savings associations fell by about 40 percent over the period, from 2,082 in 1995 to 1,244 in 2007. The number of savings association offices also declined, but less sharply than the number of institutions (less than 12 percent, from 15,637 in 1995 to 13,903 in 2007). In contrast, the total number of offices of FDIC-insured depository institutions increased almost 20 percent, from 80,958 in 1995 to 97,261 in 2007. This count does not include other channels for delivering banking services, such as automated teller machines, telephone banking, and online banking. Hence, the reduction in the number of insured depository institutions has not decreased the availability of bank services for most consumers.

The effects of the banking industry's interstate consolidation are evident: All but five states now report that more than 15 percent of depository institution branches are part of an out-of-state bank or savings association. And in over half the states, 30 percent or more of all branches are offices of out-of-state depository institutions.

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