Economic Trends

July 2008
(Covering June 13, 2008, to July 10, 2008)

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That Giant Sucking Sound

07.02.08
by Mark Sniderman

Republics are created by the virtue, public spirit, and intelligence of the citizens. They fall, when the wise are banished from the public councils, because they dare to be honest, and the profligate are rewarded, because they flatter the people in order to betray them.

—Joseph Story, Commentaries on the Constitution of the United States, 2d ed., vol. 2, chap. 45, pg. 617 (1851).

Historians may decide that Ross Perot's greatest contribution to the American political landscape was not his prediction of the job losses NAFTA would cause, but his memorable description of the result he feared. "That giant sucking sound," he said, was the noise of U.S. jobs being pulled into Mexico. Since his phrase entered the political lexicon, it has been used to describe the draining of U.S. jobs into China and India, Mexican jobs into China and India, and even Western European jobs into Eastern Europe. It would be no surprise if the Chinese began using the same phrase to describe their country's loss of jobs to Vietnam.

Perot's intent was to warn the U.S. public about the pernicious effects he believed NAFTA would cause. His phrase resonated with the public: Everyone has heard that sucking sound, most often when something is being swept away (into a vacuum cleaner, say), or siphoned off (down a bathtub drain). Despite all of the passion NAFTA provoked in its supporters and detractors, economists are still divided about the agreement's ultimate consequences for U.S. and Mexican employment.

Has the phrase outlived its usefulness? I think not: There are plenty more sucking sounds to worry about.

The loudest is the sound of earth's atmosphere sucking in the greenhouse gases that human inventions are spewing out. Although opinions differ about the effect of human activity on the global warming trend, few dispute the rise in greenhouse gas emissions. Controlling these emissions presents an enormous political challenge for heads of state, who feel that accepting emission limits is tantamount to imposing limits on their citizens' employment and income growth. At the same time, we know that failure to find a solution could have disastrous consequences for life—human and otherwise—on the planet. So every time you drive a car, fly in a plane, enjoy cooling or warming indoors air, or consume products manufactured using coal, petroleum, or natural gas, remember to listen for the giant sucking sound of hydrocarbons being inhaled by earth's atmosphere.

Another worrisome sucking sound is caused by the speed with which we are siphoning off potable water from our lakes, rivers, and underground aquifers. Climate change, urbanization, and global population growth are combining to create water shortages in many parts of the world. In the United States, several major metropolitan areas have undergone serious water shortages in recent years and been forced to impose rationing. Although many people attribute recent water scarcities to a period of unusually low rainfall, we know that demand for water in arid regions of the country has been driven up by growing populations and agricultural usage. In many instances, water rights established by treaties or grants more than a century ago are still in force, leading to conflict with present realities. Unfortunately, there may be little scope for market forces to play a strong role in allocating water for its most beneficial uses, or political institutions to protect ground and surface water from being depleted by overuse, much as some fishing grounds have been depleted in the absence of sustainable use agreements.

The third vortex—you have probably anticipated this one—is the federal budget deficit. There was a time when people erroneously believed that fiscal rectitude required that the budget be balanced annually. Economists debunked that belief, replacing the one-year balancing interval with something more akin to the business cycle; their logic was that in times of high unemployment and resource slack, fiscal deficits would help stabilize the economy,

while in times of low unemployment, surpluses would do the same. The prudent course was to adopt spending and tax programs that would make for a balanced budget in times of full employment.

In the long term, our current fiscal posture is unsustainable. We have become accustomed to thinking that if an objective is worthwhile, it is worthwhile to subsidize it, increase spending on it, or insure private lenders against the risk they assume for it. Granted, we have a great many national needs, some of them worthy of being financed through debt rather than current taxes. But our current trajectory must be corrected, and the longer we delay that correction, the more disruption we invite.

Carbon and water imbalances may be more dire than a fiscal mismatch, but a large fiscal footprint is not a thing to be taken lightly. I think Mr. Perot would agree.

Inflation and Prices

May Price Statistics

07.02.08
by Michael F. Bryan and Brent Meyer

The CPI rose 8.1 percent (annualized rate) in May, pushed up, in part, by a 67.8 percent increase in energy components. Over the past three months, the CPI is up 4.9 percent. The CPI excluding food and energy (core CPI) increased 2.5 percent in May, rising at a rate above all its longer-term trends and following a 1.3 percent increase in April. Like the CPI, import prices have been affected by oil prices—albeit to a greater extent—as the import price index for all commodities rose 30.9 percent in May and 35.4 percent over the past three months. Unfortunately, it is not just oil prices that are rising. The nonpetroleum import price index increased 6.6 percent during the month and is up almost 13 percent over the past three months. The export price index rose 3.9 percent in May, somewhat more subdued than its longer-term trends.

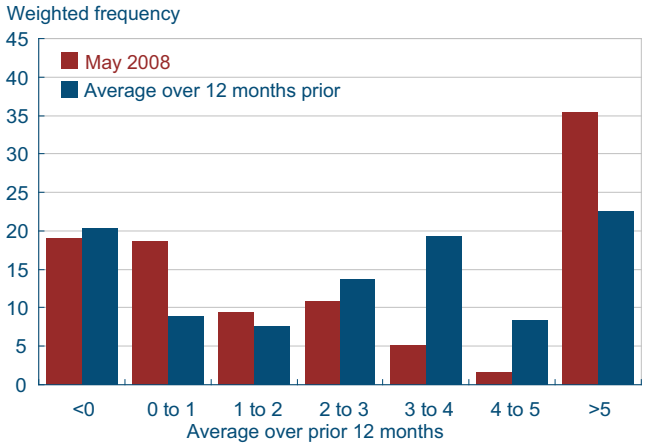
There was an unusual amount of dispersion between the median CPI and the 16 percent trimmed-mean CPI in May, as the 16 percent trimmed-mean measure rose 4.0 percent, while the median increased just 2.2 percent. That last time the trimmed-mean estimators were this far apart was in October 2001. Looking at the component distribution reveals that nearly 36 percent of the CPI's components rose at rates in excess of 5.0 percent during the month. This, coupled with 38 percent of the index's components rising at rates less than 1 percent, shows that 74 percent of the CPI was out near the tails of the component price

May Price Statistics

	Percent change, last					
	1mo.[a]	3mo.[a]	6mo.[a]	12mo.	5yr.[a]	2007 avg.
Consumer Price Index						
All items	8.1	4.9	4.0	4.2	3.4	4.2
Less food and energy	2.5	1.8	2.1	2.3	2.2	2.4
Median[b]	2.2	2.7	2.9	3.0	2.7	3.1
16% trimmed mean[b]	4.0	3.5	3.1	3.0	2.6	2.8
Import Price Index						
All commodities	30.9	35.4	20.1	17.8	8.0	11.5
Nonpetroleum imports	6.6	12.9	10.0	6.6	3.3	3.1
Export Price Index						
All commodities	3.9	9.9	10.4	8.0	4.6	6.1

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.

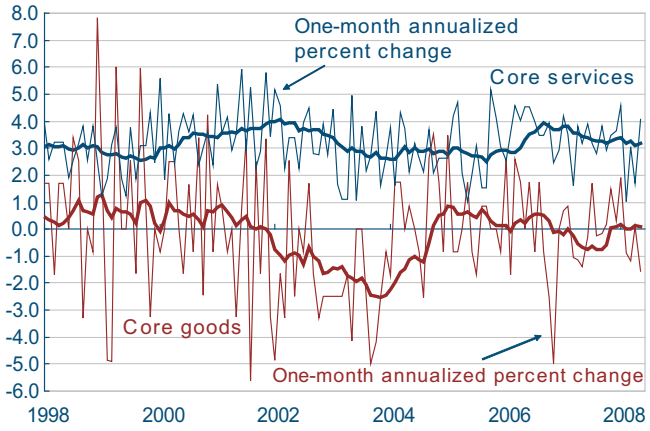
CPI Component Price Change Distributions



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

Core CPI Goods and Core CPI Services

12-month percent change



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

CPI and Forecasts

Annualized quarterly percent change

Sources: Blue Chip panel of economists, June 10, 2008.

distribution. The 16 percent trimmed-mean incorporated some of those wild component price swings, such as a 30.7 percent increase in car and truck rental prices and a 17.4 percent increase in the lodging-away-from-home component. On the other side of the distribution (but excluded from the 16 percent trimmed-mean), the prices of jewelry and watches fell 18.9 percent, infant and toddler apparel decreased 9.8 percent, and medical care commodities fell 8.5 percent in May. While it may be tempting to tell a story about budget-constrained consumers substituting away from other goods in the face of higher relative fuel prices, it would take more data and careful analysis to prove that point.

The prices of core services (services excluding energy services) rose 4.1 percent in May, following a 1.7 percent increase in April. Over the past 12 months, core service prices are up 3.2 percent. On the other hand, the prices of core goods (goods excluding food and energy commodities) fell 1.6 during the month and are up only 0.1 percent on a year-over-year basis.

Looking forward, professional forecasts see headline consumer prices remaining elevated throughout the rest of 2008 and falling to 2.4 percent by the end of 2009. Of the 48 forecasters surveyed, 36 revised their 2008 inflation forecasts upward in June from their projections in May, and will most likely do so again, as energy prices have continued to rise.

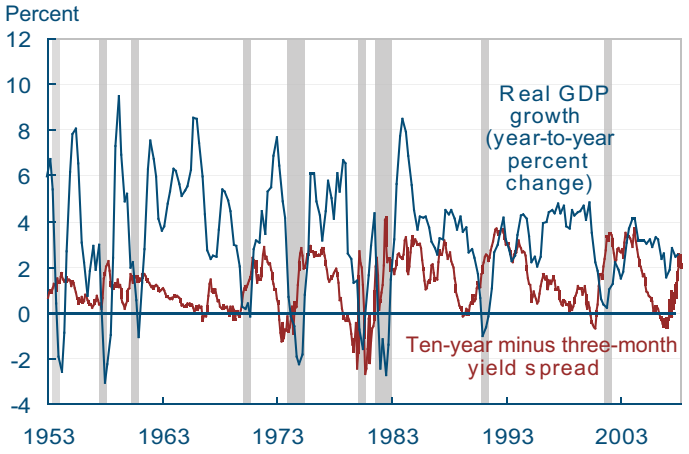
Money, Financial Markets, and Monetary Policy

What is the Yield Curve Telling Us?

06.18.08
by Joseph G. Haubrich and Kent Cherny

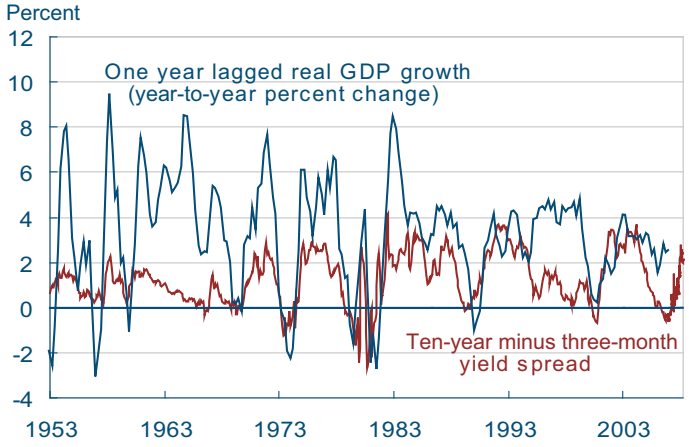
Since last month, the yield curve has taken a parallel upward shift, with both short-term and long-term interest rates rising. One reason for noting this is that the slope of the yield curve has achieved some notoriety as a simple forecaster of economic growth. The rule of thumb is that an inverted yield 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

Yield Spread and Real GDP Growth



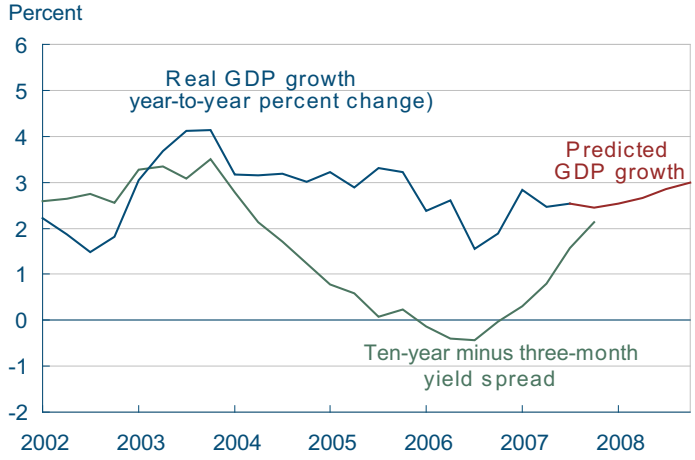
Note: Shaded bars represent recessions.
Sources: Bureau of Economic Analysis; Federal Reserve Board.

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.

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 Treasury notes and 3-month Treasury 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 slope stayed the same, with both long and short rates edging up. The spread remains positive, with the 10-year rate moving up 30 basis points to 4.15 percent and the 3-month rate up 33 basis points to 1.97 percent (both for the week ending June 13). Standing at 218 basis points, the spread is just below the 221 basis points seen in April and May. Projecting forward using past values of the spread and GDP growth suggests that real GDP will grow at about a 3.0 percent rate over the next year. This is on the high side of other forecasts.

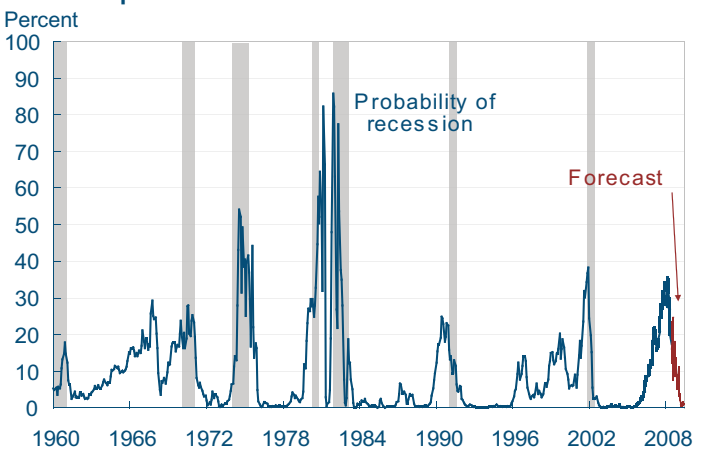
While such an approach predicts when growth is above or below average, it does not do so well in predicting the actual number, especially in the case of recessions. Thus, it is sometimes preferable to focus on using the yield curve to predict a discrete event: whether or not the economy is in recession. Looking at that relationship, the expected chance of the economy being in a recession next June stands at 1.1 percent, just above May's 0.9 percent, and April's 1 percent.

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

To compare the 1.1 percent to some other probabilities and learn more about different techniques of predicting recessions, head on over to the Econbrowser blog.

Of course, it might not be advisable to take this

Probability of Recession Based on the Yield Spread



Note: Estimated using probit model.
Sources: Bureau of Economic Analysis; Federal Reserve Board; author's calculations.

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.

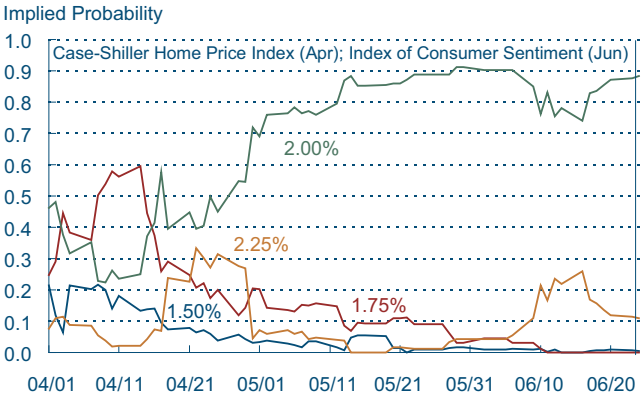
For more detail on these and other issues related to using the yield curve to predict recessions, see the Commentary "Does the Yield Curve Signal Recession?"

Money, Financial Markets, and Monetary Policy

Steady on Policy Rate, but Alert to Inflationary Pressures

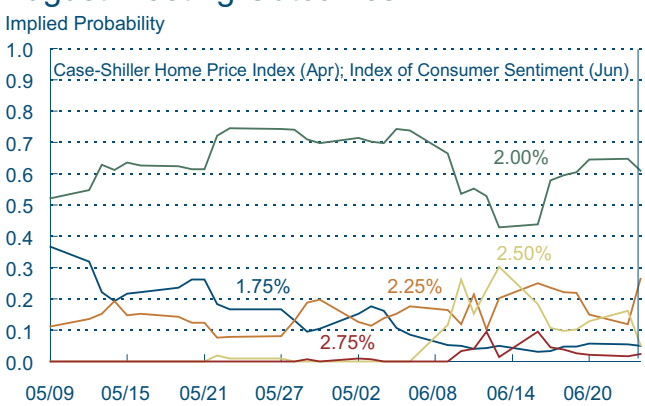
06.26.08
by John B. Carlson and Sarah Wakefield

June Meeting Outcomes



Note: Probabilities are calculated using trading-day closing prices from options on federal funds futures that trade on the Chicago Board of Trade.
Sources: Chicago Board of Trade and Bloomberg Financial Services.

August Meeting Outcomes



Note: Probabilities are calculated using trading-day closing prices from options on federal funds futures that trade on the Chicago Board of Trade.
Sources: Chicago Board of Trade and Bloomberg Financial Services.

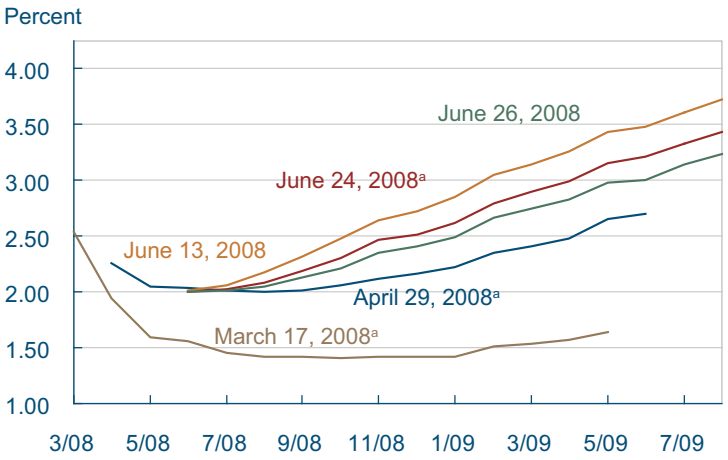
The Federal Open Market Committee (FOMC) left its target for the federal funds rate unchanged at 2 percent on June 25. This outcome surprised few: The market's assessment of the probability of a rate change never rose above 25 percent during the intermeeting period.

Immediately after the April 30 meeting, market participants expected the FOMC to hold the policy rate steady at least through the summer. However, when incoming data failed to confirm that the economy was in a recession, a rate hike of at least 25 basis points in August emerged as the most likely prospect. But by mid-June, the no-change outcome reemerged as the most likely one.

Prices for Federal funds futures revealed a similar story. The highest and steepest trajectory for implied yields occurred in the second week of June, when stronger-than-expected data on the economy were released and some Fed officials expressed concerns about inflationary pressures.

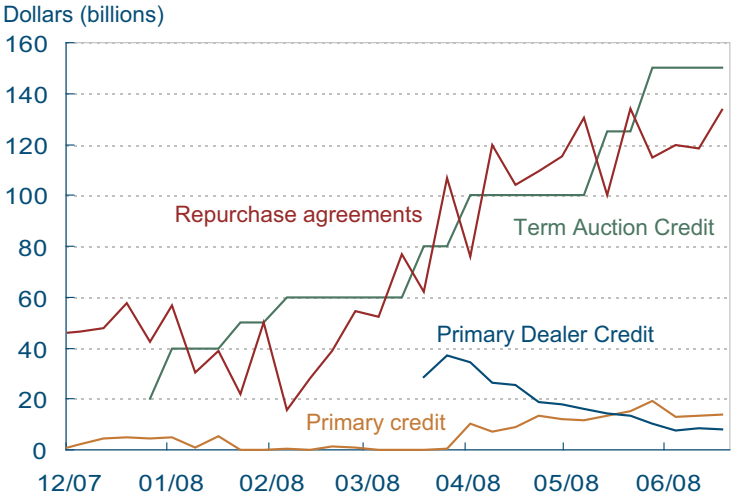
In its post-meeting statement, the FOMC noted that "[t]ight credit conditions, the ongoing credit

Implied Yields on Federal Funds Futures



a. One day before FOMC meeting.
Source: Chicago Board of Trade and Bloomberg Financial Services.

Reserve Bank Credit



Source: Federal Reserve Board.

3-Month LIBOR Spread

Notes: Daily observations; LIBOR spread is the three-month LIBOR rate minus the three-month OIS Rate.
Sources: Bloomberg Financial Services, Financial Times.

contraction, and the rise in energy prices are likely to weigh on economic growth over the next few quarters." Moreover, "the Committee expects inflation to moderate later this year and next year."

The FOMC's assessment of risks indicated that the "substantial easing of monetary policy to date, combined with ongoing measures to foster market liquidity, should help to promote moderate growth over time. Although downside risks to growth remain, they appear to have diminished somewhat, and the upside risks to inflation and inflation expectations have increased."

The market's reaction to the June 25 policy announcement has been limited. Initially, equity prices reacted favorably, adding more than half a percentage point to an ongoing rally of almost one percentage point. However, prices then declined somewhat, ending the day up about 60 basis points over the previous day's close. The bond market showed little reaction to the news. Although the market continues to expect an upward trajectory to the policy rate, the FOMC statement led participants to expect rate hikes to come later than sooner.

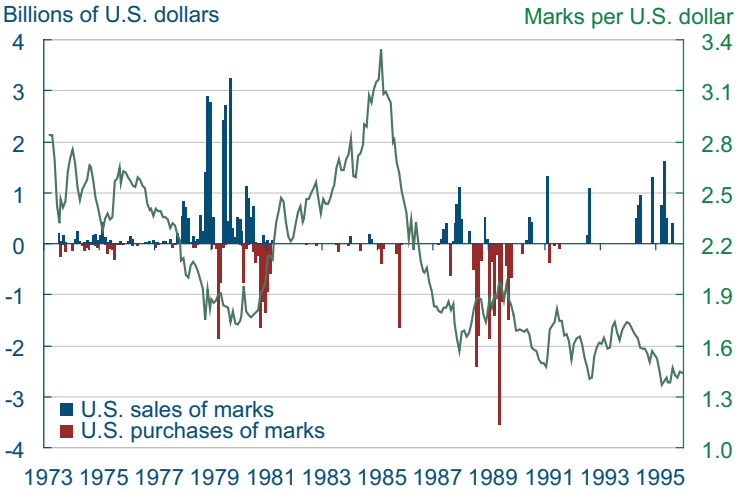
The rise in Reserve Bank credit during the intermeeting period was primarily a reflection of the higher amounts auctioned through the Term Auction Facility (TAF), a key new measure to foster market liquidity. Primary credit peaked in late May, driven largely by a rise in the number of institutions borrowing on net. Primary dealers have substantially reduced their reliance on the Primary Dealer Credit Facility.

Although credit terms have tightened for some businesses and households, concerns about liquidity have lessened substantially. The spread between the term borrowing rate in the London interbank market (LIBOR) and the cash market rate (OIS) is a closely watched indicator of liquidity conditions. Spreads for both one-month and three-month borrowing have declined considerably from recent peaks, although they remain above their pre-crisis levels.

Why Hasn't the United States Intervened?

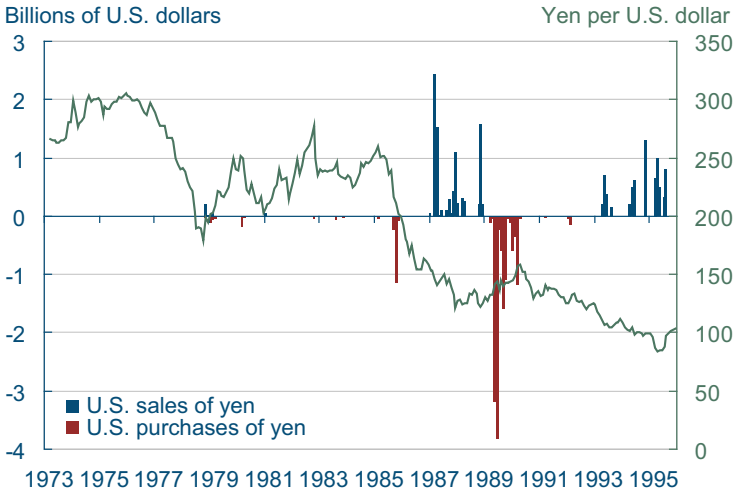
07.09.08
by Owen F. Humpage and Michael Shenk

Interventions: German Mark



Source: Board of Governors.

Interventions: Japanese Yen



Source: Board of Governors.

The dollar's precipitous fall since February 2002, particularly against the euro, has renewed interest in foreign-exchange-market intervention, that is, official purchases and sales of foreign exchange designed to influence dollar exchange rates. Aside from a single transaction against the euro and a single transaction against the yen, the United States stopped intervening in 1995 for two very good reasons: First, foreign-exchange-market intervention has the potential to conflict with monetary policy and to create uncertainty about the ultimate objectives of monetary policy. Second, intervention has not been very successful.

Technically, foreign-exchange interventions are very much like open-market operations, and like the latter, they can conceivably add or drain bank reserves. To stem a dollar depreciation, for example, the Federal Reserve Bank of New York might sell euros or Japanese yen to banks and debit their reserve accounts in payment. Such an intervention, if big enough, could indeed slow or reverse a dollar depreciation by reducing U.S. money growth. So why not intervene?

Because it isn't necessary. Or worse, such an intervention is likely to conflict with the domestic objectives of monetary policy. Intervention is unnecessary if the underlying cause of the dollar's depreciation is a rise in U.S. inflation. In that case, standard open-market operations can reduce the inflation rate and prop up the dollar. In all other cases, attempting to support the dollar through intervention sales of foreign exchange can conflict with the domestic objectives of monetary policy. When, for example, inflation expectations are fairly well contained and the FOMC is temporarily providing liquidity to stave off a credit collapse and the associate downside risks to real economic activity, selling foreign exchange to prop up the dollar will conflict with the domestic thrust of policy. The Federal Reserve does, of course, have a way around this problem. To avoid conflict with the domestic

Were U.S. Foreign Exchange Interventions Succesful?

		Total interventions	Actual successes	Expected successes	Standard deviations
Was a U.S. purchase of German marks associated with					
	...dollar depreciation?	502	127	242	11
	...a more moderate dollar depreciation?	502	96	64	7
	...either of these criteria?	502	223	306	11
Was a U.S. purchase of Japanese yen associated with					
	...dollar depreciation?	150	47	48	5
	...a moderate dollar depreciation?	150	22	14	3
	...either of these criteria?	150	69	62	5
Was a U.S. sale of German marks association with					
	...dollar depreciation?	469	121	225	10
	...a moderate dollar depreciation?	469	90	59	7
	...both of these criteria?	469	211	285	10
Was a U.S. sales of Japanese yen associated with					
	...dollar depreciation?	94	86	46	5
	...a more moderate dollar depreciation?	94	23	12	3
	...both these criteria?	94	49	57	5

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.

objectives of monetary policy, the Federal Reserve routinely offsets (or sterilizes) any intervention whose impact on bank reserves conflicts with the FOMC's federal-funds-rate target. In doing so, however, the Federal Reserve also prevents intervention from affecting key macroeconomic determinants of exchange rates—interest rates and money growth.

Sterilized intervention has long been a puzzle because economists are not quite sure how, or if, it works. According to the current best guess, central banks can sometimes convey information through sterilized intervention to foreign exchange traders that aids them in price discovery. Information is costly, and market participants do not continuously possess the same information about exchange rates. Large foreign-exchange traders may often have better information than their smaller counterparts because of broader customer bases and wider market networks. Such information asymmetries can sometimes encourage bandwagon effects, overreaction to news, and excessive volatility in uncertain exchange markets. If monetary authorities have better information about fundamentals than private traders, they may be able to impart this information to the market through their trades and improve the market's functioning. Central banks do have large information networks, and sometimes they have an inside track to impending policy changes.

Sounds grand, but do central banks, in fact, routinely have better information than foreign-exchange traders? If they do, then their interventions should be highly successful at influencing exchange rates.

Between March 2, 1973, and December 31, 1998, the United States intervened in the foreign-exchange market on 652 days against German marks and on 563 days against Japanese yen. Most of these were purchases of foreign exchange. These interventions were not successful at producing a same-day dollar depreciation or appreciation; in fact, market participants generally could have profited by trading against U.S. monetary authorities. These interventions, however, were successful at moderating dollar appreciations or depreciations over the day of the intervention from the previous

day. These successful interventions amounted to only about 20 percent of all transactions—so much for the routine information story.

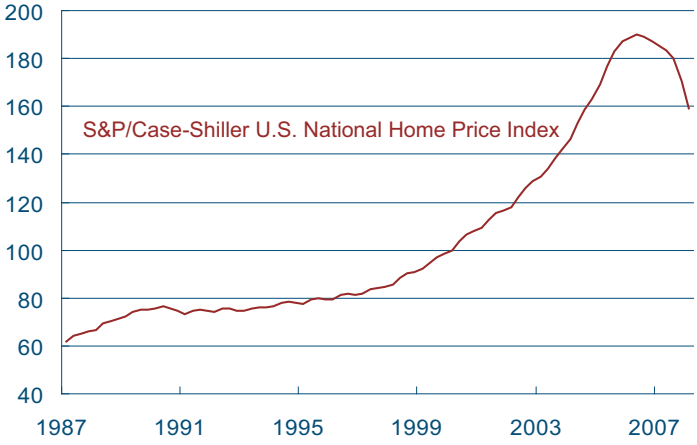
The underwhelming success rate, however, was not the key reason that U.S. monetary authorities gave up on an active intervention program. As expressed at their October 3, 1989, meeting, the FOMC feared that even sterilized intervention ultimately must create uncertainty about the Federal Reserve's commitment to price stability. They determined that a central bank cannot credibly anchor inflation expectations and attempt to manage exchange rates.

Economic Activity and Labor Markets

Housing Values

Case-Shiller Home Price Index

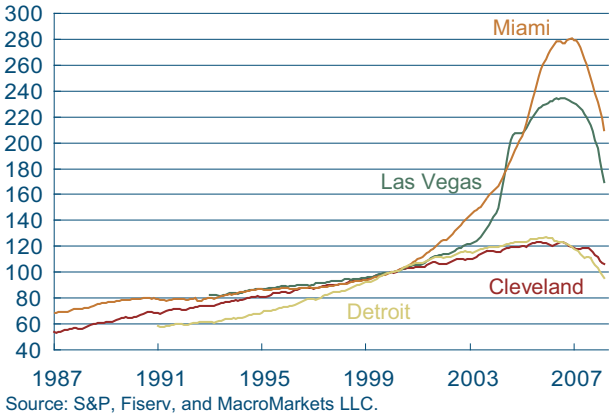
Index, January 2000 = 100



Source: S&P, Fiserv, and MacroMarkets LLC.

Index, January 2000 = 100

Case-Shiller Home Price Index



Source: S&P, Fiserv, and MacroMarkets LLC.

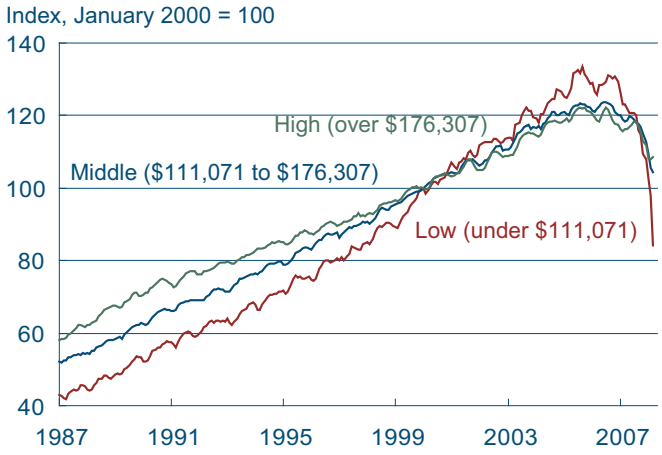
06.19.08
by O. Emre Ergungor

The Case–Shiller Home Price Index continued its rapid descent in the first quarter of 2008. Currently, it stands 14 percent below the peak it hit in the second quarter of 2006.

Home prices continued to deteriorate in the Cleveland metropolitan area. According to the Case–Shiller home price index, home prices are back to their February 2002 levels. In comparison, the well–publicized price collapse in the bubble areas (Miami and Las Vegas, for example) brought those prices back only to their 2004–2005 levels. In other words, people who purchased a house in Cleveland or Detroit in late 2002 would now take a loss if they tried to sell, but those who bought in Miami or Las Vegas could still turn a profit.

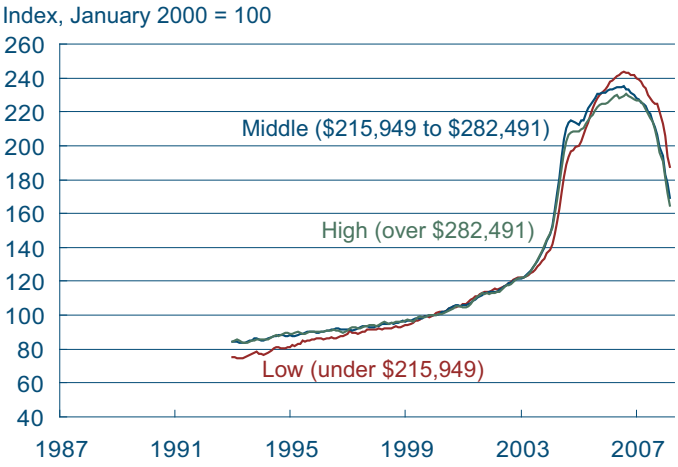
The Cleveland metro area differs from the bubble areas not only in terms of the hit it is taking to housing values but also in terms of which part of its housing stock is experiencing the losses. Recently, S&P began dividing the housing stock in most metro areas into three groups by home value. In the Cleveland area, for example, a third of housing stock is valued over $176,307 (depicted as "high" in the chart below), a third below $111,071 ("low") and a third in the middle of these two values ("middle"). These thresholds will be higher or lower in other metro areas but in the end, they all capture the highest, lowest, and the middle third of local

Tiered Home Price Index: Cleveland



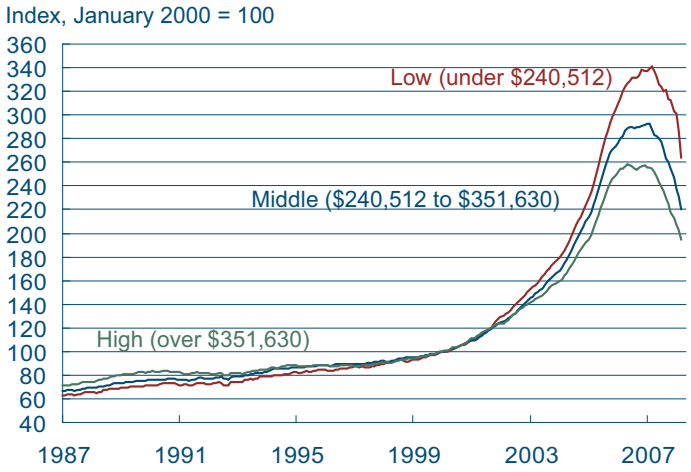
Source: S&P, Fiserv, and MacroMarkets LLC.

Tiered Home Price Index: Las Vegas



Source: S&P, Fiserv, and MacroMarkets LLC.

Tiered Home Price Index: Miami



Source: S&P, Fiserv, and MacroMarkets LLC.

home values.

In the 1987–2005 period, the home price appreciation in the low end of the Cleveland housing market has been noticeable. Homes that are worth less than $111,071 appreciated by more than 6 percent per year. Annual appreciation in the high end of the market was a more modest 4 percent over the same period (nominal figures). However, the health of the market deteriorated dramatically after 2005. Since September 2005, the low end of Cleveland's housing market has experienced 37 percent depreciation, compared to an 11 percent decline in the high group and a 15 percent decline in the middle group.

While home prices declined much more significantly in Miami and Las Vegas compared to Cleveland (they are down 28 percent in Las Vegas from their peak in August 2006 and down almost 25 percent in Miami over the same period), the declines have been slightly more pronounced in the higher-end homes. In Las Vegas, low–end housing units lost 23 percent of their value in 18 months. Higher–valued homes lost drop is 28 percent.

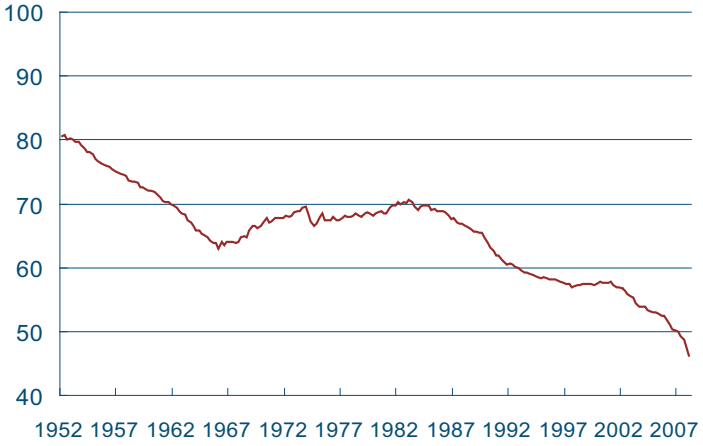
Similarly, in Miami, low-end housing units lost 22.5 percent of their value in the last year. The losses are around 23.4 percent for higher value homes.

As prices have fallen, so too has homeowners' equity in their homes. An increase in equity extractions and low–downpayment purchases adds to the problem. Homeowners' equity in their homes, as reported by Mortgage Bankers Association, dropped to 46.2 percent of the home value, the lowest level on record.

One negative consequence of declining equity is an increase in homeowners' inability to sell their homes and pay off their mortgages or refinance their loans if the payments become too burdensome. As a result, mortgage foreclosures have risen sharply in recent quarters. While subprime adjustable-rate mortgages (ARM) look like the worst performers, even the recently originated prime fixed–rate mortgages (FRM) are performing uncharacteristically poorly, according to Loan Performance Corporation data.

Homeowners' Equity

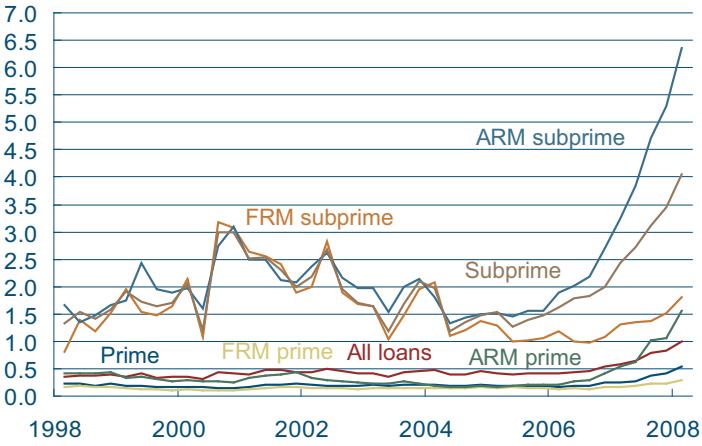
Percentage of household real estate



Source: Mortgage Bankers Association.

Foreclosure Starts

Percent



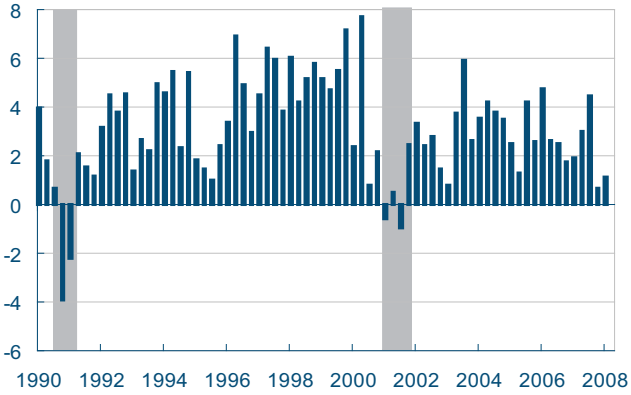
Source: Mortgage Bankers Association

Economic Activity and Labor Markets

Where's the Spillover from Housing?

Gross Domestic Purchases Excluding Residential Investment

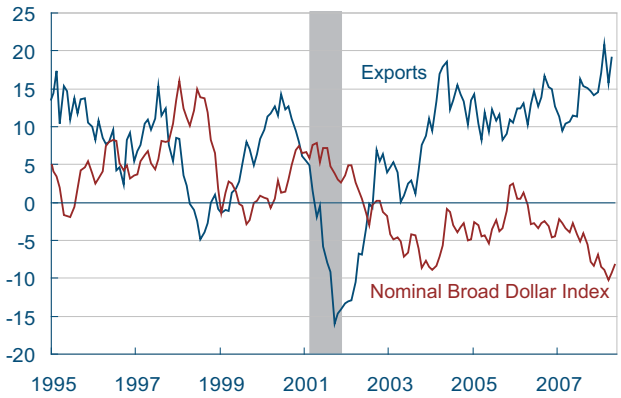
Percent change, annual rate



Note: Shaded bars indicate recessions.
Source: Bureau of Economic Analysis.

Export Growth and the Value of the Dollar

12-month percent change



Note: Shaded bar indicates a recession.
Source: Census Bureau; Federal Reserve Board.

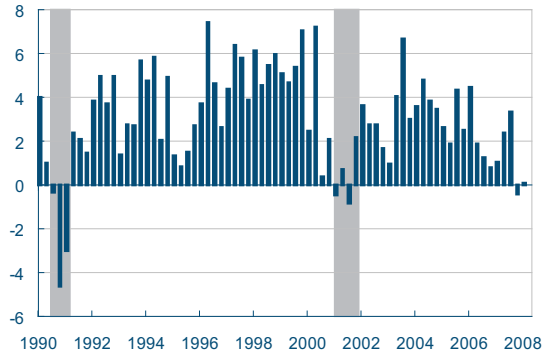
06.19.08
Michael Shenk

Recently, the argument has been made that outside of the housing market, the economy is actually doing pretty well. Looking at the GDP numbers, that argument appears to hold some weight. Once you take into account the direct impact of large declines in residential investment (it fell an annualized 25.5 percent in the first quarter of 2008), GDP growth looks pretty good over the past two quarters: According to the preliminary estimate, GDP excluding residential investment increased 2.0 percent in the first quarter of 2008, following a 1.7 percent gain in the fourth quarter of 2007. While these numbers may be encouraging, they seem at least a little peculiar, given what we know about housing and what we've seen in the labor market.

Aside from providing a place to live, homes provide many services for their owners. They are a means of forced savings, a storer of wealth, and, in most cases, a household's largest asset. With homes so important to a household's financial situation, how is it that a serious downturn in housing can have such a limited effect on the rest of the economy? One factor that helps to explain the persistence of GDP growth is the global economy. GDP measures the value of goods produced in the United States,

Gross Domestic Purchases

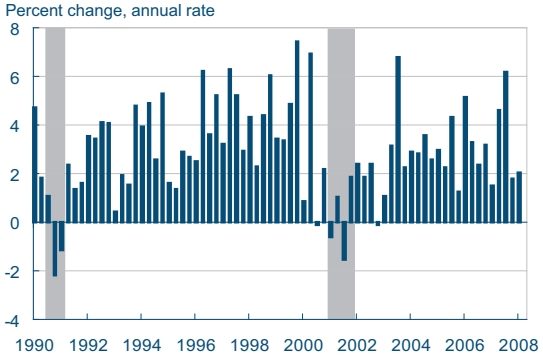
Percent change, annual rate



Note: Shaded bars indicate recession.
Source: Bureau of Economic Analysis

GDP Growth Excluding Residential Investment

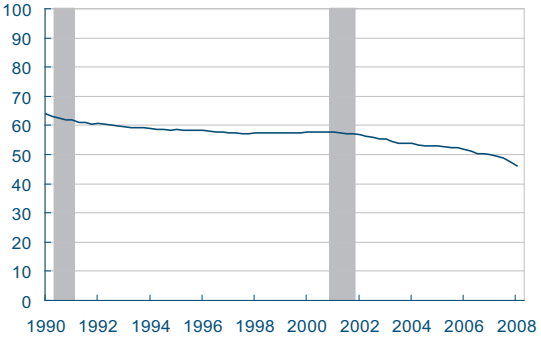
Percent change, annual rate



Note: Shaded bars indicate recessions.
Source: Bureau of Economic Analysis.

Owners' Equity in Household Real Estate

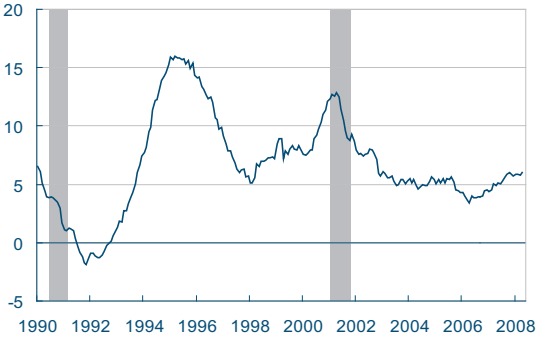
Percent



Note: Shaded bars indicate recessions.
Source: Federal Reserve Board

Household Consumer Credit

12-month percent change



Note: Shaded bars indicate recessions.
Source: Federal Reserve Board

but not all of these goods are consumed within its borders. While demand for U.S. goods may have slowed within the United States, rapid growth in the global economy has added to it. The increase in foreign demand has been further boosted by a weak dollar, which makes goods and services priced in dollars cheap relative to goods and services priced in other currencies. The increase in demand from outside of the U.S. helps to keep production in the U.S. from falling off, ultimately boosting our GDP. We can see this in the relative strength of export growth.

Meanwhile, to see the strength of domestic demand by itself, we can look at gross domestic purchases. This series, which is essentially GDP less net exports, has grown much more slowly than GDP in the past two quarters, perhaps reflecting a negative wealth effect from the downturn in housing.

After adjusting for the direct impact of the downturn in residential investment, we still see some slowing in overall domestic purchase growth over the previous two quarters but not to the extent that purchases have actually fallen. This slowdown is likely partially the result of spillover from the housing downturn, but it should also reflect the impact of factors unrelated to housing that are weighing on consumers, such as rising food and energy costs. Still, the overall persistence of the series suggests that the spillover effect from housing has been relatively small.

One reason we still see no large-scale spillover may be that households view the downturn as transitory and just aren't adjusting their spending significantly This behavior requires, of course, that households have either enough wealth or available credit to buffer the temporary downturn. For some, this is certainly an issue, but in general, households still have a significant amount of equity in their homes to borrow against, and despite the credit crunch, households' nonmortgage borrowing appears to be robust.

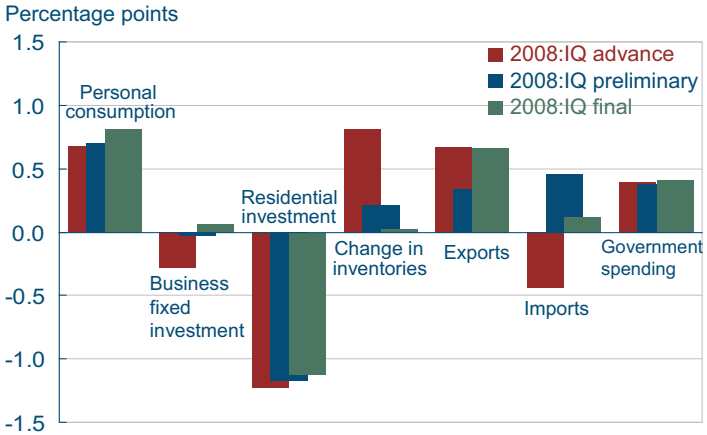
First Quarter Real GDP: Final Estimate

Real GDP and Components 2007: Fourth-Quarter Advance Estimate

	Quarterly change (billions of 2000$)	Annualized percent change, last: Quarter	Four quarters
Real GDP	27.9	1.0	2.5
Personal consumption	23.8	1.1	1.9
Durables	-19.0	-6.0	0.5
Nondurables	-1.0	-0.2	0.7
Services	36.5	3.1	2.8
Business fixed investment	1.9	0.5	6.7
Equipment	0.6	0.2	3.5
Structures	1.0	1.3	13.7
Residential investment	-29.3	-24.5	-20.7
Government spending	10.5	2.1	3.0
National defense	7.1	5.6	5.8
Net exports	23.0	—	—
Exports	19.6	5.5	9.5
Imports	-3.4	-0.7	-0.1
Change in business inventories	-1.3	—	—

Source: Bureau of Labor Statistics.

Contribution to Percent Change in Real GDP



Source: Bureau of Economic Analysis

07.07.08
by Brent Meyer

Real GDP increased at an annualized rate of 1.0 percent in the first quarter of 2008, according to the final estimate released by the BEA. The revision—which is 0.1 percentage point above the preliminary estimate and 0.4 percentage point above the advance release—was primarily due to upward adjustments to private investment and exports, which were mostly offset by a downward adjustment to inventories and an increase in imports (which enter as a negative in GDP accounting). Business fixed investment was actually revised up from a 2.5 percent decrease (annualized rate), according to the advance estimate, to a slight growth of 0.5 percent in the final release. Another encouraging sign was that, with each iteration, residential investment was revised up (albeit slightly).

An investigation into individual components' contributions to the percentage change in real GDP shows us that inventory accumulation added 0.8 percentage point to real GDP growth in the advance report, but that this increase was almost completely revised away. Net exports were undoubtedly helped by the continued weakness in the dollar, as the final estimate for the first quarter had net exports adding 0.8 percentage point to real GDP growth, compared to just 0.2 percentage point in the advance estimate. Since the first quarter of 2000, net exports have subtracted 0.2 percentage point from growth, on average.

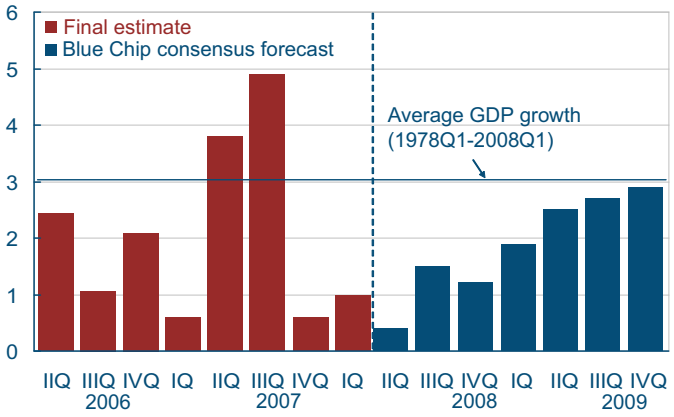
While personal consumption limped in at 1.1 percent in the first quarter, there is little evidence to suggest that will be the case in the second quarter. Real personal income increased 2.1 percent and 4.4 percent during the first two months of the second quarter. While the exact effect may be hard to measure, it seems that the fiscal stimulus rebates are giving at least a moderate boost to consumption. The rebates are also having a significant effect on personal income. Real personal income jumped up 19.0 percent in May. However, after subtracting out transfer payments—such as the stimulus

checks—real personal income was virtually flat, falling 0.3 percent at an annualized rate.

Professional forecasters continue to expect below–trend growth over the next few quarters, before returning to near–trend growth by the end of 2009. Of the 48 forecasters surveyed by Blue Chip, 27 revised their 2008 forecast up from last month's forecast. On the other hand, nearly half of the forecasters on the Blue Chip panel revised their 2009 GDP forecast down compared with their forecast a month ago.

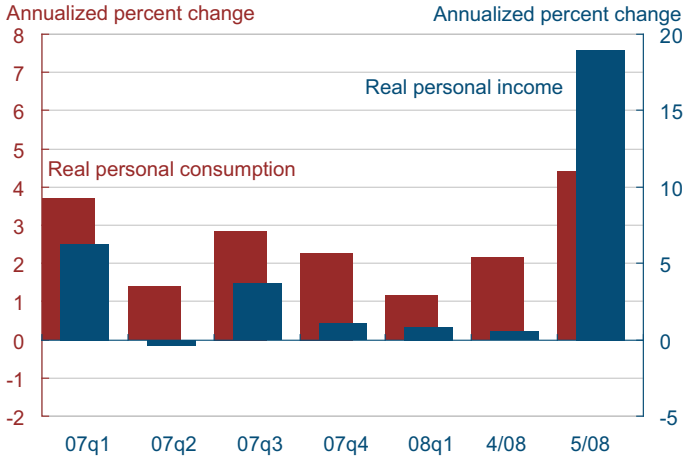
Real GDP Growth

Annualized quarterly percent change



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

Real Personal Income



Source: Bureau of Economic Analysis.

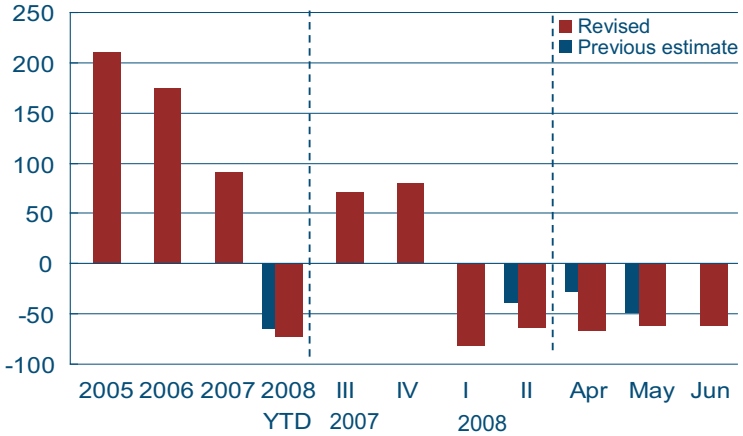
Economic Activity and Labor Markets

The Employment Situation

07.08.08
by Yoonsoo Lee and Beth Mowry

Average Nonfarm Employment Change

Change, thousands of jobs



Source: Bureau of Labor Statistics.

Today's Employment Report revealed a net decline of 62,000 jobs in June, in line with expectations and identical to May's 62,000 drop (after revision). Combined downward revisions for April and May amount to an added loss of 52,000 jobs for those months. This report brings the sixth consecutive month of decline, which began in January. Average monthly job losses for the second quarter were about 64,000, compared to an average of 82,000 in the first quarter. The diffusion index of employment change improved slightly, edging up from 45.6 in May to 46.9 in June. The reading below 50 indicates that over half of all industries are still cutting back on employment.

The goods-producing sector registered its fifteenth-consecutive month of decline, losing 69,000 jobs in June and surpassing May's loss of 54,000. The only major industry within this sector to add jobs was natural resources and mining. Service-providing industries narrowly squeezed by with a small gain of 7,000 jobs. Discounting the government's addition of 29,000 jobs, however, leaves private services with a loss of 22,000. Furthermore, May's 8,000 gain in services was entirely erased and revised instead to a loss of 8,000 jobs in today's report.

Labor Market Conditions and Revisions

	Average monthly change (thousands of employees, NAICS)				
	April current	Revision to April	May Current	Revision to May	June 2008
Payroll employment	−67	−39	−62	−13	−62
Goods-producing	−109	−9	−54	3	−69
Construction	−59	−7	−37	−3	−43
Heavy and civil engineering	−9.5	1	−3	1	−5
Residential[a]	−32	−5	−30	5	−21
Nonresidential[b]	−17.5	−3	−4	1	−17
Manufacturing	−52	−3	−22	4	33
Durable goods	−45	−1	−14	5	−16
Nondurable goods	−7	−2	−8	−1	−17
Service-providing	42	−30	−8	−16	7
Retail trade	−46	−7	−23	5	−8
Financial activities[c]	−2	−3	−3	−2	−10
PBS[d]	17	−15	−49	−10	51
Temporary help services	−19	−7	−32	−2	−30
Education and health services	48	−13	44	−10	29
Leisure and hospitality	14	2	9	−3	24
Government	24	12	29	12	29
Local educational services	−4	1	12	−2	0

a. Includes construction of residential buildings and residential specialty trade contractors.
b. Includes construction of nonresidential buildings and nonresidential specialty trade contractors.
c. Financial activities include the f nance, insurance, and real estate sector and the rental and leasing sector.
d. PBS is professional business services (professional, scientif c, and technical services, management of companies and enterprises, administrative and support, and waste management and remediation services.
Source: Bureau of Labor Statistics.

Within the goods-producing sector, construction shed 43,000 jobs and manufacturing shed 33,000. Durable and nondurable goods manufacturing faced similar losses amounting to 16,000 and 17,000 jobs, respectively. Within durable goods, fabricated metal products (–9,300) and wood products (–5,600) suffered the greatest losses. Transportation equipment was one of the few subsectors to add jobs during the month (7,100). Sectors experi-

encing notable losses within nondurable goods were printing and related support activities (–5,800) and textile mills (–3,200).

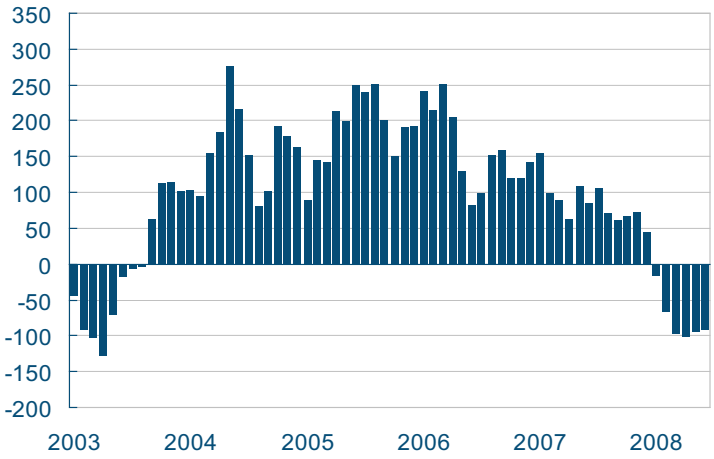
Labor Market Conditions

	Average monthly change (thousands of employees, NAICS)				
	2005	2006	2007	2008 YTD	June 2008
Payroll employment	211	175	91	−73	−62
Goods-producing	32	3	38	−79	−69
Construction	35	13	−19	−42	−43
Heavy and civil engineering	4	3	−1	6	−4.9
Residential[a]	11	−2	−10	−29	−21
Nonresidential[b]	4	7	1	−9	−16.6
Manufacturing	−7	−14	−22	−39	−33
Durable goods	2	−4	−16	−27	−16
Nondurable goods	−8	−10	−6	−12	−17
Service-providing	179	172	130	6	7
Retail trade	19	5	6	−27	−7.5
Financial activities[c]	14	9	−9	−6	−10
PBS[d]	56	46	26	−33	51
Temporary help svcs.	17	1	−7	−26	−30.4
Education and health svcs.	36	39	44	44	29
Leisure and hospitality	23	32	29	15	14
Government	14	16	21	21	29
Local educational svcs.	6	6	5	5	−0.2
	Average for period (percent)				
Civilian unemployment rate	5.1	4.6	4.6	5.1	5.5

a. Includes construction of residential buildings and residential specialty trade contractors.
b. Includes construction of nonresidential buildings and nonresidential specialty trade contractors.
c. Includes the f nance, insurance, and real estate sector and the rental and leasing sector.
d. PBS is professional business services (professional, scientif c, and technical services, management of companies and enterprises, administrative and support, and waste management and remediation services.
Source: Bureau of Labor Statistics.

Private Sector Employment Growth

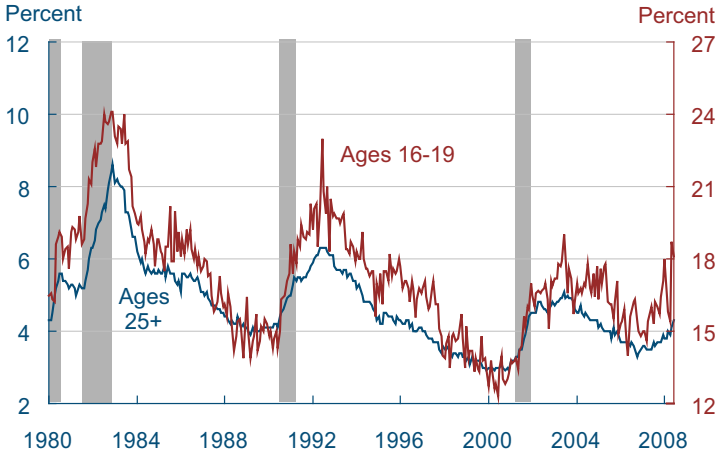
Change, thousands of jobs: three-month moving average



Source: Bureau of Labor Statistics.

The small overall gain in service-providing industries was the result of very mixed performances in its subsectors. Gaining jobs were education and health services (29,000) and leisure and hospitality (24,000). Losing jobs were professional business services (–51,000), financial activities (–10,000), trade, transportation, and utilities (-9,000), and information (–4,000). Retail trade lost 7,500 jobs, an improvement compared to May's loss of 22,600 and April's loss of 45,700. Some of the biggest losses in the professional business service sector were felt by administrative and support services, which lost a whopping 70,200 jobs, and temporary help services, which lost 30,400. Temporary help

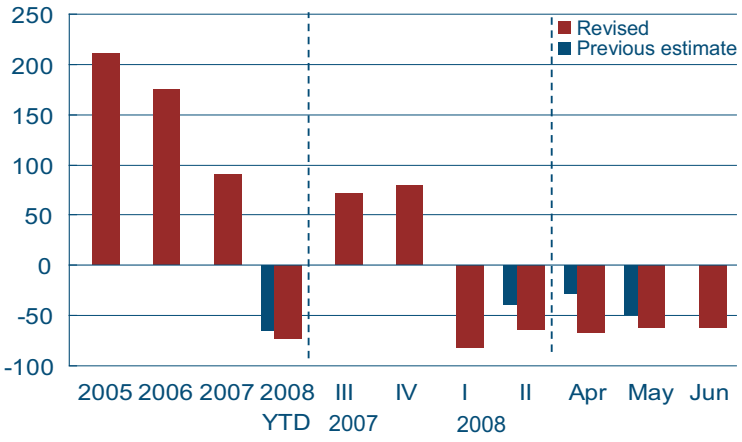
Unemployment Rate for All Ages



Note: Seasonally adjusted rates for the civilian population.
Source: Bureau of Labor Statistics.

Average Nonfarm Employment Change

Change, thousands of jobs



Source: Bureau of Labor Statistics.

services is often regarded as a leading indicator of overall employment conditions, so this loss does not paint an optimistic picture of the labor market in the near future.

The three-month moving average of private sector employment growth remains well in negative territory and relatively unchanged from the previous report at -91,000. The moving average has been negative since January.

While employment dropped 155,000, 144,000 people left the labor force, leaving the unemployment rate unchanged at 5.5 percent. A sharp increase (0.5 percentage point) in the unemployment rate in the May report was particularly concerning, although the series was thought to be noisy with an unusually high increase in teenage unemployment.

The labor market activity of teenagers around this time of year is tricky to measure. In May, the unemployment rate for teenage workers increased from 15.4 percent to 18.7 percent, as large numbers of young workers entered the labor market but had yet to find jobs. June's unemployment rate for teenagers sagged slightly to 18.1 percent but remains at a very high level. However, 359,000 teenagers left the labor force this month, which is a large number considering the overall labor force decline of 144,000. Meanwhile, the unemployment rate for workers aged 25 and older increased slightly from 4.1 percent to 4.3 percent.

Economic Activity and Labor Markets

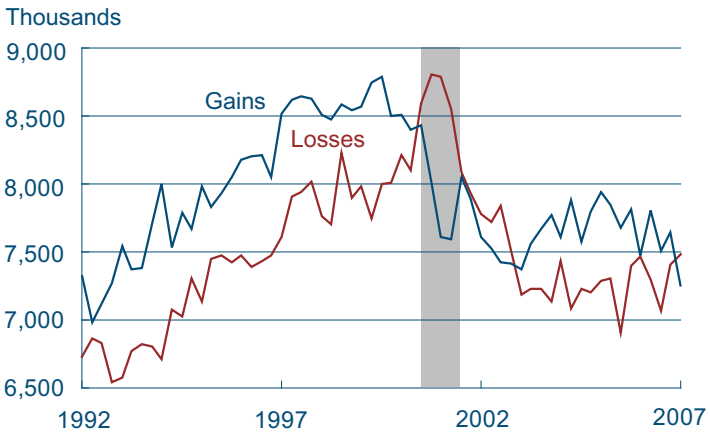
Just When Did the Labor Market Begin to Soften?

Data on Job Gains and Losses Suggest It's Earlier than Previously Thought

07.08.08
by Yoonsoo Lee and Beth Mowry

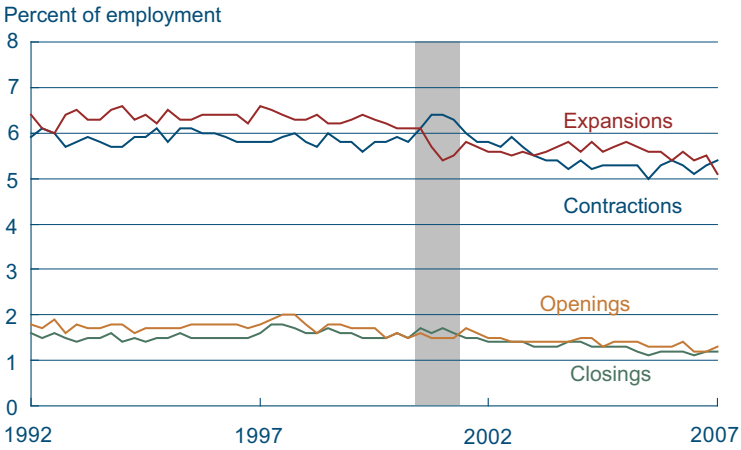
While net employment changes are usually tracked as a major indicator of the growth or decline of the economy, these numbers mask the underlying process that begets the net results, a process that includes employment turnover, job creation, and job destruction. To track this underlying process, the Bureau of Labor Statistics launched its Business Employment Dynamics (BED) in 2003. BED

Gross Job Gains and Losses



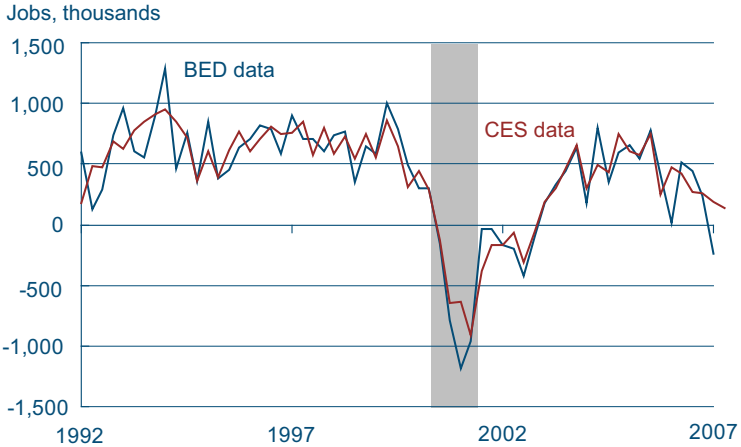
Note: BED data are seasonally adjusted on a quarterly basis, and represents private sector jobs.
Source: Bureau of Labor Statistics.

Expansions versus Contractions and Openings versus Closings



Source: Bureau of Labor Statistics.

Net Employment Change



a. The CES data shown exclude the government sector for consistency with BED data. Both cover private nonfarm employment here.
b. These CES data have been made quarterly by summing the net employment change for each quarter.
Source: Bureau of Labor Statistics.

is a set of statistics that tracks gross job gains and losses between periods of net employment reports. Gross gains represent the sum of all jobs added at the opening and expanding of establishments, and gross losses are the sum of all jobs lost at the closing and contracting of establishments.

The most recent BED data show gross job gains totaling 7.25 million in the third quarter of 2007 and gross job losses totaling 7.5 million. Before this quarter, the difference in the series, or net employment growth, had not been negative since the second quarter of 2003, in the period following the 2001 recession now referred to as the jobless recovery. The rate of gross job gains fell to 6.4 percent from 6.7 percent in the previous quarter, its lowest since the series began. This decline is mostly explained by existing (or expanding) establishments, where the rate of gains dropped from 5.5 percent to 5.1 percent. At new establishments, the rate of job creation actually increased from 1.2 to 1.3 percent. The rate of gross job losses, in the meantime, increased 0.1 percent to 6.6 percent. Again, existing (or contracting) establishments were solely responsible for the rate change.

In fact, most gross job gain and loss activity occurs at existing (expanding or contracting) establishments rather than at new or closing facilities. In the third quarter of 2007, for example, 80 percent of all job gains occurred at expanding establishments and 82 percent of job losses occurred at contracting establishments. The graph below illustrates this fact by showing that activity at expanding and contracting establishments constitutes a much larger share of total employment than that of new or closing firms.

In fact, most gross job gain and loss activity occurs at existing (expanding or contracting) establishments rather than at new or closing facilities. In the third quarter of 2007, for example, 80 percent of all job gains occurred at expanding establishments and 82 percent of job losses occurred at contracting establishments. The graph below illustrates this fact by showing that activity at expanding and contracting establishments constitutes a much larger share of total employment than that of new or closing firms.

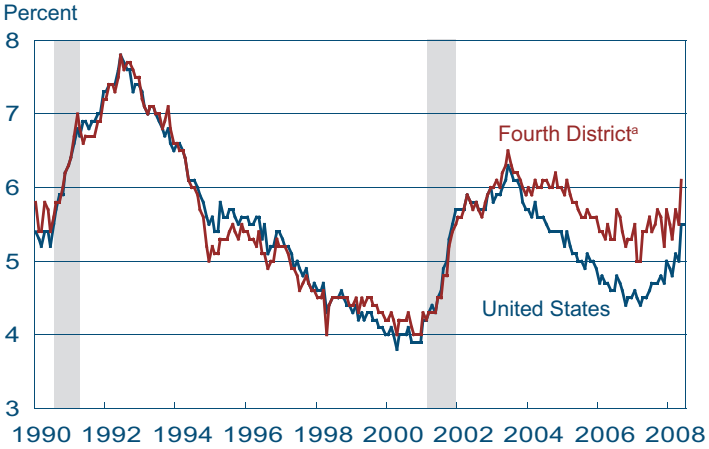
There are a number of differences between the two data sets besides their frequency. Business Employment Dynamics is released quarterly with a lag of about nine months. Not until the May 21 release did we see the numbers for the third quarter of 2007, while the CES Employment Report is released monthly with just a one-month lag. Although not as timely as the Employment Report, BED data are based on the Quarterly Census of Employment and Wages (QCEW). The QCEW requires all employers subject to state unemployment insurance laws to submit employment and wage information, so BED data are based on a virtual census covering about 98 percent of all nonfarm employers. The CES Employment Report, on the other hand, is based on much smaller monthly sample surveys and is benchmarked to the QCEW data once a year.

Regional Activity

Fourth District Employment Conditions

07.10.08
by Tim Dunne and Kyle Fee

Unemployment Rates



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

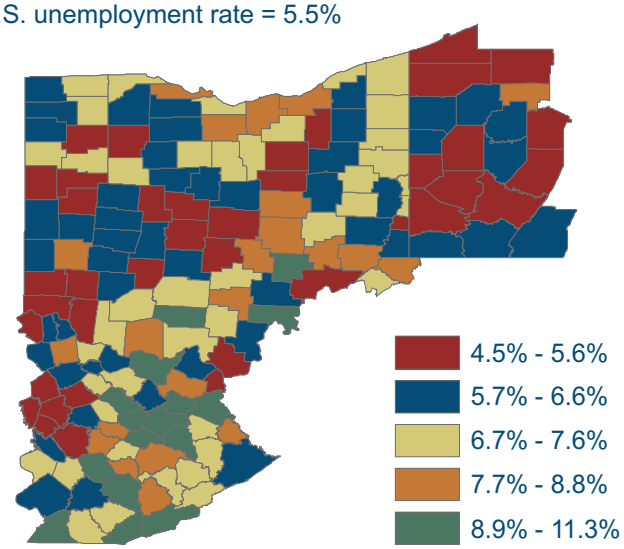
The district's unemployment rate jumped 0.6 percent, to 6.1 percent, for the month of May. The increase can be attributed to monthly increases in the number of people unemployed (12.4 percent) and the labor force (0.3 percent), along with a decrease in the number of people employed (–0.2 percent). Compared to the national rate, the district's unemployment rate stood 0.6 percent higher in May and has been consistently higher since early 2004. Since the same time last year, the Fourth District unemployment rate has increased 0.7 percentage point. The national rate has increased 1.0 percentage point.

There are considerable differences in unemployment rates across counties in the Fourth District. Of the 169 counties that make up the Fourth District, 32 had an unemployment rate below the national average in April, and 136 had a higher rate than the national average. Rural Appalachian counties continue to experience higher levels of unemployment.

The distribution of unemployment rates among

County Unemployment Rates

U.S. unemployment rate = 5.5%



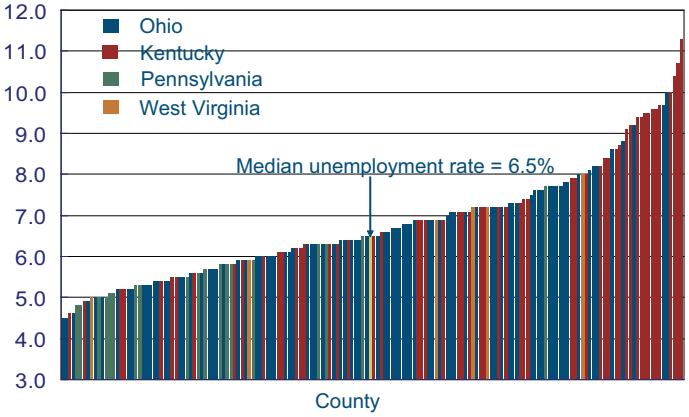
Note: Data are seasonally adjusted using the Census Bureau's X-11 procedure.
Source: U.S. Department of Labor, Bureau of Labor Statistics.

Fourth District counties ranges from 4.5 percent to 11.3 percent, with a median county unemployment rate equal to 6.5 percent. Only one of Pennsylvania's Fourth District counties lies in the upper half of the distribution compared to 65 percent of Kentucky's Fourth District counties that lie in the upper half of the distribution.

The distribution of monthly changes in unemployment rates across counties shows that the median county's unemployment rate increased 0.64 percentage point from April to May. The county-level changes indicate that 98 percent of Ohio counties and 100 percent of Kentucky counties in the Fourth District experienced an increase in their unemployment rates. Alternatively, the unemployment rate in about half of the Pennsylvania counties in the Fourth District actually fell or did not change from April to May. This is consistent with previous Fourth District employment reports, which have shown that Fourth District Pennsylvania has a much stronger labor market than Ohio and Fourth District Kentucky and West Virginia.

County Unemployment Rates

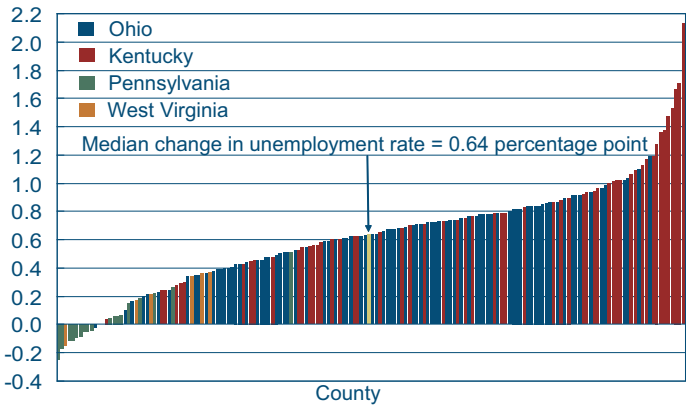
Percent



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

Change in County Unemployment Rates, April 2008 to May 2008

Percentage points



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

Regional Activity

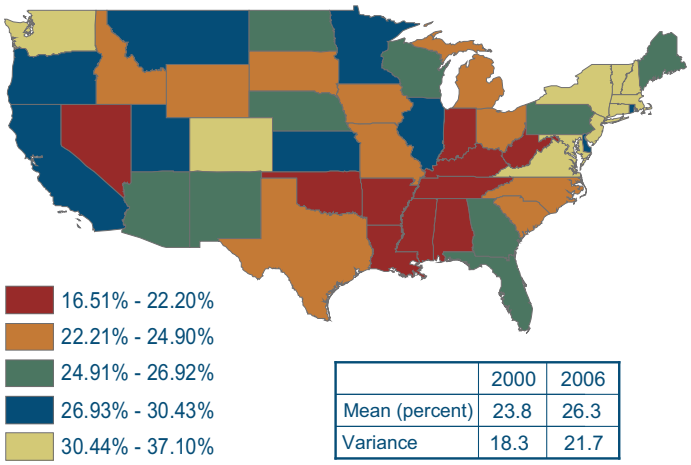
Differences in Educational Attainment across States

07.10.08
by Timothy Dunne and Kyle Fee

Human capital is the term economists use to describe the skills and knowledge of a worker or, more broadly, of the workforce. It is a main determinant

Percent of Population with a Four-Year Degree, 2006

Total U.S. (older than 25) with a four-year degree or higher = 27.0.

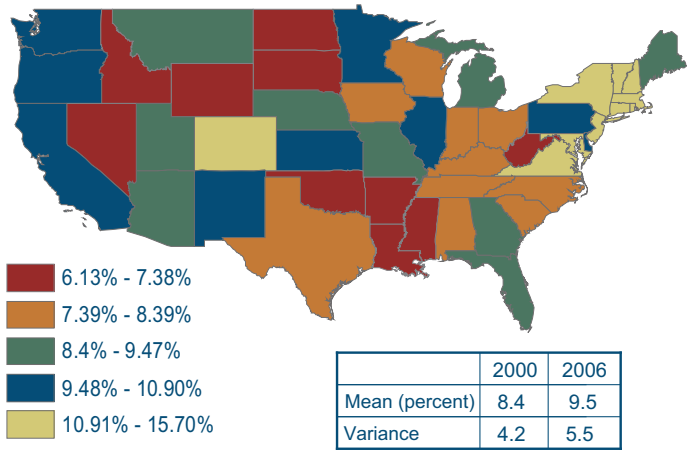


	2000	2006
Mean (percent)	23.8	26.3
Variance	18.3	21.7

Sources: Census and American Community Survey.

Percent of Population with an Advanced Degree, 2006

Total U.S. (older than 25) = 9.9



	2000	2006
Mean (percent)	8.4	9.5
Variance	4.2	5.5

Sources: Census and American Community Survey.

of economic growth for a country or a region. The relationship between economic growth and human capital is well established in economics (and is the subject of the Federal Reserve Bank of Cleveland's 2005 Annual Report). While human capital is difficult to measure, economists often use data on educational attainment as a proxy for the amount of human capital in a region or country.

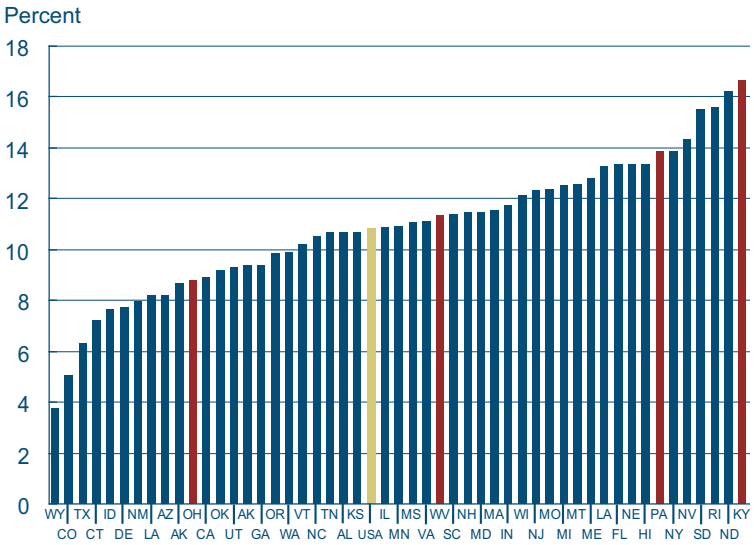
In the United States, there are considerable differences in educational attainment across regions and states. This is especially true when one focuses on differences in the share of the adult population with either four-year or advanced degrees. Currently, states with the lowest educational attainment levels include West Virginia and Arkansas, where the shares of the adult population with a four-year college degree are 16.5 percent and 18.2 percent, respectively. States with the highest educational attainment levels (above 35 percent) are in the Northeast and Mid-Atlantic, with Massachusetts and Maryland topping the list. In 2006, the most educated states had roughly twice the proportion of adults with a college degree compared to the least educated states.

A similar pattern is apparent when one examines the share of the population with advanced degrees—a master's degree or above. About 1 in 10 adults over 25 years old has an advanced degree in the United States. Northeast and Mid-Atlantic states generally have high shares of adults with advanced degrees. Colorado and Washington also have relatively high shares. States with relatively low shares are located in the Mid-South and in the Northern Plains.

Of the Fourth District states, Pennsylvania has the highest share of adults with four-year college and advanced degrees, while West Virginia has the lowest. For both four-year and advanced degrees, Ohio is in the second-lowest quintile of states—ranked 38th for 4-year degrees, and 33rd for advanced degrees. Kentucky is in the lowest quintile in the case of 4-year degrees and second-lowest quintile in the case of advanced degrees.

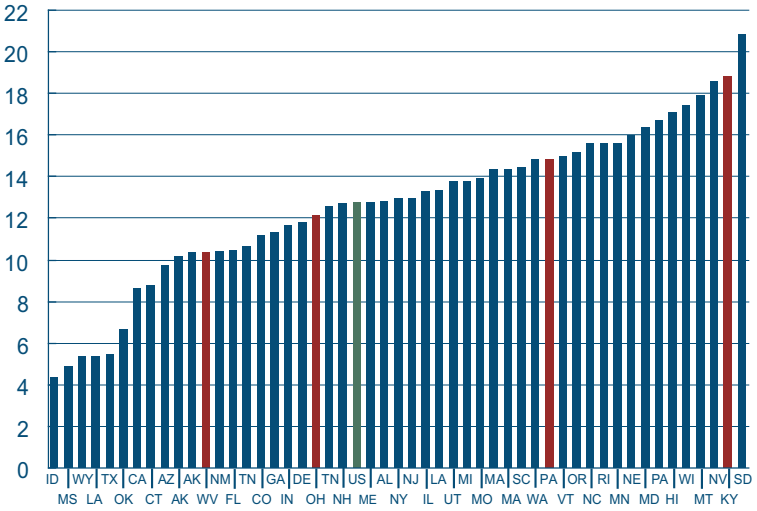
Comparing the data from the 2006 American Community Survey to the 2000 Decennial Census, the average state increased the share of its adult

Growth in Share of Population with a Four-Year Degree, 2000 to 2006



Sources: Census and American Community Survey.

Growth in Share of Population with an Advanced Degree, 2000-2006



Sources: Census and American Community Survey.

population with a college degree from 23.8 percent to 26.3 percent—a 10.5 percent increase—as well as its share of those with advanced degrees, from 8.4 percent to 9.5 percent—a 13.1 percent rise. Depending upon the measure of variation used to describe the spread of the data, the overall across-state variation in education rates either held steady (the coefficient of variation) or rose (the variance). The difference between these two measures is that the coefficient of variation normalizes the variance by the mean of a variable and thus adjusts for the rise in the mean between 2000 and 2006. The key point is that this steady-to-rising variation in the state education data indicates that differences in state educational attainment rates persisted over the period 2000 to 2006.

Moreover, growth in the share of the adult population with a four-year degree also differed markedly across states. The growth rate ranged from a low of 4–5 percent for Wyoming and Colorado to a high of 16 percent for Kentucky and North Dakota. A closer look at the tails of the distribution for these growth rates shows that states with both high and low shares of adults with four-year college degrees appear at both ends of the distribution. For example, Colorado and Connecticut, states with high shares of degreed individuals, had relatively low growth rates, while other highly educated states, such as New York and Rhode Island, experienced high growth rates. A similar pattern is found for states with low educational attainment.

With respect to advanced degrees, the growth rates ranged from a low of 4 percent to a high of 20 percent. Examining the tails of the distribution, it is generally the states with low shares of advanced degree holders that populate both ends of the distribution. Idaho, Mississippi, and Wyoming experienced low growth, while the Dakotas and Kentucky had the highest growth rates. All these states had relatively low shares in 2000 and still have low shares in 2006. States with relatively high shares of advanced degree holders are also spread across the distribution, but these states do not appear in the extreme tails of the growth rate distribution.

Looking at Fourth District states, Kentucky and Pennsylvania have above-average growth in the

share of the population with both four-year and advanced degrees, while Ohio had below-average growth in both categories. This is especially true in the case of four-year college degrees, where Ohio's growth rate between 2000 and 2006 was the 11th lowest among the 50 states. Alternatively, West Virginia had somewhat higher growth in four-year degrees than the nation in the period 2000-2006, but lower growth in advanced degrees. However, even with this higher-than-average growth rate in four-year degrees, West Virginia remains the lowest ranked of the 50 states, with only 1 in 6 adults over 25 having earned a four-year college degree.

Economic Trends is published by the Research Department of the Federal Reserve Bank of Cleveland.

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ISSN 0748-2922