Banks and Credit Unions

Competition Not Going Away
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By Richard G. Anderson and Yang Liu

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A Quarterly Monetary Policy Report Would Improve Fed Communications

The Federal Open Market Committee (FOMC) has increased the degree of transparency surrounding monetary policy in a number of ways since the 1990s. For example, the FOMC now releases a statement shortly after each meeting and releases the minutes of the meeting three weeks later. In addition, Fed Chairman Ben Bernanke now conducts four press briefings a year. A further step toward more transparency would be a quarterly monetary policy report for the U.S., as I have called for in the past. Many other central banks around the world, including the Bank of England, the European Central Bank, the Reserve Bank of New Zealand and the Riksbank, already publish such a report on a regular basis.

Currently, the FOMC releases a Summary of Economic Projections four times a year, which includes projections for a few economic variables and for the future path of the target federal funds rate. With 19 FOMC participants, however, there are potentially 19 different sets of forecasts based on 19 different models and 19 different policy assumptions. Thus, while the Summary of Economic Projections provides helpful information, communications about how the FOMC views the economy could be improved.

A quarterly monetary policy report could potentially provide a more complete discussion of the state of the U.S. economy and the likely direction going forward. This report could also include a discussion of the risks facing the economy and the possible impact of special situations (e.g., natural disasters). Such a report should be forward-looking and should contain forecasts as the Summary of Economic Projections does. The release of the new report could be coordinated with the chairman’s press briefings.

The main benefit of a quarterly monetary policy report would be improved communication with financial markets and the American public about how the FOMC views the key issues facing the U.S. economy. This view could serve as a benchmark for the discussion of monetary policy and the state of the economy, both for policymakers and for those in the private sector.

The report should also be able to give a sense of the amount of uncertainty surrounding U.S. economic performance. Too much emphasis tends to be placed on specific values for the forecasts and not enough on the notion that we do not really know how the economy will evolve. The Bank of England includes probabilities of a wide range of outcomes, which reflects how much uncertainty exists. The Fed should do the same.

An important question to address regarding a quarterly monetary policy report is: Whose forecast for the U.S. economy would serve as the baseline Fed view? The Board of Governors staff could construct this forecast under the chairman’s guidance. Given that the chairman typically stays in the middle of the Committee, the natural outcome would be a forecast that is not too different from the central tendency of the FOMC.

As with any forecast of the economy, the forecast in a quarterly monetary policy report must be based on certain assumptions about future monetary policy. My preference is to use the market’s expectation of future policy (on both the interest-rate side and the balance-sheet side) at the time the forecast is made. By using the market’s expectation rather than the Committee’s, the FOMC participants would avoid potentially giving the appearance of committing to a specific path for policy and would be able to adjust future policy as they deem necessary. Using the market’s expectation would also put the forecast on the same basis as private sector forecasts.

Of course, not every single person on the FOMC would necessarily agree with the baseline forecast in the report. Voting on a forecast, however, would be very complicated and would not make sense. Participants could instead give their own forecast separately and explain how their view differs from the baseline Fed view. For instance, a participant’s forecast for GDP may be higher, or his or her assessment of a certain risk may not be as large. Thus, the policy debate would not go away; it would simply revolve around the baseline.

Overall, a quarterly monetary policy report for the U.S. would be an improvement in Fed communications, and it would bring us up to the standards of international transparency.
Banks and Credit Unions

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The U.S. financial system includes depository institutions small and large, some chartered by states and others by the federal government, some operated for profit and others not for profit, some operated by volunteers and others by the world’s foremost financial professionals.
Credit unions and commercial banks are important parts of this system—and aggressive competitors. Both types of institutions are chartered by the federal and state governments, often with the intent of fostering competition between the institutions. At the same time, a web of regulations seeks to maintain competitive balance between the institutions. In this essay, we examine aspects of these regulations and the competition between credit unions and banks since the 1998 Credit Union Membership Access Act (CUMAA) relaxed membership regulations for credit unions.

At the end of September 2012, approximately 2,710 credit unions were chartered by 47 states and Puerto Rico, and approximately 4,320 credit unions were chartered by the federal government. Each is a not-for-profit cooperative, democratically governed (with each member having one vote) and operated by a volunteer board of directors elected by the credit union’s members. Credit unions had 96 million members, representing more than half of American families, and provided 16.7 percent of outstanding consumer credit. Credit unions have become important in home-mortgage and small-business lending, too.

In the provision of financial services to households, credit unions and community banks continue to grow more similar, a trend that began with advances in technology during the mid-1970s and accelerated during the 1980s. Because most credit unions offer a full range of financial products and services (either directly or through third parties), a number of news articles have suggested that households consider larger credit unions as full-service alternatives to banks. Academic studies have confirmed that (1) rates on deposits at banks and credit unions move together, (2) credit union lending to small businesses partly displaces bank lending, and (3) credit union lending has been steadier through business cycles, including the recent financial crisis, than bank lending. Further, a series of studies have concluded that during 1989-2001 the presence of one or more credit unions in a county tended to reduce the number of banks and competition among the existing banks.

In any industry where firms compete, each asks if others have an unfair advantage. Banking industry supporters have long asserted that credit unions possess an advantage because they are exempt from federal income tax. State-chartered credit unions became exempt in 1917, federal credit unions in 1935. Although the exemption reduces credit unions’ cost of capital by approximately 40 percent relative to a fully taxed environment, several thousand small and medium-size banks are organized for tax purposes as Subchapter S corporations and are similarly exempt from federal income taxes.

Congress has been clear regarding the social purpose of the credit union exemption: “Credit unions are exempt from federal taxes because they are member-owned, democratically-operated, not-for-profit
A 2006 study of 14 million credit union members concluded that the distribution of their incomes closely resembled the income distribution of the nation as a whole.8

When the dust settles, the core issue is whether the tax exemption tilts the competitive balance toward credit unions and away from community banks. The intensity of feeling is illustrated by the longevity of the issue. In 1997, the first vice president of the American Bankers Association (ABA), R. Scott Jones, testified at a House of Representatives hearing: “The fact is that the extension of a single common bond to multiple common bonds carries with it an extension of government benefits and special regulatory treatment, paid for by all taxpayers. In fact, if credit unions were not subsidized by the government, I doubt that we would be here this morning.” In January 2013, the chairman of the ABA, Matt Williams, placed first on his 2013 “wish list” an end to the credit union federal tax exemption.

There is precedent for removal of a federal tax exemption: Mutual savings banks and savings and loan associations (similar to credit unions in being owned by their depositors but dissimilar in not being organized as cooperatives) were exempt from federal income taxes until 1952, when Congress ruled that the nature of their business had matured to the extent that they should be taxed in the same manner as commercial banks.

Credit Unions and the Banking Industry

Credit unions compete primarily with community banks, those banks with assets of $10 billion or less. At the end of September 2012, although the nationwide numbers of credit unions and all commercial banks were approximately equal (7,030 for credit unions and 6,170 for all banks), credit unions in the aggregate held $1 trillion in assets and banks held $13 trillion. Most credit unions and banks are small: At the end of last September, 97 percent of credit unions and 91.5 percent of banks held less than $1 billion in assets (Figure 1). Further, about 50 percent of the credit union industry’s assets but only 10 percent of the banking industry’s assets were held by small institutions—those with less than $1 billion in assets.

During the past 15 years, the banking and credit union industries have experienced...
remarkably similar trends (Figure 2). For example, the number of banks has decreased 30 percent, while total assets have increased 140 percent. The number of credit unions has decreased 36 percent, while total assets have increased 160 percent.

**Field of Membership and the Common Bond**

Membership in a credit union is governed by its “field of membership” (FOM). Each FOM is composed of one or more groups of persons who share a “common bond.” Examples include an occupational bond (the same employer), an associational bond (membership in the same organization or association) and a community bond (residence in the same neighborhood, community or rural district). Although statutes vary, most state credit unions operate with multiple-group FOMs. Prior to 1982, federal regulations permitted only single-group FOMs for federally chartered credit unions. In 1982, federal regulators first allowed FOMs that included more than a single occupational or associational group; in 1983, they permitted FOMs for individual credit unions that included both occupational and associational groups. More recently, in circumstances where a solvent credit union has acquired an insolvent one, federal regulators have permitted FOMs that include mixtures of groups with occupational, associational and community bonds.

In 1990, the American Bankers Association and its supporters sued federal regulators, asserting that federal law did not permit multiple-group FOMs. Although the plaintiffs prevailed in the Supreme Court on Feb. 25, 1998, Congress quickly vacated the court’s action: On Aug. 7, 1998, President Clinton signed the Credit Union Membership Access Act, which amended federal law to explicitly permit multigroup FOMs. But the law had a number of caveats. First, only groups with fewer than 3,000 members would be allowed to join existing credit unions (except when regulators certified that the group was unlikely to form a viable separate credit union). Second, community charters were restricted to a “well-defined local community, neighborhood or rural district.” Third, a credit union’s commercial lending could not exceed 12.25 percent of its assets.

On Jan. 8, 1999, the ABA again sued federal regulators, alleging that their rules with respect to occupational and associational groups did not reflect Congress’ intent. The suit was dismissed by the U.S. Court of Appeals.

Later litigation challenged the community bond. In March 2003, federal regulators approved a community charter in Utah that included six counties, two metropolitan statistical areas (Salt Lake City and Ogden) and, as noted by the court, two mountain ranges. The ABA sued the next year. The District Court vacated approval of the community charter for lack of adequate procedure but not because of the merits. The community charters were revised and approved.

As of 2012, there were three criteria for a federal community FOM. First, the area must have clear geographic boundaries, such as a city, township, county or counties, or school district; entire states and congressional districts are not permitted.
Second, there must be interaction among the residents, such as a single political/governmental jurisdiction or designation of the area by the federal Office of Management and Budget as a Core Based Statistical Area (or a Metropolitan Division within a Core Based Statistical Area). Third, the area must have a population of no more than 2.5 million people.11 State criteria for community charters may differ.

See Figure 3 for more data on credit unions with federal charters.

Credit Union Expansion

Since January 1999, multiple-group federal credit unions have added 151,000 groups that contained 29 million persons at the time they were approved. Of the 151,000 groups, 89 percent contained 200 or fewer people, while 806 groups contained at least 3,000 people.

The largest groups were large indeed. In 2005, the Georgia United Federal Credit Union added the 367,000 employees of the Catholic archdiocese of Atlanta. In 2006, South Florida Educational Federal Credit Union added the 370,000 students attending Miami-Dade public schools. In 2007, the Pentagon Federal Credit Union added the 300,000 persons in the Military Officers Association of America. In 2012, Logix Federal Credit Union (Los Angeles) added 325,000 members of the California Teachers Association.

Because some multiple-group associational credit unions include in their FOM certain professional, social and civic associations that accept anyone as a member, the number of their potential members is limited only by the U.S. population. The Pentagon Federal Credit Union, for example, includes several associations that offer membership to anyone for a nominal fee.12 At New Jersey’s Affinity Federal Credit Union, for a one-time $25 fee, any resident of New York, New Jersey or Pennsylvania can join the New Jersey Coalition for Financial Education and become a member of the credit union.13 Utah’s HeritageWest Credit Union offers membership to all people who contribute $10 or more to the We Promise Foundation of its parent, the Chartway Federal Credit Union, based in Virginia Beach, Va.

Perhaps the most-recent creative example of FOM expansion is the decision in 2012 by Thrivent Financial for Lutherans, a Minnesota financial holding company, to split its Thrivent Financial Bank into two parts: an associational federal credit union and a trust company, the latter to remain a subsidiary of the holding company. A writer in the Credit Union Times noted that offering loan products and other retail banking services through the tax-exempt credit union would allow Thrivent to reduce prices while continuing to offer investment products through its sister trust company. But what of the common bond? Membership in the credit union is open to members of Thrivent Financial for Lutherans, a mutual organization. As of this writing, Thrivent Financial for Lutherans’ web page offers for $19.95 an “associate” membership to any person who “provides support for strengthening the membership efforts of Thrivent Financial for Lutherans.” The membership requires no purchase of products or services—but the web page notes, “The $19.95 annual membership fee may be waived when you purchase a product from a Thrivent Financial affiliate or subsidiary, such as a Thrivent mutual fund product or Thrivent Federal Credit Union product.” With the waiver, this credit union is, perhaps, the lowest-cost open-to-anyone associational credit union in the United States.

In addition, some federal credit unions operate in multiple states. Noteworthy are the $6.9 billion Security Service Federal Credit Union, San Antonio, Texas, with 70 locations in three states, and the aforementioned Chartway, with 64 offices in 10 states. These credit unions, with complex FOMs, were created when federal regulators used broad emergency authority to enable the purchase and assumption of an insolvent credit union by a solvent one. Under this authority, the acquirer and acquired credit unions may be in different states, and
the acquirer may retain the FOMs of the acquired in addition to its own.

Finally, we note that three federal credit unions bought assets from banks during 2012. One of the more closely watched was the purchase by GFA Federal Credit Union (a community charter) in Gardner, Mass., of Monadnock Community Bank in Peterborough, N.H., a shareholder-owned savings bank. At the outset, some analysts believed that it would be difficult for a credit union with a federal community charter to purchase a bank 25 miles away. That difficulty seems to have been resolved—but perhaps at the expense of credit unions further resembling banks.

Summary

Have the combined effects of the exemption from federal income taxes plus the multigroup expansion possibilities permitted by the CUMAA tilted the competitive balance away from banks and toward credit unions? The evidence does not permit any sharp conclusions. Despite the often-heated rhetoric of competing advocates, both industries have experienced similar trend growth since 1998. Further, the relative proportions of assets held by federally chartered single, multiple and community bond credit unions have changed little. The only safe prediction is that, in the future, credit unions and community banks will continue to grow more similar.

Richard G. Anderson is an economist at the Federal Reserve Bank of St. Louis and a visiting professor at the University of Sheffield in England. Yang Liu is a senior research associate at the St. Louis Fed. For more on Anderson's work, see http://research.stlouisfed.org/econ/anderson/

ENDNOTES

1 Federal Reserve System, Flow of Funds data and authors’ calculation.
2 See Smith and Woodbury; Wilcox; Smith.
3 See Feinberg and Rahman.
4 For example, Browning, Lieber and Prevost.
5 See Burger and Dacin; Smith and Woodbury; Smith.
6 See Credit Union National Association.
7 See U.S. 105th Congress.
8 See National Association of State Credit Union Supervisors.
9 See Emmons and Schmid (1999 and 2003).
10 See Burger and Dacin.
11 See National Credit Union Administration.
12 See Lieber.
13 See Browning.
14 See Silver-Greenberg.

REFERENCES

Credit Union National Association. CUNA Issue Summary: Subchapter S Corporation Bank, February 2013.
For a number of years now, there has been a renewed and ongoing debate in the U.S. about the proper role and size of government. On one side of the argument, distrust in markets has increased due to the severity of the 2007-08 financial crisis, particularly how it impacted household wealth. On the other side, distrust in government has increased, given the apparent ineffectiveness of stimulus programs and worries about mounting debt, both of which resulted from the government’s response to the recession that followed. The disagreement in views promoted a situation in which federal revenue gradually fell well below historical averages while spending rose significantly.

These circumstances marked the negotiations to raise the debt ceiling in 2011. An important element of the agreement that was brokered during these talks was the establishment of a congressional “supercommittee” (officially, the Joint Select Committee on Deficit Reduction), whose job was to significantly reduce the deficit over the span of a decade. This bipartisan committee, however, failed to provide any deficit-cutting recommendations; that failure triggered a series of automatic deficit-reducing measures, as specified in the original agreement during the debt-ceiling negotiations.

Because of these measures, the federal deficit was projected to drop sharply in the following years, fueling worries of depressed future economic activity in the context of a weak recovery from the previous recession. This sharp fiscal contraction, dubbed the “fiscal cliff” in the news, consisted of the expiration of various tax cuts, tax credits, unemployment insurance extensions and Social Security payroll tax relief; the decrease in Medicare payment rates to health-care providers; and automatic spending cuts, known as “sequestration.” But on Jan. 1, 2013, Congress passed the American Taxpayer Relief Act of 2012, which significantly moderated the increase in federal revenue relative to the fiscal cliff scenario and postponed sequestration until March.

The burden of this increased taxation was distributed unequally across income groups. For those earning up to $400,000 a year ($450,000 for those filing joint tax returns), the biggest impact came from the expiration of the cut in Social Security payroll taxes. On the flip side, the so-called Bush-era tax cuts were made permanent for this income bracket, removing the uncertainty about their eventual expiration. In contrast, high-income earners saw significant increases in tax rates on their income, capital gains and dividends.

Comparing Historical Levels with Today’s

The accompanying chart shows the federal deficit, debt, revenue and outlays, all in terms of GDP, since 1950 and projected by the Congressional Budget Office (CBO) until 2023. As a reference, the chart also includes projections of what could have occurred if no fiscal deal had been reached—that is, if the fiscal cliff scenario had materialized.

Until the recent financial crisis, federal revenue had been relatively stable, averaging about 18 percent of GDP between 1950 and 2008. A series of tax provisions (in 2001, 2003, 2009 and 2011-12) brought revenue down gradually to 16 percent of GDP in 2012. One of the main concerns during the fiscal cliff debate was the potentially recessionary effect of letting these tax provisions expire.

The deal ended up being a compromise from a deficit-reduction perspective: Revenue is projected to return to historical levels, but it still will not be sufficient to finance current levels of spending.

On the expenditure side, federal outlays averaged 20 percent of GDP between 1950 and 2008. Since then, in response to the financial crisis and subsequent recession, outlays averaged 24 percent of GDP, peaking at 25 percent in 2009. Spending is currently at its highest since the end of World War II. The fiscal cliff deal postponed automatic spending cuts, which, although much dreaded in the news, would have had a minor impact on the federal deficit.

To better understand the outlook on spending, it is instructive to inspect changes in its composition. Since the end of the Korean War in 1953, defense spending has steadily decreased its share in total outlays. Currently, defense accounts for about 20 percent of all spending and is projected to decrease to about 13 percent in 2023. On the other hand, mandatory spending or “transfers”—mainly, retirement payments, medical care and unemployment assistance—is accounting for a larger share of spending. Remaining below 30 percent of total spending until 1970, the share of transfers has since exploded. In 2012, transfers accounted for about 57 percent of total outlays (13 percent of GDP) and are scheduled to continue growing. As the chart shows, much of the recent increase in transfers appears to be permanent; over the next decade, they are expected to remain about 3 percentage points of GDP above precrisis levels. This is an issue that will likely be at the center of any meaningful political negotiation aimed at curbing federal spending.
These recent developments in revenue and expenditure have resulted in large and persistent deficits since 2009. During the past four years, the deficit has been at its largest since World War II. One of the projected outcomes of the fiscal cliff scenario was a quick, if painful, resolution of the current deficit problem. Instead, the deal struck in January only raised projected revenue moderately and continued to push the spending issue forward unresolved.

**Not a Pressing Problem Now, but…**

Persistent deficits matter because they pile up debt. Mounting debt turns into a serious problem when markets start asking for heavy compensation to buy public bonds or flat-out refuse to roll over the maturing debt. At the moment, neither scenario appears pressing, as evidenced by the historically low yields earned by U.S. Treasury bonds. If anything, these low returns have postponed any sense of urgency in resolving fiscal matters. Looking ahead, however, as interest rates increase, so will the financial burden of accumulated debt. Eventually, this may require significant increases in taxes or reduction in other spending priorities, both of which have economic and political consequences.

Deficits and debt aside, the uncertainty about the ultimate size of government is itself an important concern. Will spending eventually return to its postwar average level of about a fifth of output, or will it remain permanently elevated due to the pressures of increased transfers? If government is to be larger, how is the burden of taxation going to be distributed? Here, it is important to know not only who will pay the tab, but also in what form new revenue is going to be collected. Income taxes? Capital gains and dividend taxes? Estate taxes? Uncertainty about future taxes, both level and type, makes undertaking marginally profitable endeavors more risky and, thus, generally depresses economic activity and outlook, further delaying the economic recovery.  

Fernando Martin is an economist at the Federal Reserve Bank of St. Louis. For more on his work, see http://research.stlouisfed.org/econ/martin/

**Looking Back and Ahead**

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<td><strong>DEBT IN THE HANDS OF THE PUBLIC</strong></td>
<td><strong>20</strong></td>
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**Endnotes**

1 The deficit is the difference between outlays and revenue. Outlays include all forms of government spending (that is, purchases of goods and services, transfers to individuals and other grants, and interest payments on the debt). Debt is defined as “debt held by the public,” which excludes holdings by federal agencies. All years referred to in this essay are fiscal years. The fiscal year in the United States begins Oct. 1 and ends Sept. 30 of the subsequent year and is designated by the year in which it ends. Before 1977, the fiscal year began July 1 and ended June 30.

2 This is the “baseline scenario” projected by the CBO in August 2012.
Who Is Concealing Earnings and Still Collecting Unemployment Benefits?

By David L. Fuller, B. Ravikumar and Yuzhe Zhang

The unemployment insurance program in the U.S. offers benefits to workers if they lose their jobs through no fault of their own. In 2011, this program cost $108 billion, of which nearly $3.3 billion was spent on overpayments due to fraud.1

Unemployment insurance fraud occurs when an ineligible individual collects benefits after intentionally misreporting his or her eligibility. Recent headlines have brought attention to extreme forms of fraud, such as the collection of unemployment benefits by prisoners.2 The dominant form of unemployment insurance fraud, however, is what’s called concealed earnings fraud. This fraud occurs when individuals collect unemployment benefits while they are employed and are earning wages. The overpayments due to concealed earnings accounted for almost $2.2 billion in 2011, two-thirds of the total overpayments due to all categories of fraud.3

In this article, we document a few facts regarding concealed earnings fraud among various income groups. These facts may help focus efforts to deter fraud and to recover overpayments.

To begin, not everyone who is unemployed collects benefits: Some people are not eligible, and some choose not to collect. In 2011, the number of unemployed individuals collecting benefits was 3.7 million (only 27 percent of the unemployed individuals).4 The median of their earnings when they were last employed was $596 a week. Among those collecting unemployment benefits, 88,000 committed concealed earnings fraud; their (past) median earnings were $479.5

Individuals committing this type of fraud are not evenly distributed among various income groups. Figure 1 illustrates the number of individuals committing this fraud and the overpayments to the individuals in each income group.

Among those committing concealed earnings fraud, 18,000 (roughly 20 percent) earned less than $300 per week, and 12,000 (14 percent) earned more than $900 per week. Part of the reason for the uneven distribution across income groups could be that individuals collecting unemployment benefits are not evenly distributed across income groups. However, the numbers do not line up conveniently. For instance, 14 percent of those collecting benefits earned less than $300 per week, whereas almost 25 percent earned more than $900 per week.

Table 1 illustrates the percent of individuals in each income group. Those earning less than $300 per week accounted for 14 percent of the individuals collecting unemployment benefits but accounted for 20 percent of the individuals committing concealed earnings fraud. In contrast, those earning at least $900 per week accounted for 24 percent of the individuals collecting unemployment benefits but only 14 percent of the individuals committing concealed earnings fraud.

Measured in terms of fraud dollars, however, the picture looks different. As Figure 1 illustrates, nearly half a billion dollars of the overpayment went to those earning more than $900 per week and only $210 million of the overpayment was accounted for by the individuals whose weekly earnings were less than $300. That is, those earning more than $900 per week accounted for almost 22 percent of the overpayment, while the ones earning below $300 per week accounted for less than 10 percent.

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One reason why the number of individuals committing fraud in each income group does not line up perfectly with the fraud overpayments in each income group is that the unemployment benefit dollars are not

FIGURE 1
Fraud due to Concealed Earnings in 2011 by Income Group

SOURCES: Benefit Accuracy Measurement (BAM) program, U.S. Department of Labor; authors’ calculations.
NOTES: To arrive at the number of individuals committing concealed earnings fraud (red), we first calculate the fraction of individuals in each income group (in the BAM sample) committing concealed earnings fraud. We then multiply this fraction by the total number of individuals collecting benefits in each group. We perform a similar calculation to find the overpayments due to this type of fraud (blue pattern). We calculate the concealed earnings fraud overpayments as a fraction of benefits for each earnings group (in the BAM sample) and multiply it by the total benefits received by each group.
distributed according to the proportion of people in each income group. In fact, only 5.5 percent of the benefits distributed by the unemployment insurance program went to individuals who earned less than $300 per week, whereas 35.5 percent of the benefits went to individuals who earned more than $900 per week. (See Table 2.)

Roughly speaking, high earners receive larger unemployment checks than low earners. In the U.S. unemployment insurance system, each worker collects benefits equal to a percentage of his or her previous earnings. This percentage is referred to as the replacement rate. The replacement rate for high earners is less than that for the low earners. In 2011, a person earning $300 per week had a replacement rate of almost 50 percent, a person earning $1,200 had a replacement rate of 33 percent and a person earning $2,400 had a rate of 15 percent.6 Despite the lower replacement rate, the high earners receive a higher unemployment benefit relative to the low earners. Consequently, concealed earnings fraud committed by an individual earning $2,400 per week accounts for more than twice as many dollars as the fraud by an individual earning $300 per week.

Table 2 illustrates the percent of the overpayments (due to this type of fraud) going to each income group. Fraud committed by a high earner involves more dollars relative to a low earner, and more of the overpayment amounts go to the high earners.

Fraud due to concealed earnings represents the largest source of fraud in the U.S. unemployment insurance system. Individuals with relatively low earnings constitute a larger fraction of those committing such fraud. High-earnings individuals, however, account for larger dollar amounts of this fraud. Given limited resources to deter fraud and to recover overpayments, the unemployment insurance system faces a trade-off between the number of individuals versus the dollar amounts.

David L. Fuller is an economics professor at Concordia University. B. Ravikumar is an economist at the Federal Reserve Bank of St. Louis. Yuzhe Zhang is an economics professor at Texas A&M University. For more on Ravikumar’s work, see http://research.stlouisfed.org/econ/ravikumar/

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### Table 1

**Percentages of Those Collecting Unemployment Benefits and Concealing Earnings in 2011**

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<thead>
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<th>$300 and below</th>
<th>$300-$600</th>
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<tr>
<td>Individuals collecting unemployment benefits</td>
<td>14%</td>
<td>37%</td>
<td>25%</td>
<td>11%</td>
<td>7%</td>
<td>4%</td>
</tr>
<tr>
<td>Individuals committing concealed earnings fraud</td>
<td>20%</td>
<td>47%</td>
<td>19%</td>
<td>6%</td>
<td>4%</td>
<td>3%</td>
</tr>
</tbody>
</table>

**Sources:** Benefit Accuracy Measurement (BAM) program, U.S. Department of Labor; authors’ calculations.

**Notes:** To obtain the percentage of all collectors earning less than $300/week, we calculate the total number of individuals in the BAM sample earning below $300/week and divide this by the total number of individuals in the sample who collected some benefits. The calculations for individuals in other earnings groups and for individuals committing concealed earnings fraud are similar.

### Table 2

**Percent of Unemployment Benefits and Percent of Overpayments due to Concealed Earnings Fraud by Different Income Groups in 2011**

<table>
<thead>
<tr>
<th>$300 and below</th>
<th>$300-$600</th>
<th>$600-$900</th>
<th>$900-$1,200</th>
<th>$1,200-$1,600</th>
<th>$1,600-$2,400</th>
<th>$2,400 and above</th>
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<tr>
<td>Unemployment benefits</td>
<td>5.5%</td>
<td>29%</td>
<td>30%</td>
<td>16%</td>
<td>10%</td>
<td>6%</td>
</tr>
<tr>
<td>Overpayments due to concealed earnings fraud</td>
<td>10%</td>
<td>43%</td>
<td>26%</td>
<td>10%</td>
<td>6%</td>
<td>5%</td>
</tr>
</tbody>
</table>

**Sources:** Benefit Accuracy Measurement (BAM) program, U.S. Department of Labor; authors’ calculations.

**Notes:** The calculations are similar to those in Table 1, only now we are calculating the total dollar value of benefits or overpayments to each income group. For example, for all unemployment benefits, we add the total benefits collected by those earning less than $300/week and divide by the total benefits collected in the BAM sample.

---

FRAUD DATA: To obtain the percentage of all collectors earning less than $300/week and divide this by the total number of individuals in the sample who collected some benefits. The calculations for individuals in other earnings groups and for individuals committing concealed earnings fraud are similar.

6 Replacement rates are calculated from the BAM sample. For each individual in the sample, we divide the weekly earnings in the BAM sample by the total number of persons collecting benefits in 2011. We calculate weekly earnings in the BAM sample by dividing total reported earnings by number of weeks worked.

5 To calculate the number of individuals committing concealed earnings fraud, we calculate the fraction in the BAM sample and multiply by the total number of persons collecting benefits in 2011.


3 See Fuller et al. 2012a.


1 Fraud data are taken from the Benefit Accuracy Measurement (BAM) program run by the U.S. Department of Labor. See Fuller et al. 2012a.

**REFERENCES**


Low Interest Rates Have Yet To Spur Job Growth

By William T. Gavin

The Federal Reserve set the target range for the federal funds rate at 0 to 25 basis points in December 2008. It has remained there because the recovery in output and jobs has been so slow. The rate was set so low to stimulate aggregate demand and job growth (by lowering borrowing costs for consumers and firms). With low interest rates, consumers are more likely to increase spending now rather than wait to consume later. Low interest rates also drop the cost of borrowing to invest in productive capital. The increased demand for consumption and investment then leads to higher demand for labor. But of late, the low interest rates do not seem to be having much of the intended effect, either on spending or on job growth.

One way to gauge job activity is to look at the ratio of employed people to the civilian population. The employment-to-population ratio falls whenever people quit their jobs and leave the labor force. It also falls when workers are laid off and counted among the unemployed. The figure shows this ratio from 1990 through 2012. The shaded areas represent recessions. As can be seen, the employment-to-population ratio dips to a trough early in each recovery, but the most recent recovery is distinguished by the failure of this ratio to rebound from the post-recession low.

The figure also shows the federal funds rate over the same period. A cursory glance reveals positive comovement between the employment-to-population ratio and the Federal Reserve’s policy rate.

Obstacles to Low Interest Rate Policy

Recognizing that the economy is a complex system subject to many shifts in taste and shocks to productive activity, it is also important to consider the economic mechanisms that work against low interest rate policy. The effect of low interest rates on the supply of labor is subtle but not so hard to understand.

Interest rates represent the return we get for waiting to consume. Low interest rates encourage more spending today, which the Fed intends, and more leisure today, which the Fed does not intend. Labor participation rates decline for many reasons, but low interest rates work in the direction of discouraging labor market participation. This effect of interest rates is not large and is usually ignored in academic studies of factors that affect labor supply.

The business demand for labor, however, is widely thought to be the main determinant of job growth. The effect of low interest rates on labor demand works through the impact of interest rates on the marginal product of capital. To understand how this can discourage job growth, it might help to review the basic economic principles surrounding the ways that lower interest rates affect investment decisions.

Consider a simple world in which a firm uses just two factors to produce output: capital and labor. The marginal product of capital refers to the increase in the value of output that occurs when a firm invests in one more unit of capital while keeping the employment level fixed.

For example, consider an automobile plant that produces cars with capital (assembly lines) and labor which can vary depending on the demand for cars and the cost of hiring workers. If demand goes up, the firm may hire more employees to produce more cars with the same capital. Adding workers will increase the marginal product of the physical plant (the capital), but it will lower the marginal product of the last worker hired. Now suppose that the cost of capital falls and the firm decides to add another assembly line. In this case, the firm will move some of the workers from the other line and hire more workers. For a variety of reasons, the second assembly line will produce fewer cars than the first line operating alone would. One reason is simply that demand fluctuates and the two lines together will operate below capacity more often than one line alone would. The increase in capital will lead to a decline in its marginal product, but investment can be justified if the cost of capital is low enough.

The marginal product of capital depends on how much capital one uses, but it also depends on how much labor is employed. If interest rates fall, the marginal product of capital will also fall if the firm adds more capital or if it dismisses some workers. If
interest rates fall because demand is projected to be weak, then the firm may decide to lay off a shift of workers, leaving the existing assembly lines idle more often and resulting, overall, in a lower marginal product of capital that is compatible with the lower interest rate on bonds.

The Role of Bond and Capital Markets

Low interest rates affect investment through the interaction between bond and capital markets. If bond rates are held lower by policy, then the return to capital will fall until investors are indifferent between investing in bonds or capital. In the happy scenario, funds shift from bond markets toward investment in more capital until the risk-adjusted net marginal product of capital falls enough to equal the policy-induced low return on bonds. In the perverse scenario, firms lay off workers until the marginal product of capital falls enough to be consistent with the lower interest rate. For the employment-to-population ratio, it matters whether the marginal product of capital is lowered by adding capital (more investment) or by laying off workers.

We are in new territory with interest rates being held at zero. In policy statements from recent meetings, the Federal Open Market Committee (FOMC), the monetary policy arm of the Federal Reserve System, promised to continue adding $85 billion a month to its balance sheet, and it pledged to keep the target rate unchanged until the unemployment rate falls to 6.5 percent or inflation projections rise to 2.5 percent. According to the most recent FOMC forecasts, neither is expected to occur before 2015.

Forecasting is always a problem, but especially so today because we have very little data from economic history with which to predict how the economy will behave when the interest rate is pegged at zero. A few theoretical studies use New Keynesian macroeconomic models to analyze monetary policy when interest rates are near zero. In these models, if there is a positive shock to productivity that would normally occur during a recovery, it is expected to have perverse effects if the interest rate is pegged at zero. The perverse effects include subpar expansion and downward shifts in both the supply and demand for labor. In these models, raising nominal interest rates (lifting off the zero lower bound) can lead to higher wages and to higher rates of return in both bond and capital markets. Firms would have an incentive to add workers because doing so would lead to an increase in the marginal product of capital. People would have an incentive to re-enter the work force because the return to saving would increase.

Although these are only models, they are widely used in analyzing monetary policy. After more than four years of low interest rates and stagnating growth around the world, a better understanding of low interest rate policies is needed.

William T. Gavin is an economist at the Federal Reserve Bank of St. Louis. Feng Dong, a technical research associate, provided research assistance. For more on Gavin’s work, see http://research.stlouisfed.org/econ/gavin/

The Federal Funds Rate and the Employment-to-Population Ratio

NOTE: The shaded areas indicate recessions.

REFERENCES


The 2010 U.S. census was a reality check for Mt. Vernon and surrounding Jefferson County, in the middle of Southern Illinois. Results, released in early 2011, revealed population declines of 6 percent for the city and 3 percent for the county as a whole over the previous decade.

Ironically, the decade ending in 2010 had been one of substantial job growth. It was led by the town’s major employers, primarily a tire-maker whose successive expansions created jobs by the hundreds. Employment also grew steadily at a drug store chain’s distribution center and in the city’s vibrant health-care sector, made up of two hospitals and a number of off-site medical offices and clinics.

Obviously, people have been working in town but not living there, but why?

“We’re in a rural economy, and a rural economy means labor can come from 45 or more miles away,” says Jo David Cummins, president of Mt. Vernon’s Community First Bank. “People don’t move into town; they commute back and forth.”

With a limited housing stock, mostly from the mid-20th century, the town offers few compelling options. According to a study done for the city last year, just to keep up with the new jobs, the city needs in the coming five years at least 360 new homes, mostly priced under $175,000. Cummins speculates that a chicken-and-egg situation developed, with risk-averse builders...
were connected in 1974, creating beelines from Mt. Vernon north to Chicago, south to Memphis, west to St. Louis and east to Louisville. That same year, the plant of Continental Tire the Americas opened with 150 employees. Taking advantage of what had become a natural location for distribution centers, the drug store chain Walgreens began operations in Mt. Vernon in 1990 with 175 employees and gradually expanded. The distribution center now services 700 stores in 10 Southern and Midwestern states.

The crossroads have also given rise to 12 hotels, with more than 1,000 rooms altogether. Bonnie Jerdon, director of the Mt. Vernon Convention & Visitors Bureau, says room nights have increased steadily in recent years. Last year alone, they went up 5 percent. However, only about half of the visitors stay more than one night. Jerdon hopes that the new branding campaign will persuade more people to stay longer.

Mary Ellen Bechtel, executive director of the Jefferson County Development Corp., welcomes the new brand as a supplement to rather than a substitute for traditional economic development. The latter includes tax credits and training grants from the state and property tax abatement and sales tax waivers from local governments. All of these incentives have been used in various combinations to attract new businesses to the area and help existing ones grow, she says.

**Investing in Infrastructure**

A heavy emphasis has been put on infrastructure improvements, too. On the west side of town, near the I-57 interchange that opened in 2009, plans call for a new high school, a 600-acre planned-unit development, the area’s third industrial park and more medical-related facilities. The city and state are investing $9.5 million into public works in that area to make all the development possible.

“We use every tool we have in the economic toolbox” to encourage development and redevelopment, adds Mt. Vernon Mayor Mary Jane Chesley.

The city’s tools also include tax increment financing (TIF) districts, where tax increases above an initial, fixed amount are dedicated to district upgrades. Of the four the city has created over the past five years, results have been most striking in the downtown district, where commercial

**Quality of Life, Quality of Life, Quality ...**

The consultant’s report presented branding as an economic development strategy. The report says “quality of life” is the “leading reason” businesses start in or move to an area in the 21st century. Location is now a secondary consideration, the report says.

In contrast, Mt. Vernon’s location at the intersection of Interstates 64 and 57 was its primary economic engine in the late 20th century. The thoroughfares
buildings are up to a century old and many remain empty. Proceeds from the TIF have funded 40 building renovation projects, worth about $2.3 million, and have spurred another $5 million in private investment, the mayor says.

Little by little, a downtown master plan completed in 2006 is being realized. “It’s been slow, but we keep moving forward,” says Cyndy Mitchell, executive director of the Downtown Mt. Vernon Development Corp. “I think downtown is the heartbeat of a city,” says Chesley. As further signs of progress, she points to what she describes as the city’s ongoing “quality of life” enhancements, including street repairs, park improvements, new bike trails and an outdoor aquatic center that is due to open July 4. Abandoned housing and other unused buildings are being demolished, and rental housing is now being inspected.

Meanwhile, the year began with, by Bechtel’s calculation, up to 450 new jobs pending over the next three years. Of these, 350 are on tap at Continental Tire. The non-union plant, which makes Continental and General tires, has thrived as the company has closed unionized U.S. plants. In January, it announced its latest expansion. It will cost $129 million and lead to 100 new jobs.

**New Plant for Magnum**

The remaining 50 to 100 new jobs are in the offering at Magnum Steel Works, a fabricating and machining shop specializing in repair of industrial equipment. Magnum started in 2005 with a handful of employees. In January, the company began moving its 56-person workforce from an outgrown 33,000-square-foot building into a new $16 million, 128,000-square-foot facility. President Jim Czerwinski says Mt. Vernon is an ideal location for his company, which counts the tire company and Southern Illinois’ coal mining companies among its major clients.

**New Hospital Facilities**

Also in January, Mt. Vernon continued evolving into what Cummins perceives as “a health mecca.” Good Samaritan Regional Health Center moved to a new, five-story, 142-bed, $237 million facility near the new interchange, almost double the size of its previous home. The extra space allowed for a large number of improvements. With the move, the hospital also created 100 jobs, says President Michael Warren. The opening came just months after Crossroads Community Hospital, also on the west side of town, completed its $23 million renovation and expansion.

A developer has bought Good Samaritan’s former site and is tentatively planning to build housing there. City Manager Ron Neibert says the city is in preliminary conversations with two other potential developers who have other home-building projects in mind.

“We think we’re on the right track,” Bechtel says. “We think we can correct the decline in population, but it’s going to take some time. We probably won’t know until the next census.”

Susan C. Thomson is a freelance writer and photographer.
Signs Point to Stronger Growth in GDP This Year

By Kevin L. Kliesen

The U.S. economy ended 2012 on a down note. Although real gross domestic product (GDP) rose at an annual rate of only 0.4 percent in the fourth quarter, several of the key underlying components registered solid growth. In particular, consumer outlays for durable goods remained exceptionally strong, as did construction of new residential structures. Likewise, business spending on equipment and software rebounded impressively after falling unexpectedly in the third quarter. Outlays for imports are another measure of the willingness of consumers and firms to spend. Together, these components registered about a 3.7 percent annual rate of growth in the fourth quarter of 2012.

So, what accounted for real GDP’s flat performance in the fourth quarter? The Bureau of Economic Analysis provided an explanation. First, firms cut back on their inventory stocking in the fourth quarter; this reduced overall real GDP growth by 1.5 percentage points. Second, federal government expenditures on national defense fell at their fastest rate in a little more than 40 years; this plunge reduced real GDP growth by an additional 1.3 percentage points. Finally, exports of goods and services declined for the first time in nearly four years; this drop reduced real GDP growth by 0.4 percentage points. In all likelihood, these developments are one-off factors and not likely to persist.

As for the components of real GDP that posted healthy growth in the fourth quarter, there are plausible reasons to believe that those factors supporting growth in this area will remain in place in 2013. Thus, it is likely that real GDP growth this year will exceed its 1.6 percent growth rate registered in 2012, which was the weakest growth in three years.

Hope on the Horizon

Several developments have weighed on financial markets, consumers and businesses over the past two years. These developments have included Europe’s sovereign debt and banking crises, the debates in the United States over the debt-ceiling extension and over the expiration of the 2001-2003 tax cuts, the sharp rise in oil prices from May 2010 to April 2011, the Japanese earthquake and tsunami in 2011, and Hurricane Sandy in October 2012. Fortunately, the headwinds emanating from these shocks are abating or have abated entirely. As evidence, the St. Louis Fed’s Financial Stress Index in February indicated lower than normal financial stresses. All else equal, lower than normal financial stresses tend to be associated with improving economic conditions.

A bottom-up approach to analyzing the economy provides further support for steadily improving prospects in 2013. Last year, auto sales registered their highest level since 2007, housing starts posted their highest level since 2008 and business capital spending finished on a strong note. Thus, continued low interest rates, rising values of financial assets like stocks and bonds, an improving labor market, and increased lending activity should continue to benefit sales of autos, houses and other durable goods this year. Rising stock prices, elevated profit margins and healthy cash flows also augur for continued improvement in business capital spending and increased hiring in 2013. Finally, most forecasters expect continued modest inflation pressures in 2013. Importantly, the U.S. Energy Information Administration is forecasting a modest decline in crude oil prices.

Risks to the Outlook

Any forecast contains the risk that growth and inflation could turn out to be weaker or stronger than forecasters had expected. In this vein, four recent developments stand out. First, fiscal policy will be restrictive in 2013—chiefly through higher taxes. Higher taxes could have a significant drag on consumption spending. Second, the decision to raise the federal debt ceiling was postponed until May. As in the summer of 2011, another rancorous political debate could raise uncertainty, elevate financial stresses, and dent the confidence of consumers and businesses. Third, gasoline prices have risen by more than expected thus far in 2013. Finally, labor productivity growth has weakened considerably over the past two years. In response, the growth of unit labor costs has accelerated. If businesses are increasingly able to pass along these increased costs to consumers, then that could be another avenue for higher inflation in 2013. At this point, though, forecasters and financial market participants see inflation of about 2 percent this year.

Kevin L. Kliesen is an economist at the Federal Reserve Bank of St. Louis. See http://research.stlouisfed.org/econ/kliesen/ for more on his work.

ENDNOTE

1 This percentage is derived from Table 2 of the March 28, 2013, GDP report from the Bureau of Economic Analysis.
Economists who study urban areas argue that cities lead to higher levels of productivity due to agglomeration economies. In other words, the higher the density of individuals, the higher the overall level of productivity within that area. To examine the potential for productivity growth in the Eighth District, we looked at population and population density growth trends between 2000 and 2011.

The District, whose population grew 6.5 percent since 2000 and 2.0 percent since 2007,1 experienced significant growth in its metro areas.2 To illustrate, Table 1 indicates that the population in the District’s metro areas grew 9.9 percent since 2000 and 2.9 percent since 2007. During these time periods, three of the four major metro areas in the District grew at rates lower than the nation’s. Specifically, the populations in Louisville, Memphis and St. Louis grew 11.0 percent, 9.7 percent and 4.3 percent, respectively, since 2000 and 3.6 percent, 2.5 percent and 1.3 percent since 2007. Little Rock grew 15.9 percent since 2000 and 5.7 percent since 2007, rates higher than the District’s and the nation’s cities.

The District’s largest levels of growth, however, came from some of the smaller metro areas. Of these areas, the fastest growers were Fayetteville-Springdale-Rogers, Ark.-Mo. (35.6 percent since 2000 and 8.5 percent since 2007); Bowling Green, Ky. (22.0 percent since 2000 and 6.9 percent since 2007); Columbia, Mo. (20.3 percent since 2000 and 6.1 percent since 2007); and Springfield, Mo. (19.0 percent since 2000 and 4.0 percent since 2007). Only one area—Pine Bluff, Ark.—showed a population decline (−7.7 percent since 2000 and −2.9 since 2007).

### Table 1

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Since 2000</td>
<td>Since 2007</td>
</tr>
<tr>
<td>Bowling Green, Ky.</td>
<td>22.0%</td>
<td>6.9%</td>
</tr>
<tr>
<td>Cape Girardeau-Jackson, Mo.-Ill.</td>
<td>7.2</td>
<td>2.5</td>
</tr>
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<td>Columbia, Mo.*</td>
<td>20.3</td>
<td>6.1</td>
</tr>
<tr>
<td>Elizabethtown, Ky.</td>
<td>14.5</td>
<td>8.0</td>
</tr>
<tr>
<td>Evansville, Ind.-Ky.</td>
<td>4.9</td>
<td>1.5</td>
</tr>
<tr>
<td>Fayetteville-Springdale-Rogers, Ark.-Mo.*</td>
<td>35.6</td>
<td>8.5</td>
</tr>
<tr>
<td>Fort Smith, Ark.-Okla.*</td>
<td>9.6</td>
<td>2.6</td>
</tr>
<tr>
<td>Hot Springs, Ark.</td>
<td>10.0</td>
<td>2.5</td>
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<tr>
<td>Jackson, Tenn.</td>
<td>7.2</td>
<td>1.5</td>
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<td>Jefferson City, Mo.</td>
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<td>Jonesboro, Ark.</td>
<td>13.6</td>
<td>5.7</td>
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<td>Little Rock-North Little Rock, Ark.</td>
<td>15.9</td>
<td>5.7</td>
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<td>Louisville, Ky.-Ind.</td>
<td>11.0</td>
<td>3.6</td>
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<td>Memphis, Tenn.-Miss.-Ark.</td>
<td>9.7</td>
<td>2.5</td>
</tr>
<tr>
<td>Owensboro, Ky.</td>
<td>4.8</td>
<td>2.2</td>
</tr>
<tr>
<td>Pine Bluff, Ark.</td>
<td>−7.7</td>
<td>−2.9</td>
</tr>
<tr>
<td>St. Louis, Mo.-III.</td>
<td>4.3</td>
<td>1.3</td>
</tr>
<tr>
<td>Springfield, Mo.</td>
<td>19.0</td>
<td>4.0</td>
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<td>TOTAL URBAN USA</td>
<td>11.7</td>
<td>3.9</td>
</tr>
<tr>
<td>ALL DISTRICT CITIES</td>
<td>8.9</td>
<td>2.9</td>
</tr>
<tr>
<td>FULL DISTRICT CITIES</td>
<td>8.5</td>
<td>2.7</td>
</tr>
</tbody>
</table>

**Notes:**
1. “All District Cities” reports changes in metro areas where more than half of the population lives within the Eighth District; “Full District Cities” indicates changes in metro areas where all of the population lives within the Eighth District; “Movers” are individuals who changed residences in the year preceding the period in which they were surveyed; 3. “New Residents” are individuals who changed residences in the year preceding the period in which they were surveyed and moved from a residence outside of their current metro area; italic indicates a major metro area in the District; and 3. “New Residents” are individuals who changed residences in the year preceding the period in which they were surveyed and moved from a residence outside of their current metro area; italic indicates a major metro area in the District; and “New Residents” are individuals who changed residences in the year preceding the period in which they were surveyed and moved from a residence outside of their current metro area; italic indicates a major metro area in the District; and “New Residents” are individuals who changed residences in the year preceding the period in which they were surveyed and moved from a residence outside of their current metro area; italic indicates a major metro area in the District; and “New Residents” are individuals who changed residences in the year preceding the period in which they were surveyed and moved from a residence outside of their current metro area; italic indicates a major metro area in the District; and “New Residents” are individuals who changed residences in the year preceding the period in which they were surveyed and moved from a residence outside of their current metro area; italic indicates a major metro area in the District; and “New Residents” are individuals who changed residences in the year preceding the period in which they were surveyed and moved from a residence outside of their current metro area; italic indicates a major metro area in the District; and

### Migration into District Cities

To examine the migration into the District’s cities, we looked at city- and county-level data from the 2007-2011 American Community Survey. According to Table 1, the percent of District residents who had moved during the sample period was 16.2 percent, about 1 percentage point higher than the percentage of urban residents in the U.S. who had moved during that time.
The District’s metro areas with the highest levels of mobility from 2007 to 2011 were Columbia (27.2 percent), Bowling Green (22.6 percent) and Jonesboro, Ark. (22.3 percent). The cities with the lowest levels were Owensboro, Ky. (13.4 percent), St. Louis, Mo.-Ill. (13.7 percent) and Louisville, Ky.-Ind. (14.0 percent).

Of those moving within metro areas in the District or into those metro areas from outside, only 27.6 percent were new residents to the area, compared with 42.8 percent of migrants who were new residents to their respective cities throughout all U.S. urban areas. In fact, only two of the District’s metro areas—Elizabethtown, Ky., and Jefferson City, Mo.—had higher percentages of new residents than the average among all U.S. cities.

### Migration within District Cities

The low rate of new residents as a percentage of total movers in the District implies that there are high levels of intracity migration. This trend could indicate that the cities within the District were growing spatially. Table 2 examines the level of suburban sprawl: individuals moving from central cities and inner suburbs to outlying suburbs.

#### TABLE 2

<table>
<thead>
<tr>
<th>Intracity Migration Patterns</th>
<th>Migration to Outlying Counties</th>
<th>Central Area’s Density</th>
<th>Outlying Area’s Density</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bowling Green, Ky.</td>
<td>5.3%</td>
<td>66.0%</td>
<td>24.3%</td>
</tr>
<tr>
<td>Cape Girardeau-Jackson, Mo.-Ill.</td>
<td>11.5</td>
<td>66.7</td>
<td>11.4</td>
</tr>
<tr>
<td>Columbia, Mo.*</td>
<td>3.5</td>
<td>77.1</td>
<td>21.8</td>
</tr>
<tr>
<td>Elizabethtown, Ky.</td>
<td>3.5</td>
<td>34.7</td>
<td>15.6</td>
</tr>
<tr>
<td>Evansville, Ind.-Ky.</td>
<td>18.4</td>
<td>52.9</td>
<td>6.5</td>
</tr>
<tr>
<td>Fayetteville-Springdale-Rogers, Ark.-Mo.*</td>
<td>7.8</td>
<td>63.3</td>
<td>38.7</td>
</tr>
<tr>
<td>Fort Smith, Ark.-Okla.*</td>
<td>38.5</td>
<td>32.5</td>
<td>11.9</td>
</tr>
<tr>
<td>Hot Springs, Ark.</td>
<td>NA</td>
<td>65.1</td>
<td>10.0</td>
</tr>
<tr>
<td>Jackson, Tenn.</td>
<td>18.6</td>
<td>68.2</td>
<td>6.7</td>
</tr>
<tr>
<td>Jefferson City, Mo.</td>
<td>53.9</td>
<td>43.1</td>
<td>6.9</td>
</tr>
<tr>
<td>Jonesboro, Ark.</td>
<td>13.4</td>
<td>67.2</td>
<td>19.1</td>
</tr>
<tr>
<td>Little Rock-North Little Rock, Ark.</td>
<td>25.4</td>
<td>60.7</td>
<td>13.2</td>
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<td>Louisville, Ky.-Ind.</td>
<td>20.3</td>
<td>53.7</td>
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<td>Pine Bluff, Ark.</td>
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<td>−9.4</td>
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<td>St. Louis, Mo.-Ill.</td>
<td>12.2</td>
<td>23.2</td>
<td>3.4</td>
</tr>
<tr>
<td>Springfield, Mo.</td>
<td>15.1</td>
<td>51.9</td>
<td>20.2</td>
</tr>
<tr>
<td><strong>TOTAL URBAN USA</strong></td>
<td><strong>7.9</strong></td>
<td><strong>50.7</strong></td>
<td><strong>11.2</strong></td>
</tr>
<tr>
<td><strong>ALL DISTRICT CITIES</strong></td>
<td><strong>15.9</strong></td>
<td><strong>48.6</strong></td>
<td><strong>9.7</strong></td>
</tr>
<tr>
<td><strong>FULL DISTRICT CITIES</strong></td>
<td><strong>16.4</strong></td>
<td><strong>47.3</strong></td>
<td><strong>7.9</strong></td>
</tr>
</tbody>
</table>

**Notes:**
1) “All District Cities” reports changes in metro areas where more than half of the population lives within the Eighth District; “Full District Cities” indicates changes in metro areas where all of the population lives within the Eighth District;
2) “New Residents” are individuals who have changed residences in the year preceding the period in which they were surveyed and moved from a residence outside of their current metro area;
3) “Other Migrants” are individuals who have changed residences in the year preceding the period in which they were surveyed but remained within their original metro area of residence;
4) Italics indicate a major metro area in the District; and
5) * indicates that the metro area is partly contained in the Eighth District.
Among the new residents in the District’s metro areas from 2007 to 2011, 15.9 percent moved directly to outlying counties compared with 7.9 percent of new residents in U.S. cities. Across metro areas, there is a high level of variation in the percentage of new residents moving directly to outlying areas. For example, only 3.5 percent of new residents in Columbia and Elizabethtown moved directly to the outlying counties compared with 53.9 percent of new residents in Jefferson City, Mo.

From 2007 through 2011, the District also had fewer individuals moving from the central city to the outlying areas (48.6 percent) relative to the average of all U.S. cities (50.7 percent). The movement to outlying areas also had a high degree of variation. For example, 23.2 percent of St. Louis movers left the principal city for residence in outlying counties, while 77.1 percent of residents in Columbia left the principal city for outlying counties.

Changes in population density allow us to examine whether fewer city residents are moving out into the suburbs. Within the District, the population density in cities overall, central areas and outlying areas has grown at rates slower than in the rest of the country. For example, central city population density and outlying area population density have increased 3.2 percent and 2.4 percent, respectively, since 2007. These figures show that the density of residents in central areas has actually increased more during the past five years than the density of residents in outlying areas. In fact, suburban population density has actually decreased in five of 18 cities in the District: Cape Girardeau-Jackson, Mo.-Ill.; Evansville, Ind.-Ky.; Jonesboro; Owensboro; and Pine Bluff. Only one central area—Pine Bluff—had a decrease in central area population density over this period.

Subhayu Bandyopadhyay is an economist and E. Katarina Vermann is a senior research associate, both at the Federal Reserve Bank of St. Louis. For more on Bandyopadhyay’s work, see http://research.stlouisfed.org/econ/bandyopadhyay/
I totally agree that what we are interested in in the article is abnormal assets by aggregate total assets minus cash and equivalent assets ratio, which is obtained by dividing aggregate cash and equivalent so much cash, but we focused on a measure referred to as cash-to-net-liabilities immediately. In the article, our concern was why corporations hold measures the ability of a company to use its cash to retire its current liabilities. It

Two Letters:

Charlotte, N.C.

Richard Hodde, retired partner of WEDGE Capital Management in
also analyze cash to debt.

standpoint of financial strength, however, it would seem appropriate to balance sheets as a measure of financial strength. The article seems to Investment analysts have been using the amount of cash on corporate
be mixing an increase in working capital with a desire to hold cash. Has this been looked at? So, what we want to find is the excess over the normal or even trend quick ratio.

Lee Minton, investment manager in Sparta, N.J.

Dear Editor:
Wouldn’t the quick ratio give you a closer look at the question? You might be mixing an increase in working capital with a desire to hold cash. Has this been looked at? So, what we want to find is the excess over the normal or even trend quick ratio.

Richard Hodde, retired partner of WEDGE Capital Management in Charlotte, N.C.

Response from Co-Author Juan M. Sánchez to These Two Letters:
Thanks for your questions; they are very relevant. The “quick ratio” is the ratio of what we refer to as cash in the article to the current liabilities. It measures the ability of a company to use its cash to retire its current liabilities immediately. In the article, our concern was why corporations hold so much cash, but we focused on a measure referred to as cash-to-net-assets ratio, which is obtained by dividing aggregate cash and equivalent assets by aggregate total assets minus cash and equivalent assets. I totally agree that what we are interested in in the article is abnormal cash holdings. We actually mentioned that the work of Pinkowitz, Stulz and Williamson considered a measure of “abnormal cash holdings,” defined as the difference between the cash holdings of firms predicted using their patterns in the late 1990s and their actual cash holdings in subsequent periods. They showed that abnormal cash holdings of U.S. firms are significantly larger than those of foreign firms.

Dear Editor:
The article by Sánchez and Yurdagul attributes the vast cash holdings of corporations to uncertainty and precaution, credit constraints, and tax avoidance. This fails to speak of another possibility—inadequate aggregate market demand stemming from four leakages, one being the massive increase in income inequality: the larger fraction of income going to a small fraction at the top, with individual incomes so high they could not be expected to spend more than a fraction on anything that provided jobs. This weakness in aggregate demand left corporations with few promising new investment opportunities; so, they sat on cash or bought up other companies, the second even increasing unemployment.

James Morgan of Ann Arbor, retired economics professor at the University of Michigan

Dear Editor:
I’ve always thought a good study would look at the margin requirement for derivative transactions for currency and interest rate instruments. Multinationals use these more and more to smooth earnings and risk in overall operations. The requirement forces cash to be held to secure such transactions, and just a quick perusal of Microsoft’s 10K reveals as much. The growth of derivatives over the study period should help explain at least some of the cash accumulation.

Raymond Lombardo, managing partner/CEO of investment advisers Clearview Investment Partners LLC in Newport Beach, Calif.

Q. How does the Federal Reserve control the supply of money?

A. The Fed controls the supply of money by increasing or decreasing the monetary base. The monetary base is related to the size of the Fed’s balance sheet; specifically, it is currency in circulation plus the deposit balances that depository institutions hold with the Federal Reserve. The Fed has essentially complete control over the size of the monetary base.

The primary way the Fed controls the monetary base is through open market operations: buying or selling securities. To increase the monetary base, the Fed buys securities from any party and pays with a check. That check, written on the Fed, is deposited by a bank in its account with the Fed, thereby adding to its reserves and increasing the monetary base. The same process works for decreasing the monetary base: The Fed sells securities, getting a check from a bank in exchange. When the check is deposited, the bank’s balance at the Fed decreases.

The total supply of money (M1) consists of currency held by the public and checkable deposit balances of banks and other depository institutions. The money supply and the monetary base are linked by reserves, i.e., vault cash and deposit balances held at Federal Reserve banks. While the Fed’s control over the size of the monetary base is complete, its control over the money supply is not. One major reason for this is banks can choose to hold the additional base money (i.e., deposit balances with the Federal Reserve banks) supplied by the Fed as excess reserves.
Finance and Economic Development:
A Global Perspective

What is the role of finance in nations’ economic development? Are financial markets essential for economic growth? Why do some countries have more developed financial markets than others? Find out in the July issue of The Regional Economist.

Read about the need to rebuild household balance sheets

The net worth of many U.S. households was severely impacted by the financial crisis and ensuing recession. Severe declines in home values and stock prices, together with many job losses and weak income growth among those who held on to their jobs, exposed the precarious debt-laden balance sheets many families had created.

In the upcoming annual report of the Federal Reserve Bank of St. Louis, find out which groups of people lost the most wealth because of the downturn in the economy, why it’s important for those households to rebuild their balance sheets and what the latest research has to say about the impact of household financial stability on the broader economy. Many of the families with weak balance sheets going into the crisis have yet to recover financially, while others, who were better diversified and had less debt, have benefited from rising stock prices and low interest rates. Thus, the economic recovery to date has been bifurcated among households of varying balance-sheet strength and remains weak overall.

To sign up for an e-mail alert when the annual report is published this spring or to subscribe to the paper version (U.S. addresses only), see www.stlouisfed.org/subscribe