FIRST QUARTER 2010

REGION FOCUS

THE FEDERAL RESERVE BANK OF RICHMOND

IS HIGH(ER) UNEMPLOYMENT HERE TO STAY?

A LOOK AT THE FUTURE OF THE JOB MARKET

REGION FOCUS

COVER STORY

FEATURES

DEPARTMENTS

PHOTOGRAPHY: GETTY IMAGES

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Expectations and Monetary Policy

The cover story of this issue explores the possibility that there may be a new and higher "natural" rate of unemployment. The natural rate notion itself has historically been linked to another important mid-20th century idea — the relationship between inflation and unemployment known as the Phillips curve. The early analysis of this relationship posited a negative correlation between unemployment and inflation: When one of these variables went up, the other went down.

The Phillips curve relationship heartened ambitious policymakers in the 1960s and 1970s. If they wanted to drive unemployment lower, the reasoning went, all they needed to do was tolerate a bit more inflation.

The article in this issue explores some of what we know about the Phillips curve trade-off today and whether we can realistically expect that statistical relationship to remain stable over time. These are important questions — ones that captivate the attention of academic economists and policymakers, and rightly so. The debate over these issues has been intense not just within the economics profession but also at Federal Open Market Committee meetings.

This is especially important because of the way the traditional Phillips curve relationship broke down in the 1970s. The Federal Reserve allowed somewhat higher inflation in the late 1960s in an effort to keep unemployment low. But inflation kept rising, forcing policymakers to change direction and tighten policy, causing a recession that pushed unemployment rates into double digits. The result was that both inflation *and* unemployment were high and variable throughout the 1970s. That was not supposed to happen according to the classic Phillips curve story.

So what happened? People eventually reoriented their expectations about inflation. If the Fed wanted to try to drive unemployment down further, it needed to increase the money supply even more the next time. So that's what it did.

Meanwhile, a rethinking of these policies had begun in earnest in the 1960s by economists such as Milton Friedman, Edmund Phelps, and Robert Lucas. Each in their own way, and others pursuing similar research in this area, came to the conclusion that the expectations of market participants mattered a great deal. In fact, these expectations could alter the traditional Phillips curve relationship. Money was, as economists say, "non-neutral," but only in the short term. In other words, inflation would produce more employment only if the Fed were able to surprise markets with a higher-than-expected inflation. After folks caught on, the effect on employment would go away.

The Fed lost credibility in the 1970s as an institution committed to keeping the money supply in check. A persistently high rate of inflation was seen as a fact of life.

The classic Phillips curve trade-off evaporated. This reality even caused some to speculate that monetary policy might be unable to influence employment growth unless, for instance, the pressure of labor unions to raise wages could be resisted. In retrospect, it may not be surprising to note that those who shared this "cost-push" view of inflation, in which the labor input costs to production were the primary drivers of general price increases, were missing the real story.

The good news is that there is a broad consensus today that this monetary policy experiment of the 1970s failed. While many economists and members of the FOMC still use a fundamentally Keynesian framework to view the relationship between elements of the economy, they all generally acknowledge that the traditional Phillips curve story cannot stand on its own.

It's also helpful that the Fed has well-trained economists employed in studying these important macroeconomic relationships over time. And the level of economic knowledge on the FOMC itself has gotten stronger over the past 20 years as more professional economists have ended up on the Board of Governors and as regional Fed presidents. This is a change from previous decades when FOMC members often didn't have much formal economic training or might have even been distrustful of economists.

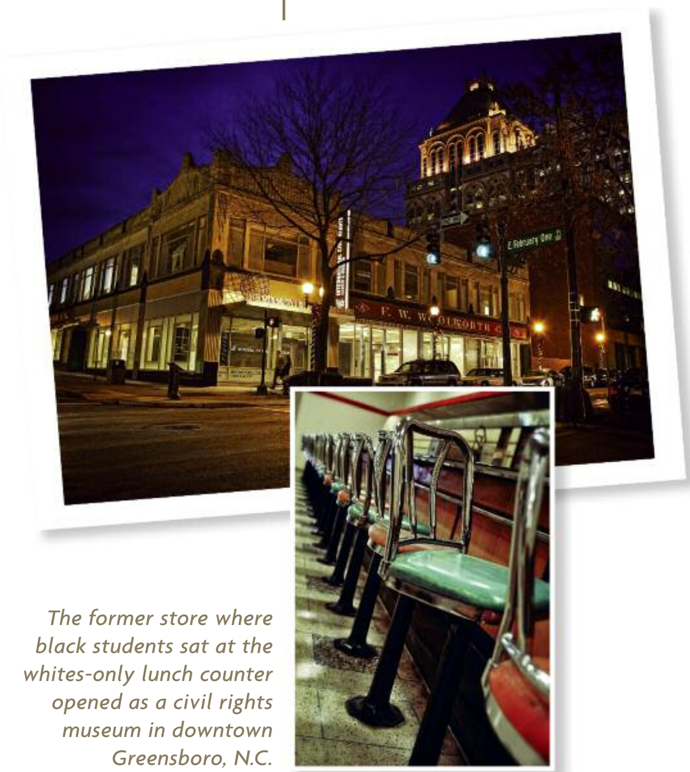
There are still differences of opinion over how to interpret economic trends, of course. But the tone of the discussion is always tempered by the knowledge that it's important for policymakers to take into account the expectations of market participants when making monetary policy decisions. That insight will be especially important in the near term. The Fed will at some point change its stance on the federal funds rate, and it has started closing the lending facilities it created to provide liquidity during the recent recession. These "exit strategies" will be executed best if they are firmly based on what history has taught us about market expectations. **RF**

JEFFREY M. LACKER
PRESIDENT
FEDERAL RESERVE BANK OF RICHMOND

The 1960 Greensboro Sit-In

Famed Woolworth's Now Houses Civil Rights Center

The five and dime closed in 1993, but the brass letters above the former store are polished to perfection, as is the interior. Fifty years to the day after the first sit-in there, the International Civil Rights Center & Museum opened.



The former store where black students sat at the whites-only lunch counter opened as a civil rights museum in downtown Greensboro, N.C.

PHOTOGRAPHY: INTERNATIONAL CIVIL RIGHTS CENTER & MUSEUM

The museum also may house a proposed Joint Center for the Study of Civil and Human Rights. The effort took 17 years and $23 million in private contributions and historic tax credits sold to private investors. The idea for the museum took hold when news spread that the former store would be razed to make way for a parking deck.

On Monday, Feb. 1, 1960, four black North Carolina A&T University students shopped for toothpaste and school supplies at F.W. Woolworth Co. on South Elm Street, Greensboro's main drag. Then they seated themselves at the lunch counter reserved for whites. They were met with silence. A waitress finally told them the store didn't serve blacks seated at the counter. They stayed anyway and eventually left without incident.

Elsewhere in the South, racial barriers were being tested and protested in schools and on buses. But those actions were less common in private businesses. Historical estimates say Woolworth's lost $200,000 during the five months of on-and-off peaceful demonstrations that disrupted business and likely deterred some shoppers. That amount of money has the same buying power as $1.5 million today.

The actions of the four Greensboro students defined "a pivotal moment in the civil rights movement," according to Melvin "Skip" Alston, chairman of the center and museum. The freshmen who planned and executed the protest were Ezell Blair Jr., Franklin McCain, Joseph McNeil, and David Richmond.

As television and radio stations joined the newspapers in coverage, more students, black and white, from the city's five colleges joined the four and by Saturday of the same week, all seats at the counter were occupied in protest. A picket line stretched down Elm.

The sit-in set off a chain of similar protests at Woolworth's stores in Charlotte, Winston-Salem, Fayetteville, and Durham. By July, after months of negotiation, the Woolworth's and S.H. Kress store, also located on Elm, formally announced their lunch counters would be integrated. The first black people to eat at the now-famous lunch counter were Woolworth's own kitchen workers. — BETTY JOYCE NASH

Exit Signs

The Fed Pulls Back from the Mortgage-Backed Security Market

Along with better weather and the new baseball season, this spring brought the end of the Federal Reserve's agency mortgage-backed securities (MBS) purchase program. Launched in early 2009 to ease financial market conditions, the program's end was no surprise; the Fed announced six months prior its intention to wind down the program as economic and financial conditions improved. The real question has been how mortgage rates would respond.

The Fed originally pledged to purchase up to $1.25 trillion in securities in the troubled MBS market by the end of the first quarter of 2010. The goal was to support the availability of credit in the housing market as mortgage rates shot higher during the economic downturn. Financial institutions failed to find willing buyers for the MBS on their books, and the prices of those assets fell, causing mortgage rates to spike. The Fed's purchase of these securities should have put upward pressure on asset prices and thus downward pressure on mortgage rates.

The program appeared to work: The spread between 30-year fixed-rate mortgages and Treasuries fell significantly after the program went into effect. Brian Sack, head of the New York Fed's Markets group, said in a March speech that he believes the program was indeed responsible. He points out that mortgage spreads remained low even after the Fed began to slow its MBS purchases. In his view, the total amount of MBS held in the Fed's portfolio had eased mortgage market conditions, not the volume of the Fed purchases. If this is true, then the program's end shouldn't have a large effect on mortgage rates since there are no plans to unload that stock of securities from the Fed's balance sheet.

Researchers Johannes Stroebel and John Taylor of Stanford University have a slightly different view. They argue in a 2009 paper that the decline in mortgage spreads since the start of the program stems from other factors affecting the mortgage market, such as declines in prepayment and default risks. But the implication of Stroebel and Taylor's view is much the same: The end of the MBS purchase program shouldn't have a large effect on mortgage rates.

But the jury is still out. Stroebel and Taylor emphasize that the government intervened in a variety of markets during the time period in question. That will make it difficult to isolate the effect of the MBS program.

Mortgage rates exhibited no large reaction to the Fed's announcement that the purchases would cease at the end of the first quarter. Regardless, the mortgage-rate response will also depend on another significant wind-down decision: when and how the Fed will unload the MBS from its balance sheet. A good portion of the securities will mature and thus exit the balance sheet naturally. The Fed will decide when and at what pace to draw down the remainder of its MBS holdings based on how well the economy and financial markets recover. — RENEE COURTOIS

Proposed Training Center Draws Fire

Maryland's Eastern Shore Targeted for Stimulus-Funded Facility

The American Recovery and Reinvestment Act of 2009 included $70 million toward construction of a center to consolidate diplomatic security training, now performed at 19 scattered locations. The Eastern Shore county targeted for this facility currently ranks No. 1 in Maryland in corn, wheat, and soybean production.

A farm near Ruthsburg, Md., has been chosen from 30 sites in five states, although the 2,000-acre site on former grain fields has not yet been purchased as of press time. Proximity to Washington, D.C., at least 150 miles, is a requirement for this proposed Foreign Affairs Security Training Center (FASTC). The site was also chosen because the land is easy to develop, available, and meets mission requirements, according to project literature.

It is also next to the Tuckahoe State Park. An environmental assessment has been delayed until late spring. But the Environmental Protection Agency has recommended that the General Services Administration begin preparing an environmental impact statement because of the center's proximity to sensitive natural areas. The GSA oversees federal construction.

Reactions to the project are mixed. Though it's impossible to determine who will be hired, or where the workers will come from, an estimated 350 to 500 jobs will be created in the first phase of construction. FASTC may employ more than 400 permanent employees in the future, according to project literature.

The campus will feature high-speed driving tracks, indoor and outdoor firing ranges. It will also house improvised explosive device (IED) training ranges, and simulated urban areas for counterterrorist drills. Fences and vegetation would buffer the site. The project's timetable and cost estimates are still being determined, according to spokeswoman Gina Gilliam of the Government Services Administration. As a federal project, the center requires no local government approvals. —BETTY JOYCE NASH

FEDERAL RESERVE

Central Banking and the Merits of a Federated Structure

BY SHANNON McKAY AND KIMBERLY ZEULI

The recent recession has caused many to question the role of the Federal Reserve. The reforms under debate in Congress could significantly alter the regulatory responsibilities of the Federal Reserve or change the current decentralized nature of Fed policymaking. Many proposals, however, often do not consider why the Federal Reserve's policymaking process might be well-served by its organizational structure as a federated system.

The logic of a decentralized Fed is an important framework for analyzing competing reform proposals. Additionally, federated structures are not unique to central banks. The value added to other types of institutions and industries can highlight the advantages of a decentralized Federal Reserve System.

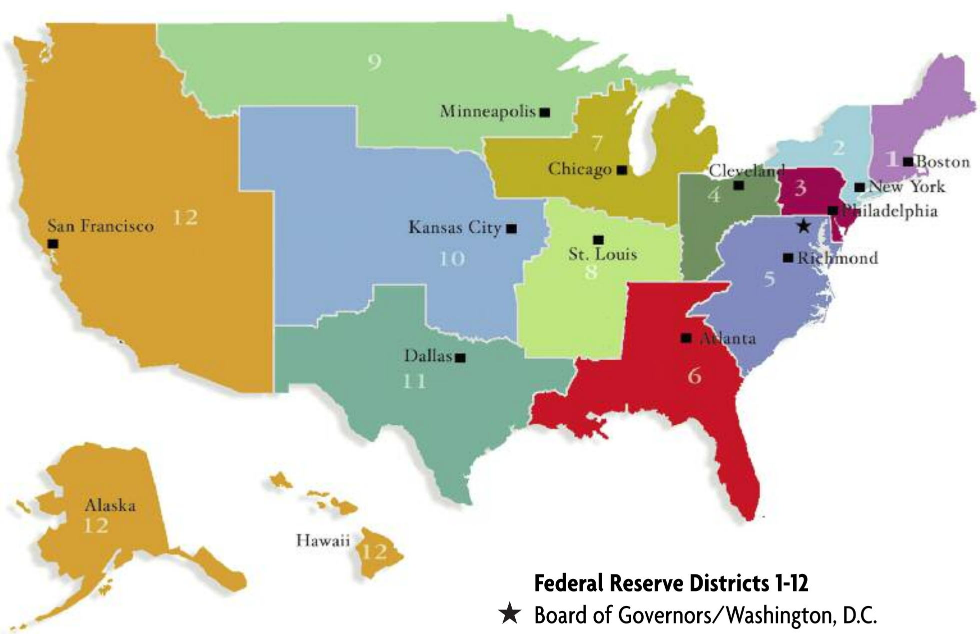
What is a Federated Structure?

The federated structure is prevalent in many sectors of the economy: agriculture, wholesale purchasing, and nonprofit service organizations. In agriculture, federated cooperatives have a long history of strategic importance in the United States as well as other countries and often dominate a significant share of their markets. For example, CHS Inc. is one of the largest farm supply businesses in the United States and is a Fortune 100 company. Internationally, Colombia's National Federation of Coffee Growers (the owner of the famous Juan Valdez logo) dominates their coffee market. In the nonprofit sector, the YMCA and the Red Cross are some of the largest community service organizations in the United States and the world.

In a federated structure, a group of autonomous organizations with local or regional representation are part of an alliance under the umbrella of a national- or international-level organization. The local or regional organizations (often referred to as affiliates) retain independence over their internal affairs and are at least partially self-governing. Certain powers are, however, ceded to the national or centralized coordinating body, which is wholly or partially owned by all of the affiliates.

In the Federal Reserve System, there are 12 semiautonomous regional Reserve Banks, each operating in a distinct geographical territory, referred to as a district. The Board of Governors, which is a federal government agency, provides general supervision and regulatory oversight of the operations of the regional Banks. The Board comprises seven governors appointed by the President of the United States. The Board of Governors and five regional Bank presidents constitute the Federal Open Market Committee (FOMC), which sets the nation's monetary policy. The Board also approves the appointments of presidents and first vice presidents at each Bank. Each regional Bank has its own Board of Directors representing member banks and the general public. The regional Banks implement other functions of the Federal Reserve System, including payment processing, currency distribution, bank exams, discount window operations, and certain banking operations for the U.S. Treasury.

The regional Banks earn their primary revenue from interest on securities and fees for services provided to depository institutions. Service fees are set at the System-level so as to cover the costs of providing these services. The net revenue is first allocated as fixed dividend payments to member banks and then to maintaining an adequate surplus. The remainder, which has historically been approximately 95 percent of the total, is paid to the U.S. Treasury.



Federal Reserve Districts 1-12

★ Board of Governors/Washington, D.C.

■ Federal Reserve Bank Cities

SOURCE: Board of Governors of the Federal Reserve System

Historical Background: The Populist Influence

When it was created in 1913, the structure of the Federal Reserve System was a political compromise. The original idea of some legislators was to construct a national banking system led by a strong central (and centralized) bank. However, the country's relatively recent experiences with the First and Second Banks of the United States (1791-1811 and 1816-1836) tainted the public's opinion of a central banking system. As a result, policymakers explored decentralized banking systems and central bank models in other countries.

One difficulty in imposing a truly centralized structure on the banking industry in the early 20th century was related to the industry's size. A survey taken on April 28, 1909, reported 22,491 banks in existence in the United States and its island possessions. At the time, the banking industry was composed of national banks, state banks, mutual savings banks, stock savings banks, private banks, and loan and trust companies. National banks are distinct from state banks because their charter comes from the federal government rather than a particular state. The federal government thus had regulatory control over the national banks, but not state banks.

In the banking industry of 1909, state banks vastly outnumbered national banks (11,319 and 6,893, respectively). However, in terms of assets, national banks dominated state banks. The national banks that participated in the survey reported a total of more than $9.3 billion in assets compared to roughly $3.3 billion for the state banks. This difference in assets partly reflects the role of national banks as depository institutions for bonds from the U.S. Treasury.

The banking industry's characteristics also varied by geography. In the New England and Eastern states, the number of national banks dwarfed the number of state banks. The opposite trend prevailed in the Southern, Middle Western, Western, and Pacific regions.

Decentralization was the predominant characteristic of the U.S. banking industry. Yet the banking system reforms designed by Senator Nelson W. Aldrich, which arose out of the work of the National Monetary Commission of 1908 to 1912, advocated a more centralized system than what was finally passed in the Federal Reserve Act of 1913. The purpose of the commission was to study the existing U.S. financial system and its history as well as look to other nations for ideas on appropriate currency and banking reforms that would prevent or lessen the damage from events like the Bank Panic of 1907. Senator Aldrich, chairman of the commission and a Republican from Rhode Island, politicized the reform effort by identifying the Republican Party as the supporters of a central bank plan. The Democratic Party platform of 1912 opposed a central bank. The Aldrich Plan introduced in the Senate on Jan. 9, 1912, would have established a "National Reserve Association" which was "strictly a bankers' bank with branches under the control of separate directorates having supervision over the rediscount operations with member banks."

The element of centralization in the Aldrich Plan came from the establishment of one central body that controlled the system and a membership board that would be chosen by both the banking sector and the federal government. The system was to be comprised of 15 districts with a branch of the National Reserve Association in each district. The Executive Committee of the National Reserve Association would be in charge of operations. However, the banking industry would be given more of a voice on the board than government officials. In recognition that his plan leaned more heavily to banking interests, Aldrich sought to minimize this dominance by limiting the powers of the National Reserve Association and spreading membership on the directorate board across the geographic banking regions. Aldrich's approach was described as "fifteen chapels united by a solid dome."

Because of the political climate of an election year, Aldrich's bill never received full congressional consideration. The congressional and presidential elections of 1912 placed the Democrats as the party in power both in the Congress and the White House and they began to fashion their own banking and currency reform legislation. The Democratic effort was spearheaded by Congressman Carter Glass of Virginia and Senator Robert Owen of Oklahoma. Both men represented a departure from Senator Aldrich whose work on banking reform was viewed as tainted by moneyed interests because John D. Rockefeller, Jr., the son of the founder of Standard Oil, was his son-in-law. Glass' background was in journalism as a newspaper reporter, editor, and owner while Owen had worked as a teacher and lawyer before organizing the First National Bank of Muskogee, a small bank in Oklahoma.

To ensure its passage, any piece of banking reform legislation put forth by the Democrats needed William Jennings Bryan's stamp of approval. Bryan, the Secretary of State appointed by President Wilson in 1913, was born and raised in rural Illinois and Nebraska and represented the latter as a U.S. Representative between 1891 and 1895. His Democratic Party base was comprised of newly arrived immigrants, agrarian reformers, and supporters of women's suffrage. William Jennings Bryan became an overnight sensation in Democratic circles while still in his 30s and was that party's nominee for president in 1896, 1900, and 1908. His platform included breaking up perceived monopolies, fighting big banks and railroads, and generally promoting populist ideas.

In 1896, Bryan was also the Populist Party's presidential nominee. That party, established in 1892, grew out of the Panic of 1873, which began in September of that year with the failure of Jay Cooke & Company, an investment bank heavily involved in the financing of railroad expansion. Its failure triggered the collapse of other banks which led to the temporary closure of the New York Stock Exchange. The effects of the panic were felt across the nation and led to the Depression of 1873-1879. During this period, a constrained money supply lead to deflation resulting in plummeting values for agricultural prices. Many farmers believed the government's monetary policy was being controlled by the large banks and industrial monopolists on the East Coast. They strongly advocated the abolition of national banks and the control of the currency by the "people" instead of bankers.

The Federal Reserve Act that was ultimately passed in 1913 allowed between eight and 12 regional Banks. This approach gained support for two reasons. First, the system needed to be able to adapt to the economic conditions occurring in the different regions of the country, particularly with regard to setting discount rates. Each regional central bank could set the appropriate rate for its region rather than trying to have one central bank maintain several different discount rates. Second, there was a desire to break up or weaken the control that New York banks had on the money market. The ability for another "money trust" to develop and dominate the financial sector would be curtailed if economic power was more decentralized across the country.

The Federal Reserve Act also departed from its predecessors in terms of the distribution of power in the system. The Aldrich Plan was severely criticized for the perceived dominance that business interests could have over the National Reserve Association, so the Federal Reserve Act went in the opposite direction by including a stronger voice for the federal government in the system. The government's influence is embodied in the fact that the members of the Federal Reserve Board are nominated by the President and subject to congressional approval.

The interjection of politics into the Board's membership was one of the necessary changes made in order to gain Bryan's support for the Federal Reserve Act. As Bryan wrote to Glass in August 1913, "the bill provides for Government control of the issue of this money ... This is another distinctive triumph for the people, one without which the Government issue of the money would be largely a barren victory." The Republicans and the banking industry were opposed to such governmental interference in banking. As Glass wrote at the time, "I also told the President his proposition would put the whole scheme into politics and that he could not expect a powerful Republican minority in the Senate to sit quietly by and permit the creation of a banking system, the absolute control of which, to begin with, would be in the hands of men all appointed by a Democratic President."

The banking industry was presumed to have a voice in the boards of directors of the regional Federal Reserve Banks, which represent their member banks. Each regional board consists of nine members. The Federal Reserve Board of Governors controls the appointment of three directors. The remaining six directors are elected by their member banks with three directors representing the interests of stockholding banks and the other three as representatives of nonbanking activity like agriculture, commerce, or industrial sectors. E.W. Kemmerer, a Princeton University economist, argued in 1922 that the term "federated" was applied to the structure of these boards because they were organized in a way that would, "1) recognize the public's dominant interest in matters of broad policy; would 2) recognize the dominant interest of the bank and the banker's business customer in the narrower banking questions, such as the goodness of paper against which advances were to be made, the amounts to be loaned individual member banks, the quality of open-market investments, and the like; and would 3) permit of a democratic control among the member banks of this banking business."

Bryan and other populist Democrats at the time also would have been familiar with the federated agricultural cooperative structure, which was particularly prevalent in the Midwest. In 1915, there were more than 5,400 agricultural cooperatives in the United States with more than 650,000 members. This type of organizational structure was promoted by Edwin Nourse, an economist trained at the University of Chicago. Nourse, who grew up on a small farm in Illinois and eventually served as chairman of the first Council of Economic Advisers under President Truman, was staunchly opposed to monopolies and believed that local cooperatives could force agribusiness firms to behave more competitively by achieving scale through a federated system.

The division of power in the Federal Reserve Act between the Federal Reserve Board and the regional Federal Reserve Banks is a distinctive feature of the U.S. central banking system. Since 1913, the System's inherent regional structure has been able to remain in place with only a few revisions. Some restructuring occurred during the Great Depression. The Banking Act of 1933 redefined the Federal Reserve's powers and the Banking Act of 1935 established the FOMC. The "accord" of March 3, 1951 between the U.S. Treasury and the Federal Reserve solidified the notion of the independence of the Federal Reserve System within the government.

Federated Tensions and Resilience

The relationship between the local and national organizations in any federated structure is complex and contains inherent tensions. The sustainability of federated systems requires that all local organizations remain "loyal" to the system. For example, if local cooperatives conducted most of their business outside of their federated system, it would threaten the viability of their regional organization and ultimately the entire federated structure.

In the case of the Federal Reserve, this loyalty manifests itself as speaking with one voice on policy decisions after they have been made. Although FOMC votes are recorded and dissents are noted, the final decision is formally supported by all Reserve Bank presidents. Paul M. Warburg, a member of the first Federal Reserve Board, wrote in 1930, "A regional system that is to operate successfully must remain a balanced system. That is to say, the Reserve System must be under the leadership and direction of the Reserve Board; but with a generalship on the part of the Board that does not rest on the assertion and bureaucratic or dictatorial exertion of its legal powers but on the reserve banks' full confidence in the competence, fairness, and impartiality of the Board, and on the clear recognition by the reserve banks of a coordinating leadership by a Board seeking their harmonious cooperation as indispensable to the successful and undisturbed functioning of the System."

The fundamental tension in any federation stems from the potential incompatibility between maximizing benefits derived from the national organization and maximizing local benefits. If local benefits can be increased by doing business outside the federation, the local organization has to weigh those potential gains against possibly smaller benefits derived from a weaker federated system. In the extreme case, if a local organization fails to derive substantial benefits from the federated system, they are better off operating "disloyally," which is to say as a truly independent organization. This extreme case is hard to imagine in the case of the Federal Reserve System, because the regional Banks are legally bound to the System — they cannot set their own monetary policy, for example. However, it is also important to distinguish between loyalty to the policy decisions made by the System and allowing a difference of opinion about monetary policy and theory to be expressed by each regional Bank.

As Warburg recognized in 1930, the relationship between the Board and the Reserve Banks is complicated by all of the factors that made the European central bank model inappropriate to the United States, such as the "vast expanse of our country; the immensity and diversity of its resources and interests; the complexities of our political life and of a decentralized system of thousands of individual banks; and the existence of stock exchanges and industries of towering strength, standing outside of the System's immediate control" to avoid interference.

The federated structure, however, has some significant comparative advantages in the face of diverse local conditions. The primary advantage in comparison to alternative centralized structures is that it allows the local affiliates or organizations to retain their flexibility when serving their unique local markets. For example in the nonprofit sector, a federated model of governance has allowed YMCAs in different countries and communities to offer diverse programs that meet local needs. In the case of the Federal Reserve System, it allows each Reserve Bank to respond to local conditions when regulating their member banks and providing technical assistance to local communities.

The federated structure also supports the flow of local, independent information and opinions upward within the organization. In the case of the Federal Reserve, each Reserve Bank collects its own economic data and information that is used to define an independent monetary policy perspective. Each Reserve Bank president provides policy opinions at FOMC meetings. A centralized structure would not provide the same incentives for independent information and opinions from each region. Instead, policies would be made centrally and funneled down through the organization. Although this type of decisionmaking may be less costly in some sense, such centralized policymaking might not generate or accommodate diverse opinions as effectively as the current structure and thus might result in uninformed policies.

Federated structures are also often criticized for operational inefficiencies. For example, local affiliates may operate their own IT and payment systems or maintain different accounting standards. These types of inefficiencies are avoided in centralized structures where uniform systems are typically adopted by headquarters and all branches. In the case of the Federal Reserve, some system-wide operations have been adopted. For example, all 12 banks share the same payment, contracting and IT platforms.

Why a Federated Structure Still Matters

During a time of crisis, it is common to want to undertake major policy changes in order to prevent another from occurring. However, in a rush to reform the national banking system, there may be a tendency to dismiss the broader rationale behind the central bank's organizational structure. Arguments for keeping a federated structure for the United States' central banking system still have the same credibility in 2010 as they did in 1913 when the structure was created.

Each regional Reserve Bank in the Federal Reserve System has a unique culture and perspective that reflects its district. The federated structure has allowed each regional Bank to maintain its unique policy voice while also realizing the efficiencies of consolidated operations. The diversity of opinion within the Fed continues to generate solid, consensus-driven policy decisions and can be seen as one of the strongest arguments in favor of the current structure. **RF**

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JARGON ALERT
Counterfactual

BY RENEE COURTOIS

The nation's unemployment rate continued to grow in 2009 despite a $787 billion fiscal stimulus package passed that February. Does this mean the stimulus was a failure? Comparing unemployment today to when the stimulus was passed won't tell us. Had the stimulus not been implemented, employment would not likely have stayed exactly where it was in February 2009 — the economy would have either worsened or improved due to other factors. A more accurate assessment of the program would ask a hypothetical question: Where would employment be *today* if no stimulus had been passed?

That hypothetical what-if scenario is called a "counterfactual." Many academic disciplines use counterfactual scenarios to help understand the impact on the world of some event or policy. Counterfactual historians, for example, imagine what the world would look like had the alliance between Germany, Japan, and Italy prevailed in World War II, or if the United States hadn't purchased Alaska and its rich oil reserves from Russia in 1867.

In economics a counterfactual often refers to a numerical estimate of how some economic variable would have performed had some policy action been different. The more accurately analysts can estimate what the counterfactual scenario would have been, the better picture we'll have of the policy's effects.

There are generally two tools for estimating a counterfactual to a macroeconomic policy: statistical estimates and theoretical economic models. To generate a statistical estimate, an economist will create the forecast he would have made before the stimulus affected the economy. He'll use regression analysis to estimate how the economic variables in question have tended to behave in the past and therefore what levels they were likely to achieve today without a stimulus. Comparing the counterfactual estimate of where employment would have been to actual employment is one way to gauge the stimulus's effect on jobs.

Statistical analysis tends to rely more on history than economic theory. The method does require making a few important assumptions about how variables relate to each other. But one needn't construct a full model of how the economy operates, which requires taking a more explicit stand on potentially unresolved issues, such as how likely households are to spend after a tax cut.

The statistical approach is relatively straightforward but it does have significant drawbacks. Since the forecast cuts off data starting from when the policy in question was implemented, this method will lump together all the factors that have affected employment since then and attribute their effects to the stimulus. This includes other policies designed to help the economy, such as efforts by the Federal Reserve and other agencies to provide liquidity to credit markets, or perhaps fluctuations in international conditions that also affect employment in the United States.

Relying too heavily on statistical estimates may assume too much of historical relationships. The economic variables in question might not behave during the recession the way history, and thus statistical models, would predict. Perhaps the recession and financial crisis have hampered employment to an unprecedented degree, or new policies implemented since the onset of the recession have changed the usual relationships between variables. Indeed, the policy being studied could itself have changed people's behavior in such a way as to make statistical relationships diverge from their historical patterns.

That's where theoretical models may usefully supplement the analysis. A theoretical model of the economy is a detailed story of how economic variables relate to each other based on the theories the economist finds most convincing — theories designed to be consistent with statistical relationships. For example, if they think households are likely to have an unusually weak reaction to tax cuts, they can tweak a theoretical model to include that effect.

Such models will not only tell economists what the counterfactual scenario would likely have been without a given policy, but may also shed more light on which underlying factors in the economy have reacted to produce that outcome. And because of this feature, the theoretical method for estimating a counterfactual might allow a richer analysis of the trade-offs involved with a policy. The downside of imposing many theoretical assumptions on a model is there can be as many estimates of the counterfactual as there are theories of how the economy operates. To avoid this pitfall, economists seek to discipline their use of theories to those that fit data across a variety of applications.

Of course, any model is likely to miss some real-world detail and that can skew the results. That's why using both statistical and theoretical tools when analyzing macroeconomic policy often provides the most complete picture of a policy's effects. Using many estimates simply comes with the territory when trying to estimate what the world would be like in an alternate scenario. **RF**

ILLUSTRATION: TIMOTHY COOK

A Tale of Two Fed Banks

BY DANIEL BROOKS

Economists continue to debate whether the Federal Reserve would have been able to mitigate the banking crisis that preceded the Great Depression. Some believe that regardless of what the Fed might have been able to do, banks would have continued to fail because the economy contracted so dramatically. Others believe that the Fed could have served as a lender of last resort in response to the widespread run on the banks and avoided their collapse.

Even with the right data, properly evaluating the role of monetary policy — and public policy generally — during the crucial years before the Great Depression poses several challenges. Both federal and state governments changed policies often in light of economic conditions. Additionally, shocks to markets were transforming the economic landscape. These dimensions make discerning the impact of Federal Reserve policy difficult.

In order to overcome such obstacles, Gary Richardson of the University of California, Irvine, and William Troost of the University of Southern California set out to find a group of banks within an economically similar environment which were subject to the same state regulations but influenced by different monetary policies. Banks in Mississippi fit the bill. In 1913, the state was split evenly into two Federal Reserve districts. The top half of the state was placed in the Eighth District presided over by the St. Louis Federal Reserve Bank. The lower half was part of the Sixth District which was the domain of the Atlanta Fed.

"Mississippi was homogeneous economically and demographically," write the authors. "Unemployment rates were low. Farm debt hovered around one-third to one-fifth of farm value. Rural counties concentrated on cultivating cotton." Yet, the approach to monetary policy taken by the Fed bank in each district could not have differed more. The Atlanta Fed followed a policy of lending based on "Bagehot's rule." According to that doctrine, the central bank should act as a lender of last resort and provide credit to troubled institutions based on good collateral and at a penalty interest rate. By contrast, the St. Louis Fed adhered to the "Real Bills" doctrine. Under that view, monetary policy should allow the supply of credit to contract as the economy contracts because less credit is demanded during times of weak economic activity.

In order to assess the outcome of this natural "quasi-experiment," the authors needed a wide range of sources to provide the basis for their historical analysis. Archives of the Board of Governors detail communication between the Board and both regional banks and illustrate the approach of each. A wide variety of Census Bureau sources allowed them to control for the differences between Federal Reserve districts.

Although a number of different statistical methods were used to analyze the data, the results tell very similar stories. In the Sixth District — where the Bagehot intuition governed policy — the rate of bank failure was lower than in the Eighth District.

The authors note that one criticism of this type of analysis is that the results may apply only to this region during the time period studied. Yet there are real lessons that can be drawn from such a natural experiment. The evidence in this study is important to understanding the link between banking panics, monetary policy, and the real effect of both on the economy. In fact, Richardson and Troost look deeper at the economic outcomes in these two Fed districts and discover that commerce slowed down less in the Sixth District as a result of a comparatively stronger credit market in the southern part of Mississippi that resulted from the Atlanta Fed's actions. The drop in the number of wholesale firms, which relied on available credit, was about half as much in the Sixth District portions of the state as it was in the Eighth District portions. Additionally, net sales did not drop as much in the Sixth District portion as they did in the Eighth District portion.

All in all this paper supports other studies that suggest stopping bank panics could have led to a smaller contraction for the economy as a whole. It also reinforces the idea that Federal Reserve banks missed an opportunity in the 1930s to stabilize the banking sector and potentially avoid the severe downturn that followed. Whatever caveats can be ascribed to a historical study of the sort authored by Richardson and Troost, this paper is a strong addition to the body of research detailing the failures of monetary policy in the 1930s. Such lessons are important today, particularly as they relate to how the Fed can best perform its role as lender of last resort. **RF**

"Monetary Intervention Mitigated Banking Panics during the Great Depression: Quasi-Experimental Evidence from a Federal Reserve District Border, 1929-1933." Gary Richardson and William Troost. *Journal of Political Economy*. December 2009, vol. 117, no. 6, pp. 1031-1073.

POLICY UPDATE

Federal Debt Limit Raised to Cover Shortfalls

BY STEPHEN SLIVINSKI

On February 12, President Obama signed into law a $1.9 trillion increase in the federal debt limit. The new debt limit sits at $14.3 trillion.

Over the past year, lagging revenue and spending programs created to shore up the banking system and to respond to various other elements of the recession spurred the issuing of new Treasury debt for auction to the public. The amount of outstanding federal debt subject to the limit was rapidly closing in on the $12.4 trillion cap at the time the president signed the increase. If the limit had not been raised, the Treasury would have had no legal authority to issue additional debt to finance the spending.

An immediate consequence of not raising the debt limit is that it could cause operational problems, such as an inability to pay for the day-to-day expenses of government agencies, which might spur disruptions in a variety of federal programs. A potential but arguably improbable outcome is that the federal government could default on debt. That could result in a loss of confidence by investors in the U.S. government and sharply raise the cost to the government of financing debt in the future as lenders demand higher interest rates to compensate for new risk.

How likely these outcomes might be is open to debate. For instance, it's quite unlikely that pressure to raise the debt level would be resisted by policymakers. Since the late 1950s, the debt limit has been raised by Congress approved by the president almost every year except in the five-year span between fiscal years 1998 and 2001. Those were years in which the federal government actually ran budget surpluses and didn't need to issue any debt. In fact, the government was able to buy back some bonds and marginally reduce its debt load.

The genesis of the debt limit can be found in the Second Liberty Bond Act of 1917. This law allowed the Treasury to issue long-term debt to finance the military expenditures of the United States during World War I.

Before the war, Congress would have to authorize specific loans or debt instruments on a case by case basis, as when it approved the debt to build the Panama Canal, for instance. The limit in the act applied to both certificates of indebtedness and Liberty Bonds. This was meant to allow some discretion and flexibility to the Treasury to meet its needs.

In the next two decades, however, Congress would pass separate limits on other categories of debt that included traditional Treasury bonds. In 1939, Congress eliminated these separate limits and created the first aggregate limit that covered nearly all federal debt.

The debt limit as we know it today covers publicly held debt — bonds that are sold by the Treasury at auction and are purchased by foreign governments and individual private investors, just to name a few. The federal government can also hold debt that is subject to the limit. Since the mid-1980s, the Social Security program has collected more in revenue than it has paid out in benefits. This surplus has been committed to current spending on other programs by Congress. In its place, Treasury bonds have been issued to the Social Security account.

Some argue that a debt cap so frequently raised hardly seems like a constraint. The importance of fiscal restraint, however, isn't always absent from the minds of some policymakers. Some of the legislative debate over the recent debt limit hike centered on the need to restrain the rates of government spending and to limit the amount of new debt needed. But a number of amendments to place some constraints on the budget process were voted down.

Many analysts argue that debt levels should be viewed in relation to the size of the economy. Today, debt held by the public is equal to about 60 percent of GDP. The Congressional Budget Office (CBO) estimates that, under current policies, the level of publicly held debt could reach 66 percent of GDP by 2020. Enacting new spending proposals in the president's budget could increase that figure to 90 percent in the next 10 years, according to the CBO. In contrast, that figure never rose above 50 percent between 1970 and 2008.

Others argue that the important number to keep in mind is the amount of interest the federal government needs to pay on the national debt. As long as the interest rates on the bonds — the cost of carrying that debt — are low, there will be less real fiscal strain. Today the interest on the debt equals 1.4 percent of GDP. Even in the worst-case scenario currently projected by the CBO, that figure will equal 3 percent of GDP in 2020.

Many observers also note that the high cost of federal benefits to be paid to retirees in the future should be cause for concern. As members of the baby boom generation begin to retire, the money to fund their benefits will have to come from the current revenue stream because the Social Security accounts are filled not with cash but with Treasury securities. Pressure to issue even more debt or to raise taxes will likely increase. An alternative would be to cut benefits or raise the retirement age, but it's unclear how those proposals would fare politically.

If the past is an indication of future political will to restrain budget deficits and maintain the debt limit, we may be in for much higher debt levels — and higher debt limits — in the years to come. **RF**

Stock Market Investing Is a Family Affair

BY DANIEL BROOKS

"Information Sharing and Stock Market Participation: Evidence from Extended Families." Geng Li, Federal Reserve Board Finance and Economics Discussion Series 2009-47, September 2009.

In this paper, Geng Li of the Federal Reserve Board of Governors suggests that sharing of information about the stock market between members of a family plays a large role in influencing each family member's stock market participation. Existing literature along these lines tends to focus on the transmission of knowledge from parents to children. Li suggests that the relevant transmission mechanism is a two-way street and parents can learn from the stock market experiences of their children.

Li concludes that whether a parent or child had entered the stock market during the previous five years increases by 30 percent the chances that a member of that same family will enter the stock market within the next five to six years. Additionally, even investors older than 65 years of age — a group often found to have lower stock ownership generally — are significantly influenced by their children's past stock investment. Information sharing among siblings, however, doesn't seem to influence stock market entry in a statistically significant way. To show that the phenomenon observed isn't just a coincidence — or that it's simply a reflection of members of a family having similar preferences — Li studied the sequence of stock market entry among family members. If the entry was simply a matter of upbringing, he argues, you might see each member of the family enter the stock market at similar stages of their respective life cycles. Instead, Li's analysis implies that the entry of one family member will positively influence the entry decision of another member who is at a very different stage in his life cycle.

Li concludes his analysis with a discussion of whether any of this can be explained by simple "herd" behavior. He looks at stock market exits by the same family members. As it turns out, exit of one family member does not necessarily precipitate the exit of others, suggesting that herd behavior does not dominate and lends credence to the idea that information sharing between family members is a more potent motivator of stock market investment decisions.

"Boomerang Kids: Labor Market Dynamics and Moving Back Home." Greg Kaplan, Federal Reserve Band of Minneapolis Working Paper No. 675, October 2009.

Stories in the popular press have provided anecdotal accounts of "boomerang kids." These are young adults who have moved back in with their parents after having initially moved out of the home. Greg Kaplan of the Minneapolis Fed looks at not only the empirical prevalence of this phenomenon but also how economic activity may affect such choices.

Kaplan examined the National Longitudinal Survey of Youth 1997. This survey provides information on labor market behavior and educational outcomes, as well as detailed information on the youths' family and community background. Kaplan's paper examines a sample of young adults who completed high school but did not attend college. Among that group, about 51 percent of males and 49 percent of females returned home for at least one month by age 23.

The intensity of the boomerang effect was strongly related to trends in the labor market. Males who moved out, became employed, and then unemployed were 64 percent more likely to return home than those who remain employed. For females in the same situation, the figure was 72 percent. Kaplan suggests that a careful examination of the movement characteristics of the college educated would be a useful addition to his paper and to the anecdotal reports that have largely focused on this group.

"The Long Run Effects of Changes in Tax Progressivity." Daniel R. Carroll and Eric R. Young, Federal Reserve Bank of Cleveland Working Paper 09-13, December 2009.

Previous studies often lend support to the notion that flattening the tax code — in essence, making the income tax less progressive — would result in gains for the economy. These gains tend to be a result of more efficient allocations of capital.

Daniel Carroll of the Cleveland Fed and Eric Young of the University of Virginia have constructed a model in which households can more fully insure against economic risk, a feature missing from many previous models. (An example of such insurance might be the ability to borrow in the present based on expected future income.) They find that in such a world more progressive, though revenue-neutral, tax schedules can actually lead to steady states with as much as 47 percent and 40 percent *greater* capital and labor input, respectively. Progressivity increases labor output in simulations of their model because it reallocates labor from less productive to more productive agents — and this is true despite a decrease in the total number of hours worked. Carroll and Young also find that increased progressivity generally lessens income inequality but raises wealth inequality. **RF**

The New Normal?

Economists ponder whether the "natural" rate of unemployment has risen

BY RENEE COURTOIS

Many economists believe that the recent recession is technically over. But it may not feel that way on Main Street. This recession brought the largest post-war upswing in the unemployment rate, rising from a pre-recession low of 4.4 percent to about 10 percent in recent months. Many economists predict a "jobless recovery," in which gross domestic product — the foremost measure of the economy's overall output — rises, but employment continues to fall or remains stagnant.

Is some of this unemployment here to stay?

Economists often speak of a "natural" rate of unemployment that the economy will gravitate to after working through business cycle fluctuations. There will always be some positive level of unemployment. Firms continually create and destroy jobs in response to supply and demand conditions. Moreover, at any given time some industries are declining while others are expanding. The supply of labor, too, changes with people graduating, retiring, moving between jobs, and choosing to work more or less throughout their lives, and it can take time for job seekers to locate opportunities.

The natural rate of unemployment — or, conversely, the level of "full employment" — is the rate that exists due to this constant churning even when the economy is running smoothly. Before the recession, the Congressional Budget Office, which produces the most widely used estimate of the natural rate, judged it to be about 5 percent. A current unemployment rate of almost double that implies the economy has a long way to go before reaching full employment. But if the natural rate has risen, as some economists suspect, then we may not expect unemployment to fall anytime soon to the low levels seen before the recession.

A Moving Target for Policy

Promoting employment is half of the Federal Reserve's mandated policy objective. But when unemployment is especially low, labor markets are tight and that puts upward pressure on wages and, therefore, inflation. This poses a problem for price stability, the other half of the Fed's mandate. In general, the Fed's monetary policy tools push inflation and unemployment in opposite directions. This inverse trade-off reflects the famed Phillips curve.

To know what level of unemployment the Fed can reasonably expect to achieve without igniting inflation, Fed policymakers must have in mind some estimate of the natural rate. This is a challenge because the natural rate is not an observable statistic — it must be inferred from other data — and it changes over time. The natural rate is determined by features of the economy that are more or less permanent, like the flexibility of labor markets and the policies and laws that affect it.

Though these are usually deeply embedded features of an economy that change slowly over time, this doesn't mean we should too easily assume the current natural rate will remain the status quo. "The medium term natural unemployment rate can dart around just like any other economic variable,"

PHOTOGRAPHY: GETTY IMAGES

says Edmund Phelps of Columbia University who won the 2006 Nobel Prize in economics in part for his work on the natural rate. For example, he says the natural rate is partly a function of the values that entrepreneurs and investors put on business assets. "If that takes a jump, your best guess about the medium term natural unemployment rate takes a jump too," and the actual unemployment rate will eventually follow. Perhaps the best example of this was in the late 1990s tech boom that endowed the economy with lasting productivity gains and, as a result, arguably lowered the natural rate of unemployment. But it is hard to definitively know in real time whether the natural rate is changing. Some economists, such as Stanford University's Robert Hall, have gone as far as suggesting that the natural rate is too variable to be useful in policymaking.

The Phillips Curve relationship, too, is far from stable. When it was first documented by New Zealand economist A.W. Phillips in 1958, economists initially believed the relationship presented a relatively simple trade-off for policymakers: If low unemployment was the priority, they could "buy" it in each period by printing money (or, similarly, through fiscal expansion), fooling employers into thinking demand for their products had increased, leading them to hire more workers. This meshed well with the Keynesian view of the day that endorsed the government's ability to manage demand to produce high employment.

But such a policy trade-off was too simple to be true since it would rely on tricking people indefinitely, as Phelps and Milton Friedman, also a Nobel laureate, pointed out in their respective research during the 1960s. Eventually, people would figure out that the boost in demand was only an illusion created by the increased money supply. Workers would be unwilling to work at their old wages since inflation had eroded their purchasing power, and nominal wages would have to rise at a magnitude equal to the increase in inflation, bringing unemployment back up to the natural rate. In the medium run — a period long enough for the economy to go through this learning process — the result of this attempt at expansion would be a higher price level with no change in any "real" economic variable like unemployment or production. "The natural unemployment rate idea is all about how demand doesn't matter in the long run," says Phelps.

Moreover, the inflation trick would only boost employment once or twice before the public grew to expect it. Then, Friedman explained in 1968, only perpetually higher and higher inflation surprises would produce the short-run boost in employment. It wasn't that the natural rate corresponded to a particular rate of inflation — say, 3.5 percent. Instead it corresponded to no change in inflation. When unemployment was equal to its natural rate, inflation could be expected to be relatively stable. That's how the natural rate of unemployment got a rather awkward nickname: the non-accelerating inflation rate of unemployment, or NAIRU.

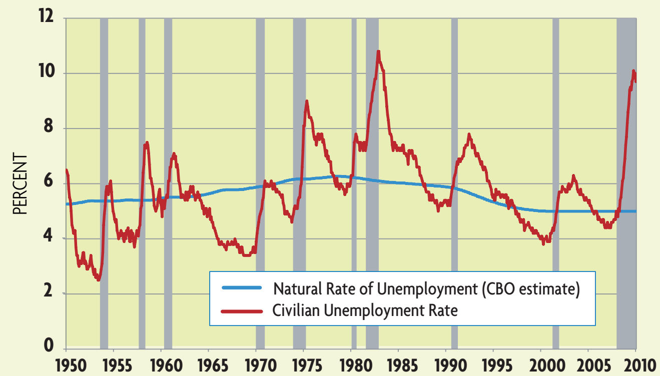
Then in the 1970s policymakers learned painfully that high inflation from easy monetary policies doesn't translate to low unemployment. Additionally, oil price spikes made inflation a more consistent phenomenon. Rising inflation was simply the norm, so it no longer had the beneficial effect on unemployment. Stagflation, or simultaneously rising inflation and unemployment, was the result.

The Great Moderation of the 1980s, 1990s, and 2000s also challenged conventional thinking about the Phillips curve. The economy performed well during this period, and both inflation and unemployment were low and stable relative to their historical averages. When macroeconomic variables don't vary much, it is harder to identify a statistical relationship between them. Here the Phillips curve appeared to be a less concrete description of the short-run trade-off between inflation and unemployment. A 2001 study by University of California, Los Angeles economists Andrew Atkeson and Lee Ohanian documented that since the mid-1980s, the short-run Phillips curve relationship had not been very stable, and therefore had limited use for policymakers.

But the Phillips curve may redeem itself when the variables move to extremes. It is in steep recessions that the inflation-unemployment relationship seems strongest, argue San Francisco Fed economists Zheng Liu and Glenn Rudebusch in a January 2010 analysis. That implies the Phillips curve relationship, though inconclusive, could be a useful tool for monetary policy as the economy recovers from the recent severe recession. If the natural rate has not risen from its pre-recession level of about 5 percent, then unemployment is currently much too high, and this could potentially be addressed by sustained accommodative monetary policy. But if the natural rate has risen, then the point at which accommodative monetary policy becomes inflationary should occur sooner.

Constant Churning

Actual Unemployment and the Natural Rate



NOTES: Shaded areas correspond to recessions. Data through March 2010.
SOURCE: Bureau of Labor Statistics/Congressional Budget Office

Prospects for a Jobless Recovery

That means economists have to turn to the difficult task of gauging whether the natural rate of unemployment has changed, and if so, by how much. This depends on the labor market conditions currently contributing to unemployment, their magnitude, and how permanent they are likely to be.

No two recessions are alike in this regard. In recessions immediately following World War II, up through that of the early 1980s, the economy experienced a sharp boost in employment soon after each recession's trough. But the more recent recessions of 1990-91 and 2001 were characterized as jobless recoveries with sluggish or nonexistent job growth even as GDP recovered.

At first blush the recession that began in 2007 shares labor market characteristics of both modern and older recessions, according to New York Fed economist Aysegul Sahin. Two important factors contribute to an increase in the unemployment rate: how many workers lose their jobs and flow into unemployment, and how many find new ones and flow out of unemployment. The recent recession began with a large number of layoffs, causing an increase in inflows into unemployment like the also-steep recessions of the 1970s and 1980s. In addition, even after layoffs subsided, unemployed workers continued to have difficulty finding new jobs, causing a drop in outflows, similar to the recessions of the early 1990s and 2001. As a result, the unemployment rate more than doubled from 5 percent at the start of the recession in December 2007 to a high of 10.1 percent in October 2009, and still remains at elevated levels.

So which employment recovery will the current recession resemble? As with all recessions, inflow rates have receded as the economy has begun to pull out of the recession, so the mystery is how outflow rates will behave going forward.

Outflows depend on two factors: job creation and the labor market's ability to match job seekers with openings. Job creation should be relatively swift if much of unemployment is cyclical — that is, a result of the business cycle — writes Chicago Fed economist Ellen Rissman in a 2009 study. Laid-off workers can simply be called back to work when demand for goods and services picks back up. But unemployment resulting from structural realignment — in which some industries decrease in size for good — tends to hang on longer. Affected employees must find new industries, which in some cases will mean moving to new locations or acquiring new job skills.

It's not clear how much of the current unemployment rate comes from structural realignment. Some industries have been hit harder than others in the recent recession, most notably those that expanded as a result of the housing and lending boom. The so-called FIRE sector — finance, insurance, and real estate — as well as construction, have all declined more than employment as a whole. Total nonfarm employment has contracted by more than 5 percent since the recession's start, while the FIRE sector has lost more than 6 percent of its jobs. In construction, more than 25 percent of jobs have been eliminated.

Much of the unemployment within construction and the FIRE sector is indeed being caused by large structural reallocations, according to Rissman. But so far structural realignment was not adding much to the economy's overall unemployment rate, she found in her 2009 study. Economist Rob Valletta and analyst Aisling Cleary of the San Francisco Fed also examined the role of sectoral imbalances in late 2008. Based on updated analyses using data through the end of 2009, Valletta reports that labor demand imbalances across industries — which require a reallocation of workers — did not appear to be adding much to overall unemployment. In fact, they found the imbalances had begun to dissipate in the second half of 2009. Their findings imply that the increase in unemployment during 2008-2009 was primarily cyclical rather than structural.

One possible explanation for this is that the sectors economists think might be permanently shrinking represent a relatively small component of total employment. Manufacturing, for example, was about 10 percent of total nonfarm employment before the recession and also was hit hard during the downturn. Though the hit to construction has been severe, the sector constituted just 5.4 percent of total employment going into the recession

But the nature of layoffs may provide some evidence of structural realignment. "Starting from the 1990s, firms' use of temporary layoffs declined a lot. As a result only a tiny fraction of unemployed people today are on temporary layoff," Sahin says. A job's permanent eradication may be a harbinger of a permanent shift away from that industry.

Even if permanent layoffs don't reflect a structural realignment, they can still hint at a slower employment recovery. "Temporary layoffs are very easy to reverse because you basically have the desk, the computer, and now you just call the worker back," Sahin says. "It's much cheaper than actually setting up a new position and investing in the capital and posting a vacancy."

To the extent that a worker's old job has permanently gone away, re-employment will have to come from new job creation. Once demand starts to pick up, firms still may be hesitant to hire until they are sure to be out of the woods economically — especially if they can tap into other means of producing more with the same number of workers in the meantime. Some firms may increase the number of hours their current employees work without hiring new workers, or they call on temp workers when possible. "They can just push the existing workers even more because the quit rate is very low," Sahin says. "Less people produce more as a result. In those recessions productivity increases a lot."

This seems to be the case now, since productivity has stayed strong in this recession. In the 2001 recession productivity growth never dropped below 2 percent, note Cleveland Fed economists Paul Bauer and Michael Shenk. So far in this recession productivity growth dropped to a low of 1.4 percent before surging well above 5 percent at the end of 2009. Historically, productivity growth would fall or even turn negative in recessions. Most economists point to "labor hoarding," in which firms hang on to workers through the recession so as to not lose good workers familiar with their production. In the recent recession, productivity coming from more intense use of capital has increased even though investment has not, implying that employers are indeed finding ways to produce more with the same number of workers.

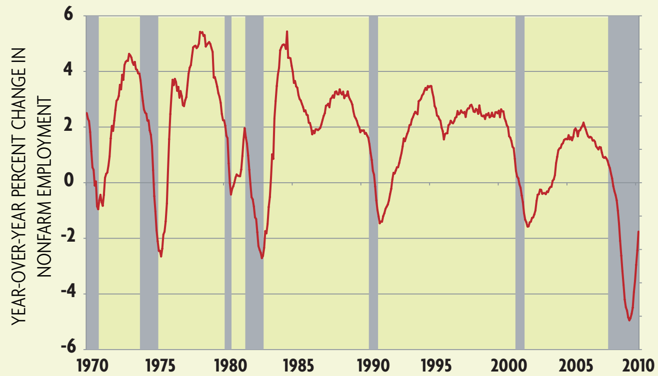
Regardless of how many jobs are created, the labor market's efficiency at matching available workers to jobs has gone down in this recession, Sahin says, which puts a crimp in employment recovery. There are several explanations behind this lower match efficiency. Workers' skills may not sync well to the jobs opening up, especially if the jobs are in new industries. "It could be that lots of people lost manufacturing jobs and there are many jobs in the health sector, but they are not good matches so they need retraining," Sahin says. Rissman suggests that workers in the FIRE sector, for instance, may have skills that are more easily transferable to other industries whereas workers in construction have skills that are not as easily adaptable. Also, those who have been unemployed for long durations can experience skill depreciation. And even if a worker's marketable skills are still largely intact, long spells of unemployment may appear as a negative signal to would-be employers.

The weak housing market may also limit the ability or willingness of some unemployed to relocate to new jobs. It's not clear how quantitatively important this effect could be, but it could be geographically concentrated in areas that are economically struggling and have weak housing markets. Economists Fernando Ferreira and Joseph Gyourko of the University of Pennsylvania and Joseph Tracy of the New York Fed found in a 2009 study that negative equity in one's home reduced mobility of affected households between 1985 and 2007, making them one-third less mobile on average. Their results do not cover the current housing downturn, but their evidence would be consistent with the most recent U.S. Census estimates that the "mover rate" — a measure that captures the mobility of households — fell in 2008 to the lowest level since the data were first collected in 1948. The proportion of movers who have stayed within the same county has spiked, while the proportion who have moved out of state has fallen to the lowest level since the mid-1990s.

The federal government's expansion of unemployment benefits also could temporarily reduce the labor market's match efficiency. More generous unemployment insurance (UI) regimes have been known to contribute to unemployment for two reasons: Workers receiving UI can be more selective about the job they choose to take, and some unemployed workers who otherwise may have stopped looking for jobs (and therefore would no longer be included in unem-

History of the Jobless Recovery

Employment Recoveries Have Been Slower Since the 1990s



NOTE: Shaded areas correspond to recessions.
SOURCE: Bureau of Labor Statistics

The Role of Demographics in the Natural Rate of Unemployment

"[M]any of the market characteristics that determine [the level of the natural rate of unemployment] are man-made and policy-made," Milton Friedman said in 1968. But one of the most important determinants of the natural rate of unemployment is entirely out of the control of policymakers: the composition of the labor force. Changes in demographics, particularly concerning the average age of workers, account for the bulk of the shifts in the natural rate over time. Younger workers are more likely to change jobs than middle-aged people who have a mortgage and other responsibilities, and they are more prone to unemployment.

Thus, the biggest contribution that demographics makes to the natural rate is the proportion of the work force aged 25 or less. It is easy to understand why when you look at unemployment rates by age group. Before the recession, the 16-19 age group had an average unemployment rate in excess of 15 percent, compared with about 8 percent for 20- to 24-year-olds, and well under 4 percent for workers aged 25 and above.

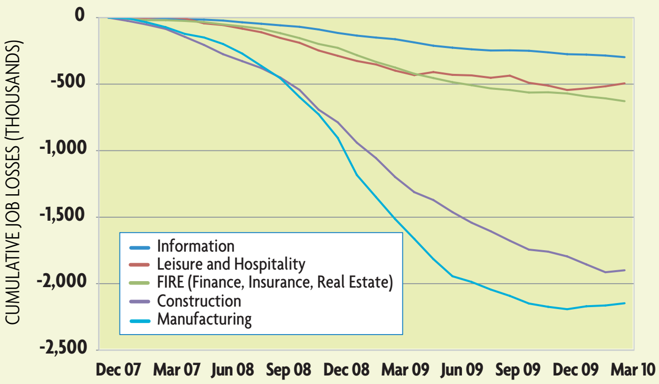
This explains why the natural rate of unemployment rose in the 1980s, when a large crop of baby boomers entered the labor market. Then in the 1990s, after that major component of the labor force had aged some, the natural rate fell. Now many baby boomers are retiring, lowering the average age of labor force participants.

Nobel laureate Edmund Phelps of Columbia University says it is the policy response to retiring baby boomers that could most affect the natural rate. "I've been bracing for a rise in the natural rate for a long time on the thinking that as we get nearer to 2020, when spending for Social Security, retirement pensions, and Medicare and so forth reaches full force, markets will start to factor that in and that will mean expectations of higher tax rates sooner or later to pay for those entitlements." That should depress business asset values, reducing the return to capital investment and innovation, he says. That slower innovation could set a new higher floor for the natural rate of unemployment.

— Renee Courtois

Some Worse Off than Others

Job Losses in Selected Industries Since Start of Recession



SOURCE: Bureau of Labor Statistics

ployed numbers) may keep searching to continue receiving benefits. But this effect is not likely to be large or persistent. "Even with the temporary increase in generosity, benefits are still pretty stingy by the standards of other advanced economies," says economist Larry Ball of Johns Hopkins University. "This is not only temporary but, even while it lasts, a pretty small step in the direction of the welfare state." Sahin adds, "People expect benefits to go down as the economy recovers."

Is High Unemployment the New Normal?

While it is relatively easy to lay out the risk factors that could point to a jobless recovery, it is highly uncertain how important each of these factors might be. "We believe there are temporary factors that are causing the unemployment rate to be higher than suggested by the stable relationships in the U.S. economy," Sahin says, summarizing a recent analysis of the behavior of employment in the recent recession with coauthors Bart Hobijn and Michael Elsby, of the San Francisco Fed and the University of Michigan, respectively. These factors could contribute to the risk of a jobless recovery, she says. But there is good news: The U.S. labor market is exceptionally dynamic and flexible, which might help it work through these temporary issues faster.

Would a slow employment recovery mean the natural rate of unemployment has risen too? That is a much trickier issue than simply deriving an outlook for employment. Economists think of the natural rate of unemployment as a function of structural and permanent features of the economy. That said, the difference between a shock that takes a long time to work through and a rise in the natural rate is, to a degree, a matter of semantics. "There's not a clear distinction between what's really permanent and what just takes a long time," Ball says. "One way to think about a change in the natural rate is something that lasts substantially beyond two or three years."

The outlook for the natural rate and actual unemployment will also depend on prospects for the economy's future. Though a theoretical premise of the natural rate of unemployment is that demand doesn't affect the level of employment in the long run, Phelps says, "that's not to say that the *structure* of demand doesn't matter." In particular, he says, investment demand has a large impact on the natural rate. "I think you're going to have an overhang of people whose careers were tied to investment-like activities who are not going to get picked up again for employment unless, and until, there's a revival of business investment and more generally of forward-looking projects in companies."

Though economists can't with certainty pin a number to the changing natural rate in real time, Phelps ventures what he admits is a rough estimate: "I think the new normal is somewhere between six and a half and eight percent," he says, an estimate which ranges from "very rosy" to "maybe a little too pessimistic."

One could also try to pin down the natural rate in terms of the Phillips curve — that is, in terms of what's simultaneously happening with inflation. "It seems very unlikely that we're going to be back down to five percent unemployment or very close to that in the next five years," says Ball, "and inflation seems very stable. And the definition of the NAIRU is the unemployment rate consistent with stable inflation," he reminds. "So if we see unemployment staying well above five percent without inflation continuously falling, then by definition the NAIRU has risen." That is, he adds, if our basic model of the Phillips curve is right. **RF**

Readings

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Shoppers for the Long Haul

The past, present, and future of consumption

BY BETTY JOYCE NASH

Family Dollar Stores Inc. has changed its product mix to reflect preferences for consumables such as canned food or bread or paper towels. The efforts of the Mathews, N.C-based retailer have paid off. December sales grew 4 percent above the same month in 2008, even in stores open for at least a year. They're now attracting higher-income shoppers they hope will return even when consumers start spending more freely.

In this recession, people have cut back on purchases of everything from new clothes to homes to refrigerators. In 2009, overall personal spending declined, particularly on vehicles and other household durable goods. Spending on services was more stable, but people ate out less and cut back on vacations, even though disposable income rose by 1.1 percent, largely because of tax cuts and rebates.

In contrast, savings rates for the year reached 4.3 percent, up from 2.6 in 2008. This makes economic sense after a shock. People will "rein in their spending aggressively in order to increase their buffer stock of savings," says Satyajit Chatterjee, an economist at the Philadelphia Fed.

Consumer activity still represents the biggest chunk of the nation's output, as it does in most countries. But today people are spending less for many reasons. Perceptions about future wealth are one of the biggest influences on spending.

Income and Consumption

How people view future income growth potential affects spending patterns. But for decades economists took a view of consumption that didn't account for these expectations.

John Maynard Keynes introduced the first "consumption function" in 1936 to chart the relationship between annual disposable income and consumer spending. His "absolute income hypothesis" suggested that consumption depends on current income only. Available household data at the time seemed to bear this out: Higher-earning households tended to spend more than poorer households although the portion of wealthier households' income consumed was smaller.

The real test of this theory would be whether it held for aggregate consumer spending and aggregate income at different points in time. In Keynes' day, data on aggregate spending and income for different years weren't available, explains Chatterjee. The spending-income relationship has since been studied as scholars have developed better datasets and statistical techniques. Two newer theories add important insights.

Both theories are based on assumptions of "rational choice." Both estimate how a household will act over time in the face of uncertainty about future income. Nobel Prize-winning economist Franco Modigliani explained that people spend and save according to expected lifetime income, not current income. "In a rational choice context, current spending need not respond to a change in current income if that change is fully anticipated in a previous period," Chatterjee writes of Modigliani's research with his student Richard Brumberg. An implication of the model is that economic growth increases average lifetime incomes over time and this causes people to assume that over time they will get richer. This suggests that aggregate spending will grow proportionally.

Yet Milton Friedman may have been most responsible for showing how the relationship between consumption and income would be borne out in real life. In his 1957 book, *A Theory of the Consumption Function*, he developed the "permanent income hypothesis." People are more likely to consume more when permanent income — expected lifetime income — rises. He argued that if income jumps and there's a reason to believe it's temporary, people may consume more but not as much as if they had received a permanent raise. A similar relationship can be inferred from a drop in income: Becoming temporarily poorer may not inhibit consumption in the short-term as much as an expected long-term decline might.

In each of these theories, the relevant comparison is between consumption and expectations of lifetime income or total wealth. Empirical tests of these theories have yielded mixed results. But the element that survives in most studies is the underlying approach that recognizes household response to expectations about the future.

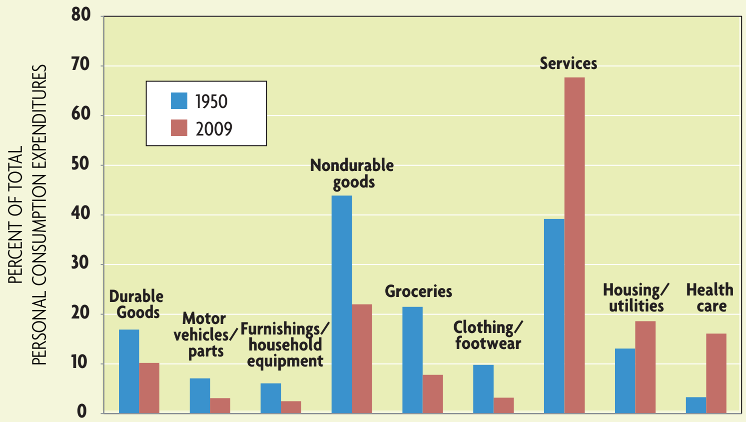
In the 1990s, work by economists Christopher Carroll of Johns Hopkins University and Angus Deaton of Princeton University has added the idea of "precautionary savings" into models. Simulations reveal that people often accumulate a buffer stock of savings to protect their households from unforeseen circumstances.

These theories may explain why people who make more money are shopping at discount stores such as Family Dollar, and also may explain rising savings rates in the first half of 2009. Expectations about the future would have to be a part of any explanation for this renewed savings behavior. Theory helps explain consumer response in the current economic climate but can't forecast when people will start spending. That will occur as people pay down debt, accumulate rainy day funds, and regain confidence about future income.

The Contours of Consumer Spending

Decreases in consumer spending like this haven't been seen since the recession of the early 1980s. This time around, the

The Change in Goods and Services Consumption
(Selected Categories)



SOURCE: Bureau of Economic Analysis

credit market conditions and the growing home equity that softened the 2001 recession are missing.

As people consumed consistent with anticipated wealth based on rising house prices, they helped fuel economic expansion until house prices fell and triggered the financial crisis. Then spending slowed and so did growth in the nation's gross domestic product (GDP). These personal consumption expenditures (PCE) dominate GDP and are said to drive the economy.

Consumers' share of GDP has grown over time. In 1951, PCE was 61.5 percent of GDP, where it stayed for three decades until it rose to 63 percent in 1980. By 2008, it comprised 70.1 percent. Today, spending on services ($6.8 trillion) is almost twice as large as spending on goods ($3.3 trillion). In 1950, services represented about 40 percent of spending, but today it hovers around 70 percent (see figure above).

Since that time, real incomes have grown, along with household wealth. From 1959 to 2000, real per-capita disposable personal income grew at an average annual rate of 2.3 percent. More women entered into the work force, which encouraged even more services purchases — think day care and eating out. During that time, there was also the addition of government payments for health care via Medicare and Medicaid. As workers matured, they also earned more to pay for such services. Increasing household wealth through homeownership and individual stock purchases also fueled discretionary spending on vacations, vehicles, and electronics. Technological change also expanded the field of consumer options for both goods and services.

Growth in services has partly come from sectors that have seen rapid technological innovation such as communications. In 1995 purchases of communications services accounted for $89.3 billion (in 2005 dollars), or about 1.5 percent of PCE that year. In just 14 years, the category has grown to 2.4 percent of PCE, and more than doubled in real terms ($231 billion).

Meanwhile, people spent less of their overall budget on nondurable goods such as food to prepare at home, and less on durable goods like automobiles and furniture. The decline in clothing expenditures partly reflected falling relative prices.

By far the biggest services category is health care — $1.4 trillion, or more than 15 percent of PCE in 2009. That's roughly the same share of PCE as it was in 1995, but more than five times what it was in 1950. That includes doctor and dental services as well as home health care and expenditures on medical labs.

The durable goods category is often considered a barometer of economic activity because it includes items such as appliances, cars, and electronics — goods that wear out over time. Purchases of durable goods tend to rise with economic expansions and fall in economic contractions. In fact, the variance in durable goods purchases is much higher than that of personal consumption expenditures generally. For example, spending on household durables went from $820 million in 2000 to almost $1.2 billion in 2007 in real terms, which reflects the run-up in housing, before declining in 2008 and 2009. During the recession of 1960, durable goods purchases fell by 12 percent. In the 1980 recession, they fell by 13.4 percent, and by 10 percent in 1990 through the first quarter of 1991 (see figure on page 19).

How Personal Are Consumption Expenditures?

Spending money on cell phones, on eating out, or on refrigerators is fairly easy to understand, but other elements of the PCE are less transparent. The PCE tracks money households pay for products such as carpets, tools and computers, cereal and meats, jewelry and therapeutic appliances to services such as health care and dry cleaners. The category also includes money consumers don't spend except indirectly through taxes.

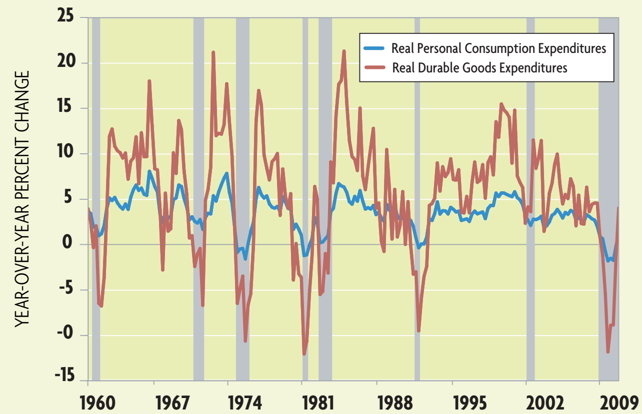
Health care goods and services, for instance, includes government payments to physicians and hospitals. The total health care category represents about 15 percent of GDP. Yet about only 15 percent of that health care spending is out of pocket, according to economist Michael Mandel, formerly of *Business Week*. The remainder comes from government or employee health plans.

There's also the amount of "imputed rental value" for housing. The government assumes an imputed rent on housing even if a house is paid off. This figure is included to help capture in the PCE data the amount of money spent on shelter.

Then there's an amount imputed for financial services such as interest-free checking accounts. But that's not really an explicit cost but rather an opportunity cost because the bank doesn't pay interest but uses the money. Had customers invested savings elsewhere, they might have earned a return on the money. Other items, like the net income of nonprofits, are also not strictly consumer-driven but are included as consumption expenditures in the national accounts.

Another 12 percent of GDP is represented by imports such as computers and televisions. These are goods manufactured elsewhere and the only contribution to U.S. GDP is perhaps through the money spent to transport or sell those goods. Taking that into account changes the math. Mandel suggests that domestically produced goods and services drive less economic activity than is often commonly cited.

Durable Goods Expenditures



NOTE: Shaded areas correspond to recessions.
SOURCE: Bureau of Economic Analysis

Household Behavior

Overall spending barely dipped in the 2001 recession, as people were able to consume via credit card borrowing or home equity loans. "Interest rates were low and people were able to take advantage of that and borrow more; there was a lot of cash-out refinancing that made for a mild recession" in 2001, says Karen Dynan, currently of the Brookings Institution and formerly an economist at the Federal Reserve Board of Governors.

In the past two decades, credit innovation and increasing incomes allowed people to align spending with long-term income prospects. Wide participation in equity markets and increasing home prices added to household wealth. Aggregate household wealth stayed at about four times aggregate personal income from 1960 through the mid-1990s. It then grew to 5.25 and 5.5 times personal income in 1999 and 2006, respectively, according to Dynan in a 2009 paper published in the *Journal of Economic Perspectives*.

Meanwhile, the debt-to-income ratio has grown. Households as a group came into this recession more highly indebted than in other recent recessions, Chatterjee explains. And that's worked against spending. Credit card firms have responded to the downturn "by slashing credit limits and raising interest rates because the loans look more risky to them now." And that led to curtailed spending as households aggressively paid down debt, another way of increasing savings. Consumers are also saving another way: cash-in refinancing. That's when people put more money on the mortgage to reduce payments. The government housing corporation, Freddie Mac, reported that in the final quarter of 2009, cash-in financing grew to a third of all refinancings.

Spending will certainly return, but how quickly? The drop in consumer spending in the early 1980s was followed by a spending spree. "After recession ended in 1982, we saw a real snapback in consumption — 5 percent or 6 percent growth in the first year. That is unlikely to happen in this episode," Dynan says. The unemployment rate in that recession reached the same level as that of the current downturn, but the damage to household balance sheets will linger. While consumers "have recovered some, on net they are still down by a substantial amount, about 20 percent, and they lost tremendous wealth through their homes."

Savings rates, however, are going up. Between 1959 and 1990, savings averaged almost 9 percent, but the rate went negative in the third quarter of 2005. Soon after, in the second quarter of 2006, household borrowing peaked at nearly $1.4 trillion before falling to a negative $279 billion by third quarter 2008. Households are now de-leveraging by paying down (or defaulting) on their debt, according to a 2009 paper by economist Riccardo DiCecio and research associate Charles Gascon of the St. Louis Fed. Savings rates have climbed since 2008.

That has an upside since long-term economic growth stems from innovation and capital investment. By examining savings rates relative to GDP growth since 1948, St. Louis Fed economist Daniel Thornton found that the savings rate grew from 6 percent in the late 1940s to 12.5 percent in second quarter of 1975, and fell to 1.2 percent by fourth quarter 2007. "Over these same periods, output grew at rates of 3.8 percent, 3.2 percent, and minus 2.4 percent respectively." Personal savings and growth may correlate, and a higher savings rate may not hinder an economic expansion, although these results are not conclusive. More savings, besides buffering economic shocks to households, could flow to increased capital investment. Mainly, these results serve to underscore that the relationship between household savings and broader macroeconomic growth is more complicated.

As households rebuild wealth and feel secure about employment, spending will likely resume. But will the decline in current wealth be seen by households as a permanent change or a temporary one? Stores like Family Dollar aren't waiting for an academic consensus on that. They are planning future product mixes on the assumption that they will keep their new customers in the future — the ones who traded down when the purse strings tightened. **RF**

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The National Headcount

Census emphasizes outreach to improve accuracy

BY BETTY JOYCE NASH

Counting the nation's diverse and mobile population can be difficult and contentious. The final numbers will determine the state and local funding allocations for many federal spending programs for a decade, and can also reassign seats in the 435-member U.S. House of Representatives. South Carolina, for instance, may gain a seat after 2010's final tally.

But this year's census — or that of any year — couldn't possibly count households everywhere with 100 percent accuracy. For one thing, in 2000, the final response rate was only 67 percent. That's down from a high of 78 percent in 1970 but better than 1990's rate of 65 percent. And imagine the possibilities for error. You might count your college student on the form but the college does too. Parents of multiple children may not list the baby. Fear can prevent the poor or undocumented from naming people in the household.

One way to increase response rates is to increase awareness of the national headcount. Some of the economic stimulus money has been used to double the resources devoted to publicizing Census 2010. This effort will help but may not completely solve the disproportionate undercounts of minorities and overcounts of whites identified first in 1940. In 2000, for instance, whites were overcounted by an estimated 1 percent.

The emphasis on advertising will help reach people who are hard to count. This is an alternative to relying on statistical adjustments and allocation to the local level after the fact, ever a controversial practice. Even though Census 2010 numbers will not be statistically adjusted, the debate remains unresolved over how to account for those who might be missed.

Census 2010

Using $14 billion in expenditures, 1.4 million temporary employees, and 500 field offices, the decennial census is the nation's biggest peacetime undertaking. Census data underpinned some $430 billion in federal assistance to states in fiscal 2008, according to a 2009 Brookings Institution analysis. That's money disbursed for Medicaid and education and many other programs. People in business also use the data to make investment, location, capital expenditure, and employment decisions. Migration, commuting, and housing patterns as well as education, income, and information about poverty emerge from the data.

For Census 2010, the federal government is spending roughly $400 million, including $250 million in stimulus funds, to advertise and promote the count. The ad campaign even included a Super Bowl TV spot. This is only the second paid ad campaign in its history — the first ever was in 2000. Previous censuses relied on public service announcements, typically aired at times like 2 a.m., when most people aren't watching television.

Census 2010 also hit the road and the Internet to generate buzz. Representatives traveled to communities like Gaffney, S.C., where an event included a performance by a Hispanic dance troupe. The road show also went to Huntington, W.Va.'s Marshall University to remind students to list Cabell County as their primary residence since they live there more than six months of the year.

To simplify the process this year, the Census Bureau has switched to a short form with fewer questions, leaving detailed information to the timelier, monthly American Community Survey, introduced earlier in the decade. ACS is a rolling sample of 250,000 households designed to provide detail. Aggregated over the decade, ACS will in theory provide the same number of interviews captured by the long form in years past.

Completing and returning a census form is required by law, and the Census Bureau follows up with nonrespondents by telephone or in person. Still, final response rates vary from state to state. For instance, in South Carolina, it was 58 percent in 2000.

With improved mapping technology and geo-coding, workers canvass neighborhoods using handheld computers to verify addresses. Technological glitches, however, have prevented the use of handhelds in the follow-up visits to nonresponders.

Contacting the least reachable is the goal: the poor, minorities, children, and immigrants who comprise the undercounted. "That's where the resources have shifted instead of working on a technical adjustment process," says Margo Anderson, a professor at the University of Wisconsin, Milwaukee. Anderson and co-author Stephen Fienberg of Carnegie Mellon University have written widely about census and statistical sampling controversies, including the 1999 book, *Who Counts? The Politics of Census-Taking in Contemporary America*.

In every city, committees have been formed to tap grassroots groups to publicize and demystify the census. Carmen Morosan is a Baltimore city planner who is coordinating efforts to ensure a successful count. In 2000, the census missed less than 1 percent of Baltimore's population of 651,000. Mail responses are the most accurate, yet in 2000, Baltimore's mail response rate of 53 percent was the lowest in the nation among cities with similar populations, according to Morosan.

Education about the purpose of the census is critical because the counters on foot with clipboards may not fare any better. "When someone comes to your door, you might not want to answer questions for a stranger," Morosan says. The city's got characteristics typical of hard-to-count areas: a high percentage of recipients on public assistance, a high ratio of renters to owners, a higher than average number of unoccupied housing units, and others. Surveys in general don't do well there, Morosan says, and the census is no exception. "There's a lack of understanding about the purpose and benefits."

Census and Statistical Sampling

The first census was held in 1790, mandated by the Constitution, with federal marshals directed to count people. This involved hiring reputable assistants who would canvass towns and territories. Assistants sometimes tallied on court day, the day people came to town. "They were told to visit each home, but obviously in the frontier world in much of the 18th and 19th century, that was hit or miss," Anderson says. And in the mid- to late-19th century, enumerators were provided army escorts in frontier areas. "At no point in the nation's history was there a physical count of each person in the country."

In 1940, a natural experiment revealed the level of what's known as the "differential" undercount when 453,000 more men registered for the draft than had been recorded by the previous April's Census. Though the results varied by region and race, 13 percent of draft-eligible black men had been missed. Nationally, 229,000 more black men registered for the draft than would have been expected from Census estimates. Overall, the net undercount in 1940 was 5.6 percent, 10.3 percent for all blacks and 5.1 percent for nonblacks.

While there had been complaints about the census before, it wasn't until the development of large-scale data systems that alternative estimates could be compared to census numbers. Until the 1960s, the undercount and methods to evaluate the work of the Census Bureau held interest for few besides statisticians. The increasing flow of taxpayer money through urban renewal, highway, public health, and other government programs, though, upped the ante on the census count.

That was the era of Great Society programs and equal protection laws, when funds began to be disbursed, according to the headcount data. Voting rights tests hinged on population numbers in voting precincts. And in 1962, the Supreme Court decided a case that set off a chain of reapportionment lawsuits. More than ever, accuracy counted.

By 1970, coalitions of state and local officials and private citizens had started to challenge methods through lawsuits. The government usually won. A 1996 ruling over the potential undercount in the 1990 Census, brought in 1988 by a coalition of city and state governments led by New York City, went to the Supreme Court. The plaintiffs sought to reinstate a statistical sampling plan that had been developed by panels from the National Academy of Sciences as well as private and government researchers. The issue was over post-enumeration surveys that could estimate population in

PHOTOGRAPHY: U.S. CENSUS BUREAU

The Census Road Show stopped in Gaffney, S.C., and the rally featured the Ballet Folklorico Internacional of Greenville, S.C.

areas of high undercount. Ultimately, the Commerce Department, the agency in which the Census Bureau is based, opted against adjustment. The Supreme Court upheld the department's decision.

In the 1999 case of Department of Commerce v. House of Representatives, the Supreme Court disallowed sampling but only for congressional apportionment. The court decisions, however, didn't end the sampling controversy.

Adjusting the Count

Since the 1950s, the Census Bureau has used probability-based evaluations of population subsets, in addition to other demographic tools, to assess accuracy. One type of demographic analysis takes vital records data and immigration records and projects the size of any particular cohort. "So, we can make an estimate of how many white females aged 40 to 44 there are in the country. Then you look and see what number comes out in the census," Anderson notes. But that doesn't reveal the location of those over- or undercounted.

The second method is capture-recapture, first used to count wildlife. The idea is to combine two estimates to generate one that is closer to the actual number. In the census, the traditional count is the "capture" phase and a second nationwide survey serves as the "re-capture" phase. That allows an estimate to be extrapolated. This year, the instruments to allocate population to local jurisdictions based on the derived estimates have not been put in place. It would take, according to Anderson, a large-scale sample size to ensure accuracy. This estimated allocation was planned for the 1990 and 2000 censuses, but did not happen and will not be part of Census 2010 either.

As it turns out, Census 2000 overcounted the population by several million. While over- and undercounts are not unusual, on net, until 2000, there was always an undercount. In 2000, proposals for sampling in the case of follow-up (when people can't be reached or don't return the survey form) met with resistance and were eventually abandoned

continued on page 26

Nobody's Home

Weighing the prospects for neighborhoods hit hard by foreclosure

BY RENEE COURTOIS

In some of the nation's neighborhoods, the height of grass is a serious economic indicator. "The first indication we have that a house is vacant is that a neighbor will call about tall grass and weeds," says Liz Via-Gossman, director of community development for the city of Manassas, Va.

The eyesore of unkempt lawns has helped the city detect properties that have become vacant as a result of the housing downturn and foreclosure crisis. The City of Manassas received about six tall grass complaints in 2007. By halfway through 2008, when foreclosures had really begun to mount around the country, it had received 277.

Manassas is one of the areas hit hardest by the foreclosure crisis in the Fifth District, together with the nearby city of Manassas Park and surrounding Prince William County. All are located just southwest of Washington, D.C. Prince William's foreclosure rate is about double that of Virginia as a whole.

What has been left behind by the nationwide housing downturn is a record number of vacant homes throughout the country: nearly 19 million housing units, according to Census estimates, about 14 percent of total housing units. To be sure, many of those empty homes are for sale through the usual process, while others are seasonal homes or those listed for rent.

But by all accounts, a larger number of homes than ever before are vacant as a result of the severe housing downturn. Most notorious are those in the process of foreclosure or in real-estate ownership (REO) at banks or other financial institutions. REO homes are foreclosed properties from which the borrower has been fully extricated. The title has reverted to the lender or, increasingly, a loan servicer hired to manage a pool of properties on behalf of investors in a mortgage-backed security. Yet, in some cases, homes become vacant prior to foreclosure because the resident has simply given up on the mortgage and walked away.

Many foreclosed homes are listed for sale, sometimes in a market saturated with other for-sale properties, which can depress local house prices if there are enough of them. The health of the local housing market largely determines whether a foreclosed property is maintained: If the cost of maintenance exceeds the net return from the sale of the property, the home runs a greater risk of being neglected. The net return depends on the value of the house and the loan-to-value ratio.

Such homes will lack cosmetic maintenance or exhibit more serious structural damage. Others can be damaged by normal seasonal patterns. Because some are not properly winterized, pipes can freeze and burst in cold weather. Vacant homes without electricity won't have operating sump pumps, and the undrained rainfall can result in mold growth.

The surrounding neighborhoods can also suffer from foreclosure since empty and decaying homes impose an externality. High numbers of vacancies may bring down the value of surrounding properties. If not maintained, these abandoned homes may provide a signal about the area's desirability to potential buyers. Some research has also linked high numbers of foreclosures to crime, fire, and the resulting strains on local government resources — though the connections here may be tenuous in some cases.

It's not that foreclosure necessarily leads to deterioration of a home and the neighborhood in which it resides. In areas that haven't experienced a large number of foreclosures, a foreclosed property is more likely to be cared for and resold before long. Many foreclosures concentrated in one area, on the other hand, can imply broader economic strain, residents' declining commitment to the neighborhood, or a misalignment of lenders' and borrowers' incentives to produce the best possible outcome for the home and neighborhood. Those are the places in which a local foreclosure problem is more likely to result in neighborhood blight.

A Tale of Two Crises

There are generally two types of areas heavily affected by foreclosure. The first is the archetype of the housing boom and bust: areas like Phoenix, Las Vegas, and interior California that experienced massive amounts of new building. Many buyers in these areas based their purchases on what seemed at the time to be reasonable expectations about future income and house price appreciation, but those expectations often did not prove correct.

The second story is one of structural economic decline that started long before the housing boom and bust, with populations abandoning urban cores and, in many cases, the region as a whole. In areas like Cleveland and Detroit, the foreclosure incidence can be timed not with the fall in housing prices, but with the acceleration of the decline in manufacturing employment around the turn of the millennium. The Fifth District is home to both types of areas, including supply-ridden Charleston, S.C., and parts of the Washington, D.C., area, and regions with longer-term struggles like Baltimore and much of South Carolina.

This is a simplification, of course, since many areas are affected by both the housing bust and economic woes. The housing downturn surely exacerbated the economic problems of depressed Ohio and Indiana. And job loss due to the recession has been a surefire way to push Phoenix and Miami homeowners into delinquency. In both types of areas, subprime lending and the credit boom helped get many borrowers into houses they couldn't sustainably afford.

For areas in longer-term economic decline, today's abandonment problems may feel a lot like the shrinking industrial centers of the late 1960s and through the 1980s. For these areas, the decline has been merely exacerbated by the foreclosure crisis and recession. But the nation's more recent neighborhood abandonment problems also have some new elements. For the first time, abandonment seems to be affecting neighborhoods whose economic prospects are mostly viable in the long term, and are still intrinsically desirable places to live.

Though there is abundant research on the problems that abandoned homes can pose for surrounding communities, there is a lack of hard data about where vacancies and foreclosures have begun to deteriorate neighborhoods. "The problem is, there's no way to really track this kind of information except going out physically with a clipboard or handheld computer and documenting it," says Alan Mallach, a senior fellow at the Brookings Institution. "You can track foreclosures because every time somebody forecloses a record is created. But nobody creates records about vacant and abandoned properties. So there's no overall way of getting a handle on it."

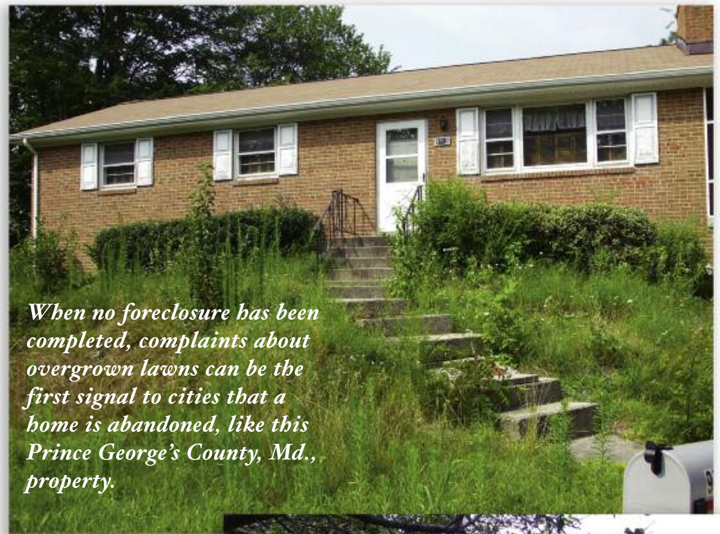
Still, to get the best sense of the scope of the blight problem you should look at cities where the foreclosure incidence is highest (see map on page 24). The comparison isn't perfect, however, since not all foreclosures result in long-term abandonment and decay. But what's clear is that foreclosures, which can be associated with long-term vacancies, are no longer occurring primarily in decaying urban cores: They are simultaneously affecting small cities, suburbs of big cities, and rural areas.

In the absence of hard data on the problem, local practitioners do the best they can to keep track of and treat vacant and decaying properties, Via-Gossman says. "I would suspect when the spring rolls around and we hit that grass season, then we'll get this year's picture about where we are with vacancies."

The Choice to Foreclose

The severity of the housing crisis is redefining what economists know about the causes of foreclosure.

When economists think about a homeowner's decision to default on a mortgage, they borrow from what is called "option price theory." An option is a security that entitles the owner to buy or sell an asset in the future at a predetermined price. A "put" option is useful when one expects the price of the underlying asset to decrease: The holder can sell it for a higher price than one would be able to get on the market. A homeowner's ability to default on a mortgage is like a put option when the home's value is falling, since one



When no foreclosure has been completed, complaints about overgrown lawns can be the first signal to cities that a home is abandoned, like this Prince George's County, Md., property.

Multiple adjacent homes await buyers in this Fairfax, Va., neighborhood.

PHOTOGRAPHY: STEVE SANDERFORD (TOP) AND COURTNEY MAILEY

is effectively selling the house to the lender.

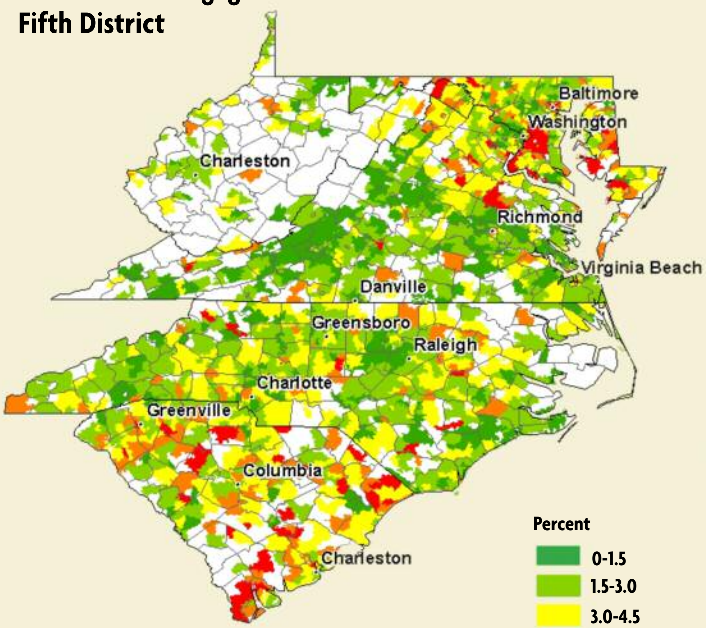
Applying the most simple option model to the housing market would lead to the conclusion that every homeowner would default on his mortgage the instant the market value of his house falls below what he owes on it — a seemingly alarming prediction given estimates that a quarter of all homeowners are currently "under water" on their mortgage. The reason we haven't seen defaults quite that catastrophic is that in reality there are transaction costs to walking away, as well as a number of personal considerations.

But many of the deterrents from walking away are less present in areas where local house prices are still falling or the neighborhood has already seen a large number of foreclosures. This has led to a growing number of "strategic defaults" in which borrowers are technically able to afford the mortgage, but choose to walk away because they view the home as a losing investment that will never pay off.

Moral obligation, the stigma attached to default, and emotional attachment to one's home all may prevent someone from walking away. But all three are being eaten away by the extreme conditions of the current housing market, says economist Luigi Zingales of the University of Chicago. Some people may feel less of a moral obligation to make good on their debts if they are severely under water. ("There is a price to morality, and when the price becomes too high you default anyway," he says.)

People who bought homes as an investment, more com-

Percent of Mortgages in Foreclosure/REO in the Fifth District



NOTE: Uncategorized zip codes have fewer than 100 loans or no data available.
SOURCE: Federal Reserve Bank of Richmond estimates using data from Lender Processing Services (LPS) Applied Analytics (November 2009) and Mortgage Bankers Association (2009:Q3)/HaverAnalytics

mon during the housing and lending boom, especially in areas currently most afflicted by housing oversupply, don't face the transaction and emotional costs of moving. "Second homes and especially investments are where people look at their choice to buy a house in a strictly rational or financial way, and it's much more likely that they will walk away when there's not the emotional investment that there is in their main residence," Zingales says.

And people are more likely to walk away when they know one or several people who have defaulted strategically. "If everybody does it then it becomes socially acceptable," Zingales says. A 2009 study by Zingales and economists Luigi Guiso and Paola Sapienza collected survey data that indicate people who know someone who has defaulted strategically are 82 percent more likely to say they'd be willing to also default strategically should they find themselves severely under water. "There might be some critical point beyond which the social stigma breaks down, and then defaults spread like wildfire," he says.

Given that the costs to borrowers of walking away appear to be diminishing, it is not surprising that lenders face a tough choice when deciding whether to help a borrower avoid foreclosure by modifying the terms of their original mortgage. It is often in the best interest of the counterparty to a mortgage to avoid foreclosure. So if foreclosure seems imminent under the existing mortgage terms, lenders may be willing to modify them for the borrower, by reducing the interest rate or principle, for example.

Of course, modifying a mortgage reduces the expected return from the mortgage for the lender, but under certain circumstances it may still be worthwhile. If the state does not have "recourse" laws — which allow the lender to go after a borrower's other assets in the event of default — then lenders may be more willing to modify the mortgage to avoid foreclosure. This has an influence on the borrower's incentives too. Research by City University of New York economist Andra Ghent and Richmond Fed economist Marianna Kudlyak found that recourse laws are a powerful deterrent to foreclosure since they increases the cost to borrowers of walking away.

But lenders who do offer modifications face an adverse selection problem since mortgages that are modified tend to have a high re-default rate, according to a study by Boston Fed economists Manuel Adelino, Kristopher Gerardi, and Paul Willen. Some loan modifications will simply delay the inevitable. Since lenders know this, and there is no way to know in advance who will prove to re-default, it may reduce their willingness to modify loans for everyone. This may partially explain why relatively few mortgages nationwide have been modified so far.

From Vacancy to Blight

The health of the local housing market in part determines the fate of foreclosed homes in an area. Therefore, whether an area's economic prospects are generally weak or strong is a key determinant of whether a high foreclosure rate evolves into a broader problem of neighborhood decay. Unfortunately, the lenders' incentives once foreclosure is imminent are not always aligned with the health of the neighborhood.

"What the lender wants to do is dispose of the property in a way that maximizes its return," says Guhan Venkatu, an economist at the Cleveland Fed. A foreclosed property generates no income and is costly to maintain. So in most cases, the lenders' incentive is to minimize the amount of time that a vacant property is sitting on their books.

Expediting foreclosure is not always an option for the lender. Some states have a "judicial" foreclosure process in which foreclosure requires a court action. In those states foreclosures take much longer and are administratively costlier to the lender. Perhaps more importantly, Venkatu says, it imposes less flexibility on the lender to make the decision that maximizes the value of the property for them.

Dragging out foreclosure, on the other hand, may also be an option. In areas hit by many foreclosures, the prospects for reselling property at a reasonable price may appear more dismal to lenders, providing an incentive for them to delay the foreclosure process.

"They're just letting the process slow down," Mallach says. Instead of initiating foreclosure when a home becomes 90-days delinquent, when foreclosure legally becomes a possibility, he says they might wait 180 or 210 days, or longer to help them wait out the market. And since in these cases eventually selling the property is the goal, he says the lender sometimes doesn't want it vacated and subject to decay. "I've heard in some cases that some lenders will actually call up the homeowners and say, 'Please don't leave the house. Stick around. We know you're not paying.'"

Mallach says it lacks a catchy name so far, but the phenomenon is what those in the industry are calling a "shadow REO inventory." "That means this huge inventory of properties that could become REO properties but aren't because the servicers are not pushing to finalize the process that would turn them into REO properties." Some estimates claim these properties number in the millions.

Observers in the industry have also noted a new occurrence in which lenders and loan servicers who have acquired properties through foreclosure withhold those homes from the market for fear of depressing prices further in an already supply-saturated area.

Dragging out foreclosure and withholding REOs from the market can make the housing statistics appear rosier since it could lead to an underestimation of supply. It also lengthens the market adjustment process, and masks how many homes are, or will eventually be, on banks' balance sheets.

In the very worst areas, mortgage defaults become the city's problem. If the prospects for reselling the property are extremely poor, the cost of foreclosure and maintaining the property may exceed the value the property holds for the lender. In the case of so-called "toxic titles," the tenant has defaulted and vacated the house, but the lender never completes the process to take legal ownership. This leaves the property in a state of legal limbo: The lender holds the lien, but the tenant technically owns the home. Meanwhile, the house sits empty and often deteriorating or subject to vandalism, with no steps being taken to bring it back to market. Toxic titles are most likely to be found in very low value areas where the market is essentially nonexistent, Mallach says.

The Status of Distressed Homes

Delinquent: Mortgages for which the borrower has ceased mortgage payments. Typically, foreclosure can be initiated after 90 days of delinquency.

In Foreclosure: Properties for which the foreclosure process has been initiated. There is no national standard for length of the foreclosure process.

Bank owned or REO (real estate owned): Properties that have gone through the foreclosure process (i.e., the homeowner is fully extricated from the loan) and are now owned by the lender or the trust that has purchased the mortgage as part of a mortgage-backed security.

Vacant: A home that, for whatever reason, is not legally occupied. Most foreclosed and REO properties are vacant, although not all vacant homes are in foreclosure or REO. Sometimes the borrower has given up on the mortgage and vacated the property.

Toxic titles: Homes for which the borrower has ceased mortgage payments and vacated, but for which there is no immediate intention to foreclose. The foreclosure process costs more than the home is worth on the current market, so for a lender or loan servicer it makes better financial sense to walk away than to complete the foreclosure. The result can be homes with unclear legal ownership. These exist in areas where the housing market is especially weak.

Stabilization and Revitalization

Neighborhood stabilization is the key to neighborhood recovery, according to Mallach. He defines a stable market as one in which homeowners and potential buyers feel their investment is secure. "If you have a neighborhood that has been losing ground and people in it are basically just hoping to move out, and nobody in particular is eager to move in, if you start to see a significant number of foreclosures it's likely to have a much more dramatic effect than the same number in a neighborhood that is still seen by its residents, and by other people in the region, as being desirable."

The federal government has devoted funds to help deal with vacant and abandoned homes. The federal Neighborhood Stabilization Program (NSP) directs funds (about $6 billion in total under the 2008 and 2009 economic recovery acts) to local governments and community developers to try to stem falling home values in areas already hit hard by foreclosure.

The funds could be used for a number of things that try to maintain or improve the condition of abandoned properties. Funds can help community organizations purchase and rehabilitate deteriorated homes, for example, or establish "land banks" (local legal entities that hold vacant, abandoned, and foreclosed properties and transfer them back to productive use). The money also can fund incentives to get homeowners into empty homes.

Community organizations and local governments have found it hard to implement NSP funds, however, for a variety of reasons. Among the largest is difficulty identifying the current owner of the mortgage. Only the original lender is listed in the loan documentation, whereas most mortgages today are sold after initiation in secondary mortgage markets and ultimately to large groups of unnamed investors. The loan servicers who represent these investors may be located in a completely different region, and thus have no expertise on the local housing market in question, and may have any number of other distressed properties they are also managing. And in the case of toxic titles, it takes legwork and legal expertise to determine who owns the property.

Even when the loan servicer is identified, they often have limited discretion when dealing with resale of the property. Service agreements obligate them to maximize the value of the trust for the investor owners, but these agreements were written in a dramatically different housing market environment in which it would have been hard to imagine the discounted sales of distressed properties to local governments and nonprofits.

There is no reason to believe that overbuilt neighborhoods must stay empty forever. Venkatu sees an analogy between fundamentally desirable neighborhoods and the vast expansions and oversupply of fiber-optic capacity during the late 1990s tech boom. "It's not like that stuff doesn't get used," he says. "It gets used — it just gets sold at a loss." At some point these new developments — which for now look more like movie sets than neighborhoods — will start to look attractive to buyers.

Not all homes will be candidates for resale. In economically declining areas that are rapidly losing both jobs and residents, the strategy of community organizations buying and rehabbing homes nicely and trying to sell them would almost certainly be a failure. "And in fact, it should be," Mallach says, "because it's crazy to spend that kind of money or try to entice people into a neighborhood that may be already three-quarters empty," he says.

That may be where there is potential to find alternative uses for vacant homes, from rental units to office space or, at the extreme, razing the property to use the land for something else. But this requires new strategic plans for the community at a time when local governments are being stretched thin. When faced with the choice of spending resources to convene local community organizations and neighbors to gain consensus on the direction of an abandoned property, or funneling those resources to programs that attract jobs, the latter often seems to be the priority.

And perhaps that's for good reason. Job opportunities are a large part of what will make neighborhoods hit hard by foreclosures once again desirable places to live. For many areas affected by foreclosure, economic recovery that brings strong employment prospects and income stability, as well as a well-functioning housing market, may be the quickest path to community revitalization. **RF**

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Census *continued from page 21*

along with proposals to adjust the population figures afterward using statistical sample results.

"The methodology in 2000 could not be shown to be an improvement over the actual enumeration," Anderson says. "You have to argue that it is better, not just that it's different, and there are big arguments over what better means — numerical accuracy, distributive accuracy, all of which get tangled up in the politics of it."

Anderson further explains: "There were two approaches; one was that the Census Bureau should improve the method to reach everybody and the other was that it's more efficient and potentially more accurate to use statistical methodology." Many statisticians and demographers believe the sound methodology of sampling techniques could provide more accuracy, but the two main political parties have staked out opposite positions. That has made compromise unworkable. Not surprisingly, the census has become a political issue. Republicans have tended to favor unadjusted counts while Democrats tend to support adjustments. Most Americans, Anderson says, don't object to sampling, but do worry about the possibility of political machinations behind technical matters that are hard to understand.

In any case, methods for counting people are likely to always be an imperfect way to capture the scope of a constantly evolving nation. The controversies over how we count may be as recurrent as the decennial census. **RF**

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The Lessons of Jamestown

BY STEPHEN SLIVINSKI

How land privatization benefited one of the earliest British colonies

When British royalty and men of commerce looked westward to the New World in the late 16th century they saw the benefit that a permanent colony could provide. Yet they had different notions of why such a settlement could prove worthwhile.

Queen Elizabeth, and her adviser Sir Walter Raleigh, had an interest in establishing a colony in North America for the sake of keeping Spanish outposts there in check. In 1587, Raleigh attempted to settle a colony on Roanoke Island in the Outer Banks area of present-day North Carolina. The ongoing sea war with the Spanish empire, however, tied up the ships that would have replenished the colony. It would be three years before a resupply voyage was made to Roanoke. Upon arrival, the captain of the resupply vessel discovered that the settlement was deserted. Historians today still debate what caused the colony's demise.

The next effort at starting a permanent colony in North America had its roots in 1606, under the reign of James I. This time the colony was not seen as a launching-off point to conquer and plunder the outposts of England's rivals. That was strictly forbidden by the new king, in fact, as he had recently made peace with Spain.

Instead, it would be an endeavor that was privately funded and motivated mainly by commerce. As historian Edmund Morgan described it, the investors had "hopes of finding precious metals or minerals, of discovering valuable plants for dyestuffs and medicines, and perhaps of opening a northwest passage to the Pacific. But they were prepared to settle for glass, iron, furs, potash, pitch, and tar, things that England needed and mostly had to import from other countries."

They knew generating a profit would take time and were taking a long view of the investment. After all, this new settlement wasn't meant to resemble the trading posts that England had established in other countries where English goods were unloaded in exchange for native products. Instead, the settlers would have to produce original articles of trade that could not or would not be produced at home.

Thus, the Virginia Company of London came into existence in 1606, composed of a group of investors led by well-known merchant, Sir Thomas Smythe. The company was granted a charter by the king that awarded them the right to establish a colony of 100 miles square somewhere approximately between Cape Fear and Long Island Sound.

In December 1606, three ships — the *Susan Constant*, the *Godspeed*, and the *Discovery* — left England carrying the first settlers, just over 100 mariners and adventurers in all, to the shores of Virginia. When the captains of those vessels looked for a proper place to drop anchor, they used a formula devised by Richard Hakluyt, a writer and geographer who was an adviser to King James and an investor in the Virginia Company. It was a simple recipe: Find a place near the entrance of a navigable river that could be easily defended.

They found a preferred spot on May 14, 1607, along what is called the James River today, about 60 miles from the opening at the Chesapeake Bay, placing it at a great enough distance to give the settlers ample warning of any invasion by sea. The settlement was also situated on a peninsula that made it defensible by land, and the river was

Archaeological excavations of the Jamestown colony have identified a severe drought as a problem that beset this early British settlement. Economists and historians point to the collective ownership of farmland as another.

PHOTOGRAPHY: COURTESY OF PRESERVATION VIRGINIA navigable for another 75 miles into the interior of Virginia — as far as present-day Richmond.

Jamestown seemed as if it was off to a good start. The land was hospitable to farming, and two of the colony's leaders, John Smith and Christopher Newport, were relatively successful at opening initially cordial relations with the nearby Powhatan Indian tribe. By the end of June, Newport was able to return to England with some of the exports the colonists had already created.

Yet, by Newport's return in January 1608, nearly two-thirds of the settlers were dead. For the entire official life of the colony, an average of one out of every four settlers would survive. Part of the hardship was beyond the direct control of the colonists. But another element — the labor and land polices of the colony — exacerbated the difficulties the settlement faced during the first 10 years of its existence.

In 1624, the Virginia Company would lose its charter. Historians are often quick to refer to Jamestown as a failed settlement: Until the rapid revenue growth generated by tobacco farming that started around 1613, the colony didn't turn a profit. Yet, the years before then were an important learning experience for the residents of Jamestown.

A Grim Beginning

Although it was not meant to be primarily an agricultural endeavor, the Jamestown settlers anticipated the need to establish a strong agricultural output. But that would take time. So they initially based their sustenance on the trade that would result from maintaining a good relationship with the Indian tribes in the area. While they did trade for food with the nearby Powhatan tribe, it was a sporadic and unreliable arrangement as the relations with the Indians were often tense and occasionally broke down.

In any case, the trading activity would not likely have yielded enough to sustain the settlers for a long period of time. Instead, they tended to rely on supplies sent from England. It could not be assured that the supply ships would always arrive on schedule, however, especially since the vessels sometimes encountered harsh weather. (In 1609, for instance, one of the supply ships was temporarily shipwrecked in Bermuda. The incident became the inspiration for William Shakespeare's play *The Tempest*.)

Malnutrition was one of the biggest drivers of the high mortality rate in those early years. Weather patterns had a profound effect on the rate of malnutrition. An analysis of 800-year old bald cypress trees at the colony site conducted in 1997 indicated that lack of sufficient rainfall in the period of 1606 to 1612 produced a severe drought that has not been matched since. Historians and scientists note that not only did this put a large strain on the Jamestown crops but it also made the food harvested by the Powhatan more valuable to the tribe itself and most of it was not traded to the settlers.

Additionally, the colony didn't have a freshwater well until 1609. This forced them to rely on water from the James River. That water was much too salty and consumption of it surely contributed to the deteriorating health of the colonists. The lack of rainfall during the drought only exacerbated this problem.

Beginning three months after the landing at Jamestown, historian Philip Bruce explains that until the fall "hardly a day was unmarked by death." New York University historian Karen Kupperman notes that virtually every letter written during this period by colonists from Virginia speaks of "the helplessness the colonists felt before the phenomenon of widespread deaths." Of the 104 people who had left London in 1607, all but 38 were dead within six months of arriving in Jamestown.

The winter of 1609 was particularly hard. Although the Virginia Company had sent 500 new recruits to the colony that summer, the population was reduced to about 60 only six months later. The period is known in the histories of the colony and first-hand accounts as the "starving time."

The Problem of Adverse Incentives

The drought and harsh winters, while dealing a massive blow to the settlers' ability to sustain themselves, were not the only contributors to the colonies' low agricultural productivity. The legal status of workers and property — and the adverse incentives this created for the colony's workers — played a role in the colony's failures through 1619.

University of Chicago economist David Galenson explains that the Virginia Company treated workers "as bound servants of the company for lengthy terms." This indentured servitude worked in a very specific way. The laborers would sign a contract that pledged them to work for the recruiting agent — in this case, the Virginia Company — for a specified period. The company then paid for the servants' transportation to Jamestown, housed them in barracks, provided them with rations and clothes, and put them to work.

The incentive this created for the workers seems obvious, at least in retrospect. Once arriving at the colony, there wasn't necessarily a reason that the servants wouldn't be better off trying to escape. The company realized this and instituted martial restraints on the servants. That did not, however, stem the frequent escape of a servant to the countryside to start his own settlement or even to live within the protection of the nearby Indian tribes.

Additionally, even those who remained under contract saw little reason to be productive. The contracts were set for a period of seven years and the terms were rigid. A servant was unlikely to be able to terminate his contract early if he worked hard. As Morgan describes it, "The work a man did bore no direct relation to his reward. The laggard would receive as large a share in the end as the man who worked hard." Thus, the general tendency of the servants was to work less or less efficiently.

By 1611, the company thought simply providing more manpower might solve many of the problems the colony was facing. (The colony, for instance, was still relying on corn obtained from the Powhatans, something the investors thought would not bode well for the long-term prospects of the colony.) The company sent Sir Thomas Dale, a British naval commander, to take over the office of colony governor in 1611.

Yet, upon arrival in May — a time when the farmers should have been tending to their fields — Dale found virtually no planting activity. Instead, the workers were devoted mainly to leisure and "playing bowls." "[T]he settlers did not have even a modified interest in the soil, or a partial ownership in the returns of their labor," explains historian Philip Bruce.

Another fundamental problem built into the Virginia Company's original plan for the colony was its treatment of property. All land was owned by the company and farmed collectively. The lack of private property in that case encourages people to use up a resource faster because nobody has an incentive to preserve it for future use. Instead, the collective property of the Jamestown colony reinforced the adverse incentive structure of the indentured labor arrangement: The workers would not hope to reap more compensation from a productive farming of the land any more than the farmers would be motivated by an interest in making their farming operations more efficient and, hence, more profitable.

Seeing this, Dale decided to change the labor arrangements: When the seven-year contracts of most of the original surviving settlers were about to expire in 1614, he assigned private allotments of land to them. Each got three acres, 12 acres if he had a family. The only obligation was that they needed to provide two and a half barrels of corn annually to the company so it could be distributed to the newcomers to tide them over during their first year.

Dale left Jamestown for good in 1616. By then, however, the new land grants had unleashed a vast increase in agricultural productivity. In fact, upon returning to England with Dale, John Rolfe — one of the colony's former leaders — reported to the Virginia Company that the Powhatans were now asking the colonists to give them corn instead of vice versa. A letter written from one stockholder to another at the time noted that "the worst of that colony is past" because the colonists "were well victualed by their own industry."

The reform was so successful that the company decided to further expand the land grants in 1618. Those who had arrived before 1616, referred to as "Old Planters," were awarded 100 acres apiece whenever their terms of service were up. (If a colonist had paid his own way to the colony, he would immediately receive his 100 acres.) Shareholders in the company also received 100 acres for every share they owned. Settlers who arrived after 1616 got 50 acres. The reform was also used as an enticement to attract settlers to the colony: Anyone who came on his own thereafter would receive the "headright" of 50 acres, as would anyone who had paid for the transportation of a new settler.

The labor arrangements were also modified to attract more workers, particularly impoverished English laborers who could be persuaded to take a chance in the New World: Anyone sent to the colony at company expense would be assigned some land to work then as sharecropping tenants and turn over half of his earnings to the company for seven years. At the end of those seven years, the laborer would also receive 50 acres of his own.

Colonial Parallels

The experience of Jamestown seemed to have a parallel in the Plymouth colony farther north. That settlement was founded in 1620 and financed by the Plymouth Company, a joint stock company that was granted an identical charter by James I as was granted to the Virginia Company for the mid-Atlantic zone.

It soon became obvious that the Cape Cod colony could hardly feed itself. The governor, William Bradford, diagnosed the problem as a lack of incentive to produce efficiently resulting from the common property restriction. "For this community (as far as it was)," he wrote in his memoirs, "was found to breed much confusion and discontent and retard much employment that would have been to their benefit and comfort. For the young men, that were most fit and able for labour and service, did repine that they should spend their time and strength to work for other men's wives and children without any recompense." Private property was allowed in the Massachusetts Bay colony in 1623, only three years after the settlers landed on shore.

In Jamestown, tragedy struck in 1622 when an attack by a Powhatan tribe destroyed the settlement and killed many of the colonists. For the next two years, the company officials and the British government were at odds over whether the colony could survive as a commercial endeavor. In 1624, King James decided to revoke its charter to the Jamestown settlement, after which it came under direct control of the crown. But it is in Jamestown that the general presumption of private land ownership as being a key to prosperity in the New World had its earliest roots. **RF**

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INTERVIEW

David Friedman

David Friedman is one of the leading figures in the law and economics movement, that group of scholars who use economic analysis to better understand legal systems and to consider reforms that may lead to more efficient outcomes. Unlike many in this field, Friedman's formal training is neither in law nor economics. Rather, he holds a Ph.D. in physics from the University of Chicago.

Friedman's first full-time academic appointment was at Virginia Polytechnic Institute and State University. At VPI, he was colleagues with James Buchanan, Gordon Tullock, and other members of the "public choice" school, who employ economics to analyze political decisions and institutions. By that time, Friedman had published his first book, *The Machinery of Freedom*, in which he made the case that a society without a state could effectively handle such classic "public goods" as police, courts, and national defense. His "anarcho-capitalism" distinguished him from his father, Milton Friedman, who, while an eloquent spokesperson for a market system, believed that some goods could not be produced privately and argued instead for a minimal state.

David Friedman currently teaches at Santa Clara University. In addition to his academic work, he has recently written two novels, *Harald* and *Salamander*, which consider many important economic, legal, and philosophical issues. He is also the author of *Hidden Order: The Economics of Everyday Life*, published in 1996, one of the first of several relatively recent books to explain economic reasoning and policy in nontechnical language for a popular audience. Many of Friedman's papers and books are available on his personal Web site: www.daviddfriedman.com. Aaron Steelman interviewed Friedman in April 2010.

RF: Your formal academic training was in the physical sciences. How did you become interested in economics? And what was your path toward an academic career in economics?

Friedman: While I was working on my doctorate in physics I was also writing columns on political and economic topics as the token libertarian columnist for *The New Guard*, a conservative student magazine. While a post-doc in physics at Columbia, I did a piece on population economics for the Population Council as well as writing and publishing *The Machinery of Freedom*. I concluded that I was a better economist than physicist — had better intuition for the field.

Julius Margolis, who ran the Fels Center for State and Local Government at the University of Pennsylvania, saw some of my work and offered me a post-doctoral position at his center as an opportunity to switch fields. I accepted, spent two years as a post-doc and one as a lecturer, and wrote my piece on an economic theory of the size and shape of nations, which was eventually published in the *Journal of Political Economy*.

At some point I met James Buchanan and found that we had similar ideas about the application of economics to understanding political institutions. Buchanan was the dominant figure in the economics department at VPI. He arranged for me to be hired there as an assistant professor. He also, I think deliberately, arranged for me to be assigned to teach quite a large part of the total syllabus over the course of the next few years, thus filling in some of the gaps in my economic education; teaching is a good way of learning.

PHOTOGRAPHY: COURTESY OF SANTA CLARA UNIVERSITY

RF: In your first book, *The Machinery of Freedom*, you make the case for a polycentric legal system. How would such a society overcome classic public goods problems, such as courts and, perhaps an even more difficult issue, national defense?

Friedman: Courts don't produce a public good, since they can choose not to settle disputes between people who have not paid them for the service. In the book, I describe how rights protection and the resolution of disputes could be produced as private goods.

National defense, on the other hand, is a public good, and perhaps the most serious problem for the sort of society

I described. There are, however, a variety of ways in which public goods are (imperfectly) privately produced — consider radio broadcasts, or the public good of encouraging taxi drivers to do a good job by tipping them, or the production of open source software such as Linux, or the public good of painting my house and so benefitting my neighbors. Imperfect production means that a public good may be worth more than it costs but still not get produced. Whether that will happen with the public good of national defense depends on a variety of things, including how much an adequate defense costs. I was more pessimistic about doing it when the United States was facing a hostile power with a thermonuclear arsenal than I am now. A discussion of some of the imperfect ways in which it might be possible to produce an adequate amount of this particular public good would take more space than I'm inclined to give it here.

RF: In *The Machinery of Freedom*, you also make the case for reforming the way students pay for their university educations. Could you explain that proposal — and do you think it could gain support in a world where tuition and associated costs seem to be rising considerably more rapidly than inflation?

Friedman: I proposed something along the lines advocated by Adam Smith — a university where professors were paid directly by students. This would involve disaggregating the variety of services that current universities perform. There is no strong reason why the same institution should be running hotels (called dormitories), restaurants (dining halls), producing schooling, testing and certifying.

I think something along the lines I described may happen online, where some of the difficulties of doing it in real space disappear — no need to have everyone housed in the same area, for instance. The main requirement is some form of certification, or substitute for certification, that lets a student learn a subject from whomever he wants and then get his learning certified by a credible testing agency. I find it hard to believe that the actual education part of what current colleges produce could cost as much as half of what they now charge.

RF: You also have written about monetary policy. In your opinion, what would be the most desirable way to construct a monetary system?

Friedman: What I proposed was a system of competing fractional reserve banks, each guaranteeing its currency with a commodity bundle. If you bring me a million Friedman dollars, I agree to give you in return a bundle of commodities: 500 pounds of grade X steel, 200 bushels of grade B wheat, four ounces of gold, etc. Familiar mechanisms will result in a price level, measured in my dollars, at which the total value of the bundle is just a million.

The most important argument for that system is that competing private money issuers have the right incentives. Their profit-maximizing strategy generates stable money, since if their money is not stable, people will choose not to use it, depriving them of the seignorage — probably in the form of interest — that is their source of income. That is not true for a government monopoly money. The advantage of a commodity bundle over a single commodity is that it is less subject to unpredictable fluctuations in value due to changes in demand for or supply of individual commodities. Readers interested in a more detailed account can find an article I wrote for the Cato Institute titled "Gold, Paper, or ... Is There a Better Money" on Cato's Web site.

RF: The law and economics movement has made considerable inroads in law schools and academia generally over the past 30 years. What do you think are the big remaining questions that law and economics scholars ought to address?

Friedman: One of them is how to include legislators, judges, and enforcers in the theory. In a consistent version of the economic analysis of law, they have to be treated as rational self-interested actors, just like criminals, victims, tortfeasors, and everyone else.

Another problem that has not been adequately dealt with, at least in anything I have seen, is the effect on optimal enforcement theory of differences in offenders, most obviously the fact that different offenders face different probabilities of apprehension.

A final big question is the technology of judging — what courts can do how well. If you assume a perfectly wise court system, efficient law is easy — just severely punish anyone who takes any inefficient action. If courts have no ability at all to detect truth, on the other hand, they are of very little use. Where between those points actual courts are, what sorts of questions they can or cannot get reasonably correct answers to, is a major element in figuring out what the law should be.

RF: This is an intentionally broad question to which I would like to get your reaction: How close does the American common law come to approximating an efficient legal system? Where does it go right? Where does it go wrong?

Friedman: I discuss that at some length in *Law's Order*, in the context of evidence for and against the Posner conjecture. My favorite example of inefficiency is that in the common law of tort the value of life is zero, since if you tortiously kill someone, his claim against you dies with him. That cannot be the right answer.

In many other cases, one can make arguments for either of two different legal rules, sometimes more than two. It's tempting to observe what legal rule exists and then produce the argument to show that it's efficient — but if there were a different rule you could produce an argument for it instead. My own view is that there are elements of efficiency in Anglo-American common law, but that a good deal of it does not fit that pattern.

RF: How would you suggest we think about the trade-offs associated with our current intellectual property regime? Does the system go too far in protecting the rights of creators? If so, how far and what would be a more desirable scheme?

Friedman: The immediate issue is not how far the rights of creators should be protected but how far they can be. As more and more intellectual property takes digital form, easily reproduced and distributed, and more and more people have access to fast Internet connections, it becomes increasingly difficult to enforce laws giving creators control over the intellectual property they create. At some point, the sensible response is to abandon the attempt and shift to other mechanisms for rewarding creators.

One of the subthemes of *Future Imperfect*, my most recent nonfiction book, is that the proper response to technological change is not to ask how we can keep doing what we are doing that has become harder to do — enforce copyright law, for instance. It is rather to ask how we can best achieve our objectives under the new circumstances. Sometimes that means abandoning the approach that has become unworkable, and shifting to a different approach that the new technology makes more workable than before.

RF: Many people seem to believe that less crime is always more desirable, by definition. Could you briefly explain your theory of the efficient level of crime and what the policy implications of that theory might be?

Friedman: The optimal level of traffic accidents would be zero if we could eliminate them without giving up anything else we value. But the obvious way of eliminating all traffic accidents is to stop driving, and few of us consider that a net improvement.

If law enforcement were costless, we would still not want to eliminate all illegal acts; consider the driver who is breaking the speed limit on his way to the hospital with his wife in the back seat going into labor, or Posner's example of the hunter lost and starving who comes across a locked cabin containing canned food and a telephone. Some such "efficient offenses" can be permitted by modifying the law to make them legal — for instance under the doctrine of necessity. In other cases the facts that make the offense efficient cannot readily be demonstrated to an outside party such as a court, so the best solution may be to set a penalty reflecting the damage done by the offense and then let the potential offender decide whether it is a price worth paying. The result would be a level of offenses above zero.

In the real world, law enforcement is not costless. Once one allows for that, it may be desirable to set levels of enforcement at which some inefficient offenses — offenses that harm their victims by more than they benefit the offender — occur because preventing them costs more than it is worth. Less obviously, it may be desirable to deter some efficient crimes, because deterring them saves us the cost of punishing them. For details see my *Law's Order*.

RF: You have written a fair amount about the economics of population growth. As you note in *Law's Order*, there seems to be a fairly widespread notion that "babies are a bad thing." How would you address that concern?

Friedman: Babies don't arrive with a deed to a per-capita share of the world's resources clutched in their fists; if they want land to build on or gasoline to drive with they will have to give those who own those resources something in exchange worth at least as much. So to first approximation, adding another person to the world's population makes existing people better off, not worse off. It's worth noting that there is very little relation between how rich a country is in resources per capita and how rich its population is; the most important productive resource isn't land or oil but people.

Of course, people sometimes produce negative externalities. But they also produce positive externalities. There is no general reason to expect the negative effects to be larger than the positive; when I tried to estimate both long ago (in the article "Laissez-Faire in Population: The Least Bad Solution," which is available on my personal Web site) I concluded that I could not tell whether the sum was positive or negative.

RF: Much of the recent debate regarding medical care legislation seemed to be predicated on the idea that medical care should not be treated like other goods and services. How would you respond?

Friedman: There are strongly felt emotional attitudes toward medical care that do not exist for many other goods and services and that makes it more difficult to treat it as an ordinary commodity. But I think it is hard to offer rational reasons in support of those attitudes, or good economic arguments against having it produced on the free market like food or housing. For details, see my article "Should Medical Care be a Commodity?" available on my personal Web site.

RF: What do you think of "behavioral economics"? And what does law and economics have to contribute to it?

Friedman: The observation that humans are not perfectly rational is neither novel nor, I think, very useful. The point at which it becomes interesting is when one can create a theory of how and why they are irrational, and hence just how the choices they make will differ from the choices that conventional economics predicts that they will make. I have an article that attempts to do that, based on evolutionary psychology; it's titled "Economics and Evolutionary

Psychology" and is available on my personal Web site.

RF: Since you wrote *Hidden Order*, several other popular economics books have been published by commercial houses, some to great fanfare and success. To what do you attribute the demand for and popularity of such books?

Friedman: Part of it is that people want to understand economics, part is that economics is inherently interesting.

RF: What issues are you working on currently?

Friedman: My next nonfiction book will probably be based on a seminar I have taught for some years under the title of "Legal Systems Very Different from Ours." It will describe a considerable range of legal systems, including those of modern gypsies, imperial China, ancient Athens, the Cheyenne Indians, Jewish law, and other arrangements, and attempt to identify common threads that run through many or all legal systems, and look at the different ways in which different societies have dealt with their common legal problems.

RF: Please tell us about your recent novels. What do you think science fiction and fantasy can teach us about economics and alternative legal systems? And why are those types of fiction particularly good forums for discussing such issues?

Friedman: I've published one novel — marketed as a fantasy, but more nearly a historical novel with made-up history. A second, *Salamander*, is finished and webbed, but has not yet found a publisher; that one is a real fantasy, complete with my own, I think original, version of magic. I'm currently working on a sequel to it.

The published novel, *Harald* (from Baen Books), is a story not a treatise, but it contains a good deal of implicit economics and political philosophy. One implied message is that political structures are about relations between persons, not formal tables of organization; the mess my protagonist has to deal with in the early part of the book grows out of the acts of a young and inexperienced king who thinks people can be trusted if and only if they are in allegiance to him, and so tries to convert, by force, allies into subjects.

The economics is mostly about the implications for the project of raising and using armies of the fact that soldiers don't want to be killed. My protagonist is a military leader from a semi-stateless society, faced with the problem of raising and supporting an army without taxes, a draft, or feudal obligations. One consequence is that he is very sparing with the lives of his troops, since if fighting for him turns out to be too dangerous he won't have many volunteers next time. Another is that he is reasonably sparing with the lives of his enemies, since if he forces them to surrender instead of killing them he can ransom them back to the Empire, the antagonist he is fighting, for the money he will need for his next campaign. A lot of the military strategy ends up being aimed at putting the opponent in a position where, if he doesn't surrender, or at least withdraw, his army will run out of food or water. One of the two people the book is dedicated to is the author of a fascinating book on the logistics of the army of Alexander the Great.

Salamander started out as an exploration, in a fantasy context, of the central planning fallacy, the idea that if only all of a society's resources were under someone's intelligent control, wonderful things could be done with them. The equivalent, in a society where magic exists but is weak, is a procedure that lets one wizard take control of the magical power of many others. The inventor is a brilliant but naive academic type who intends only good. Like his equivalents in the real world, he misses both the fact that those resources are already being used by their owners for their own ends and the risk that the power will be used for other than benevolent purposes. My other protagonist points out the first problem to him early on, and his colleague and collaborator forcibly demonstrates the second by seizing control of the process during the first full scale experiment with it. As the book developed, it turned out to have at least one other theme — in what sense the ends do or do not justify the means. Interested readers can find *Harald* online at http://www.webscription.net/p-196-harald.aspx and *Salamander* on my personal Web site.

RF: Which economists have influenced you the most?

Friedman: Other than my father, probably Alfred Marshall, perhaps David Ricardo. I got one idea that has been important to me from Thomas Schelling, another from Earl Thompson, and also some interesting ideas from Robert Frank. I am in some sense a follower of Gary Becker in economic imperialism, Buchanan and Tullock in public choice theory, Posner in economic analysis of law, but I'm reluctant to call that an influence, since it is more a matter of doing the same sorts of things that those people did first. **RF**

David Friedman

➤ Present Position

Professor of Law, Santa Clara University

➤ Previous Faculty Appointment

University of Chicago (faculty fellow), Tulane University, University of California at Los Angeles, and Virginia Polytechnic Institute and State University

➤ Education

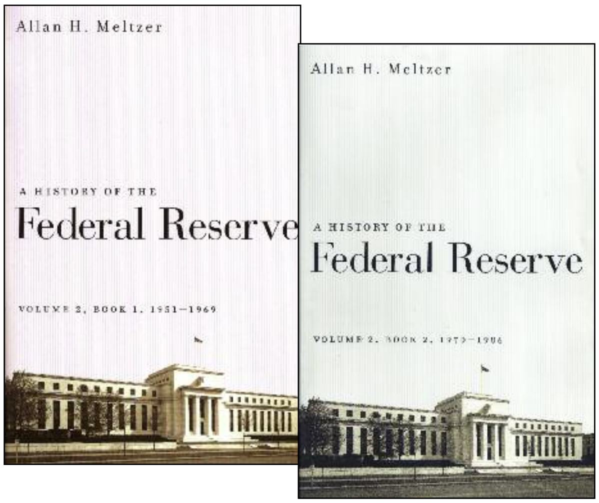
B.A., Harvard University (1965); M.S., University of Chicago (1967); Ph.D., University of Chicago (1971)

➤ Selected Publications

Future Imperfect: Technology and Freedom in an Uncertain World (2008); *Law's Order: What Economics Has to Do with Law and Why It Matters* (2000); *Hidden Order: The Economics of Everyday Life* (1996); *The Machinery of Freedom* (1973); author of numerous papers in such journals as the *American Economic Review*, *Journal of Political Economy*, *Journal of Law & Economics*, and *Journal of Legal Studies*

BookReview

The Birth of the Modern Fed



A HISTORY OF THE FEDERAL RESERVE: VOLUME 2, BOOK 1, 1951-1969
CHICAGO: UNIVERSITY OF CHICAGO PRESS, 2010, 682 PAGES

A HISTORY OF THE FEDERAL RESERVE: VOLUME 2, BOOK 2, 1970-1986
CHICAGO: UNIVERSITY OF CHICAGO PRESS, 2010, 628 PAGES

BY ALLAN H. MELTZER

REVIEWED BY STEPHEN SLIVINSKI

The first volume of Alan Meltzer's comprehensive two-volume history of the Federal Reserve, published in 2003, focuses on the years between 1913 and 1951 when the Fed was mainly a vehicle for the federal government to finance wartime federal debt. The Fed would buy Treasury bonds at the command of the government with little attention paid to the effects that this manipulation of the money supply would have on the economy. Part of that was due to a lack of knowledge or a coherent theoretical model to guide monetary policy. A large part, however, was due to the immense political pressure applied to the new institution. Such political pressure is something that the Fed has had to endure since the beginning, and how it deals with those pressures is a major theme in Meltzer's first book.

The second volume being reviewed has been published as two books. Book one begins in 1951, the year in which the Fed as we know it today began to take shape. The big turning point was the March 1951 accord with the Treasury Department that, as described by Meltzer, "changed the Fed's formal status from subservient to co-equal partner with the Treasury." Yet, as both books of Meltzer's second volume make plain, de jure independence isn't always an indicator of de facto independence.

The chairmanship of William McChesney Martin is the subject of most of book one. It's a period in which the Fed was seen as largely independent — dramatically so when compared to previous wartime years — and stands as the first test of the newly independent Fed's ability to maintain price stability. Between 1951 and 1965, inflation dropped from more than 8 percent to being constrained within a range of zero percent to 4 percent.

This accompanied a shift in Fed policy to the "bills-only" doctrine, which meant that the Fed would conduct open-market operations only through the purchase of short-term Treasury bills. This left the long-term Treasury rates to be set by market forces and was a departure from the years when the Fed was used as a tool to cheaply finance wartime spending.

Yet Meltzer also highlights a contrary and important element of Martin's tenure. Martin described his view of Fed independence as qualified. It assumed the Fed's independence within the government, not from the government. There were times when Martin was willing to coordinate policy with the executive branch.

In fact, Martin saw an important function for the Fed's open-market operations as a way to pursue an "even keel" policy wherein the Fed would stand ready to make sure that auctions of Treasury bills would not fall flat. This meant that the Fed would implicitly commit to buying enough T-bills to satisfy a specified interest rate target desired by the Treasury. Between 1951 and 1965, this didn't influence monetary policy very much. The federal government under President Dwight Eisenhower was balancing its books, obviating the need for the Treasury to issue debt that the Fed could buy. Meltzer argues, however, that Martin's willingness to collaborate with the executive branch — usually implicitly — opened the door to policy mistakes that precipitated the Great Inflation of the 1970s.

President Lyndon Johnson was never shy about applying pressure to Martin. To his credit, Martin was generally impervious to the attempts to directly influence Fed actions before 1966. Yet the monetary loosening began when his even keel approach dominated and the federal government began to run deficits to finance the Vietnam War and social spending through the Great Society transfer programs.

It wasn't obvious initially that this could lead to inflation. The lack of a coherent or accurate model to predict how monetary policy might influence the economy, Meltzer argues, is a reason why Martin, normally vigilant about inflation, allowed the Federal Open Market Committee (FOMC) to embark on an easy money policy. Fed policymakers "did not distinguish between real and nominal [interest] rates until much later." Higher nominal rates led Fed economists to overestimate the degree of restraint that FOMC actions were creating.

What was missing from the analysis, Meltzer points out, was an understanding that higher anticipated inflation would drive up nominal interest rates. Once monetary policymakers fell behind the curve by misinterpreting the signals that interest rates were sending, their control over inflation slowly began to ebb.

An additional strain came in the form of the Employment Act of 1946. The law set up a new dual mandate for the Fed: the pursuit of price stability and maximum employment. Over time, the political emphasis on keeping unemployment down would become a strong pressure on the Fed. And, as an empirical matter, Fed policymakers in the 1960s began to sense that they could lower the unemployment rate if they followed a looser monetary path. At the time it wasn't clear to many Fed economists that such a policy could become unsustainable. But, as Meltzer notes, the employment mandate would gradually become the main concern of the Fed in the next decade.

The period during which the Fed made the pursuit of full employment its main guiding principle occurred once Martin was replaced by Arthur Burns as Fed chairman in 1970. The Nixon administration was keen on reducing unemployment. (Indeed, Nixon believed a too-tight monetary policy under Martin destroyed his chances to win the presidential election against John F. Kennedy in 1960 although he was fresh off a second term as Eisenhower's vice president and was effectively running as an incumbent.)

Nixon and his advisers wanted a loose monetary policy to achieve higher short-term employment. Burns was quite willing to provide such support and did tremendous damage to the Fed's credibility as an independent institution. Meltzer flavors his chapters in this period with transcripts of White House meetings, recorded by Nixon's infamous Oval Office microphones, in which it is clear that Burns was actively seeking input from the president and his advisers.

Burns did believe the Fed could do little to stem the inflationary tide. His view was that a rising cost of labor, bolstered by rigid contracts written under pressure by powerful labor unions, was the main force driving prices higher. This "cost-push" explanation of inflation led Burns to support wage and price controls as a means to arrest price increases while the Fed tried to drive down unemployment with an expansionary monetary policy. As Meltzer points out, Burns was more than just a willing accomplice — he was a forceful advocate behind the scenes. Burns, Meltzer writes, had "little opposition" on the FOMC. Most of the members voted with the chairman out of deference or mainly because they believed that monetary policy did indeed need to be eased to further spur employment.

We know in retrospect these expansionary policies were misguided and contributed to high and persistent inflation. This was not without its critics at the time. Adherents to the monetarist school, led by economist Milton Friedman, were developing the models that implied the unemployment-inflation trade-off was unsustainable. Another set of scholars who began to have substantial influence in academic macroeconomics during this time were those from the "rational expectations" school. Both they and the monetarists came to the same general conclusion: As soon as the market built into its assumptions a new, higher price level, the employment boost would abate but the inflation would remain.

This point was understood and respected by Paul Volcker, the Fed chairman who is most responsible for not only restoring a hard-money approach to policy but also restoring the badly damaged reputation of the Fed as an independent institution. Appointed by President Jimmy Carter in 1979, Volcker immediately changed the way the Fed approached its task. The main shift was a stated focus on restraining the money supply, an approach that was endorsed heartily by the monetarists.

Both Carter and his successor, Ronald Reagan, tended to let Volcker pursue the policy. Meltzer suggests that part of the reason there wasn't a broader political backlash against the policy or the Fed was because there was a popular consensus by that point that inflation was a bigger evil than unemployment. Since then, inflation control has been seen as the primary role of the Fed. In fact, to underscore his belief that the intellectual battle over the importance of price stability had largely been won, Meltzer ends this second volume of his history in 1986, just as Alan Greenspan assumed the chairmanship of the Fed.

The second volume of Meltzer's history suffers from some of the difficulties of any history aimed at being truly comprehensive. It can be redundant at times and has a tendency to read a bit like an authoritative list of events and policy actions with details that would appeal only to a select set of readers. However, everyone can benefit by the introductory material in each chapter and the synthesis of the most important elements at the end of each chapter. Overall, it would require an uncharitable reading to deem the books anything other than a success, a monument to a lifelong study of monetary history.

Also, just because it ends in 1986 doesn't mean that Meltzer has nothing important to contribute to the current policy debate. "Perhaps the most enduring lessons for central bankers from the Great Inflation and subsequent disinflation was that the responsibility for stopping inflation fell on them," he writes. Indeed, his history serves as an important reminder that it took the Fed a long and painful time to learn that lesson. As such, Meltzer ends the book with a chapter outlining what he sees as some unsettling trends, foremost among them the potential that recent Fed actions have to undermine the institution's independence. It is even more important now, suggests Meltzer, to redouble efforts to reclaim Fed independence in the wake of current policies. The hard-won lessons of the past depicted in this book are an important reminder of why the Fed must remain steadfast in its independence of the political branches if it is to effectively pursue a policy of price stability. **RF**

Small business employment in the Fifth District and the impact of recessions

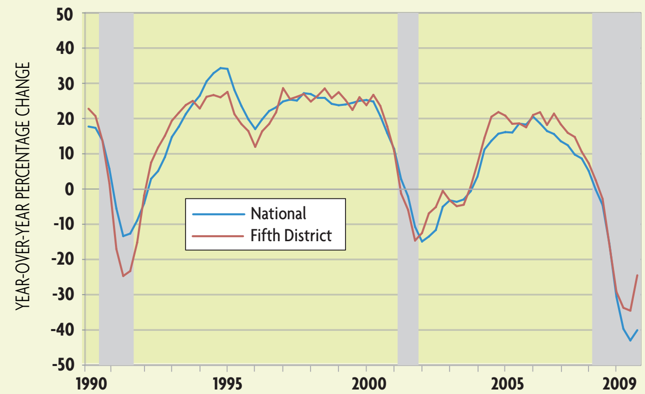
BY ROBERT H. SCHNORBUS

Small business firms are widely regarded as a key source of job growth and as largely recession-proof, but the current recession brought severe job losses even to relatively high-growth regions like the Fifth District. Of course, small businesses are constantly being created and destroyed both in and out of recessions, with job growth perhaps slowing during recessions, but rarely have small businesses as a category suffered net job losses.

The current recession, which continues to generate employment declines into 2010, is a notable exception to the historical pattern of uninterrupted small business job growth, with significant job losses occurring even in the high-growth services sector. While a clear picture of the severity of the recession in the Fifth District can be seen in the available data on government employment, data on the performance of small businesses at a regional level are limited.

Fortunately, survey data of small business firms from the National Federation of Independent Businesses (NFIB) provide interesting insights into the problems small businesses faced during past recessions and, to some degree, how the surviving firms adjusted to such difficult times. Combined with the government data, this survey allows a close look at the performance of small business firms in the Fifth District during three recessionary periods over the last 20 years.

Figure 1: Employment Growth by Quarter



NOTE: The shaded areas correspond to recessions.
SOURCE: Bureau of Labor Statistics

Defining a Small Business

Small businesses play a major role in job changes over any business cycle, but their exact definition often varies among studies. The Small Business Administration (SBA) defines a small business as any establishment with less than 500 workers. That casts a pretty large net across the labor market. By that definition, more than 99 percent of all establishments would be classified as a small business. It also means that more than 80 percent of all jobs in both the nation and the Fifth District are based in such establishments.

To match employment statistics by size of establishment as reported by the Bureau of Labor Statistics with survey-based data from the NFIB, three "size categories" can be defined for closer analysis. The first category, small business firms, is defined as establishments having less than 50 employees, which corresponds to more than 95 percent of all the firms in the NFIB survey. The second, medium business firms, is defined as establishments having 50 to 499 employees. The third, large business firms, is defined as establishments with 500 employees or more.

Under this classification system, about 95 percent of all establishments in the District and the nation still fall into the small business category. However, in terms of employment, small and medium firms each normally account for roughly 40 percent of total employment, with large firms accounting for the remaining 20 percent. Finally, it should be noted that the government data used in this study are based on individual establishments (or locations of each plant or store in an area) rather than actual firms (or complete business entities).

Many firms are composed of more than one establishment. For example, Lowe's is a single firm made up of many establishments (or store locations). However, the vast majority of small establishments are single-establishment firms with very few employees — the more common image of a "small business." Thus, the terms establishment and firm are used interchangeably here, although some discrepancies do exist.

While the District composition of small firms is in broad terms similar to the nation, differences in both employment shares and their changes among firm-size categories over time should be noted. For example, the total employment share of small businesses in both the District and the nation has been rising over time, from roughly 39 percent in 1990 to 45 percent in 2009. In addition, heading into the recent recession the Fifth District had a slightly higher concentration of small businesses (45.3 percent) than the nation (43.8 percent) and a slightly lower concentration of large businesses (14.7 percent) than the nation (16.9 percent) —

the result of small businesses growing faster and large businesses tending to decline faster in the Fifth District than in the nation on average.

Yet the share of small business employment in goods-producing industries (which include construction, manufacturing, mining, and other natural resources industries) in 1990 was lower in the Fifth District (27.1 percent) than in the nation (30.4 percent). In 2007, however, the Fifth District's share was virtually equal to the nation's (37.5 percent). In contrast, the Fifth District's share of small business employment in the services sector, which includes such industries as health, education, financial, and other professional services, has always been slightly higher than the nation.

The Sensitivity of District Small Business Firms to Past Recessions

To evaluate the severity of the current recession on small business firms, two recessions since 1990 — both comparatively mild by historical standards — are examined. The first recession began in the early 1990s (that is, from the third quarter of 1990 to the first quarter of 1991), when real GDP (in constant dollars) fell by 1.4 percent over the course of the recession. The second recession began in the early 2000s (that is, from the first quarter of 2001 to the fourth quarter of 2001), when GDP remained virtually flat.

In both recessions, employment declines in the Fifth District (from peak to trough on a seasonally adjusted basis) lasted slightly longer than in the nation as a whole, even though only employment in the first recession experienced a significantly deeper decline in the Fifth District (-2.5 percent) than in the nation (1.3 percent). Both experienced employment declines of about 2 percent during the second recession. Otherwise, Fifth District employment closely tracked the pattern of national employment growth on a year-over-year basis (see figure 1).

Since the available data on employment by size categories are limited to just the first quarter of every year since 1990, the two recessions described above can best be captured by measuring employment changes over the time periods from 1990 to 1992 and 2001 to 2003 (see table). While total employment declined during these recessionary periods, the pattern of job changes by firm size supports the claim that small firms were a key source of job growth even during recessions. For example, during both the 1990 to 1992 and 2001 to 2003 periods, small business employment increased, while both medium and large firms absorbed all the job losses, resulting in a net decline in total jobs. To be sure, some of these job losses, especially among large firms, represented structural changes as well as cyclical declines.

In contrast, the trends for small firms gained not only from new business startups but also from medium firms becoming small firms due to job losses and from displaced workers at large firms starting their own small businesses. Such factors may overstate the underlying strength of small businesses during recessions. However, since churning of jobs at the small business level occurs throughout the business cycle and is a normal part of the process of employment change, small business employment gains during recession go far beyond these two limiting factors. Thus, it seems safe to conclude that small businesses in aggregate were still the center of substantial job gains during these earlier recessions.

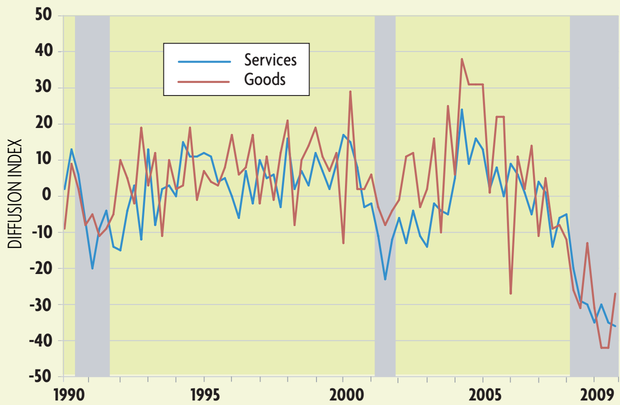
Perhaps not too surprisingly, the experience of small firms was not uniform across the goods and services sectors; indeed, all of the job gains that occurred during the recessionary periods were concentrated among service-producing firms. For example, small business employment in the Fifth District's goods-producing sector declined 8.6 percent in the 1990-1992 period, which was almost as much as the total decline in employment over the period and substantially larger than the decline of small business employment for that sector nationally. Indeed, it was the decline in goods-producing small businesses that accounted for the fact that total employment in the Fifth District declined substantially more than the nation. In the 2001 to 2003 recessionary period small business employment in the Fifth District's goods-producing sector declined by only 1.7 percent, far less than in the previous recession and much more in line with the national experience.

Employment Growth by Establishment Size During Recessionary Periods

	United States				Fifth District			
	Under 50 Employees	50-499 Employees	Over 500 Employees	Total Employees	Under 50 Employees	50-499 Employees	Over 500 Employees	Total Employees
Total Nonfarm								
1990-92	6.0%	-3.5%	-14.6%	-2.3%	5.5%	-6.0%	-13.7%	-3.2%
2001-03	1.3%	-4.6%	-9.1%	-3.0%	2.3%	-4.4%	-11.0%	-2.7%
2008-09	-2.5%	-6.3%	-5.7%	-4.5%	-2.7%	-6.6%	-4.0%	4.4%
Goods Producing								
1990-92	-5.4%	-7.7%	-11.5%	-8.1%	-8.6%	-7.5%	-11.0%	-8.9%
2001-03	-2.2%	-10.8%	-17.8%	-9.6%	-1.7%	-10.1%	-21.7%	-10.5%
2008-09	-7.6%	-12.1%	-11.6%	-10.4%	-9.8%	-12.4%	-10.3%	-11.0%
Services								
1990-92	9.1%	-1.7%	-16.1%	-0.2%	9.3%	-5.3%	-15.1%	-0.5%
2001-03	2.1%	-2.5%	-5.7%	-1.0%	3.2%	-2.6%	-5.9%	-0.3%
2008-09	-1.5%	-4.6%	-3.9%	-3.1%	-1.3%	-5.4%	-1.9%	-3.0%
Education/Health Services								
1990-92	15.4%	6.4%	4.1%	8.2%	17.0%	8.2%	10.6%	11.8%
2001-03	6.8%	6.5%	7.1%	6.8%	6.5%	8.9%	7.5%	7.7%
2008-09	1.5%	2.8%	2.7%	2.3%	2.8%	2.6%	2.1%	2.5%
Leisure/Hospital Services								
1990-92	17.2%	-11.1%	-31.2%	-0.4%	6.2%	-10.6%	—	0.1%
2001-03	5.3%	0.5%	-13.5%	1.6%	4.1%	-0.1%	—	2.7%
2008-09	-0.6%	-4.7%	-9.9%	-2.8%	-1.0%	-5.0%	—	-2.4%
Professional/Business Services								
1990-92	8.3%	4.3%	-9.2%	2.9%	9.0%	3.4%	-11.7%	2.4%
2001-03	2.7%	-7.2%	-13.7%	-5.0%	5.0%	-5.8%	-15.1%	-3.3%
2008-09	-0.5%	-8.3%	-10.2%	-5.5%	-0.1%	-7.8%	-4.3%	-4.1%

NOTE: Growth rates are based on first-quarter employment levels of each year indicated.
SOURCE: Business Employment Dynamics, Bureau of Labor Statistics

Figure 2: Small Business Sales
(Last Three Months vs. Prior Three Months)



NOTE: The shaded areas correspond to recessions.
SOURCES: National Federation of Independent Business; Richmond Fed

In sharp contrast, small services businesses in the Fifth District had an unbroken chain of job gains through both recessionary periods. It should be noted that both medium and large services firms in the District suffered significant job losses — though far less severe than their counterparts among goods-producing firms nationally. The impact of the economic shift to an increasingly service-based economy in the Fifth District is clearly reflected in the strong employment growth during both recessions among some of that sector's major growth centers, such as education/health, leisure/hospitality, and professional/other business services industries. Indeed, employment tended to increase in all three size categories during these recessions, indicating the breadth of the job growth strength that these firms have experienced. That is, until the current recession.

Small Business Experience During the Current Recession

In comparison to the two earlier recessions, employment declines in the current recession have been deeper and more pervasive both nationally and in the Fifth District. Indeed, not only did GDP in this recession decline more than twice as much as the earlier recessions, but job declines to date also have been far steeper than in the past (and that assumes that no further job losses occurred after the fourth quarter of 2009).

For example, from the first quarter of 2008 to the first quarter of 2009, total employment in the District declined by at least a third more than either the 1990 to 1992 or 2001 to 2003 recessionary periods, and that decline occurred in only half the time (four quarters). While medium and large firms still accounted for the bulk of the job losses, small firms in this recession lost more jobs than they created for the first time during a recessionary period (and probably for the first time in many decades). Employment declines were registered nearly everywhere in the Fifth District — only the District of Columbia registered a modest increase.

Perhaps what really distinguishes the current recession is the fact that service-producing firms in the Fifth District lost jobs even among small firms (with only Virginia and Maryland managing modest gains, most likely due to the influence of employment growth sustained by gains in the District of Columbia). The employment decline among small firms was relatively small, with medium firms accounting for the largest decline in jobs. However, even among some of the strongest services industries, such as professional services and leisure/hospitality industries, small firms in the Fifth District experienced net job losses for the first time ever. Only small firms in the education/health services industries were able to buck the trend and continued to add jobs in this downturn.

QUICK FACT

The "diffusion index" measures the difference between the percentage of firms reporting increases in production or planned hiring and the percentage of firms reporting decreases.

Viewing Recessions from a Small Business Perspective

A recession takes its toll on small businesses in many ways. As sales fall, survival is often a scramble to cut costs and gain access to needed credit to keep the business running until the recovery starts. The deeper the recession and the longer the delay in recovery, the fewer small businesses can be expected to survive.

A quarterly survey of more than 2,000 of NFIB's members nationally and more than 100 in the Fifth District provides an opportunity to gain insight into how small businesses viewed business conditions during past recessions and what actions they took to keep their businesses running. The questions are subjective in nature. Respondents were asked whether a particular variable, such as sales or employment, increased or decreased over the previous quarter and whether they expected increases or decreases over the next three to six months. The result is a "diffusion index" that measures the difference between the percentage of firms reporting increases in production or planned hiring and the percentage of firms reporting decreases in those variables. This allows comparison of small business behavior in the previous recessions and the current one (see figures 2 and 3).

From the perspective of small businesses in the Fifth District, the recessions in the early 1990s and 2000s were fairly similar in both depth and duration, which is consistent with both recessions being relatively mild in terms of GDP declines. For example, in both recessionary periods the index measuring the net percent of firms experiencing sales declines over the past three months expanded, with the percent of firms reporting declines exceeding the percent of firms reporting increases by 15 to 20 percentage points. The index did not return to positive territory — indicating more small businesses had expanding rather than contracting sales, a net expansion — until long after these recessions officially ended.

Other measures are not included in these figures. Credit problems for small businesses, for instance, only seemed to become a serious problem during the 1990 to 1992 recessionary period. Also, small business optimism dropped sharply as both recessions were approaching and then slowly recovered over the subsequent two years. Yet, consistent with the employment declines discussed above, the number of small businesses that planned to decrease their employment never exceeded the number planning to increase employment during either of these two recessions. (Only during the recessions in the mid-1970s and early 1980s did decreases ever exceed increases and then rarely for more than two quarters consecutively.)

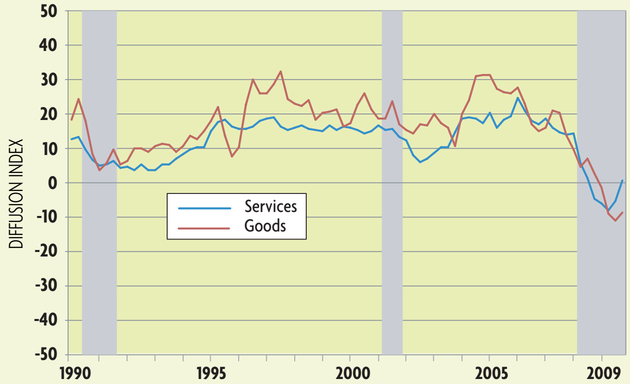
In both earlier recessions, small businesses took several years before they were back to planning net job increases at a pace comparable to the normal expansionary phase of the business cycle. In both recessions, however, the upward path toward recovery was clearly evident in the percent of firms that were planning to increase their hiring.

In sharp contrast to these two earlier recessions, the experience of small businesses in the Fifth District during the current recession, as reflected in survey responses, was by far the worst in the survey's history. For example, the index for change in sales declined by nearly twice as much as the two earlier recessions. Moreover, that decline continued for at least 10 quarters (until the end of 2009, the most currently available survey numbers, and quite likely continued to decline into 2010).

Indeed, the sales index suffered its worst decline on record by a significant margin, along as did such other measures as earnings, capital outlays, compensation, inventories, and prices — all reaching record lows. While credit problems never seemed to get as bad as during the "credit crunch" in the early 1980s, the index measuring the degree of problems obtaining credit followed a pattern similar to the early 1990s recession — starting well before the official recession began and by the end of 2009 falling farther than during that earlier recession. Not surprisingly, given the severity of general business conditions, small business optimism declined further than during any previous recession on record and, despite three quarters of recovery in 2009, was still little better than during the low point reached in the early 1980s.

The response to the deterioration in general business conditions was for the percent of small businesses planning to reduce hiring to exceed the percent planning to increase hiring for the first time since the early 1980s. Indeed, small

Figure 3: Job Hiring Plans by Quarter



NOTE: The shaded areas correspond to recessions.
SOURCES: National Federation of Independent Business; Richmond Fed

business in the Fifth District registered a net cut in planned job hiring in five of the last seven quarters for which data are available-the worst seven-quarter experience in the survey's history.

Small Business Expectations for 2010

By any measure, the current recession has been one for the record books — at least for small businesses. And interestingly, despite widespread concerns about credit availability as the recession took on the characteristics of a global financial crisis, small businesses rated weak sales, not credit availability, as their most important problem by a wide margin. While credit availability may be tight, until sales begin to improve the need for small businesses to borrow may be limited. Yet, as the most recent quarter (fourth quarter of 2009) of hiring plans suggests, small businesses in the Fifth District seem to be gearing up to start hiring again.

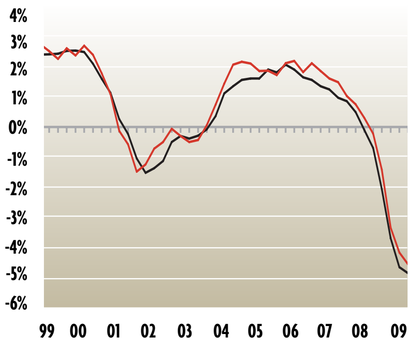
Their expectations for the recovery in 2010 seem to be guarded, however. The index for expected sales (adjusted for inflation) barely turned positive at the end of 2009. So, while more and more small businesses are beginning to expect sales to increase, the number of firms that are still expecting decreases has continued to be substantial. Similarly, while small business optimism began to improve at the end of 2008, the level of optimism at the end of 2009 remained far below the lowest levels achieved in either the early 1990s or 2000s, suggesting that small businesses remain overwhelmingly pessimistic. Still, the fact that many indexes in the survey, including sales and business conditions, have turned positive is encouraging. Indeed, the most encouraging sign may be that the index of hiring plans turned slightly positive in the closing months of 2009, although again mostly in services industries. **RF**

State Data, Q3:09

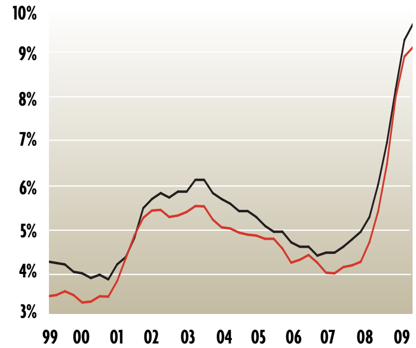
	DC	MD	NC	SC	VA	WV
Nonfarm Employment (000s)	**703.8**	**2,509.6**	**3,879.1**	**1,809.5**	**3,617.8**	**740.1**
Q/Q Percent Change	0.2	-0.8	-1.0	-0.6	-0.8	-1.0
Y/Y Percent Change	-0.8	-3.4	-6.2	- 5.9	-3.9	-3.0
Manufacturing Employment (000s)	**1.4**	**116.5**	**437.7**	**209.2**	**235.1**	**49.3**
Q/Q Percent Change	0.0	-2.0	-3.0	-2.4	-2.1	-3.4
Y/Y Percent Change	-10.6	-8.8	-14.8	-13.5	-10.8	-12.2
Professional/Business Services Employment (000s)	**146.8**	**381.8**	**455.8**	**200.4**	**634.2**	**59.0**
Q/Q Percent Change	-0.5	-0.6	-1.1	0.9	-0.5	-0.8
Y/Y Percent Change	-3.6	-4.0	-9.1	-9.2	-3.8	-3.3
Government Employment (000s)	**246.5**	**493.2**	**711.1**	**349.8**	**695.1**	**150.3**
Q/Q Percent Change	2.8	-0.2	-0.3	0.5	-1.0	-0.8
Y/Y Percent Change	4.2	0.8	0.4	1.2	-0.1	1.8
Civilian Labor Force (000s)	**331.5**	**2,979.3**	**4,526.3**	**2,178.4**	**4,171.0**	**797.4**
Q/Q Percent Change	0.1	-0.7	-0.6	-0.3	-0.5	-0.8
Y/Y Percent Change	-1.1	-1.6	-1.1	1.4	0.9	-1.1
Unemployment Rate (%)	**10.8**	**7.2**	**10.9**	**12.1**	**6.9**	**8.6**
Q2:09	9.7	7.0	10.9	11.7	6.8	7.8
Q3:08	6.9	4.6	6.5	7.2	4.0	4.3
Real Personal Income ($Mil)	**36,206.7**	**251,608.1**	**294,457.1**	**132,167.8**	**315,911.8**	**53,399.7**
Q/Q Percent Change	-0.7	-0.5	-1.0	-0.9	-0.7	-1.4
Y/Y Percent Change	1.9	1.5	-0.7	-0.8	0.9	1.9
Building Permits	**163**	**2,412**	**9,360**	**4,365**	**5,406**	**735**
Q/Q Percent Change	365.7	-5.6	-5.7	6.7	-6.6	73.3
Y/Y Percent Change	7.2	-36.8	-35.8	-34.9	-14.3	-15.8
House Price Index (1980=100)	**564.2**	**450.2**	**332.1**	**336.3**	**424.1**	**226.8**
Q/Q Percent Change	-0.4	-2.2	-1.6	-2.5	-1.8	-1.6
Y/Y Percent Change	-3.8	-7.3	-2.0	-2.1	-3.9	-1.3
Sales of Existing Housing Units (000s)	**9.2**	**75.2**	**146.8**	**74.0**	**126.4**	**29.2**
Q/Q Percent Change	21.1	12.6	18.4	10.1	14.5	19.7
Y/Y Percent Change	27.8	15.3	-4.4	-7.5	2.9	14.1

NOTES:
Nonfarm Payroll Employment, thousands of jobs, seasonally adjusted (SA) except in MSAs; Bureau of Labor Statistics (BLS)/Haver Analytics, Manufacturing Employment, thousands of jobs, SA in all but DC and SC; BLS/Haver Analytics, Professional/Business Services Employment, thousands of jobs, SA in all but SC; BLS/Haver Analytics, Government Employment, thousands of jobs, SA; BLS/Haver Analytics, Civilian Labor Force, thousands of persons, SA; BLS/Haver Analytics, Unemployment Rate, percent, SA except in MSA's; BLS/Haver Analytics, Building Permits, number of permits, NSA; U.S. Census Bureau/Haver Analytics, Sales of Existing Housing Units, thousands of units, SA; National Association of Realtors®

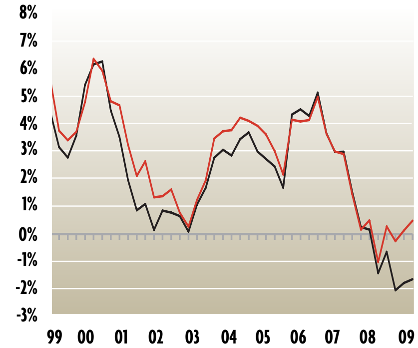
Nonfarm Employment
Change From Prior Year
First Quarter 1999 - Third Quarter 2009



Unemployment Rate
First Quarter 1999 - Third Quarter 2009

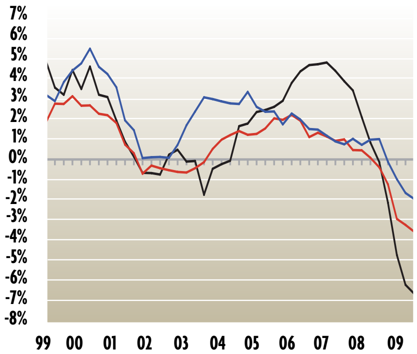


Real Personal Income
Change From Prior Year
First Quarter 1999 - Third Quarter 2009



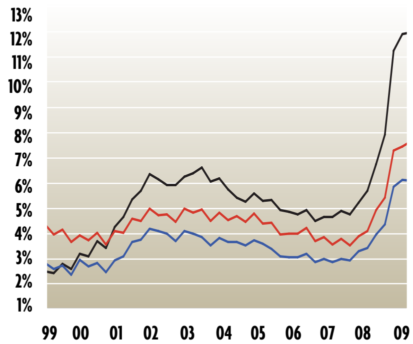
Fifth District **United States**

Nonfarm Employment Metropolitan Areas
Change From Prior Year
First Quarter 1999 - Third Quarter 2009



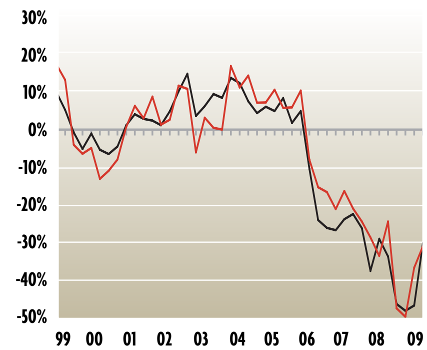
Charlotte Baltimore Washington

Unemployment Rate Metropolitan Areas
Change From Prior Year
First Quarter 1999 - Third Quarter 2009



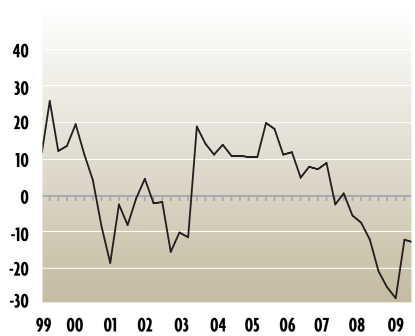
Charlotte Baltimore Washington

Building Permits
Change From Prior Year
First Quarter 1999 - Third Quarter 2009

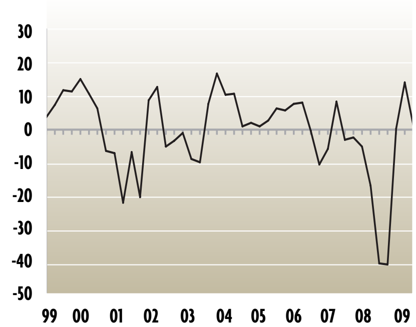


Fifth District United States

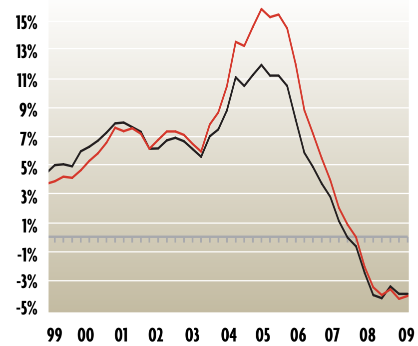
FRB—Richmond Services Revenues Index
First Quarter 1999 - Third Quarter 2009



FRB—Richmond Manufacturing Composite Index
First Quarter 1999 - Third Quarter 2009



House Prices
Change From Prior Year
First Quarter 1999 - Third Quarter 2009



Fifth District United States

NOTES:
1) FRB-Richmond survey indexes are diffusion indexes representing the percentage of responding firms reporting increase minus the percentage reporting decrease.
The manufacturing composite index is a weighted average of the shipments, new orders, and employment indexes.
2) Building permits and house prices are not seasonally adjusted; all other series are seasonally adjusted.

SOURCES:
Real Personal Income: Bureau of Economic Analysis/Haver Analytics.
Unemployment rate: LAUS Program, Bureau of Labor Statistics, U.S. Department of Labor, http://stats.bls.gov.
Employment: CES Survey, Bureau of Labor Statistics, U.S. Department of Labor, http://stats.bls.gov.
Building permits: U.S. Census Bureau, http://www.census.gov.
House prices: Federal Housing Finance Agency, http://www.fhfa.gov.

Metropolitan Area Data, Q3:09

	Washington, DC	Baltimore, MD	Hagerstown-Martinsburg, MD-WV
Nonfarm Employment (000s)	**2,391.8**	**1,268.6**	**97.3**
Q/Q Percent Change	-0.4	-1.0	-0.6
Y/Y Percent Change	-2.0	-3.6	-3.6
Unemployment Rate (%)	**6.1**	**7.7**	**9.3**
Q2:09	6.1	7.5	9.7
Q3:08	4.0	4.9	5.2
Building Permits	**2,802**	**1,102**	**208**
Q/Q Percent Change	-2.1	4.6	18.9
Y/Y Percent Change	-19.0	-32.0	-26.0

	Asheville, NC	Charlotte, NC	Durham, NC
Nonfarm Employment (000s)	**165.5**	**798.9**	**280.6**
Q/Q Percent Change	-1.2	-1.7	-1.8
Y/Y Percent Change	-6.0	-6.7	-3.5
Unemployment Rate (%)	**8.7**	**12.0**	**8.0**
Q2:09	9.2	11.9	7.9
Q3:08	5.2	6.8	5.2
Building Permits	**304**	**1,994**	**398**
Q/Q Percent Change	-6.2	-4.5	-34.3
Y/Y Percent Change	-37.1	-24.5	-26.6

	Greensboro-High Point, NC	Raleigh, NC	Wilmington, NC
Nonfarm Employment (000s)	**339.2**	**495.8**	**138.4**
Q/Q Percent Change	-1.5	-1.1	-2.1
Y/Y Percent Change	-7.1	-5.0	-5.9
Unemployment Rate (%)	**11.5**	**8.8**	**9.8**
Q2:09	11.6	8.8	9.9
Q3:08	6.9	5.2	5.9
Building Permits	**550**	**1,332**	**584**
Q/Q Percent Change	-17.8	-14.1	-25.5
Y/Y Percent Change	-19.0	-66.8	-39.6

	Winston-Salem, NC	Charleston, SC	Columbia, SC
Nonfarm Employment (000's)	**206.7**	**282.8**	**344.3**
Q/Q Percent Change	-1.0	-1.5	-0.9
Y/Y Percent Change	-4.9	-5.2	-5.1
Unemployment Rate (%)	**10.0**	**9.7**	**9.3**
Q2:09	10.2	9.4	9.1
Q3:08	6.3	6.2	6.5
Building Permits	**329**	**887**	**811**
Q/Q Percent Change	-22.0	-3.1	-5.9
Y/Y Percent Change	-6.8	-18.6	-41.0

	Greenville, SC	Richmond, VA	Roanoke, VA
Nonfarm Employment (000's)	**292.0**	**598.1**	**153.4**
Q/Q Percent Change	-1.4	-2.0	-1.9
Y/Y Percent Change	-7.3	-4.9	-5.3
Unemployment Rate (%)	**10.4**	**7.8**	**7.4**
Q2:09	10.2	7.9	7.5
Q3:08	6.4	4.5	4.1
Building Permits	**397**	**974**	**117**
Q/Q Percent Change	4.5	20.0	11.4
Y/Y Percent Change	-33.4	-13.7	-17.0

	Virginia Beach-Norfolk, VA	Charleston, WV	Huntington, WV
Nonfarm Employment (000s)	**739.8**	**147.7**	**114.8**
Q/Q Percent Change	-1.0	-1.2	-1.5
Y/Y Percent Change	-4.3	-3.5	-3.3
Unemployment Rate (%)	**6.8**	**7.4**	**8.3**
Q2:09	7.0	7.4	8.1
Q3:08	4.4	3.3	5.0
Building Permits	**1,188**	**47**	**7**
Q/Q Percent Change	-14.3	23.7	-22.2
Y/Y Percent Change	-8.7	-68.9	-12.5

For more information, contact Sonya Ravindranath Waddell at (804) 697-2694 or e-mail Sonya.Waddell@rich.frb.org

Opinion

Deregulation Should Not Be Blamed for the Financial Crisis

BY JOHN A. WEINBERG

The financial crisis, quite understandably, has motivated a broad re-examination of our approach to financial regulation. Ideas for regulatory improvements have come from academics, the financial industry, and Congress. Many commentators have argued that regulatory shortcomings leading up to the crisis were the direct result of deregulation implemented over the preceding decades. One particular step in this process of deregulation was the repeal of the Glass-Steagall Act.

Glass-Steagall became law in June 1933 as part of the legislative response to the Great Depression. This law required that the investment banking activities of underwriting and dealing in securities could not be conducted in the same companies as the commercial banking activities of taking deposits and making loans. The motivation for this law was a widespread perception that the combination of those activities had led to conflicts of interest which resulted, for instance, in questionable securities being sold to investors so that banks' borrowers could continue to service their bank loans. While this separation became weaker over time, many point to the Financial Services Modernization Act of 1999, better known as the Gramm-Leach-Bliley Act, as the action that "repealed" Glass-Steagall.

The crisis of 2007 and 2008 also involved the interaction of securities and banking, although in a somewhat different form. Securities created by pooling loans, particularly mortgage-backed securities, were at the heart of the crisis. This process of securitization includes activities that resemble both traditional commercial banking (making loans) and traditional investment banking (underwriting and dealing in securities). While many of the riskiest mortgages in the securitization market were originated by lenders outside the commercial banking system, the largest commercial banks still suffered significant losses on subprime loans. These banks suffered losses because they had provided implicit or explicit commitments of liquidity support to off-balance sheet entities involved in subprime loan securitization.

In retrospect, it has become apparent that this process led to an overexpansion of risks related to mortgages and other lending. Would this expansion have been possible before the weakening of the separation between investment and commercial banking? At the time Gramm-Leach-Bliley was passed, many of the securities activities that were tied most closely to the current financial crisis were already permissible for banks and bank-affiliated companies. So, in this sense, the legislation did not significantly alter the powers the banks had. Of course, one might respond that before Gramm-Leach-Bliley the separation created by Glass-Steagall had already been weakened considerably. This weakening had occurred due to regulators' rulemakings and court decisions. As a result, during the 1980s and 1990s commercial banks were offering many investment banking services and investment banks were offering many commercial banking services. But even so, it was not so much the mixing of activities that led to the problems in the expansion and management of risk. Rather, it was the ways in which some large financial firms, whether in commercial or investment banking, approached their exposures to an event that, at the time, looked relatively unlikely.

The securitization of assets like mortgages brings with it some benefits of risk diversification by bundling the credit made to a large number of borrowers. The risk that remains is aggregate, undiversifiable risk, like that associated with a change in interest rates or a broad decline in the value of real estate. The latter, in fact, turned out to be the risk that imperiled our financial system.

Markets are usually able to allocate large aggregate risks to those firms best equipped to hold those exposures. One factor that might give an individual firm a comparative advantage at holding such risks is access to a reliable source of emergency liquidity. The financial safety net that includes deposit insurance and access to Fed lending did this by offering implicit and explicit commitments of liquidity to issuers of mortgage-backed financial instruments. When the markets for those instruments turned sour, the risks came back onto the books of the banks. Investment banks, especially large firms which may have benefited from a presumption that they would receive official support in a crisis, may have similarly been advantaged when holding exposures to seemingly unlikely bad events, such as a decline in home prices.

This dynamic of aggregate risks being concentrated in the hands of large institutions is independent of which firms are allowed to engage in which activities. It comes instead from the way in which emergency financial support is provided by the public sector. The existence of such support creates the need for regulatory oversight and, in particular, for regulatory attention to aggregate risks that tend to be concentrated in large institutions, the failure of which can produce financial panic.

The regulatory agencies are undertaking efforts to improve this aspect of oversight, and some components of reform proposals are aimed at aggregate or systemic risks. This is an important direction for improvements to take. Yet, improvements to the way we constrain the financial safety net are needed too. These changes would make a greater contribution to financial stability than rebuilding the Glass-Steagall wall. **RF**

John A. Weinberg is senior vice president and director of research at the Federal Reserve Bank of Richmond.

NEXT ISSUE

Does the Deficit Matter?

There are many reasons why policymakers are concerned about the national debt. Economists, however, have differing opinions over how important deficit spending is to macroeconomic outcomes.

Product Recalls

When a defective product is recalled, whether through government order or voluntary action, there is often reputational damage to the manufacturer. We'll explore the economics of recalls and ponder whether market incentives are generally robust enough to encourage companies to police themselves.

Charitable Giving

Business trends sometimes have little effect on how much money people give to charity. In some cases, the type of charity matters just as much as the level of discretionary income available, as the recent downturn demonstrates.

Broadband's Last Mile

Fast Internet access has become as ubiquitous as telephone service in most parts of the country. For those regions where access isn't as prevalent, however, it's an open question about how to best serve those potential customers.

Interview

Justin Wolfers of the Brookings Institution and the University of Pennsylvania discusses how prediction markets may be able to help businesses and policymakers produce more accurate forecasts.

Federal Reserve

For much of its history, the United States operated on a gold standard. What did this mean for the economy and why was that system abandoned?

Economic History

The Commerce Clause of the U.S. Constitution has been used to justify numerous economic regulations over the last century. We'll tell the story of this often controversial provision and why some legal scholars and economists argue that a reinterpretation is due.

Jargon Alert

How can you tell when a sluggish economy is about to turn the corner? Look to the "leading indicators."

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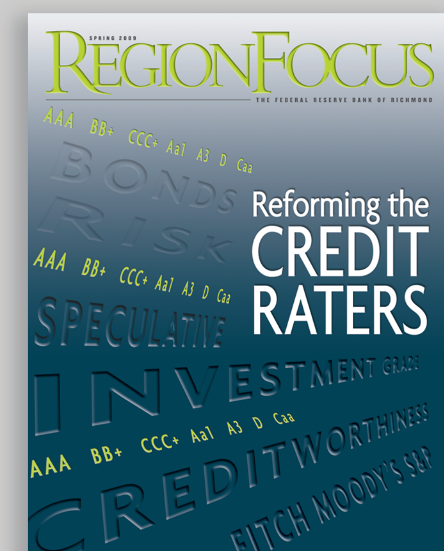
Last Stop Lending

Interview
George Selgin
University of Georgia



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Capital Cushions

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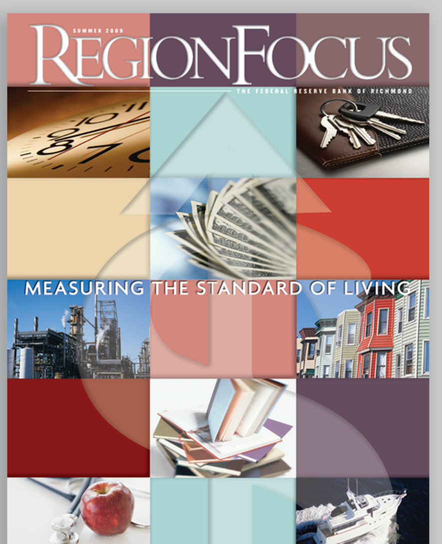
Allan Meltzer
Carnegie Mellon University



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Cover Story
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Interview
Timur Kuran
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Fall 2009
vol. 13, no. 4

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Interview
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