FALL 2005

REGION FOCUS

THE FEDERAL RESERVE BANK OF RICHMOND

OFF TO A SMART START

The Economics of Early Childhood Development

- Making Sense of Eminent Domain
- Entrepreneurs: Born or Taught
- Civil War Monetary Policy
- Interview with Robert Moffitt

PHOTOGRAPHY: GETTY IMAGES

REGIONFOCUS

VOLUME 9
NUMBER 4
FALL 2005

Our mission is to provide authoritative information and analysis about the Fifth Federal Reserve District economy and the Federal Reserve System. The Fifth District consists of the District of Columbia, Maryland, North Carolina, South Carolina, Virginia, and most of West Virginia. The material appearing in *Region Focus* is collected and developed by the Research Department of the Federal Reserve Bank of Richmond.

COVER STORY

FEATURES

DEPARTMENTS

Published quarterly by
the Federal Reserve Bank
of Richmond
P.O. Box 27622
Richmond, VA 23261
www.richmondfed.org

Subscriptions and additional copies: Available free of charge by calling the Public Affairs Division at (804) 697-8109.

ISSN 1093-1767

The Promise and Peril of Government Intervention

Government policy interacts with private market activity in a wide variety of ways. The Federal Reserve, for instance, interacts with the banking system in both the execution of monetary policy and, more directly, as a regulator and supervisor of banking organizations. These interactions help the Fed pursue its macroeconomic goal, price stability, and to ensure the safety and soundness of banks, a key ingredient in overall financial stability. This, of course, is just one small element in the array of public policies adopted in a large economy like ours.

At all levels of government — federal, state, and local — policies and actions are undertaken to influence the level, location, and composition of economic activity. Many of these aim to encourage more of an activity that the government or its constituents find desirable — or less of something deemed undesirable. In *Region Focus*, we have tried to write about such government initiatives in an objective way, providing arguments both pro and con. Sometimes when we do this, it becomes apparent that one side's case is stronger than the other's, but we try to save explicit statements of opinion for our back-page Opinion piece, or for this page, where I get to share my views with our readers.

This issue contains three notable examples of government promotion of activities, through three different mechanisms. Our story on eminent domain highlights its use by local governments to attract businesses to their jurisdictions in hopes of expanding employment and tax bases. We've written before about the controversy surrounding the use of incentives by states and localities to influence business location decisions. One lesson that emerges regarding such mechanisms is that, with a fair tally of the costs and benefits, they often are less attractive than at first blush.

Our cover story, on North Carolina's Smart Start program for early childhood education, deals with a topic that is gaining a lot of attention in the economic development community. This attention grows out of two findings from economic research. The first is the vital importance of a skilled work force for the continuing vitality of a region's economy. The second is that for long-term returns in building a skilled work force, early childhood education may provide more bang for the buck than many other forms of education and training. In particular, improvement in the early childhood services to low-income families can be a strong complement to existing educational infrastructures at the elementary, secondary, and higher education levels. The evolution of early childhood policy is something we will watch with great interest.

Finally, we have a story that examines the issues surrounding Fannie Mae and Freddie Mac, two so-called "government-sponsored enterprises" (GSEs) in the mortgage market. These companies are part of a web of federal government policies aimed at promoting homeownership, from the home-mortgage tax deduction to the backing of mortgages for lower-income households by the Federal Housing Administration. But the GSEs are a peculiar part of this mix. They were originally formed as government agencies for the purpose of creating a secondary market for mortgages. A secondary market was seen as a way of lowering the cost of capital to mortgage providers and thereby lowering the cost of borrowing for home buyers. Once the secondary market existed, however, it proved difficult for the government to simply get out of the business. Instead, Fannie Mae and Freddie Mac were converted into private companies with an array of special privileges which clouded the public/private distinction and brought us to the current state of affairs, as described in our article.

The GSEs' size, financial complexity, and central place in mortgage markets, all of which result from their special history and special status, can make it hard to clearly assess the situation. But I think our article makes clear that the issue comes down to a simple trade-off. Their status gives the GSEs an implicit subsidy, some of which gets passed on to home buyers in the form of lower mortgage rates, thereby giving some inducement to homeownership. Against this benefit, the magnitude of which has been challenged by a number of studies, is the fact that their status also allows these companies to accumulate large concentrations of risk in a way that has proven difficult to monitor. There are legitimate questions about the desirability of continuing to subsidize housing finance in this day and age, and besides, there are other more effective tools for subsidizing homeownership if that is the objective. But if the GSEs' special status and implicit subsidy are not to be removed, then the public's ability to monitor and control their risk-taking must be improved.

JEFFREY M. LACKER
PRESIDENT
FEDERAL RESERVE BANK OF RICHMOND

FEDERAL RESERVE

After Greenspan

BY ANDREW FOERSTER

Choosing the Next Chairman of the Federal Reserve

EDITOR'S NOTE: *As this issue went to press, President Bush nominated Ben Bernanke, chairman of the Council of Economic Advisers, to succeed Alan Greenspan. Confirmation hearings are pending.*

When Alan Greenspan's term ends on Jan. 31, 2006, he will have served as Chairman of the Board of Governors of the Federal Reserve System for 18 years and five months. That is the second-longest tenure in the Fed's history, just four months shorter than the one served by William McChesney Martin from 1951 to 1970.

Greenspan has earned a reputation as a deft handler of monetary policy. His era coincided with several significant economic shocks, including the stock market crash in 1987, the terrorist attacks on Sept. 11, 2001, recessions in the early 1990s and the early 2000s, and booms in the stock market and now the housing market. His success in navigating those and other pitfalls has helped him gain popularity outside of the usual realm of Fed watchers. All types of media monitor his Congressional testimony and various speeches, the likes of which produced now-famous phrases like "irrational exuberance."

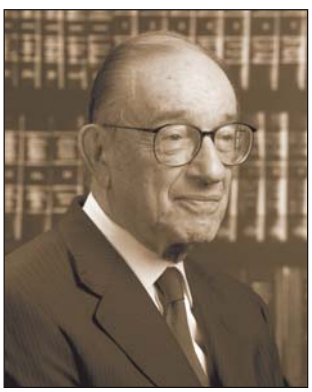
Whoever his successor turns out to be will have a difficult act to follow. Markets are now accustomed to the policies that the Greenspan Fed has pursued. There is general confidence that the Fed will keep the economy in good order. At the same time, it is difficult to articulate precisely why the Greenspan Fed has succeeded. The decisionmaking process during the Greenspan era has become more transparent over time, but there is still some uncertainty about how the Fed will build on its recent success. Will Greenspan's successor move more in the direction of rules-based decisionmaking, such as adopting an inflation target, or maintain the more discretionary approach of recent years?

The process for choosing a new chair is itself both discretionary and rules-bound. It involves input from the executive and legislative branches of government, similar to the appointment procedure for many other government posts. The Federal Reserve Act (FRA) of 1913, which established the Federal Reserve System, dictates who is eligible for positions on the Board of Governors, their term limits, and the rules for appointing the chair of the Federal Reserve. Ultimately, however, the new Chairman can be virtually anybody. The nominee's background, qualifications, and economic outlook are largely the choice of the appointing President.

Appointing a Governor

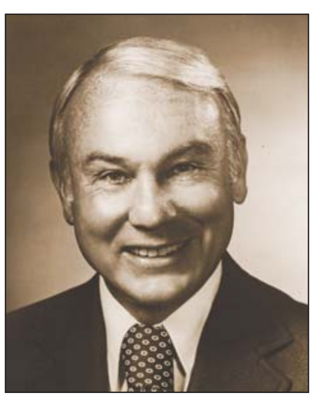
The FRA declares, "The Board of Governors of the Federal Reserve System … shall be composed of seven

Alan Greenspan
August 1987 – January 2006



Paul A. Volcker
August 1979 – August 1987

G. William Miller
March 1978 – August 1979



Arthur F. Burns
February 1970 – January 1978

William McChesney Martin, Jr.
April 1951 – January 1970

PHOTOGRAPHY: BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM/BRITT LECKMAN members, to be appointed by the President, by and with the advice and consent of the Senate." In this manner, governorships are similar to many other governmental positions that require the Senate to confirm a presidential appointment.

Usually, because Governors serve until the end of their term or give advance notice of their resignation, the President is able to give some thought into the nomination before there is a vacancy. This is the case with Greenspan's pending retirement, since it was common knowledge that he could not serve beyond January 2006. Occasionally, a Governor will decide to resign on a given date, which creates a vacancy if a replacement has yet to be appointed. Currently, for example, the positions held by former Govs. Ben Bernanke and Edward Gramlich remain unfilled. As a result, the President may have varying time frames to find replacements. The administration can look anywhere for possible nominees for Governor positions. In the past, nominees have come from banking, government, academia, and from within the Federal Reserve System.

The FRA states: "In selecting the members of the Board, not more than one of whom shall be selected from any one Federal Reserve district, the President shall have due regard to a fair representation of the financial, agricultural, industrial, and commercial interests, and geographical divisions of the country." Furthermore, the individual may not hold other employment while serving as a Governor.

After the administration chooses a nominee, the process moves to the Senate, where the nominee appears before the Committee on Banking, Housing, and Urban Affairs. The nominee delivers a prepared statement, and then fields questions from the members of the committee. The process usually focuses on the nominee's qualifications and a discussion of monetary policy or banking issues. Next, the entire Senate votes to confirm the nomination, with a simple majority vote needed to pass. Finally, within 15 days of Senate confirmation, the appointee must take the oath of office, and then the term begins.

Governors are appointed to 14-year terms, each of which begins on Feb. 1 of even-numbered years. Consequently, the terms cycle, with a different term ending every two years. The fact that many Governors do not fill their entire term means that nominations have to occur more often than once every two years. Instead of a new term beginning with a new appointment, if a Governor resigns during his term, a new nominee simply replaces the outgoing Governor and keeps serving the unfulfilled term. If the term ends, the nominee can be selected for a new term if the President chooses to keep the Governor on the Board. This means that the term limit applies only to the Governor's own term; Governors themselves can actually serve longer than 14 years. Chairman Greenspan has served for 18 years by spending the first four serving the end of a different term, and then being appointed to his own term that began in 1992.

The Governors' 14-year term limit ranks among the longest in U.S. government. These lengthy terms are intended to help the Fed preserve its independence from the political process. Governors are free to pursue what they feel is the best policy for the economy even if those policies conflict with what elected officials might want. In a world with less independence for the Fed, the President might threaten Governors with removal or withholding of their reappointment if the Fed refused to help the administration.

For example, the President may want a large short-term monetary stimulus right before an election, and if the Governors weren't independent of presidential control, they might oblige the demand. While the Governors generally do not serve their entire term, the simple presence of lengthy terms helps remove the control of monetary policy from the political sphere.

Appointing a Chairman

A simple qualification to become Chairman, as stipulated by the FRA, is that the person must be a member of the Board of Governors. In theory, this requirement might suggest that only people with experience on the Board can be elevated to Chairman. Historically, this has not been true, though, as candidates have normally been simultaneously appointed as Governor and Chairman.

In addition to the normal 14-year term limit that applies to all Governors, the chair is appointed to four-year terms. Unlike the longer terms applied to Governors, the four-year term for the chair has no set starting and ending date — the four years begin as soon as the chair takes office. The Chairman can serve multiple four-year terms; the only restriction is that he must remain a Governor. Greenspan was first appointed Chairman in 1987, and his fifth and current term began June 19, 2004.

The procedure to appoint the chair of the Board of Governors works exactly the same as for appointing Governors. The nominee has a hearing in the Senate and then is approved by a majority vote of that body. If the nominee for the chair position is simultaneously chosen for a Governor position, he goes through the process only once, although presumably with increased scrutiny.

Previous chairmen have made a custom of offering their resignation upon the election of a new President. This tradition allows the President to appoint a new chair upon entering office, one with similar priorities. However, while it is customary to offer the resignation, the President is not under any obligation to accept the offer. Greenspan, for example, although appointed initially by Reagan, has kept his position during both Bush administrations, plus the change of party to the Clinton administration.

The Evolution of Chairmen

The nature of individuals who have become chairmen of the Board of Governors has evolved since Charles Hamlin became the first Chairman in 1914. While his primary career was as a lawyer in Boston, Hamlin tried unsuccessfully to get into politics, including two candidacies for Massachusetts' governor, first in 1902 and then in 1910. In 1913 he was appointed undersecretary of the Treasury by Woodrow Wilson, and then appointed as a Federal Reserve Governor and the first Chairman in 1914. His tenure as Chairman was brief, ending in 1916, but he stayed on as a Governor through 1936, a length allowed before modern term limits were enacted.

Roy Young, who served as Chairman from 1927 to 1930, was the ultimate Fed insider. Originally a banker, Young became president of the Federal Reserve Bank of Minneapolis in 1919, where he served until his appointment as Governor and Chairman in 1927. After overseeing the Fed during the stock market crash in 1929, Young resigned the chairmanship and his Governor position in 1930, and promptly took the position of president of the Federal Reserve Bank of Boston. He returned to the private banking sector in 1942 after holding three of the most important positions in the Federal Reserve System for 23 years.

While Hamlin was a politician and Young a banker, Marriner Eccles, who served as Chairman from 1934 to 1948, was a combination politician and banker. Eccles started as a private banker in Utah, but when the Great Depression hit, he became convinced that fiscal policy was needed to help the economy. So he moved to the Treasury Department, where he helped President Franklin Roosevelt and Congress draft the Emergency Banking Act of 1933, the Federal Housing Act of 1934, the Glass-Steagal Act of 1933 that created the Federal Deposit Insurance Corporation, and the Banking Act of 1935, which restructured the Federal Reserve System.

In 1935, Eccles was appointed Chairman of the Board of Governors, where he served until 1948. He was not reappointed as Chairman by President Harry Truman, but he retained his position as Governor until 1951.

William McChesney Martin, the longest-serving Fed Chairman, served from 1951 to 1970, and followed a path in the financial world and corporate governance to the Fed. His meteoric rise started as a broker in St. Louis, after which he moved to the New York Stock Exchange, where he eventually became president of the exchange at the age of 31. He left the exchange during World War II, and was nominated for the Fed chairmanship in 1951. During his tenure, Martin led the Fed into the modern era following the passage of the Treasury-Fed Accord, and gained a reputation for pursuing monetary policy independent of the four administrations that came and went while he was Chairman.

The selection of Martin's successor, Arthur Burns, signified a shift in the type of person who would be tapped for Chairman of the Board of Governors. While his predecessors had been bankers and politicians, Burns was an economist by training. He had served on President Dwight Eisenhower's Council of Economic Advisors from 1953 to 1956, and also helped pioneer studies of the business cycle with Wesley Mitchell at the National Bureau of Economic Research. The famous monetary economist Milton Friedman was Burns' student at Rutgers University in the 1930s, though Friedman would later heavily criticize the Burns Fed for its "stop-go" policies that brought on double-digit inflation.

Paul Volcker, who preceded Greenspan, jumped around several times during his career, including stints at Chase Manhattan, the Treasury Department, and then president of the Federal Reserve Bank of New York. From his position at the New York Fed, he was nominated by President Jimmy Carter in 1979 to become Chairman. The Volcker Fed began the long road back from high and erratic inflation to a period of credibility in the Fed's fight against rising prices.

Volcker served two terms as Fed Chairman, before resigning in August of 1987. Following his departure, some questioned whether Alan Greenspan had the political independence to act effectively as Fed Chairman. Although much of his career was spent as a partner in the business consulting firm Townsend-Greenspan, he also had been long active in Republican politics, serving as Chairman of the Council of Economic Advisors for President Gerald Ford and Chairman of the National Commission on Social Security Reform under President Reagan. As a result, Greenspan was viewed by many as more of a "team player" than Volcker, who in his later years had developed a sometimes contentious relationship with the Reagan administration.

In his 1987 book, *Volcker: Portrait of the Money Man*, reporter William Neikirk noted that in "the instant analysis that followed Greenspan's selection, it was often suggested that he would not be as tough as Volcker when the White House put the pressure on and that he would, in an election year, expand the money supply to take care of whoever the Republican presidential nominee is." This, of course, proved to be untrue. Just four years later, the Greenspan Fed was widely blamed by Republican politicians for costing President Bush re-election by not aggressively cutting interest rates during the 1991 recession.

The Post-Greenspan Fed

Greenspan's successor may continue the trend away from bankers toward economists. Early chairmen such as Eccles and Martin were bankers by training, while Burns, Volcker, and Greenspan can generally be thought of as business economists. Some of the popular names in the news media for possible successors are academic economists. Such a selection would move the position even more in favor of people with rigorous theoretical backgrounds.

Greenspan has succeeded with a healthy combination of grounded practicality and theory. It will be up to his successor to mix the two and apply the newest insights of monetary economics to the real world issues that face the Board of Governors. **RF**

UNIVERSITIES OPEN DOORS

Gulf Coast Students Migrate to Fifth District

So what if University of Maryland was Zach Lieberman's second choice? He's pretty happy to be at Maryland now, after spending less than 24 hours at his first school selection, Tulane University in New Orleans.

"I grabbed my laptop, some clothes and just left," Lieberman said via cell phone on a sunny, humid day in mid-September from College Park, Md. "Everything's sitting in my [dorm] room" in New Orleans. After exiting New Orleans on Aug. 27 as Hurricane Katrina bore down, Zach and his parents eventually wound up driving first to Jackson, Miss., then to Atlanta, through high winds and rain, where they caught a plane back home to New Jersey.

Schools all over the country, and even international universities, are taking in students ousted by Hurricane Katrina and its devastating floods. The University of Maryland admitted 147 storm students, and 102 actually enrolled. Many were students who had been accepted for admission, but had chosen Tulane over Maryland, according to university spokeswoman Cassandra Robinson.

"The majority of our students are from Tulane; we have a couple from Loyola," she says. "Tulane is an American Association of Universities institution, as we are. They are typically the major research universities, so our academic profiles are similar."

Maryland isn't charging tuition, and Robinson says she doesn't know how much it will end up costing the school to add the students. Lieberman had already paid tuition at Tulane. Robinson says if students are reimbursed from their home school, "we would expect them to pay tuition here but we don't want to put any additional burdens on the students."

Barry Toiv of the Association of American Universities, a group of 60 American and two Canadian research universities, says the group "suggested to all our campuses that they first take students on temporary basis so they'd remain students of their home institution." While most students are attending tuition-free, that's not possible in some states, where by law all students must pay tuition. In North Carolina, for example, the University of North Carolina Board of Governors met and officially waived tuition for students who had been enrolled at an affected university in the Gulf region. At UNC-Chapel Hill, says spokeswoman Lisa Katz, there are about 44 storm students, along with some faculty members who have sought research spaces.

Other state universities in the Fifth District have enrolled at least some "hurricane students." Private institutions have stepped up to the academic plate too. The University of Richmond recently took in 37 undergraduate and law school students. They, too, will attend tuition-free. Twelve of the students are from Tulane, the university where President William Cooper served as dean from 1991 to 1996. The overall cost could be more than $1.2 million, according to the university student newspaper.

Despite being displaced from Tulane University, students and their football team carry on with the fall semester. Schools across the country are taking in students ousted by Hurricane Katrina.

PHOTOGRAPHY: MIKE STONE/TULANE MEDIA RELATIONS

The students arrived Sept. 4 and seemed mildly disoriented at first, says Barbara Sholley, psychology professor at Richmond. "They missed orientation and the first week of classes. [They] said they have 'catching up' to do and seem to be highly motivated to do so."

At West Virginia University, administrators are encouraging other displaced students to enroll in eight-week online courses called the Sloan Semester, funded by a $1.1 million grant from the Alfred P. Sloan foundation. The classes range from toxicology to Web design. WVU admitted seven West Virginia students displaced from Gulf colleges in its traditional fall semester.

— BETTY JOYCE NASH AND MEGAN MARTORANA

WE WANT YOU!

West Virginia Mines Finally Need More Workers

America's economic recovery, coupled with robust growth in foreign nations like China, has fueled consumption for electricity and for the fuel that most power plants use: coal. Mines in West Virginia that were too expensive to profitably operate are now financially viable thanks to higher prices.

But several factors have stymied coal producers' efforts to reap the benefits of current market conditions, from transportation delays to legal wrangling over mining permits. On top of that, many companies say they're having a harder time finding enough workers. Some are even using the word "shortage." In fact, the Mountain State's coal mining industry may be facing a transitory gap between labor supply and demand, a gap exacerbated by industry trends and demographic changes that have hit manufacturing and other sectors nationwide.

When coal producers needed to boost production in the past, they often turned to technological improvements to increase productivity. That reduced their need for labor: The state's mining employment has steadily declined since 1978, going from a headcount of about 63,000 to less than 15,000 in 2003. When they did need more miners, those laid off or fired during soft markets were usually around to rehire.

Today, coal producers appear to have reached the point where they finally need more workers. Mining productivity has been deteriorating in West Virginia due to the dwindling number of easier-to-mine deposits. "You have to move 13 truckloads of rock or soil to get to one ton of coal, and [that stripping ratio] will continue to increase," says spokeswoman Kim Link for Arch Coal, a St. Louis firm with mines in Virginia and West Virginia. At the same time, the strong demand for coal has producers scrambling to increase their output. "We're trying to get every ton out of the ground that we possibly can. Because of that, it takes extra people."

The problem is the pool of available labor is much smaller. Some experienced miners left the industry — and, in some cases, West Virginia entirely — for steadier work as capital replaced labor and coal production shifted to states like Wyoming. Additionally, the nation's aging baby-boomer population is resulting in larger numbers of workers approaching retirement age, particularly in skilled trades. As noted by William Raney in a Feb. 20 article in the *Sunday Gazette-Mail*, the average age of West Virginia miners is 52 years. Raney, president of the West Virginia Coal Association, expects at least half of miners to retire over the next six to 10 years.

The United Mine Workers of America is also concerned about these trends. "There is what we call a 'generational hole' to a certain degree," notes Phil Smith, the UMWA's director of communications. "The last big push for hiring coal miners came in the late '70s and early '80s."

However, Smith says that older, experienced miners are being turned away. He accuses some companies of limiting the number of union workers at non-union mines and trying to avoid paying pensions and other retirement benefits. "If you hire a miner at a particular age, especially someone who is in their early to mid-40s, you run the risk of being liable for some legacy costs in a relatively short period of time," Smith notes.

If the labor shortfall in the coal mining industry isn't structural, then it should be only a matter of time before the mismatch between what producers want and what labor markets supply corrects itself. Bill Lawhorn, a Bureau of Labor Statistics economist who follows mining industries, says he has heard that people are already filling up classes on mining technology in West Virginia. They are being enticed by relatively good wages: The average salary of nonsupervisory workers in mining was $20.57 an hour in 2002, more than $5 an hour higher than the average wage in all industries.

In addition, companies have been ramping up their recruitment efforts. Last summer, Massey Energy hired airplanes to fly banners over Myrtle Beach, S.C., to target West Virginia coal miners on vacation. Every few months, Arch Coal holds a 20-week training and mentoring program to introduce newcomers to mining.

But adding to the recruitment challenge is the negative perception of the industry in general and of mining as dirty, backbreaking work. These notions are changing, according to economist Ken Goldstein of The Conference Board, but it will take awhile to convince younger workers to pursue a career in coal. "Mining companies have been laying off people for years. For them to turn around and say that they don't have enough workers is a real change." — Charles Gerena

The old Cannon Mills plant in Kannapolis, N.C., the largest sheet and textile factory in the world, is undergoing demolition. A former owner of Cannon Mills, David Murdock, has unveiled plans for the North Carolina Research Center as well as private office and retail development in Kannapolis.

PHOTOGRAPHY: COURTESY OF CASTLE & COOKE

"BIOPOLIS" IN KANNAPOLIS

Research Campus Set for N.C. Textile Town

Kannapolis, N.C., may be getting a new lease on life two years after suffering one of the biggest economic wallops the Tar Heel state has ever seen. The former Pillowtex industrial site, home of the largest sheet and textile facility in the world, may become a privately held research campus and retail-residential development. It lies along Interstate 85, about 20 minutes northeast of Charlotte, N.C.

David Murdock has revealed plans for a massive investment. Murdock is former chief of Cannon Mills, the predecessor firm of Pillowtex. The Kannapolis site has lain lifeless since 2003 when textile giant Pillowtex folded.

Nearly 5,000 people were dismissed in the biggest layoff in North Carolina history. Now, downtown Kannapolis is witnessing a demolition of similar proportions.

In 2004, Murdock paid $6.4 million at auction for Pillowtex Corp.'s Plant 1 complex and wastewater treatment facility. That area encompasses 135 acres in Kannapolis. Along with other Murdock properties, the development will spread over about 350 acres. Murdock companies include Dole Food Co., Castle & Cooke Inc., and Atlantic American Properties Inc., among others. The campus, when complete, is expected to attract more than 100 biotechnology firms. Murdock has also pledged $100 million in venture capital for startups.

"The alternatives for that kind of development [the old mill site] are few and far between," Kannapolis City Manager Mike Legg says. The county is already bursting with spillover from Charlotte. "We've got an explosive western side and then our core, our historical core, is also going to explode and blossom." He adds that prices of the old mill homes, possibly the largest intact mill village in the nation, will "go through the roof."

Site plans include a nutrition institute, proposed by the University of North Carolina at Chapel Hill. A center for fruit and vegetable science led by North Carolina State University along with Dole Food Co. is also planned. The University of North Carolina at Charlotte will be a partner in the campus as well.

Last August, Murdock also said Dole would build a $54 million vegetable processing plant in Gaston County and also is searching for another site for a frozen fruit packaging plant.

State and local funds for the project could include a one-time $16 million appropriation folded into the University of North Carolina System's budget as well as an annually recurring $25 million for operations of the two research centers. Those numbers are approximate and contingent on approval by the state Legislature. Kannapolis and Cabarrus County may issue self-financing bonds, called tax increment financing (TIF), to pay for infrastructure improvements or a parking garage. That's a form of bond that repays debt with revenue generated by a specific project. It would be a first for North Carolina, which approved such financing in 2004. Legg says the completed project would generate $10 million in taxes annually "if they build what they say they will."

State and local officials are overjoyed at the prospect of renewed vigor for Kannapolis, which has gotten on its feet in the two years since the mill closed. Unemployment is about 4 percent, Legg says, and many former mill workers have earned a General Education Diploma or associate degree from local community colleges. Many now work at lower-paying service jobs, and the development could provide new work opportunities.

Can a bona fide biotechnology campus spring out of thin air? John Hood, president of the John Locke Foundation in Raleigh, is not sure the location is viable or that the use of any public funds is appropriate. He compares the birth of this park to Research Triangle Park, near Raleigh, Durham, and Chapel Hill.

"I'm not slighting Kannapolis but the reason why it's been discussed in Kannapolis is Pillowtex," Hood says. "That's totally different from saying there is an inexorable logic in basing research institutions in a park surrounded by three research universities."

Murdock plans to break ground this fall.

— Betty Joyce Nash

FIRED UP

States Force Payments from Small Cigarette Firms

When cigarette makers hiccup, it's passed on to everyone. The latest ripples in the industry affect state budgets and taxpayers as well as little cigarette makers that weren't parties to the 1998 Master Settlement Agreement (MSA).

States, seeing revenues from the $246 billion MSA decline, have passed laws to change funding formulas and compliance mechanisms for small, off-brand manufacturers. Richmond-based Philip Morris USA has asked states for payment relief because of lost market share. A clause in the 1998 pact says participants can get a break on payments if they lose market to cigarette makers that aren't part of the tobacco deal.

Virginia, West Virginia, North Carolina, and South Carolina have passed such laws — "allocable share" legislation — to ensure payments. States' MSA payments are pegged to sales of major brands.

As major cigarette makers raised prices to pay for the settlement and higher cigarette taxes, they lost market share to off-brands, and that cut into the states' portion of settlement money. In South Carolina, for example, tobacco money was off by 1.5 percent, or $1.2 million, of original projections in 2004 and by 3.25 percent, about $2.5 million in 2005, according to Rick Harmon of the South Carolina Treasurer's Office.

Manufacturers that were not participants in the MSA have snagged cigarette market share through discounts. Small firms that didn't exist in the years before warning labels pay fees, placed in escrow, in states where they sell cigarettes in case they ever get sued. But the firms somehow got around the rules and were able to get escrow refunds almost immediately.

"When the settlement was originally signed in November of 1998, the major participating manufacturers had somewhere around 97 or 98 percent market share; it's down below 90 percent now," says Kelly Tiller at the University of Tennessee's Agricultural Policy Analysis Center.

But the major manufacturers raised prices "massively beyond what they needed to pay the MSA agreements . . . the majors' problem was as much their own greed as anything the nonparticipating manufacturers did," says

Everett Gee, general counsel to S&M Brands of Keysville, Va., one of the growing number of small cigarette companies battling it out with the Big Four. "Once big tobacco got greedy and started to lose market share, the states had a fit." Gee also points out that the escrow payments small firms make are not tax deductible, but MSA payments are. The legislation has increased S&M Brands' cost of doing business by $4.25 per carton in MSA states, according to Gee.

Another wrinkle has cropped up in the form of an additional $5 "equity" levy passed by several states. That money would be on top of the escrow payments for firms that are not participating in the MSA, and is aimed at wiping out competition from smaller firms, Gee says. No Fifth District state has passed the additional fee. — Betty Joyce Nash

BRAC HITS D.C.

Walter Reed's Closure Would Free Up Premium Real Estate

Despite its history of caring for U.S. presidents, foreign dignitaries, and countless soldiers wounded in combat, Walter Reed Army Medical Center couldn't escape the Pentagon's push to consolidate the armed forces. The 96-year-old military facility in Washington, D.C., is among the 22 major closures recommended in the Base Realignment and Closure report approved by President Bush in September. If Congress concurs, a valuable piece of real estate in northwest Washington will become available for redevelopment, but not without a price.

Under the current proposal, the bulk of Walter Reed's operations would relocate to a new 165-bed hospital at Fort Belvoir in Fairfax County, Va., and an expanded National Naval Medical Center in Bethesda, Md. In addition, some of the research done at Walter Reed, which houses the military's largest medical research facility, would move to Fort Detrick in Frederick, Md.

Like every other decision to shut down or realign a military facility, the loss of Walter Reed would have repercussions well beyond the Pentagon's bottom line. The closure shouldn't inflict too much economic damage on the Washington, D.C., metro region, since many of Walter Reed's 8,700 jobs will move to other communities close by. However, the flow of people and goods in the region would likely change, creating new challenges that local governments will have to plan for.

As for the nation's capital, Washington will lose thousands of civilian, military, and contractor positions if Walter Reed closes. Although residents don't occupy most of these jobs, there would be fewer people commuting into northwest Washington every workday.

"Walter Reed represents the largest daytime population in the Georgia Avenue corridor," notes Marc Loud, executive director of the Gateway Georgia Avenue Revitalization Corp. The medical center's workers, plus the patients it treats and the families that visit, have helped draw new retailers to a strip of small businesses that has been rebuilding since the 1968 riots. "If Walter Reed closes, we will lose that anchor."

What are the odds of creating a new anchor from the 113 acres that Walter Reed currently occupies? It's too early to tell, but local developers are salivating over the site's potential. "Anytime you have a piece of ground of that size in the District of Columbia, there is going to be great interest," says Mary Margaret Hiller, spokeswoman for Akridge Real Estate Services.

Washington is a city with few large lots available and a strong demand for office, residential, and retail space. In fact, Keenan Development Ventures already has a 50-year ground lease for a vacant building at Walter Reed that the company converted into office space for private use.

The challenge will be to translate this potential into something that is compatible with and leverages existing development nearby. According to Timothy Hutchens, executive vice president of the Federal Government Services Group at CB Richard Ellis, Walter Reed serves as an unofficial buffer between two land uses — residential neighborhoods are on its western and eastern fringes and the Georgia Avenue business corridor is to the north. Mixed-use development is one option, while a commercial project would probably be less viable due to Walter Reed's location.

"It's not the kind of neighborhood that general office users are going to locate in, like downtown Washington," Hutchens says. "This is an area that is 'between.' It's not near a commercial center." However, a large corporate user like GEICO or a federal agency like the Department of Homeland Security could turn Walter Reed into a campus-like headquarters.

Another challenge for redeveloping Walter Reed is its mix of 70-plus buildings, some of which date back to World War I. Dealing with the historic buildings could prove costly and complicate the planning process, notes consultant William Harvey of Alexandria-based Public Private Solutions Group. "Developers probably would much rather start with virgin ground." — Charles Gerena

Paul Wolfowitz, World Bank president and former deputy defense secretary, is among the many officials who have routinely stopped by Walter Reed Army Medical Center to visit soldiers wounded in Iraq and Afghanistan.

PHOTOGRAPHY: DOD PHOTO BY R. D. WARD

Deadweight Loss

BY ERIC NIELSEN

At one point or another, all of us have received an unwanted gift from a well-meaning friend or relative. Out of politeness we may wear the unwanted garment at the next family reunion, or make a halfhearted stab at reading the 700-page tome. Still, we must reach the inescapable conclusion that the money spent on the gift was almost entirely wasted.

The loss in value described above — the difference between what was paid for the gift and what the gift is worth to the recipient — is one example of the economic concept of "deadweight loss." Technically, deadweight loss is defined as the waste resulting from economic inefficiency of any kind, be it through poorly designed regulation, antiquated production techniques, leaky pipes, monopoly power over a market, or unwanted gifts.

Deadweight losses are losses for everybody. Removing a deadweight loss must yield a benefit to some while leaving no one else worse off than before. (Such an improvement is called a "Pareto improvement" after the Italian economist Vilfredo Pareto.) Thus, wherever possible, economists and policymakers would like to eliminate deadweight losses from the economy.

The magnitude of these losses can be quite significant. In a paper entitled "The Deadweight Loss of Christmas," Yale University economist Joel Waldfogel attempts to estimate the magnitude of the loss from unwanted presents during the holiday season by asking his students for the total dollar value of the gifts they received as well as the dollar value they would be willing to pay for those same gifts.

Using this methodology, Waldfogel estimates that anywhere between 10 percent and 30 percent of the price of a typical gift is a deadweight loss. Thus, on average, a gift for which the giver paid $100 would be worth only between $70 to $90 to the recipient. This discrepancy constitutes a deadweight loss because the giver could have made the person just as well off by giving them the smaller cash value in lieu of the gift. Even taking the conservative estimate that the deadweight loss is closer to 10 percent than 30 percent, Waldfogel estimates that at least $4 billion are wasted each holiday season.

Waldfogel also finds that close relatives and friends are more likely to give "efficient" gifts whereas distant relatives and people very different in age tend to give unwanted gifts. Further, those groups which are most likely to give an inefficient gift, such as grandparents, are also those most likely to give cash instead of a gift-in-kind.

It is worth noting that Waldfogel's study explicitly ignores any sentimental value people may place on received gifts. Some psychology studies have found that people place a very high premium on the worth of things they have received as gifts. If this is indeed the case, then gift giving could at times be a form of "value creation." At the very least there may still be social reasons to engage in gift giving, even if it does result in a deadweight loss.

Certain government actions may also produce deadweight losses. For instance, taxes prevent sellers and buyers from realizing all the gains from trade, and subsidies encourage more consumption than otherwise would occur. In the absence of externalities, then, taxes and subsidies cause deadweight losses.

Harvard University economist Martin Feldstein has argued that the deadweight loss from income taxes in the United States may be as high as 30 percent of the total tax revenue raised. The deadweight loss is caused by taxes leading people to work less and consume more leisure, and by the inefficient substitution of wages into deductible and exempt forms of compensation. For example, high taxes on nonexempt income may prompt individuals to adopt payments in the form of health care or educational subsidies. These noncash payments are inefficient for the same reason that gifts are often inefficient — $500 worth of health care is less useful than $500 in cash, which can be spent on health care or any number of other goods. Furthermore, deadweight losses from taxation can appear in even more subtle guises; employees may opt for more opulent working conditions (larger offices, for instance) and lower pay to avoid high income taxes.

This last example highlights that deadweight losses are often very hard to detect because sometimes it is not obvious who is "paying" the costs associated with some forms of inefficiency. Nevertheless, such losses can have severe consequences for the well-being of large numbers of people.

Policymakers must remain cognizant of such losses and attempt to structure programs so as to minimize loss-creating inefficiencies. Deadweight loss also affects our everyday lives. While a cash gift may not be appropriate for an anniversary, it might be optimal for a distant nephew's birthday present. In giving him cash, you are most likely saving him, and yourself, some money. **RF**

ILLUSTRATION: TIMOTHY COOK

ResearchSpotlight

Mind Games

BY ERIC NIELSEN

Recent advances in brain-imaging technology have affected the way economists examine decision-making. Tools such as functional magnetic resonance imaging (fMRI), which make possible real-time imaging of brain activity, have opened the door for economists to seek a neural basis for economic action. In a new paper published in the *Journal of Economic Literature*, economists Colin Camerer, George Loewenstein, and Drazen Prelec outline their hope that these new tools can be used to create psychologically realistic models that modify some assumptions underlying economic theory.

Economic accounts of human action usually neglect emotions such as disgust, fear, and empathy. Such omissions were made initially out of necessity; until the advent of fMRI, it was impossible for researchers to objectively measure these motivations. Restricting themselves to what was measurable, economists created a powerful theory of economic behavior based on revealed preference; people's actions are assumed to maximize their wishes, which cannot be seen directly.

Many traditional models assume a "deliberative equilibrium" in which no party would change their actions if given more time to think. But given the complexity involved in many economic situations, it's unrealistic to assume that all agents will quickly find the optimal strategy. Furthermore, studies of saving and consumption behavior have shown that people often engage in "time inconsistent" behavior, meaning their actions and goals in one time period are not consistent with those in future periods. Finally, interactive games show what appear to be ingrained tendencies toward either revenge or altruism that are not well accounted for in traditional economic models.

In the face of such inconsistencies, "behavioral economists" created alternative models that had considerable success in accounting for some of these empirical anomalies. But those models lacked a unifying framework. Many appeared to be ad hoc mathematical constructions designed to fit the data. For example, behavioral economists created a "hyperbolic discounting" model which predicts that people will overvalue the present and act impatiently, but they could not provide a compelling justification for why people behave this way.

Meanwhile, cognitive scientists were able to demonstrate multiple levels of cognition. Rational, deductive thinking takes place in the frontal cortex of the brain; activity in this area correlates with our conscious, deliberative thought. The frontal cortex operates quite slowly and is particularly active when a person is completing a difficult task for the first time. In contrast, the limbic system and other parts of the brain process information very rapidly to produce split-second judgments about danger and to complete familiar tasks. These preconscious processing centers help us to spend time thinking only about things that warrant attention; we would be paralyzed with inaction if we had to consciously deliberate over every decision.

Economists have found direct support for theoretical constructs like hyperbolic discounting using brain imaging studies of activity in the frontal cortex and limbic system. In an ingenious study, researchers found that the level of activity in the frontal cortex was a good predictor of whether or not subjects would act impatiently and opt for immediate rewards rather than for delayed gratification. Other fMRI studies have found that heightened activity in a region of the brain associated with the disgust reaction is linked with a person's tendency to engage in revenge, while increased levels of a hormone associated with feelings of trust are present during the playing of competitive games. Researchers hope that by creating theoretical frameworks in which multiple, functionally distinct, competing cognition systems interact to produce decisions, economists will be able to gain further understanding into several noted behavioral anomalies in neoclassical economics.

The emerging field of neuroeconomics is not without its critics, however. Some economists question the *economic* value of brain imaging work; after all, we already knew that our behavior is controlled by activity in the brain, so it is not at all surprising that specific aspects of decisionmaking seem to correlate with activity in particular areas of the brain. Neuroeconomists respond that peering into the "black box" of the human mind and examining the mental basis for decisionmaking will help us refine mathematical models to better reflect reality. Although these issues are far from resolved, neuroscience has assumed a growing — but still niche — role in economic research. Whether it can establish a presence in the mainstream of the profession remains to be seen. **RF**

"Neuroeconomics: How Neuroscience Can Inform Economics" by Colin Camerer, George Loewenstein, and Drazen Prelec. *Journal of Economic Literature*, March 2005, vol. 43, no. 1, pp. 9-64.

CAFTA to Have Mixed Effects on Region's Firms

BY BETTY JOYCE NASH

The Central American Free Trade Agreement, or CAFTA, was passed this summer by a razor-thin margin in Congress. The close vote was a reflection of divided U.S. sentiment for the trade pact, which is the most significant since the North American Free Trade Agreement broke down commerce barriers with Mexico and Canada more than a decade ago.

Workers' groups worry about lost domestic manufacturing jobs. But CAFTA's immediate impact on some domestic exports will be positive, analysts say, especially for yarn and cotton producers. North Carolina, for example, sent $1.7 billion worth of goods to the region encompassed by CAFTA in 2004, of which 77 percent were textile and apparel goods.

The agreement includes Costa Rica, El Salvador, Guatemala, Honduras, and Nicaragua, as well as one Caribbean nation, the Dominican Republic. So far, three of the six countries' legislatures have approved the deal.

In general, CAFTA will cut tariffs for goods flowing between participating countries. This will ultimately spur growth, says Peter Rodriguez, an international trade economist at the University of Virginia. "It's a huge win for these Central American countries," he says.

But CAFTA opponents say that the agreement won't help the textile manufacturing industries in Central America. That's because Chinese exports have grown sharply since the Multifiber Arrangement ended Jan. 1, 2005, potentially reducing demand from Central American firms.

Exports from Fifth District States to CAFTA Countries
(in thousands of dollars)

Overall	2000	2004	% Change
DC	9,260	9,260	-61
MD	23,404	36,751	57
NC	1,038,988	1,717,090	65
SC	304,576	334,004	8
VA	148,079	152,469	3
WV	4,181	2,637	-37

SOURCE: U.S. Dept. of Commerce

CAFTA was opposed by 132 firms that form or finish fabric in the United States. The National Textile Association (NTA) protested because of provisions that could allow fabrics from outside the region, such as China, to be made into garments and enter the United States via CAFTA countries duty-free, according to Karl Spilhaus of NTA.

While textile manufacturers opposed CAFTA, companies that produce fabrics necessary for textile production generally supported it. Those firms will now be able to send their goods more easily to Central American manufacturing facilities, including factories they operate themselves.

"The higher labor content processes are done in Central America," says Cass Johnson, president of the National Council of Textile Organizations, or NCTO. "This solidifies that partnership which is important now that China's on the scene with quotas having gone away."

Yarns and fabrics manufactured in the United States are assembled into garments, many at offshore U.S. firms, and brought back into the United States duty-free. Those clothes have been imported duty-free since the Caribbean Basin Initiative, last renewed in 2000. CAFTA broadens and makes permanent this arrangement. National Spinning, of Washington, N.C., makes yarns for sweaters and home furnishings. Jim Chesnutt, president and chief executive officer, says the company has a factory in El Salvador.

"All the yarn comes from the United States, and we bring them [products] back," says Chesnutt, who also serves as chairman of NCTO. While the current agreement allows the goods into the country duty-free, it is set to expire in 2008. That uncertainty makes businesses think twice about expanding or opening factories. "Now we have something permanent in place that allows people to make decisions."

Lloyd Wood of the American Manufacturing Trade Action Coalition [AMTAC] predicts that within a few years, most remaining domestic textile and manufacturing jobs will be lost as a result of the agreement. Jobs in the textile mills and products industry are forecast to decline by about 31 percent through 2012, according to the Bureau of Labor Statistics. Already in 2005, 11 textile plants have closed in North Carolina, and another 12 in South Carolina.

While textiles and yarns dominate the conversation about CAFTA, the region may ultimately be a market for information technology, agricultural, construction, paper, chemical, scientific, and medical products. Between 2000 and 2004, the heftiest percentage increases in North Carolina's exports to the region were in categories other than textiles. Those included fruit and vegetable preserves, wire products, household appliances, and machines, among others. CAFTA will do away with tariffs in those sectors.

Rodriguez, the University of Virginia economist, says CAFTA is a step up for Central America. "You shouldn't expect this to revolutionize or overturn any of the maladies you've seen in Central American governments," he says. "But these are governments that have made tremendous economic progress since a decade and a half ago, when they were in an economic black hole." **RF**

MINDS Matter

Early childhood education meets economic development BY BETTY JOYCE NASH

Kurt Callahan is in third grade but reads at a sixth-grade level.

"He likes Harry Potter books; he likes mystery books; he likes ghost books," says his mom, Maria Callahan.

When Kurt was born, Callahan heard through a neighbor about the Montgomery County, N.C., Partnership for Children. It's the local group, one of 82 throughout North Carolina, that works with very young children through a program called Smart Start, begun in 1993. Callahan needed help because Kurt was *normal*. Kurt's two brothers, both dead now, had been born with severe disabilities.

"I have no clue how to deal with a normal child," she recalls telling the teacher that first day. "I think Kurt was 3 months old. She told us about [the program] Parents As Teachers." The program helps mothers and fathers stimulate children's minds.

The Smart Start teacher read to Kurt even at 3 months, and with encouragement, Callahan read too. She had hesitated because she'd been in special-education classes as a child and can't read very well. Her husband, who has a hearing problem, did not finish high school. He works as an attendant in the hospital in Lexington, N.C., where the family lives.

The Smart Start teacher showed up weekly with a basket of books and toys. As Kurt grew, he met her on the porch and opened the basket, eager for what came next. At the end of each session, Callahan and the teacher discussed how to cultivate Kurt's natural curiosity. The service was free for the Callahans.

Early education has moved to the front page in the United States as policymakers focus on the economics of nurturing the minds of the very young. Investments in poor children seem especially effective. At least two early projects with high-quality research design — the Perry Preschool Study and the Carolina Abecedarian Project — show enhanced language and social skills in underprivileged kids who have participated in early education programs.

Educational gains have paid off for participants later in life and for society, too, studies suggest. Participants committed fewer crimes, received less welfare, and made more money. Investing in children's developing brains is easier and cheaper in the long run than job training programs for older adults. This is big news because the economy depends more than ever on workers who can think for a living, says former North Carolina Gov. Jim Hunt, Smart Start's chief architect. Good-wage, low-skilled jobs are fast becoming relics.

Earlier Is Better

When Hunt ran for governor in 1991, he had a small, invisible constituency: North Carolina's preschoolers. Hunt

One of Smart Start's innovations is "Parents As Teachers." Blesha Carroll, left, helped teach Maria Callahan, right, how to make the most of Kurt's earliest years. The Callahans live in Lexington, N.C.

PHOTOGRAPHY: COURTESY OF SMART START

had already served two terms as a governor in the late 1970s and early 1980s, with education a priority. Still, gains weren't what he'd hoped.

"I was at a loss as to why," Hunt recalls. During his eight-year hiatus between governorships, he played with his grandchildren and they taught him well. He became fascinated with brain development and put two and two together. "I was trying to figure out how to get a highly skilled work force that would make us highly competitive. I just stumbled on this research. I read it carefully article after article and it became clear: We're starting too late. You can't wait until they get to school at age 5."

There's a timely lesson. The number of low-skilled workers in the United States is on the rise, as high school completion rates fall. (Rates vary among states, with the 2000 rate in the District of Columbia, for example, among the lowest at about 48 percent, according to a 2005 report by the Educational Testing Service.) Nobel Prize-winning economist James Heckman of the University of Chicago points out in a paper: "In the face of declining real wages for low-skilled persons and rising real returns to college graduation, the United States is now producing a greater fraction of low skill, drop-out youth than it was 30 years ago."

Early investment spurs children's learning and is especially useful to poor children who may be living with poorly educated family members, perhaps in a single-parent household. Children who develop age-appropriate skills early seem to learn more easily over a lifetime. But family background plays a big role in producing the skills necessary for learning, and "fewer children are living with two parents who are married, and, until very recently, births to unmarried women have risen," notes Heckman in a working paper for the Invest in Kids Working Group. Just as early advantages accumulate, so do early disadvantages. A poor home environment, which can include few resources, uneducated family members, and widespread community unemployment, is a liability that is expensive to remediate in later years.

Poor children or those with disabilities benefit enormously from high-quality preschool education, says Dick Clifford, who helped launch Smart Start. Clifford is senior scientist at the Frank Porter Graham Child Development Institute at the University of North Carolina at Chapel Hill. (The nation's Head Start program, begun in 1965 for poor preschoolers, serves about 19,000 of 94,600 poor children under age 5 in North Carolina. See sidebar.)

> Children who develop age-appropriate skills early seem to learn more easily over a lifetime.

"Programs that focus on at-risk children are going to provide a higher return," says Rob Grunewald, regional economic analyst at the Federal Reserve Bank of Minneapolis. Rather than using financial incentives to lure companies or expensive projects such as government subsidized ball parks, the Minneapolis Fed has pushed early childhood development as a state economic development tool. "The future productivity of the economy is going to depend on experiences young children have today," notes Grunewald.

The business community is already in the early education loop. Rob Dugger, a partner with The Tudor Group, an investment firm, chairs the Invest in Kids working group of the Committee for Economic Development, devoted to researching business issues. "States that cut education or acquire the perception that they don't have priority on the life of kids in that state eventually are not attractive to talented parents and to business, and they will not in future years have a competitive labor force," he says.

Early intervention has always made sense to Steven Barnett, professor of education and economic policy and director of the National Institute for Early Education Research at Rutgers University. "If I really think about this as a capital model, then given the way compound interest works, I shouldn't be shocked that relatively small investments in young children have big impacts on their adult skills," he says.

Reason to Believe

Current thoughts on early education are influenced by the Perry Preschool Study in Michigan (1960s) and the Carolina Abecedarian Project (1970s).

The Perry program assigned 158 poor black children randomly either to the Perry Preschool program (58 children) or to none. They have been tracked to age 40. The same children were studied every year from ages 3 to 11 and again at ages 14, 15, 19, 27, and 40. Those who participated in the preschool program have generally fared better in life than those in the control group. Some of the latest results, published earlier this year, include:

- 65 percent vs. 45 percent high school graduates
- 8 percent vs. 36 percent treated for mental impairment
- Scored higher on various tests between ages 9 and 14 and on literacy tests at ages 19 and 27
- 76 percent vs. 62 percent employed at age 40
- 76 percent vs. 50 percent had savings accounts
- Median annual earnings of $20,800 vs. $15,300
- Fewer arrests: 32 percent vs. 48 percent violent crimes; 36 percent vs. 58 percent property crimes; 14 percent vs. 34 percent drug crimes.

The Perry program highlights social benefits. Take crime. "Crime is hugely expensive, a big drag on the economy, and so making the same kinds of gains in social/emotional [development] as cognitive has a much bigger payoff," Barnett says. "The social costs for poor social skills are higher than for poor cognitive skills."

The Abecedarian project in Chapel Hill, N.C., placed 57 poor infants randomly in full-time, high-quality child care, with 54 in a control group. Results included significantly higher mental test scores through age 21 than the control group, better language skills, higher math scores, and more children attending college — 35 percent compared with 14 percent in the control group. Social behavior included child bearing at age 19 compared with age 17 in the control group. Employment rates were 65 percent for the treated group compared with 50 percent for the control group.

Markets and Child Care

Economists suggest market failures play a part in the absence of investment in early childhood. Janet Currie, an economist who has studied the nation's Head Start program, includes liquidity constraints, information failures, and externalities. For example, poor people don't have money to invest in their children. And, it's hard for parents to evaluate the quality of child care centers because of information gaps. If you're an uneducated parent, how would you know the quality of one preschool over another? It can even be hard for higher income people to navigate preschool options. Evidence suggests some parents pay for such low-quality care that it may actually harm their children, Currie notes. Finally, parents often don't realize consequences (or externalities) of parenting decisions on society.

Barnett notes that market signals in early childhood education belie economic reality. "My study of the Perry Preschool program finds the externalities are huge," he notes, referring to the costs involved with crime, school failure, and poor productivity in the labor force.

And people often aren't good at making decisions about investments whose consequences are far in the future, he says. For example, many young people don't adequately plan for their retirement. "Investing in human capital in your young child is the same problem. You're looking at consequences 20 to 30 years away."

Smart Start

Some of these economic issues are addressed, one way or another by Smart Start and by another early childhood program, More at Four. (More at Four, begun in 2002, targets at-risk 4-year-olds, 90 percent from families that qualify for free or reduced lunches in school.)

A rating system, resource and referral libraries, and direct subsidies for high-quality child care are a few ways that Smart Start attempts to correct information asymmetries, for example, and money problems. Parent education projects such as the one that helped Kurt Callahan gain an edge help parents make decisions about early education that influence a child's future positively. Smart Start, in some cases, targets at-risk populations.

Before Smart Start, Head Start

Head Start is a federally funded program that targets poor 3- and 4-year-olds. It differs from Smart Start, which is paid for with state and private money. Head Start funds preschool classes; Smart Start aims to improve the entire system, with funds distributed throughout the community. For example, a child could attend a Head Start class in the morning and a child care center that's received Smart Start grants in the afternoon. Or a staff position at the local health department might be partly funded by Smart Start, to make sure preschoolers receive immunizations on time.

Head Start began in 1965 to give poor children a leg up when they got to school. Today, it's a $6.7 billion program, and reached about 905,000 children in the United States and its territories in 2004. Studies have associated Head Start with short-term benefits, such as improved test scores, but critics wonder whether effects last. Academic improvements fade by around third grade, but economists have found social benefits, according to a paper by Eliana Garces, Duncan Thomas, and Janet Currie published in the *American Economic Review* in 2002.

The authors found that for white children, Head Start participation increased high school graduation rates, college attendance, and earnings by the time participants reached their early 20s. Black Head Start participants were less likely to be charged with a crime. The authors also found some evidence that black male Head Start participants were more likely than non-Head Start siblings to have finished high school. Lastly, the authors found evidence of positive effects from older siblings who attended Head Start. Fading test gains don't mean children don't benefit from the program, authors say. Avoiding grade repetition and special education early in life may be associated with higher schooling attainment later. And Head Start may be associated with lasting improvements in social skills.

A Head Start Impact Study mandated by the U.S. Congress began collecting data in 2002 and will continue through 2006. Its goal is to determine the effects of Head Start on school readiness and parenting, and to assess the circumstances which bring about best results. About 5,000 children, ages 3 and 4, were assigned to either a treatment group or a control group. The control group can receive any other non-Head Start service available.

The study's preliminary results from the first year include small to moderate positive effects for 3- and 4-year-olds on four of six cognitive measures. In social skills, the study found among 3-year-olds that the frequency and severity of problem behavior reported by parents were lower for Head Start children than non-Head Start participants. The study also reported significant benefits for children's dental health.

In 1994 Congress authorized funding for Early Head Start, a child development program for poor families with children under age 3. Early Head Start provides health services and parent education programs too. A national evaluation conducted by Mathematica Policy Research in collaboration with Columbia University's Center for Children and Families found that 3-year-old Early Head Start children performed significantly better on cognitive, language, and social-emotional development than a randomly assigned control group. Parents did better on home environment and parenting behavior measures. The study involved 3,000 children and families in 17 places. Half received Early Head Start services; the other half were assigned to a control group that was free to participate in other services in the community. — Betty Joyce Nash




A community with a high incidence of teen pregnancy, for example, might have an adolescent parenting program.

Charlie Owen, who runs a blanket manufacturing firm in Asheville (now owned by Springs Industries), has contributed to Smart Start since the beginning, in time and money. He saw child care worries written on the faces of plant employees. Then he saw those same worries eased with the five-star Swannanoa Mountain Area Child and Family Center that Smart Start funds help thrive. "If I look at our report card and our [test] scores and levels — they've gone up in primary schools," Owen says.

By law, private funds (including in kind and volunteer contributions of time) must comprise 10 percent of Smart Start's state appropriated funds. Seventy percent of the money either subsidizes early care for families or improves the quality of child care centers. And 30 percent may support the family, including home intervention and health care services. Current funding is at $192 million. The money flows to nonprofit corporations established in partnerships throughout North Carolina's 100 counties. Funds are woven throughout the community in a pattern that makes sense for local needs.

For example, Smart Start targets its reach differently in Cumberland County, with its young, transient military families, than in Montgomery County, which has the state's second-highest number of children, ages 5 to 7, with Spanish as the first language. Deborah Musika of the Montgomery County Partnership for Children hired a bilingual staff member to penetrate the isolated Hispanic community. "Obviously there's child care going on. If we could help some of those folks become licensed, get them to join our lending library, and take advantage of our resources, that would open the door," she says. A child who doesn't speak English on the first day of school is "at risk" and may lag, leading to a less productive adulthood.

Likewise the Cumberland County Partnership's Eva Hansen reports that her county, with Fayetteville's overwhelming military presence, serves young parents and children with special needs. "We work hard to educate the child care community, so teachers and child care directors can identify children and try to get the parents connected. Sometimes parents and caregivers don't recognize it's a risk issue. They [parents] are very young and don't know what to look for."

Early on, the business supporters who spoke the loudest for Smart Start were banks and utilities, says Clifford. "[They knew] we might not see the returns tomorrow, but you have to keep your eye on the future." BB&T contributed $1 million to Smart Start in the beginning. Wachovia and First Union each pledged $2 million, and the merged bank's commitment is complete at $4 million this year.

Not All Preschools Are Created Equal

When Smart Start was just an idea, North Carolina bottomed out in every category of care that could affect preschoolers, says Karen Ponder, president of the North Carolina Partnership for Children, created to administer Smart Start. Ponder has worked in child care since the 1970s.

"Only children who could afford it were in high-quality care," she remembers. "Our goal was to make it so particularly children who qualify for subsidies would be in our best programs." Today, 76 percent of children whose care Smart Start subsidizes are in the best programs, ones with a five-star rating. "We took it from being the poorest outcome to moving toward the best."

Even many middle-class children, remembers Clifford, were in low-quality child care at the time. Parents often didn't know the difference. And even 12 years ago, before the big scientific splashes about brain development, there was evidence that *good* child care made a difference. "We were finding huge variations in the quality of child care and also were finding indications that the quality of child care available to children had an impact on cognitive and social development," he says.

Here's one example: In the old days, child care centers could house seven infants under the care of one adult and 12 one-year-olds in the care of one adult. Today, minimum requirements are one adult for five infants and one adult for six one-year-olds. Today, 77 percent of North Carolina's children in child care centers are enrolled in centers with a rating of three to five stars.

For the highest ratings, child care center directors must have four-year degrees, and lead teachers must have two-year degrees. Research has linked better child outcomes to teacher credentials, notes Grunewald of the Minneapolis Fed.

The rating system corrects information gaps and guides parents to an appropriate center. And that's a

PHOTOGRAPHY: COURTESY OF SMART START

market signal, Grunewald notes. "The market will move in such a way as to provide information about the centers," he says. "Parents will make decisions based on their needs, their values, and their budget." For example, Tabitha Groelle of Raleigh has had her son in day care since he was 5 months old. Groelle, who considers her family middle income, is happy with the center and its three-star rating, saying it fits her son's needs.

While lasting academic and social gains from quality early childhood care are hard to prove definitively, it is clear that more children in North Carolina are getting better care. The number of children in centers with multiple star licenses has gone from 20 percent in 1993 to 87 percent, and 82 percent of preschool teachers have a degree or at least some college training, compared to 41 percent in 1993. Teacher turnover has been almost halved, from 42 percent to 24 percent. And more than 250,000 parents have gotten some education, including home visits like the ones Kurt Callahan's family enjoyed.

A 2003 study by the Frank Porter Graham Child Development Institute indicates the quality. For example, the Early Childhood Environment Rating Scale, which Dick Clifford helped develop, is incorporated into the star rating system. That is, in itself, an innovation.

The FPG study included 110 preschool programs observed between 1994 and 1999. About 512 preschool children were assessed on language, literacy, numbers, and social-emotional skills. The study concluded that child care quality increased between 1993 and 2002 and that participation in Smart Start funded activities was positively related to quality. The study noted that all children benefited from the improvements in the programs, not just poor children. Cause and effect, though, is hard to prove because of the seamless way in which Smart Start money flows.

Too Good To Be True?

Smart Start has its detractors, including the John Locke Foundation of Raleigh. The link between child care quality and kindergarten readiness appears strong, writes John Hood of the foundation. But quality care "likely reflects levels of parental knowledge, involvement, and commitment that are not modeled in this study (poverty and race are, and show the usual patterns)."

It is tough to provide solid evidence about the effects of early education, says Chris Ruhm, an economics professor at the University of North Carolina at Greensboro. Ruhm is following about 9,500 children from the Early Childhood Longitudinal Study Kindergarten cohort. He and his co-authors have written a paper that finds prekindergarten increases reading and math skills at school entry but also increases behavior problems and reduces self-control. Academic effects fade by first grade. What's left, though, continues into third grade. Effects differ according to the children's family background and what kinds of schools they enter later.

While the authors have information on whether the children were in child care, they don't know the quality of that care. Research indicates that classroom environments in later years can make a difference. "We're looking at classroom environments . . . what we're finding is the kids who start out behind catch up more if they have better classroom environments such as small class sizes."

So early childhood education is important. But policymakers can't stop there. Tools acquired early in life must be used and refined later for a cumulative process of skill building.

"At the end of the day, my belief is in [programs] like Smart Start and pre-k," Ruhm says. "There are lots of reasons to think that investments are going to be more effective at younger than older ages. But it's hard to accurately compare the costs and benefits of any specific intervention or to know the combinations of factors that lead to successful child outcomes."

Maybe Kurt Callahan can write that book when he grows up. **RF**

Readings

Cunha, Flavio, James J. Heckman, Lance Lochner, and Dimitriy V. Masterov. "Interpreting the Evidence on Life Cycle Skill Formation." National Bureau of Economic Research Working Paper no. 11331, May 2005.

Currie, Janet. "Early Childhood Education Programs." *Journal of Economic Perspectives*, Spring 2001, vol. 15, no. 2, pp. 213-238.

Currie, Janet, and Matthew Neidell. "Getting Inside the 'Black Box' of Head Start Quality: What Matters and What Doesn't?" National Bureau of Economic Research Working Paper no. 10091, November 2003.

Heckman, James J., and Dimitriy Masterov. "The Productivity Argument for Investing in Young Children." Working Paper 5, Invest in Kids Working Group, Committee for Economic Development, October 2004.

Magnuson, Katherine A., Christopher J. Ruhm and Jane Waldfogel. "Does Prekindergarten Improve School Preparation and Performance?" National Bureau of Economic Research, Working Paper no. 10452, April 2004.

"The ABCs of Early Childhood Development." Federal Reserve Bank of Minneapolis, *The Region*, Vol. 17, No. 4, Supplement, December 2003.

Visit **www.richmondfed.org** for links to relevant sites and supplemental information.

nature vs. nurture

Entrepreneurs play a unique role in the economy. Are they born that way or can their behavior be taught? BY CHARLES GERENA

Plato once said, "Necessity is the mother of invention." True enough. But someone still has to recognize an unmet need or an unsolved problem and devise a solution. That someone is usually a determined, passionate entrepreneur like Penny Bond.

Last April, Bond quit her job as a substance abuse counselor in Swannanoa, a small town in the mountains of western North Carolina. Tendonitis in her right arm refused to go away, adding to the fatigue and pain she endured for 15 years from post-polio syndrome. "There I was — no work and looking at disability because everything the doctor tried didn't work," she recalls.

Then a friend introduced Bond to SCENAR, a battery-powered, remote control-sized device developed in Russia to relieve ailments using low-voltage current through the skin. The device worked for her. "I went home with no pain anywhere in my body, which was really bizarre," she says. So Bond, a former teacher and medical student, bought a SCENAR and started treating people in their homes for various maladies, from heel spurs to hip pain.

At first, Bond didn't recognize the profit potential in front of her nose. "I was just going around helping people out and not charging them because I wanted to see if it would work," she explains. Then, Bond returned to her Master of Entrepreneurship classes at Western Carolina University (WCU) in nearby Cullowhee last August and her professors, James and JoAnn Carland, noticed how energetic and happy she was. "After class, they came up to me and said, 'What in the world happened to you?' I pulled out the SCENAR and said, 'This happened to me.'" After trying it out themselves, the Carlands urged her to build a business around it.

Bond and her partner pooled their money with $30,000 they collected from students in the entrepreneurship program and opened Healing Innovations in January. So far, they have treated more than 90 people from their office in Arden, a fast-growing community between Asheville and Hendersonville.

Bond's story illustrates how entrepreneurs benefit the economy and society. If no one ever took a chance on doing something different, innovations from the automobile to the personal computer wouldn't have improved our quality of life and generated economic prosperity. It also points out how specialized programs like the one at WCU are trying to cultivate this unique resource in the Fifth District. They add to the broader efforts of small business development agencies and incubators to foster entrepreneurism.

Call it the "grow your own" movement. At a time when local and state governments are doling out tax incentives to lure companies and jobs, some communities have focused on helping innovators create economic activity from within. A group based in Wilmington, N.C., has offered educational and networking events for entrepreneurs in the state's coastal communities since 1995. The 3-year-old Blue Ridge Entrepreneurial Council in Asheville nurtures entrepreneurs in western North Carolina by focusing on four areas: education, mentoring, communications, and capital formation.

Whether such targeted efforts are necessary — or effective — is an open question. Wilmington and Asheville ranked among the top 50 labor market areas in the nation in terms of average annual growth in new firms, one metric of entrepreneurial activity, between 1990 and 2001. (Raleigh and Charlotte are also in the top 50, along with Roanoke in Virginia and Spartanburg in South Carolina.) But some of that activity could have happened by itself.

Some people are born entrepreneurs, while others like Penny Bond need help. What may be more important than specifically fostering entrepreneurism is supporting an economic environment where anyone can discover their inner Bill Gates.

Portrait of an Innovator

It's hard to cultivate something that is hard to define. We have an idea of who the entrepreneurs are in our society — the guy selling umbrellas on a rainy day or the Internet guru creating the next eBay — but entrepreneurism isn't tangible like other factors of production, namely land, labor, and capital.

Using data on people starting new businesses and managing startups in 34 countries, the Global Entrepreneurship Monitor research consortium recently devised a general profile of entrepreneurs. Across all countries, regardless of output per capita, entrepreneurs tend to

PHOTOGRAPHY: CORBIS IMAGES

be young (between 25 and 34 years old), male (although rates of entrepreneurism are about equal between the sexes in the United States and several other countries), and otherwise employed.

A January 2004 paper co-authored by Thomas Lyons, director of the Center for Research on Entrepreneurship and Enterprise Development at the University of Louisville, noted that "an entrepreneur's goal is to create or capitalize on new economic opportunities through innovation — by finding new solutions to existing problems, or by connecting existing solutions to unmet needs or new opportunities." A 2003 paper published by the European Commission defined entrepreneurism as "the mindset and process to create and develop economic activity by blending risk-taking, creativity and/or innovation with sound management, within a new or an existing organization."

James Carland, who developed WCU's entrepreneurship program with his wife two years ago, makes an entrepreneur sound almost prophetic. "It's a person who sees what is not there and has the will to establish that vision as a reality," he says.

Looking at these descriptions, certain traits appear to be central to entrepreneurial activity. They include the vision to look beyond what appears to be possible, the creativity to develop new approaches and combine resources in new ways, and the self-assuredness to see their ideas through to fruition.

Another distinguishing trait is how entrepreneurs weigh costs and benefits. While they expect something in return for venturing into new territory, they realize that not every risk is knowable or can be hedged against. Still, they push ahead and persuade business partners, suppliers, and buyers to take a leap of faith with them, thus sharing the potential costs. Moreover, as University of Chicago economist Frank Knight argued in groundbreaking work during the 1920s, entrepreneurs are more willing to bear the financial and psychic consequences of uncertainty themselves.

Also, many entrepreneurs are passionate about having more direct control over their working lives. Once they have the opportunity to chase their dreams, they don't want to go back to being a cog in a corporate machine.

Entrepreneurs tend to be more future-oriented too. Long-term gains are valued more highly than short-term pain. Perhaps this is how entrepreneurs often endure multiple setbacks and failures before they succeed.

Consider the case of Jay Cipoletti. He frustrated his managers at adver-

Rural America: Fertile or Fallow Ground for Entrepreneurism?

Rural communities once again have an abundance of labor. Entrepreneurial activity could emerge from this untapped resource, but the transition won't be easy.

While the dearth of well-paying jobs has prompted many rural residents to leave their homes in search of better work, others stay behind for various reasons and need a way to make a living. Since there are fewer attractive employment alternatives, residents end up creating their own out of necessity. Deborah Markley, co-director of the Chapel Hill-based Center for Rural Entrepreneurship, refers to these people as "survival entrepreneurs."

The same thing happens with "lifestyle entrepreneurs," as Markley calls them. These people move to rural areas to rediscover their roots, get a taste of small-town living, or enjoy outdoor sports. But if they want to work and aren't telecommuting, starting their own business may be their best option.

The employment losses in rural areas indirectly encourage entrepreneurism in another way. Those who weren't willing to give up a factory job or bet the family farm to pursue their dreams are now free to take the plunge. "The opportunity cost associated with becoming an entrepreneur isn't so high," says Markley. "You aren't giving up a $15-an-hour manufacturing job with pension and benefits. It's the unemployment benefits that are about to run out, or commuting two hours across the mountains to another textile plant that will likely pay $8 to $10 an hour."

At the same time, the obstacles to economic growth in rural areas also hamper entrepreneurial activity. It's more difficult for entrepreneurs to find the financial capital they need because of the limited number of lending institutions and venture capital firms.

Sometimes personal connections exist between business and community leaders in rural communities that can help entrepreneurs get financing. But they can also be obstacles, according to Brian Dabson, associate director of the Rural Policy Research Institute. "Business deals may receive less than rigorous objectivity, and intercommunity rivalries may reduce the scope for regional cooperation," remarked Dabson in his presentation at a 2001 conference sponsored by the Federal Reserve Bank of Kansas City. "Existing businesses may resist new business development for fear of allowing further competition in a limited market. Local politics may blur lines of authority and decisionmaking processes."

Human capital isn't easy to locate in rural communities either, whether it's specialized labor or other innovators to brainstorm with and learn from. "It's harder for entrepreneurs . . . to network with one another," says Markley, due to the relative isolation and low density of rural communities. "In urban places, you might meet fellow entrepreneurs every morning at the Starbucks on the corner or at the local watering hole." This raises the transaction costs of locating support systems. "You drive two hours to sit in someone's office and realize when you get there that it isn't the place where you need to be."

Likewise, there is a lack of role models to inspire entrepreneurs, a problem that also plagues low-income, inner-city neighborhoods. The picture of success is usually someone who manages to get steady, well-paying work at the local employer of choice. Taking a chance to start something new isn't seen as a possibility. "It's not a positive thing to be too far outside of the mainstream in culturally conservative rural places," Markley says.

— Charles Gerena

tising agency Charles Ryan Associates by pursuing his ideas while neglecting assigned work that he found "mundane, and the upside wasn't nearly as great." He learned a lot by working at West Virginia's largest ad shop, but he stayed for less than two years. "I came to the realization that there were too many things I wanted to do." Today, he runs a marketing company with his father in Charleston.

Are entrepreneurs more optimistic when assessing the future? Cipoletti believes that entrepreneurs like himself are neither optimists nor pessimists, but realists who acknowledge the challenges around them and have the confidence in the final outcome of their actions to keep going. "You have to go in knowing that you are going to take a body blow, but you can't let it knock you off track," he notes. "Being able to deal with internal conflict is critical."

Who They Aren't

Entrepreneurs may be confident, but they aren't necessarily foolish or reckless. "What they're doing is really risky because, in most cases, they are stepping into unknown territory," says Deborah Markley, co-director of the Center for Rural Entrepreneurship in Chapel Hill, N.C. "But they are not crazy, wild-eyed risk-takers like Evel Knievel. Successful entrepreneurs understand the risks and figure out how to manage them."

Entrepreneurs are often thought of as mavericks who challenge the status quo and operate outside of the mainstream. Economists like Joseph Schumpeter described them as agents of "creative destruction" in the economy, creating better, more efficient ways of meeting demand that eventually render old industries obsolete.

But Amar Bhidé, a Columbia University business professor who has researched entrepreneurism for two decades, believes they are also sources of "nondestructive creation," introducing products and services to meet desires that didn't exist before. "It is the entrepreneurial activity of creating and satisfying new wants that keeps the system humming," he noted in a November 2004 lecture. "It employs the labor and purchasing power released by increased efficiencies in the satisfaction of old wants."

The truth is not every entrepreneur turns the world upside down. Sometimes, their innovations involve subtle changes to existing processes or applying those processes to something new. For example, Cipoletti decided to apply his marketing acumen to packaging the assets of municipal governments. "Three-fourths of all cities had budget shortfalls in 2003, so generating nontax revenues is critical," he says. So, his year-old company, Point Forward, helps governments raise revenue by doing things like selling the naming rights to a public stadium.

Entrepreneurism also tends to be associated with small startups that become fast-growing "gazelles." But not every entrepreneur makes a big splash by creating a multibillion corporation with thousands of employees. Some are less interested in wealth, except as a barometer of their success, and more interested in achieving personal freedom. In the process, their innovations ripple through the economy.

Entrepreneurship helped Penny Bond take charge of her destiny after years of feeling imprisoned in her life. "Part of the reason why I took the master's program was that, somewhere deep down inside of me, I knew that it might be a way out," she says.

Another stereotype depicts the entrepreneur as someone who can turn dreams into a business reality, but can't turn a profit. Look at the Internet and technology companies that had great ideas in the late 1990s but never translated them into a sustainable enterprise. The ones that did succeed often started with the ideas of an entrepreneur, but they eventually kicked out the visionary and put a "professional manager" in place.

WCU professor James Carland says that this doesn't have to happen. Entrepreneurs are capable of innovating and running a company. Furthermore, they need to do both things well. "An entrepreneurial venture will shift its focus and reinvent itself as it sees changes in the marketplace," he says. This need to continually evolve "isn't good from a traditional management perspective because that doesn't provide short-term profit maximization." But it's necessary for a business to remain viable in the long term.

Born or Bred?

For some people, the traits of entrepreneurism are innate. But that doesn't mean others can't learn these behaviors.

Based on research he has done and the work of other experts, Thomas Lyons at the University of Louisville believes that entrepreneurs "learned what they needed to know in order to be successful. They didn't just pop out of the womb and have certain traits that allowed them to be successful."

Carland concurs that nearly anyone can become an entrepreneur. He

JoAnn and James Carland (pictured right), professors of entrepreneurship at Western Carolina University, believe they can teach people how to become entrepreneurs like Bill Gates.

PHOTOGRAPHY: MARK HASKETT

remembers when Penny Bond entered the Master of Entrepreneurship program with her partner, Kathy Austin, just because they thought it would be interesting. Neither of them intended to start a business. "Now that I have been through the program, I realize I have much more of an entrepreneurial spirit than I had any understanding of," says Bond.

The key is having the kind of drive and motivation that propels people toward the world of entrepreneurism. "Lots of us have wonderful ideas and we don't act on them," explains Carland. "Entrepreneurs need to have the confidence in their own ability to say, 'We can produce this and people will want it.'"

That's why entrepreneurism emerges wherever people have the will to make things better, even if it's in a command and control economy like the former Soviet Union or in a volatile country like Iraq. "Entrepreneurial activity seeks cracks and crevices in the economy. Those don't exist in a stable environment," says Carland. However, in such economies this kind of activity is likely to be limited in size and scope. "If you're afraid the state is going to step in and nationalize what you've done, take it away from you or regulate it out of existence, there's not very much incentive to create anything."

In the United States, the "rules of the game" give entrepreneurs the room to pursue their dreams with little interference. Business professor Bhidé says that our market system is very efficient at directing entrepreneurial activity into ventures that promote technological change. "There is a process by which some ideas get selected and some get rejected," he notes. "The ones that are selected are able to attract resources on a large scale to reach mass markets and change everybody's lives."

Sowing the Seeds

Communities like the Research Triangle region of North Carolina have been cited as fostering entrepreneurial activity. Is there anything that other communities can do beyond the usual business development efforts?

Economic development activities usually focus on business creation, attraction, and retention, often in specific industry clusters that officials see as promising. Lyons sees this approach as "an attempt to pick winners. That's gambling because we really don't know what's going to be successful. Why play that game?" Instead, he advocates creating the necessary infrastructure to support entrepreneurial activity more broadly.

For example, experts believe that communities should invest in developing its human capital broadly rather than focusing on just the "cream of the crop." This means improving overall education as well as teaching entrepreneurial skills. "It's not just about building businesses," says Deborah Markley. "It's about helping human beings realize their potential."

Also, social and financial networks are necessary for entrepreneurs to share information and combine resources, as well as develop word of mouth for their new products. Access to capital is particularly important in sustaining entrepreneurial activity. Lyons thinks communities should help create these support systems. "If it's left entirely to serendipity, it's not going to happen at a scale that's sufficient to transform the economy," he argues.

Networking is one of the functions of the Entrepreneurial League System (ELS), an approach created by Lyons and consultant Gregg Lichtenstein to identify and develop entrepreneurs. Advantage Valley, a regional development group that covers 12 counties in West Virginia, Ohio, and Kentucky, has been using the ELS model since June 2004.

So far, four "teams" have been formed with 40 members, including Jay Cipoletti. He believes that the monthly meetings with his teammates help "create a culture of development and accomplishment" in an area that has lacked a support system for entrepreneurs.

Creating an environment in which entrepreneurism can thrive doesn't change the world over night. But if the point is to stimulate entrepreneurial activity that yields innovations for the economy, such long-term structural changes are useful. "Entrepreneurial activity may reflect, to a large extent, slow-to-change cultural and social norms and institutions," noted researchers with the Global Entrepreneurship Monitor program, sponsored by Babson College and London Business School. "Short-term policies unable to influence culture and institutions may have little or transitory effects on the level of entrepreneurial activity." **RF**

READINGS

Bhidé, Amar. "Entrepreneurs in the 21st Century: Non-Destructive Creation, How Entrepreneurship Sustains Prosperity." Lecture Presented at Royal Society of Arts, London, November 17, 2004.

Goetz, Stephan J., and David Freshwater. "State-Level Determinants of Entrepreneurship and a Preliminary Measure of Entrepreneurial Climate." *Economic Development Quarterly*, 2001, vol. 15, no. 1, pp. 58-70.

Knight, Frank H. *Risk, Uncertainty, and Profit*. Boston and New York: Houghton Mifflin, 1921.

Lichtenstein, Gregg A., Thomas S. Lyons, and Nailya Kutzhanova. "Building Entrepreneurial Communities: The Appropriate Role of Enterprise Development Activities." Working Paper #1, Center for Research on Entrepreneurship and Enterprise Development, University of Louisville, January 2004.

Visit **www.richmondfed.org** for links to relevant sites and supplemental information.

House of Cards?

Fannie Mae and Freddie Mac have helped people to live the "American dream," supporters say. But many economists worry that they pose a very real threat to taxpayers

BY DOUG CAMPBELL

Some of the nation's leading economists are concerned about the safety and soundness of twin mortgage giants Fannie Mae and Freddie Mac.

There are two frequently asked questions on this topic: Who are Fannie and Freddie? And then: Who cares?

Casual listeners of National Public Radio might recognize Fannie Mae as the top-of-the-hour sponsor that's "in the American dream business." The spots don't mention that Fannie Mae and Freddie Mac happen to be among the largest (among the top five in assets) and most profitable companies in the country.

As you can imagine, these firms carry a lot of political clout. They credibly argue that their activities result in lower mortgage rates. They have also spent much of the last decade asserting that the chances they might need a government bailout are way, way down the list of doomsday financial calamity scenarios. A lot of people think they're right.

Invisible to most Americans, the high-stakes battle over the future of Fannie Mae and Freddie Mac has arrived at an important moment. Lawmakers are proposing bills that may fundamentally change the way these "government-sponsored enterprises," or GSEs, operate. Over the past decade, both camps have unleashed a flurry of research studies that alternately play up or play down the risks and benefits of Fannie and Freddie.

On one side are economists, free-market champions as well as some financial companies that might gain if the housing GSEs were forcibly downsized. The U.S. Treasury and the Federal Reserve Board of Governors have also taken strong positions in favor of GSE reform. These critics find objectionable the breathtaking growth of Fannie Mae and Freddie Mac. The companies are owned by private shareholders but their debt is viewed by the market as implicitly backed by the U.S. government. The way detractors see it, that's a recipe for moral hazard. Investors can reap profits as long as things are going well. But their ability to borrow at low rates allows them to dominate their markets and accumulate large concentrations of risk, and if there is a downturn, ultimately taxpayers are on the hook. The firms are so big that their crashes could cause ripple effects throughout the entire economy. Their debt together totals more than $1.7 trillion, about the same amount of assets held in the 1980s by the savings and loan industry, whose taxpayer bailout totaled $150 billion.

On the other side are Fannie and Freddie and virtually the entire U.S. housing industry, including mortgage lenders, investment banks (which underwrite the GSEs' substantial debt offerings), home builders, and real estate brokers. All assert that the advantages shared by the housing GSEs serve a wider cause: Fannie and Freddie help reduce the cost of housing for everybody. Without them, homeownership would be an unreachable dream for scores of Americans, the story goes.

At its center, the debate boils down to matters of principle and potential peril. Economists like Dwight Jaffee at the University of California at Berkeley, find the principle of housing GSEs disagreeable at best, perilous at worst. "I do believe that there is an extremely serious systemic risk," Jaffee says. "In our lifetime, if we don't change the system, there will be a day when Fannie and Freddie are in trouble."

Truth be told, there is broad agreement among economists that the housing GSEs are flawed — they are inefficient ways to subsidize the U.S. housing market and they pose significant risks to the economy. Fixing them simply makes economic sense. But real reform will require overcoming arguments like those of Princeton University economist Alan Blinder, whose hard-to-argue-with position is, basically, we could do a lot worse.

"At least with the GSEs, we get something. We created a very liquid, very efficient market which didn't exist before," says Blinder, a former Fed Governor, who has since conducted research sponsored by Fannie Mae. "If I fall asleep worrying about financial risks, it's not Fannie and Freddie. There are many things that come ahead."

Wall Street Darlings

Fannie Mae and Freddie Mac are the respective nicknames of the Federal National Mortgage Association and the Federal Home Mortgage Corp. Fannie was created in 1938 by the Federal Housing Authority and Freddie in 1970 by Congress. Both were later converted to private corporations and now investors can buy shares in the companies on the New York Stock Exchange.

PHOTOGRAPHY: CORBIS IMAGES

But many of their government ties remain intact.

Today Fannie and Freddie are very similar in business profile: Together they dominate the secondary mortgage market. This is where "primary" mortgage lenders — like banks and other originators — sell the loans they've made to home buyers. By selling their loans, they get back cash or other currency and thus can turn around and make more loans.

The GSEs do one of two things with their purchased mortgages. First, they bundle them up into securities and sell them to investors. These securities are backed by the mortgages that the GSEs have bought, hence the name "mortgage-backed securities." Investors receive payment of interest and principal on the underlying mortgages, and Fannie and Freddie reap an annual "guarantee fee" of about 20 basis points. As economists W. Scott Frame of the Atlanta Fed and Lawrence White of New York University explain it in a working paper, "In essence, Fannie Mae and Freddie Mac are providing insurance to holders of mortgage-backed securities."

The second thing Fannie and Freddie do with purchased mortgages — either ones they've bought directly from mortgage originators or else picked up in the form of securities on the open market — is keep them on their books. In this case, they directly collect principal and interest payments. They are able to fund their portfolio purchases primarily by issuing enormous sums of debt. (As of this summer, about 95 percent of Fannie's and Freddie's assets were reported as funded with debt.) These retained portfolios, much more so than the securitization business, are red flags for economists because all that risk sits squarely on the GSE balance sheets.

The housing GSEs make money in large part because they're not like other companies. Their special features include: 1) exemption from state and local income taxes; 2) a direct line of credit with the U.S. Treasury for up to $2.25 billion; and 3) a release from many state investor protection laws.

Most important, their charters lend a "halo of government support." That is, investors assume that when Fannie and Freddie borrow, their debt will ultimately be backed by the federal government. Thanks to this assumption, Fannie and Freddie enjoy an approximately 40 basis point funding advantage over firms of similar size and with similar risk characteristics, according to the most widely cited studies.

Nowhere can you find a written statement that if Fannie or Freddie were to fail, the government would jump in. Fannie and Freddie themselves declare that the government does not back their debt. Just the same, investors assume that the government wouldn't let Fannie and Freddie collapse. They're probably right. The savings and loan bailout is the most widely named precedent, but a more proper citation is that of the Farm Credit System, a bona fide government-sponsored enterprise to which lawmakers offered $4 billion to save in 1987. Indeed, Fannie Mae itself was granted special tax relief when it experienced financial difficulties in the 1980s.

Far from being failures, Fannie Mae and Freddie Mac arguably have been *the* Wall Street success story of the past 15 years. In 1990, the two brought in combined profits of $1.6 billion. By 2004, earnings had soared to almost $13 billion. Their assets enjoyed similar growth — from a combined $174 billion in 1990 to more than $1.8 trillion in 2004. Stock in each firm has quadrupled in value over the past 15 years.

Most of the growth is attributable to bulking up their retained mortgage portfolios, the business that stays on their balance sheets instead of being sold to investors. Today, Fannie and Freddie together hold about one-fifth of all U.S. home mortgages and mortgage-backed securities in these retained portfolios.

Analysts say that 1990 was the approximate point when Fannie and Freddie recognized the profit-maximizing strategy of growing their retained portfolios. Whereas the average guarantee fee for issuing mortgage-backed securities is 20 percent, the average spread between interest rates earned on mortgage assets and the interest costs of funding those liabilities is between 172 and 186 basis points. Fannie Mae and Freddie Mac now earn about 85 percent of their profits and revenues from their retained portfolios. "Opportunity knocked and they answered," Jaffee says.

The "Principle" Objection

There is a whole school of would-be reformers who want to yank government ties from Fannie and Freddie for the simple reason that they think there is no need to subsidize the housing market. In the United States, homeownership stands at 69 percent — well above any other developed country. There is no market failure here and so there should be no subsidy, their logic goes.

At the same time, some economists — and many politicians — believe that the more homeownership, the better. Homeownership is thought to produce positive "externalities" of making good citizens and good neighborhoods. Thus, even a 69 percent homeownership rate should be improved upon.

But are Fannie Mae and Freddie Mac really the most efficient way to promote homeownership? That 40 basis point funding advantage is supposed to trickle down into reduced borrowing rates for residential loans. How much of it actually trickles down is one of the biggest sticking points in the "principle" debate over Fannie and Freddie.

Wayne Passmore, an economist at the Federal Reserve Board, takes one of the more skeptical views. In a series of papers he comes up with seven basis points for the amount of the GSE subsidy that gets passed on to consumers. In other words, mortgage rates are 0.07 percentage point lower thanks to Fannie and Freddie. The other 33 basis points, Passmore concludes, end up in the pockets of GSE shareholders.

Looking at Passmore's findings, it's as if the GSEs have been issued a government-backed credit card and gone on a spending binge. Fannie and Freddie shareholders have been enriched, taxpayers endangered, and the net result to homeowners, has been trivial. Seven basis points is not believed to be sufficient to influence homeownership in the aggregate; in a 2002 study, economists at the Minneapolis Fed concluded that 200 basis points are needed to influence home buying trends.

A Fannie Mae spokesman declined to comment on a series of questions. Freddie Mac did not return several phone messages seeking comment.

Fannie and Freddie managers defended their turf before Congress in April. "Fannie Mae has drawn in billions of dollars from investors abroad to expand the availability and lower the cost of housing for low- and moderate-income Americans," Daniel Mudd, interim CEO with Fannie Mae, told the U.S. Senate Committee on Banking, Housing, and Urban Affairs. In written testimony, Freddie Mac CEO Richard Syron (who served as president of the Boston Fed from 1989 to 1994) said: "The housing GSEs have attracted global capital, created new mortgage tools, and served as a shock absorber when the broader financial markets locked up. As a result, housing today is less vulnerable to the business cycle than ever before."

Perhaps. It's important to keep in mind, though, that foreign capital has been pouring into many sectors of the U.S. economy, not just the housing market. Fannie's and Freddie's portfolios arguably have grown because foreign investors believe they are subject to implicit federal protection and are therefore especially safe places to invest. Other than that, there is no reason why these companies should have a special ability to attract foreign capital.

In a study commissioned to address Passmore's findings, economist Blinder and two co-authors said their research shows that 25 to 30 basis points of the implicit subsidy get passed on to consumers — not seven basis points. "That's a world of difference," Blinder says. And to him, it justifies the continued government-backing of Fannie and Freddie.

The "Peril" Objection

Fannie Mae and Freddie Mac are supervised by the Office of Federal Housing Enterprise Oversight, or OFHEO, which is part of the Department of Housing and Urban Development. OFHEO's chief job is enforcing GSE capital requirements. The legislation that created OFHEO also dictates that HUD each year establish the percentage of loans that the GSEs must buy from low- and moderate-income plus urban home buyers. (Another key way the GSEs target affordable housing is by virtue of the limits of the size of mortgages they can buy. In 2005, the limit was $359,650. Anything bigger than that is termed a "jumbo" mortgage and only private firms can buy them in the secondary market. Of course, the vast majority of loans that fall below the jumbo limit do not go to low-income home buyers.)

OFHEO is among those supporting reform of the housing GSEs. The office wants increased powers consistent with what bank regulators have, such as strengthened capital powers, enforcement authorities, and the power of receivership. Patrick Lawler, chief economist with OFHEO, grants that the odds of Fannie and Freddie actually causing a systemic problem to the economy are remote, but adds, "A remote possibility with very large consequences is important to consider."

What worries examiners at OFHEO is the GSE Achilles' heel: interest-rate risk. If rates suddenly decline, homeowners are more likely to refinance their mortgages, in which case Fannie and Freddie would be making debt payments at rates higher than the returns they would be collecting from newly acquired mortgages. Conversely, a rapid rise in rates would mean the GSEs would be taking on new debt at rates higher than the returns they'd be raking in from their retained mortgages.

Lawrence White of New York University, describes it this way: "They generally do what they do well — but there is the possibility that something could go wrong."

Fannie and Freddie and their defenders point out that modern-day financial vehicles like derivatives offer protection from rate swings. The GSEs are among the biggest users of derivatives like interest-rate swaps and related transactions — and they maintain that they are among the best at it. But hedges like these aren't perfect. And more to the point, some studies have found that Fannie and Freddie aren't even trying to come close to perfectly hedging their interest rate risks because to do so would hurt profits. By Jaffee's count, the GSEs would give up at least $1 billion in profits if they were to fully hedge their interest rate risks.

Economists like Jaffee have been sounding alarms about the housing GSEs for years to no effect. It wasn't until this past year that reform efforts finally gained traction. Accounting scandals hit Freddie Mac and Fannie Mae in 2003 and 2004, respectively, making the firms suddenly vulnerable. Both firms were found to be improperly accounting for their interest rate hedges and had to restate earnings down by $9 billion in Fannie Mae's case and up by $5 billion in Freddie Mac's.

Now, reformers can basically be grouped into three camps: those wanting to keep the GSEs intact with a stronger regulator; those pushing for strict limits on their retained portfolios; and those aiming for full privatization.

The "mini" reform crowd includes members of the housing industry. "We do believe they play an important role, particularly in the provision of liquidity through the securitization process," says Doug Duncan, chief economist with the Mortgage Bankers Association. As a purely descriptive matter, this is surely true. But many economists doubt whether Fannie and Freddie are now essential to a well-functioning secondary mortgage market. In their absence, private firms would likely step in and provide similar services.

Duncan's group supports the creation of an "independent, well-funded regulator, very much bank-like." Fannie and Freddie officers have testified before Congress that they would support the establishment of a new regulator with expanded powers to rewrite risk-based capital standards and place troubled GSEs into receivership. They don't want detailed statutes that spell out what the GSEs can and can't do. And most important, they don't want restrictions on their mortgage portfolios. Freddie Mac CEO Syron, in prepared remarks before the Senate in April, said: "For Freddie Mac to continue fulfilling its mission, there is a very real limit to how far the restrictions on us can be increased — and our abilities diminished."

Clamping Down

The next tier of those pushing for overhaul call for dramatic curtailments in the GSEs' mortgage portfolios — the combined $1.5 trillion sitting on Fannie and Freddie balance sheets that constitute the interest rate risks. Those in favor of this approach, including the Federal Reserve Board and the U.S. Treasury, focus on that part of GSE activity with the greatest potential for systemic risk and taxpayer loss – the companies' ability to borrow at subsidized rates and build large exposures to interest rate swings through their portfolio holdings.

Fannie and Freddie are especially opposed to this idea. They argue that forcing them to cull their mortgage portfolios would hurt U.S. home buyers. They say that foreign investors in particular are attracted to GSE debt — but wouldn't be so enamored with fully private-sector alternatives, thus reducing overall liquidity in the U.S. mortgage market. (But any such special characteristics of GSE debt come only from their special status and their implicit subsidy, and foreign investment in a wide array of U.S. assets has shown healthy growth since the late 1990s.) Finally, Fannie and Freddie say that profits from their portfolios support affordable housing activities, and that their interest rate risks are no worse (and perhaps better) than those faced by the largest U.S. banks. Recent accounting problems associated with their use of derivatives (for risk-management) at the very least call this assertion into question.

The case for limiting portfolio size is strong, though, and was summed up by Fed Chairman Alan Greenspan in his testimony before the Senate in April. "We have been unable to find any purpose for the huge balance sheets of the GSEs, other than profit creation through the exploitation of the market-granted subsidy," he said. "As far as we can tell, GSE mortgage securitization, in contrast to the GSEs' portfolio holdings, is the key ingredient to maintaining and enhancing the benefits of the GSEs to home buyers. And mortgage securitization, unlike the GSEs' portfolio holdings, does not create substantial systemic risks."

Time to Cut Ties?

Privatization is the goal of the third tier of reformers. In a June 2005 paper, the Heritage Foundation, a Washington think tank, summed up its case this way: "Congress has an opportunity to reduce financial market risk and taxpayer exposure and to restore competition in the residential mortgage market. At the same time, the housing industry and homeownership opportunity will remain unaffected."

Short term, privatization would be both logistically difficult to achieve and bad for shareholders in Fannie Mae and Freddie Mac. But it could also allow the GSEs to get into new businesses, such as making loans to home buyers, now the exclusive domain of primary market mortgage lenders, for example.

On this possibility, housing industry participants are united in opposition: Fannie Mae and Freddie Mac must be confined to their own business; there should be a "bright line" between allowed and forbidden endeavors. "There's no question we have strong feelings what their charter empowers them to do," says Duncan of the Mortgage Bankers Association.

In fact, the housing GSEs have already made several forays into nonsecondary market activities. As detailed by the American Enterprise Institute, another Washington-based think tank, these forays include: expanding purchases of home equity loans; lending to luxury apartment developers; and marketing appraisal, title insurance and full-service insurance agency services. Additionally, both Fannie and Freddie are believed to be eyeing the consumer lending market. It is thus contrary to the interests of many in the housing industry to support broad GSE reform.

On the flip side? In the end, even a massive bailout wouldn't be likely to directly cost taxpayers very much on a per-capita basis. So a Congress interested in promoting homeownership while protecting the economy faces mixed incentives. In a July research note about the possibility of new mandates forcing the GSEs to curtail their portfolios, Morgan Stanley analyst Kenneth Posner said, "We do not foresee Congress agreeing on such an extreme piece of legislation."

That might be true. But it doesn't make the case for reform any less compelling. "This is a bad way to supplement low-income housing," says Jaffee. **RF**

Readings

Blinder, Alan S., Mark J. Flannery, and James D. Kamihachi. "The Value of Housing-Related Government Sponsored Enterprises: A Review of a Preliminary Draft Paper by Wayne Passmore." *Fannie Mae Papers*, May 2004, vol. 3, no. 2.

Passmore, Wayne. "The GSE Implicit Subsidy and the Value of Government Ambiguity." *Real Estate Economics*, September 2005, vol. 33, no. 3, pp. 465-486.

Passmore, Wayne, Shane M. Sherlund, and Gillian Burgess. "The Effect of Housing Government-Sponsored Enterprises on Mortgage Rates." *Real Estate Economics*, September 2005, vol. 33, no. 3, pp. 427-463.

Utt, Ronald D. "Time to Reform Fannie Mae and Freddie Mac." Heritage Foundation Backgrounder #1861, June 20, 2005.

White, Lawrence J. "Fannie Mae, Freddie Mac, and Housing Finance: Why True Privatization is Good Public Policy." New York University, Stern School of Business, Working Paper EC 04-13.

Visit **www.richmondfed.org** for links to relevant sites.

Vince Spaulding and Kathy Chamberlain have lobbied for 15 years to polish the condition of Skyland Shopping Center in southeast Washington, D.C. Last year, the city council approved a plan that would allow the taking of the 16.5-acre Skyland property through eminent domain, to be replaced with a new shopping mall.

PHOTOGRAPHY: DOUG CAMPBELL

The Economics of Eminent Domain

The recent Supreme Court decision on takings encourages economic development leaders but worries some economists BY DOUG CAMPBELL

Vince Spaulding has lived within a few blocks of Skyland Shopping Center going on 40 years. Back in the 1970s and 1980s, this short sweep of retail in southeast Washington, D.C., "was well maintained. It was better managed and you did not have all this disorganization," Spaulding says.

Today, Spaulding scorns the aging storefronts that bend along Alabama Avenue and Good Hope Road. There's Checks Cashed, Ron & Dee Clancey's Adult Entertainment, Discount Mart, and, simply, "Liquor," among the 30 or so tenants. The parking lot is pocked with potholes; trash piles up along the edges.

"It's a raggedy old place," agrees Kathy Chamberlain, Spaulding's friend and co-officer of the Hillcrest Community Civic Association. "Why is it so hard to get a decent little shopping mall?"

For 15 years, Spaulding and Chamberlain have helped lead an effort to change at least the face of Skyland Shopping Center. For all those years, they say, the Skyland property owners resisted their overtures. But last year, the city council sided with the Hillcrest group, voting unanimously to use the power of eminent domain to take the land from 16 property owners and turn it over to a public-private development group, National Capital Revitalization Corp.

To Spaulding, it's about time. "This is a worthwhile application of the use of eminent domain if there ever was one," he says.

As of September, at least six Skyland property owners strongly disagreed with that sentiment. "The business is my livelihood ... I am very distressed that the government wants to take my business after I worked so hard to start it," says Duk Hea Oh, owner of the property and business Beauty World, a Skyland tenant, in an affidavit. "I have lost faith in the American dream."

In July, National Capital asked a D.C. Superior Court to let it take over the parts of Skyland Shopping Center not already under its control. National Capital is a publicly chartered economic development group whose mission is "spurring the revitalization of underserved and emerging neighborhoods in the District of Columbia." It has named a private developer, Rappaport Cos., to handle the Skyland project.

As of the end of summer, National Capital had filed six condemnation

PHOTOGRAPHY: Isaac Reese, 2004 © Institute for Justice

Susette Kelo fought hard to protect her property from eminent domain seizure. In a closely watched property rights case, the U.S. Supreme Court ruled that the promotion of economic development is a suitable use of the government's power of eminent domain.

suits for properties that constitute about half the project site. There are a total of 16 owners, with five of them having agreed to sell and three close to an agreement; the remaining eight holdouts are the ones that have been taken to court. The project was dealt a setback in late September when a federal agency refused National Capital's funding request, but the organization said it was continuing to seek new financing options.

The new Skyland would have about 250,000 square feet of retail space and about 1,100 parking spots. With a $100 million investment, the payoff would be $3.3 million in new tax revenues each year and about 233 permanent jobs.

A spokeswoman for National Capital declined to comment about the project, citing the ongoing court proceedings. In previous public statements, the organization has said that the project could generate about $325 per square foot as opposed to the current $150 per square foot by existing occupants. The new shopping center is intended to have a major anchor, with Target as the most talked about prospect. To make way, everything on the 16.5-acre site (5 acres of which is undeveloped) would be demolished.

People familiar with the project say it was no coincidence that National Capital made its official eminent domain request just weeks after June 23. That was the date the Supreme Court reaffirmed that local governments have the power to hand over private property to private developers in the name of economic development.

To proponents of the Skyland project, the *Kelo v. New London* decision enhanced their argument that eminent domain is a legitimate tool for improving neighborhoods in ways that go beyond traditional public infrastructure. To opponents, it was further disintegration of traditional U.S. property rights — and arguably not applicable in the Skyland case.

To some economists, the Kelo decision is complicated. The case brings into focus a number of economic problems with eminent domain and adds the twist of takings in the name of economic development. Does it make economic sense for private developers to have the power to essentially take commercial property mainly because neighbors find the Skyland Shopping Center ugly and inconvenient?

An Unfortunate Trade-Off

The power of eminent domain stems from the Fifth Amendment of the U.S. Constitution. "Nor shall private property be taken for public use, without just compensation," it reads. The government can only force property owners to sell when the taking is for "public use" and the compensation is fair.

A public use example: Eminent domain was widely used in the 1950s and 1960s in building the nation's Interstate Highway System. As a result, travel became quicker and easier for millions of Americans. At the same time, many urban neighborhoods were disrupted as new roadways cut through them.

More notorious was the eminent domain case that happened in Detroit in 1981, when the city and General Motors announced a plan to build a new auto factory that would employ 6,000 people. On the downside, the plant would occupy property where some 4,200 people lived in 1,300 houses, even though the local government considered the urban neighborhood blighted and worthy of revitalization. The "Poletown" case ended up being ruled lawful by the Michigan Supreme Court, but not before bitter residents whose homes were soon to be bulldozed grabbed national headlines.

These examples demonstrate that even before the Kelo decision, there was no shortage of economic problems innate to eminent domain. Todd Zywicki, a law professor at George Mason University, says eminent domain always involves a fundamental tradeoff: between property owners strategically "holding out" for an inflated payoff and those refusing to sell out of sincere subjective value. Inevitably in cases of eminent domain condemnations, there are widows who have lived at homes going on many years to whom moving — no matter what the price — would be emotionally traumatic.

Problematically, governments can't tell if property owners are of the true subjective value ilk or if they're strategic holdouts. So eminent domain treats everybody the same by simply allowing buyouts based on "fair" market value. That's because eminent domain isn't about individuals; it's presumably about the greater good.

Sometimes, the general welfare all but demands that individual property owners will have to sacrifice to make room for a road, a post office or an airport. "A highway has to go from Point A to Point B, and potentially every person from A to B has holdout power," Zywicki says. "These are good public uses and we're willing to run the risk that people will be under-compensated because we believe these are necessary public uses."

Economists haven't agreed on the best way to minimize the risk of under-compensation, however. As recently as the 1980s, some economists believed that zero compensation should be standard because to do otherwise would encourage over-investment in property; private buyers would assume that the government would compensate them "fully" for any takings. This problem would be most acute in places where development otherwise wouldn't make sense, such as along earthquake fault lines or known flood zones.

Ed Nosal, a senior economic adviser at the Cleveland Fed, has written papers that challenge that idea. He thinks paying market value is perhaps the only way to discipline governments from making poor taking decisions.

But even those who concur that market value is the optimal compensation can't agree on how to ease the strategic holdout-subjective value trade-off. "Those bargaining problems are really hard," Nosal says. "Once you throw in more than two people, the profession hasn't come to any consensus on how these things can be resolved."

In the face of all these shortcomings, the durability of eminent domain looks surprising. It has survived politically thanks to the understanding that it is invoked exclusively in cases where public use mandates it. Otherwise, property rights would dissolve as the government unilaterally applied eminent domain as a vehicle to avoid possibly expensive — and undoubtedly inconvenient — market transactions. Used correctly, the idea is that eminent domain boosts social welfare. But in overly liberal practice, it can lead to a classic distortion of incentives for both property owners and governments.

That's one reason why eminent domain as currently practiced has plenty of doubters. Nobel Prize-winning economist Gary Becker has long been a critic. "Government at all levels do so much that the temptation is irresistible to use eminent domain condemnation proceedings to hasten and cheapen their accumulation of property for various projects, regardless of a project's merits," Becker wrote in a recent Web-log entry.

For economists like Becker who already were wary about eminent domain, the Kelo case was a major red flag. This was in large part because the 5-to-4 ruling seemed to de facto expand the government's discretion in deciding what constitutes "public use."

The city of New London, Conn., wanted to take seven houses to make way for a redevelopment project, the centerpiece of which would be a $270 million research plant for drug maker Pfizer. One of the homeowners was Susette Kelo, who joined her neighbors in suing to stop the eminent domain proceedings. Their case was closely watched not only because it reached the Supreme Court but also because it seemed to depart from standard eminent domain cases involving economic development projects. Usually, the properties being taken are clearly blighted or dilapidated. But Kelo and her neighbors, plus the advocates who joined the cause, argued convincingly that these homes were far from blighted. And therefore, they said, no amount of new tax revenues could justify the seizure.

In the majority opinion, Justice John Paul Stevens disagreed: "The city has carefully formulated a development plan that it believes will provide appreciable benefits to the community, including, but not limited to, new jobs and increased tax revenue," Stevens wrote. "Because that plan unquestionably serves a public

KELO v. NEW LONDON

Excerpt From The Opinion

The City has carefully formulated an economic development plan that it believes will provide appreciable benefits to the community, including — but by no means limited to — new jobs and increased tax revenue. As with other exercises in urban planning and development, the City is endeavoring to coordinate a variety of commercial, residential, and recreational uses of land, with the hope that they will form a whole greater than the sum of its parts. To effectuate this plan, the City has invoked a state statute that specifically authorizes the use of eminent domain to promote economic development. Given the comprehensive character of the plan, the thorough deliberation that preceded its adoption, and the limited scope of our review, it is appropriate for us, as it was in *Berman*, to resolve the challenges of the individual owners, not on a piecemeal basis, but rather in light of the entire plan. Because that plan unquestionably serves a public purpose, the takings challenged here satisfy the public use requirement of the Fifth Amendment.

SOURCE: Justice John Paul Stevens writing for the majority

Excerpt From The Dissent

Today the Court abandons this long-held, basic limitation on government power. Under the banner of economic development, all private property is now vulnerable to being taken and transferred to another private owner, so long as it might be upgraded — i.e., given to an owner who will use it in a way that the legislature deems more beneficial to the public — in the process. To reason, as the Court does, that the incidental public benefits resulting from the subsequent ordinary use of private property render economic development takings "for public use" is to wash out any distinction between private and public use of property — and thereby effectively to delete the words "for public use" from the Takings Clause of the Fifth Amendment.

SOURCE: Justice Sandra Day O'Connor writing for the minority purpose, the takings challenged here satisfy the Fifth Amendment."

The backlash was swift. To many, it was as if the Supreme Court had taken a wrecking ball to traditional property rights. A political cartoon depicted Justice Stevens with an auction block crying, "Sold to the politically wired developer," while a humble homeowner below him mumbles, "But, but, my house isn't for sale." The Institute for Justice, which represented homeowners in the Kelo case, called it "the worst Supreme Court decision in years" and an "abuse of power." The number of states considering eminent domain law changes that would restrict takings for economic development purposes grew to 25.

Why the uproar? In purely economic terms, there may be little difference between the use of eminent domain for the provision of traditional public goods versus economic development projects. Theoretically, either a new airport or a new shopping mall could enhance overall well-being. So, from an economist's standpoint, the line that ought to divide worthy uses of eminent domain from unworthy ones is not always so bright. Still, the use of eminent domain for economic development purposes tends to increase opportunities for abuse of the system. The historical "public use" requirement acted as a gatekeeper to limit possibilities for takings of private property, while in a post-Kelo world the possibilities seem virtually limitless.

In addition, what some economists didn't like about the Kelo ruling was the seeming artificiality of the strategic holdout problem. Pfizer, unlike a local school system or airport authority, could build in any number of communities, including many within the state of Connecticut. But instead of deciding on and bargaining for the precise location of its facility beforehand, it did so only after agreeing with the city of New London to locate there. Under those circumstances, it would seem too easy for Pfizer or any other organization to quickly back out of property negotiations and ask for eminent domain proceedings. "There's no reason that Pfizer has to go to that neighborhood in New London," Zywicki says. "So the holdout power is imaginary. Unlike traditional public uses where there's a limited number of sites, here there's an unlimited number of sites."

That's why New London is so desirable to Pfizer, Zywicki says. Because of the prearranged agreement between Pfizer and the city government, Pfizer has the unique opportunity to essentially end-run a market transaction by getting the city to use the power of eminent domain. And what's worse, Zywicki says, is that Pfizer, in addition to the incentive of eminent domain, gets the added enticement of tax breaks and other perks offered up in the corporate recruitment process.

The particular facts of the Kelo case aside, some economists who have studied eminent domain continue to believe that takings are warranted in many economic development efforts. John Blair, an economist at Wright State University in Dayton, Ohio, who has published extensively on urban development and eminent domain, believes the Supreme Court made the right call in terms of general economic principle. It remains desirable for governments to be able to capture the extra value of land that is generated when it's assembled for development. The trick, he says, is clearly defining the circumstances under which properties are considered blighted enough to take for public use.

"We've got some reasonable grounds for using eminent domain for economic development. It seems to be almost necessary for cities in a lot of circumstances," Blair says. "But there also is the potential for misuse. What the average citizen sees is that a

Before New London, Poletown

Perhaps the most infamous instance of eminent domain in the name of economic development happened 24 years ago in Detroit. About 4,200 people were moved from their homes when General Motors and two local governments launched a plan to build a new GM plant that would employ 6,000 people. The facility would encompass property in the city of Detroit and adjacent Hamtramck known as "Poletown" for its population of Poles, Albanians, and Yugoslavs, among others.

The idea was to provide a "glittering example of what the auto companies and their suppliers could do in the city of their birth," according to a retrospective of the case by the *Detroit News*. It turned into a controversial *cause celebre* with the likes of Ralph Nader siding with holdout Poletown homeowners. The Archdiocese of Detroit endorsed the plan but was opposed by one of its own churches, the Immaculate Conception Roman Catholic Church, which was to be razed.

Despite the continued protests and nationwide attention, local politicians pushed through with the plan and were ultimately backed by the Michigan Supreme Court in March 1981. Homes were demolished along with the church.

In the aftermath, according to *Poletown, Community Betrayed*, a 1989 book about Poletown, Detroit ended up at least $80 million over budget in land acquisition costs. A University of Michigan study concluded that most homeowners who were forced to leave ended up "better off," with more than 80 percent happy in their new homes and less than 39 percent saying relocation payments were insufficient.

The Poletown case was widely cited as precedent by municipalities using eminent domain for economic development projects. But in July 2004, the Michigan Supreme Court overturned its earlier Poletown ruling and "sharply restricted governments such as Detroit and Wayne County from seizing private land to give to other private users," according to the *Detroit Free Press*. The new case arose because of an effort by Wayne County, Mich., to take private land for a technology park.

In the recent *Kelo v. New London* case, the U.S. Supreme Court essentially revisited the basic question in the Poletown case: Can the government in certain instances take private property for economic development purposes? The answer was affirmative. — Doug Campbell developer wants land and uses influence with the local planners and politicians, greases the wheels, and an average citizen gets removed from their home. That's clearly an improper use. It seems to me the solution would be to adopt clearer definitions."

The New Twist

That seems to be at least part of the challenge in the Skyland project. Elaine Mittleman, an attorney representing several Skyland property owners who don't want to sell, says that while New London can accurately be described as "distressed," the same can't be said for Washington, D.C. "There is a real estate boom in Washington, D.C., and the District certainly is not an economically distressed city," Mittleman wrote in a letter to officials with the Department of Housing and Urban Development, protesting a proposed HUD loan guarantee for the project.

The real goal of the Skyland project isn't economic development, Mittleman says. It's about catering to "higher-income persons who want to shop at a new, big box shopping center." To accomplish this, National Capital is assembling land with $25 million and then selling it to a developer for $4 million. Losing out are the business owners who must relocate with "no assurance that their business will be viable in the new location," Mittleman concludes. She notes that a leading property owner, First FSK Limited (not one of her clients) has proposed a private redevelopment of the shopping center that would answer many neighborhood concerns.

> It's hard to say whether this neighborhood would blossom further if not for the existing Skyland shopping center.

To be sure, the southeast Washington, D.C., neighborhood where Skyland is located is neither wholly distressed nor wholly booming. While the Skyland shopping center itself is described by neighbors as run-down, across the street is a relatively new, clean shopping strip anchored by a Safeway grocery store. Surrounding both retail centers are single-family homes that average in sale price around $400,000. It's hard to say whether this is a neighborhood that would blossom even further if not for the existing Skyland Shopping Center.

Skyland neighbors Vince Spaulding and Kathy Chamberlain think of the redevelopment of Skyland as the tipping point for the neighborhood. They believe the time for relying on private-led action or market forces has passed. It is time now for government intervention, they say. "They'd been given chance after chance to do something about it," Chamberlain says. "I think it's now the city's responsibility to do something."

As both sides await a court hearing on the Skyland case, they might do well to remember that these sort of eminent domain proceedings contain more than one part. After deciding whether a property can be seized comes the valuation phase. If the liquor store and the strip joint are forced to sell in eminent domain, will they fetch prices equal to their current status as small parcels in a slumping retail area? Or will they be valued as integral pieces of a huge and possibly profitable private development? That's the sort of dilemma that doesn't surface in classic eminent domain cases, where park lands or roads suggest no obvious market value. Traditionally, condemned properties have been valued on their predevelopment worth. But courts may be forced to ponder whether that's fair in cases of eminent domain for economic development.

What if developers have to pay "enhanced" value for the Skyland properties? That is, what if they have to share some of their gains with the incumbent owners? In that case, arguments that property owners aren't being "justly" compensated, as per both the Constitution and economic principle, grow weaker. There might well be enough of a payout for a business to comfortably relocate — or even for the owner to retire. At the same time, an eminent domain project like Skyland becomes less desirable to cost-conscious developers.

For attorney Mittleman, that's an issue for another day. Right now, she is concentrating on her property owner clients. "It doesn't matter if it makes economic sense or any other sense," Mittleman says. "The whole premise is wrong." **RF**

Readings

Epstein, Richard A. *Takings: Private Property and the Power of Eminent Domain*. Cambridge, Mass.: Harvard University Press, 1985.

Giammarino, Ronald, and Ed Nosal. "Loggers vs. Campers: Compensation for the Taking of Property Rights." Federal Reserve Bank of Cleveland Working Paper 04-06, July 2004.

Greenhut, Steven. *Abuse of Power: How the Government Misuses Eminent Domain*. Santa Ana, Calif.: Seven Locks Press, 2004.

Munch, Patricia. "An Economic Analysis of Eminent Domain." *Journal of Political Economy*, June 1976, vol. 84, no. 3, pp. 473-498.

Staley, Samuel R., and John P. Blair. "Eminent Domain, Private Property, and Redevelopment: An Economic Development Analysis." Reason Foundation Policy Study 331, February 2005.

"Eminent Domain: How to Take the Ruling." *Washington Business Journal*, July 1, 2005.

Visit **www.richmondfed.org** for links to relevant sites and supplemental information.

TO WORK

Or not to work?

That is the question for rural residents of South Carolina's Lowcountry. For many of them, the answer is "no thanks." BY CHARLES GERENA

A slew of training services are available in the Lowcountry, but getting to where they are located can be just as difficult as getting to a well-paying job for people without a car.

Racheal Simmons never saw herself working part-time as an administrative assistant. The 19-year-old from Allendale, S.C., thought about joining the military, but those plans went down the drain when she became pregnant four years ago. She dropped out of high school, just three credits shy of graduating.

"I didn't have a positive attitude. I just hung around," Simmons admits, adding that she ended up getting in trouble with the law and spending time in juvenile detention. "It took me awhile to get my head right."

With this troubled history, the best work Simmons could find was a $6.25-an-hour job at McDonald's. She quit after just two months, and not because she had ambitions of making more than a buck and change over the minimum wage.

"For me, it was the transportation and I had a baby that was in school," Simmons says. The McDonald's was two hours away on Hilton Head Island and, since she lacked an automobile, the only way to get there was via the transit system operated by the Lowcountry Regional Transportation Authority. "The bus leaves at 5 o'clock in the morning and you get home at 7:30 at night. You are gone all day. By the time you get home, the only thing you can do is say, 'Hi baby, bye baby.'"

Simmons realized that she had to finish her schooling in order for things to change. She enrolled in the Allendale County Adult Learning Center, which was within walking distance of home and offered daycare services. She earned the credits she needed and, after graduating at the top of her class, got a job offer from the center's director. "My life turned around and my attitude changed," Simmons states proudly.

In South Carolina's Lowcountry, farming and factory jobs aren't as plentiful as they used to be and the alternatives require some kind of sacrifice, whether it's traveling hours by bus, accepting lower-paying positions locally, or going back to school to

PHOTOGRAPHY: CHARLES GERENA

improve one's marketability. But not everyone has the motivation and drive that Simmons possessed. Many people just give up on the world of work — less than half of the working-age population in Allendale County was in the labor force in 2000. The consequences of their fateful economic decisions reach far beyond the negative impact on their own lives.

South Carolina has been progressing economically, but one of the reasons it hasn't been able to close the gap with many of its neighbors is a relatively low rate of labor force participation. This is the percentage of the adult, civilian population that is either employed or actively seeking a job.

After staying within a range of 66 percent to 67 percent for most of the 1990s, the state's labor force participation rate declined to 62.6 percent in 2002. This drop put South Carolina behind the nation as a whole and its neighbors. The United States' participation rate was 66.6 percent in 2002. North Carolina's rate was the same as the national average and Georgia's rate was about one percentage point higher. (That year, West Virginia had the lowest rate: 56.0 percent.)

Labor force participation in South Carolina has improved since 2002, with Upstate counties like Greenville and York leading the way. But the state still lags North Carolina and Georgia, as the poorest parts of the Lowcountry continue to struggle with putting its human capital to work.

"There are people who don't have hope," says James Pinkney, board member of the Southern Carolina Regional Development Alliance, which covers the counties of Allendale, Bamberg, Barnwell, and Hampton. Pinkney found hope: He was the first among nine siblings to finish high school and became a brick mason. Today, he chairs the county council and is a supervisor in the construction division of the Savannah River Site, one of the few major employers in a region that's much poorer than the rest of the state and relatively isolated from other job markets. "There is nothing here," he adds. "If jobs were available locally, I believe that more people would work."

Inside the Numbers

When government officials talk about the unemployment rate, workers who have dropped out of the labor force aren't included. The figure also doesn't include people who want a full-time job, but end up doing part-time work or side jobs off the books to make ends meet.

Therefore, a community with a lot of discouraged and part-time workers may have a lot more slack in its labor supply than a low unemployment rate would suggest. In such cases, labor force participation is an especially useful barometer of how well an economy utilizes its human capital. And if an economy doesn't fully use its human capital, the effects can be profound.

"There may be enough jobs to employ most of the people who want jobs, but that does not necessarily mean there are enough people working to supply a growing level of production that leads to more goods, less expensive goods, and an improved standard of living," noted Atlanta Fed economist Julie Hotchkiss in a 2005 article. "Ensuring continued output growth will eventually require an infusion of labor to support it."

On top of that, low labor utilization may inhibit future economic development. "If you have a county where you have 50 percent labor force participation, it's that much more difficult to attract businesses," notes Donald Schunk, an economist at the University of South Carolina. The reason is that firms looking to relocate "are going to assume that it's a county where people don't want to work."

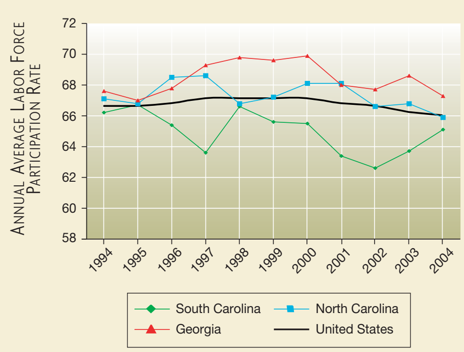
Finally, low labor participation rates are often associated with slower income growth. Indeed, the three South Carolina counties with the lowest rates of labor force participation in the state in 2000 were also near the bottom in terms of per-capita income, median household income, and median family income.

Allendale County ranked the lowest in the state in all three income categories in 2000. About a third of its population lives below the poverty line compared to 14 percent of the statewide population.

A snapshot of the county's downtown business district shows how bleak things are. On a sticky Tuesday afternoon, the streets are pretty deserted, except for a group of young men hanging around a worn-out storefront. One corner has an impromptu farmer's market, taking advantage of the shade provided by the awning of a run-down building with appliances and boxes stacked inside. An older man in a ballcap and sweat-stained shirt tries to stay cool while negotiating the price of a melon with a customer. Such "survival entrepreneurs" typically emerge where few employers are around to hire people.

Below Average

Despite improvements after the 2001 recession, South Carolina continues to have comparatively fewer people employed or seeking employment than its neighbors and the nation as a whole.



SOURCE: Bureau of Labor Statistics

Labor Market Holdouts

There are as many reasons why people aren't on anyone's payroll as there are people. Some don't need a job. Others want employment, but have stopped searching or never bothered to start. Let's look more closely at these two groups.

Among those who don't need employment are seniors who can afford to retire. In an influential 1985 paper, economists Michael

Hurd and Michael Boskin contend that a sizeable increase in Social Security benefits between 1968 and 1973 accelerated the decline in labor force participation of elderly men during that period.

In the Lowcountry region, only Beaufort County has a sizeable retirement-age population that contributes to its relatively low participation rate. The county saw a 76 percent jump in the number of residents 65 and older between the 1990 and 2000 censuses. Since 1950, the county's senior population has grown at an average annual rate of 5.1 percent while its general population grew at an annual rate of 3 percent.

Then, there are labor market holdouts who decide to enlist in the armed forces. Again, only Beaufort has a sizeable military presence in the Lowcountry. About 9,000 people work for a cluster of facilities, including an air station and recruiting depot for the U.S. Marine Corps.

The $35,000- to $40,000-a-year jobs that Grant Forest Products is expected to need for its new plant will hopefully entice some Allendale County residents into the work force.

While more women take part in the labor force than in past decades, men continue to have a higher participation rate. Many women still choose to make running their households their primary occupation. Others don't enter the work force for other reasons.

"Depending on your education and skill level, it may not pay to enter the work force," Schunk offers as one explanation. A woman may have a husband who earns enough to pay the bills, so it isn't worth the cost of the wife working, which includes additional transportation and daycare for the kids. "It might be the case that you're not netting very much from that additional earner in the household."

Al Maynor, human services coordinator at the Allendale County Department of Social Services, says most of the agency's welfare clients are women who report they are single parents. While they receive a variety of services, including low-cost child care, they have their reasons for not working. "In their minds, it's easier to stay at home rather than try to work," Maynor notes. "If you're paying $50 a week for child care and transportation, what is left for what you want to buy?"

Of course, there are people who just don't want to work. They make money on the side occasionally, live off of the generosity of relatives, or receive public assistance. They live from day to day rather than think about the future.

William Gillespie, chief economist with the South Carolina Office of Research and Statistics, contends that these people are perfectly happy with their lot in life, despite having fewer things. "They don't need to make $50,000 a year. Medicaid covers their health costs and they get food stamps," plus the cost of living is low. Those who are unhappy can move somewhere with better employment opportunities.

Down on the Future

But what about the citizens of Allendale and other rural counties nearby who want to work but don't? What keeps them out of the work force?

Employment opportunities are available in the rural counties of the Lowcountry. But the labor market picture is far from rosy, frustrating those who are forced to retire through attrition or are laid off.

"There are jobs out there if you look in the newspaper," says W. Stephen Gardner, a labor market analyst with the South Carolina Employment Security Commission. "It will advertise a company coming to a particular location that will hire 150 people, but it will only pay $7 an hour. Most people cannot pay their bills on that kind of salary so they don't bother to apply."

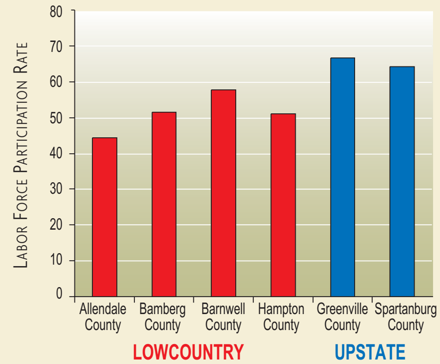
Some jobs may pay enough to cover the mortgage and living expenses, but they don't cover the opportunity costs. Doing lots of overtime or night shift work at a factory means less time with the family. Commuting long distances also keeps workers away from home longer, plus it entails finding someone to watch the kids and spending more on gasoline or bus fare.

Transportation is a major issue for relatively isolated communities like Allendale County where residents have to travel hours to find jobs with good pay and benefits. One major source of employment for Allendale residents are the recreation, hospitality, and food service businesses in Hilton Head Island. But they are more than 70 miles away, a major obstacle for those without automobiles.

The Savannah River Site where Allendale's county council chair, James Pinkney, works is another major source of employment. The Department of Energy complex reprocesses and stores nuclear material from weapons. It's closer to Allendale than Hilton Head, but it has experienced some retraction. The federally funded operation laid off thousands of employees during the 1990s, plus 2,000 full-time workers will get their pink slips between now and 2006.

Lowcountry vs. Upstate

The Southern Carolina Regional Development Alliance is trying to bolster economic growth in four Lowcountry counties in order to create the kind of job opportunities that help Upstate counties like Greenville and Spartanburg pull relatively more people into the work force.



NOTE: Data are from 2000.
SOURCE: South Carolina Office of Research and Statistics

Agriculture was a major employer 30 years ago, but the good old days of farming are over. That has put many former agricultural workers in a tough spot. The Lowcountry has a limited industrial base with few employment options for those with little or no education. Until Grant Forest Products made its June announcement of a $200 million plant that plans to employ 120 people, the last time a major producer located in the county was two decades ago. No wonder a big banner welcomes the company to town more than a year before its scheduled opening.

There are a few large manufacturers in Allendale, including a chemical producer and an ice machine maker, and several smaller ones. However, they often require skills that former farmers and textile workers don't have.

"We have a lot of folks who are unemployable," notes Wilbur Cave, executive director of a grassroots development organization called Allendale County ALIVE. "It is very difficult to get people prepared to work in some of the local plants because of the level of technology [they use]. Our industry is a little younger than the industries in some of the surrounding counties."

Instead of giving up, people could make themselves more employable. That's what Racheal Simmons did by learning as much as she could about computers while earning her high school diploma. "You've got to know these computers because everything has to do with them," she says. "Cash registers have turned into computers."

Some may be ill-prepared to acquire the skills necessary in today's technology-intensive labor market. For instance, the state took over management of Allendale County's school system in 1999 due to its consistently inadequate performance in the previous decade.

Even when educational opportunities are available, expectations play a big role in a person's willingness to take advantage of them. Workers have to invest time and money to get a GED or take a vocational class, and they won't do it unless they anticipate a return on their investment. Given the lack of job diversity in the Lowcountry and the lack of growth in existing industries, people may have low expectations.

"Historically, manufacturing was an industry where people could be able to get a job ... with a relatively low level of education and earn a good living," says University of South Carolina economist Donald Schunk, and the same was true about agriculture. That is no longer the case but attitudes toward the value of education have been slow to change, especially since the state as a whole is still transitioning from an agrarian-based to an industrial economy. "Maybe it takes generations before you change that mindset," Schunk says.

These and other factors contribute to high dropout rates in Allendale and throughout the state. A 2002 study by the Manhattan Institute found that South Carolina had a high school graduation rate of 62 percent, nine points below the national average. In contrast, Virginia's graduation rate was 74 percent and West Virginia's rate was 82 percent.

Improving primary and secondary education, along with providing work force training for adults long out of school, is often cited by community and government leaders as a way to help increase labor force participation. "You not only have to try to help those who are already out there, but you have to prepare the next generation so they won't be faced with the same issues," Cave explains. **RF**

Readings

Bowen, William G., and Aldrich Finegan. "Educational Attainment and Labor Force Participation." *American Economic Review*, March 1966, vol. 56, no. 1/2, pp. 567-582.

Bradbury, Katharine. "Additional Slack in the Economy: The Poor Recovery in Labor Force Participation During This Business Cycle." Federal Reserve Bank of Boston Public Policy Briefing No. 05-2, July 2005.

Bradley, David H., Stephen A. Herzenberg, and Howard Wial. *An Assessment of Labor Force Participation Rates and Underemployment in Appalachia*. Harrisburg, PA: Keystone Research Center, August 2001.

Fullerton, Howard N. Jr. "Labor Force Participation: 75 Years of Change: 1950-98 and 1998-2025." *Monthly Labor Review*, December 1999, vol. 122, no. 12, pp. 3-12.

Hotchkiss, Julie L. "Employment Growth and Labor Force Participation: How Many Jobs Are Enough?" Federal Reserve Bank of Atlanta *Economic Review*, First Quarter 2005, vol. 90, no. 1, pp. 1-13.

Schunk, Donald L. "The Gender Wage and Participation Gap." *Business & Economic Review*, July-September 2005, vol. 51, no. 4, pp. 8-12.

Visit **www.richmondfed.org** for links to relevant sites.

POLES APART

The public views many positions favored by economists with skepticism. Why?

BY AARON STEELMAN

Economists are famous — or infamous, some would say — for being unable to reach agreement on important issues. Harry Truman, for instance, famously pleaded, "Give me a one-handed economist. All my economists say, 'On the one hand ... on the other.'"

There is some truth to Truman's claim. Economics is a science, and there will always be disagreement about how to interpret the evidence. This is especially true when new, and often contradictory, evidence becomes available. Still, it's easy to overstate the differences. On many matters, mainstream economists are in basic agreement — a point that is confirmed by several surveys conducted over the past 30 years.

In 1976, Brigham Young University economist J. R. Kearl and three colleagues sent a list of 30 propositions to economists around the country. The respondents were asked to state what they thought about those propositions, by choosing one of the following three options: "generally agree," "agree with provisos," or "generally disagree." Kearl and his colleagues looked at the responses and concluded that "it is clear from this analysis that the perceptions of widespread disagreement are simply wrong." Digging a little further, though, they determined that the strongest agreement was generally found on microeconomic issues, while macroeconomic propositions yielded more mixed results. In short, it was harder to find consensus on the most pressing issues of the day — inflation and unemployment, for instance — and thus not surprising that many people perceived economists as a disagreeable bunch.

Fourteen years later, Kearl and two new colleagues sent out a similar survey. And again they concluded that, across a wide range of issues, "there is much consensus among economists." To cite just a few, more than 90 percent of respondents agreed that "tariffs and import quotas usually reduce economic welfare;" almost 80 percent said that "a minimum wage increases unemployment among young and unskilled workers;" and more than 70 percent stated that "inflation is primarily a monetary phenomenon."

Enter the Public

Having determined that, among economists, agreement rather than contention was the norm on many issues, some researchers have turned to their attention to the public. What does the public believe about economics — and why?

A principal source of data on the public's attitude toward economic issues is a 1996 poll done by the *Washington Post*, the Kaiser Family Foundation, and Harvard University titled simply, the "Survey of Americans and Economists on the Economy," or SAEE. The survey asked 1,511 members of the public and 250 economists to give their views on a series of economic questions that can be grouped into three broad categories: views of past and current economic performance; expectations for future economic performance; and explanations of why the economy is not doing better.

The findings of the survey were reported at length by the survey's authors in a 1997 article in the *Journal of Economic Perspectives*. They argued that the data "show a substantial gap between how the public and economists view the economy." In general, the public tended to believe that economic conditions were not as strong as stated in official government reports, and they were more pessimistic about future conditions than the economists polled. As for explanations, the public tended to have a much more populist outlook than the economists. About two-thirds of the public said that excessive foreign aid spending was one of the reasons the economy was not performing as well as it could, compared to just 1 percent of economists. Similarly, 69 percent of the public thought that high salaries for top executives were hurting the economy, compared to only 12 percent of economists.

Although the survey was not designed to determine the reasons the public holds widely divergent views from economists, the authors offered several possibilities, including the following: "Americans do not have a very good foundation of knowledge about how the economy operates, and therefore they may be having a difficult time making accurate assessments of how the economy is performing." One question, in particular, demonstrated "the public's lack of belief in market forces." Nearly 70 percent said that when prices go up, it is mainly due to companies trying to manipulate prices to increase profits, while only 28 percent said price increases were mainly due to supply and demand forces.

In a series of papers, George Mason University economist Bryan Caplan has mined the SAEE data to better determine the sources of the public's beliefs on economics. He argues that separating the questions into two categories — causal and noncausal — reveals some important distinctions. Causal questions ask respondents to describe how a particular variable — for instance, immigration — affects the economy. Noncausal questions, on the other hand, simply ask people to describe economic conditions — for instance, whether average family incomes rose, fell, or stayed the same during the last 20 years.

How the public responded to the two sets of questions depended on different demographic characteristics. For causal questions, the respondents' education and ideology are the dominant factors. For noncausal questions, the respondents' income growth is particularly important.

Consider immigration, a typical causal issue. "Education exerts an overwhelming influence on beliefs about immigration: As it rises, the estimated severity of the immigration problem rapidly falls," Caplan writes. In contrast, for real family income, a typical noncausal issue, people are significantly more likely to believe it rose over the last 20 years if their own income did and/or will grow.

How do we explain the differences? Caplan argues that on noncausal questions, respondents are "intuitive scientists." That is, they use their own experience to form beliefs about the state of the economy. For instance, if their company is laying off workers, they are more inclined to believe that the economy as a whole is performing badly.

On causal questions, though, respondents are more inclined to rely on expert opinion. People with higher levels of education and more firmly held ideological beliefs generally have been exposed to "a bundle of 'off-the-shelf' theories" that are unfamiliar to less educated and ideological people, argues Caplan. In addition, these variables also "prompt individuals to reject — as mere prejudice or propaganda — theories they encounter in popular culture. This is particularly so with education, where much time is spent combating popular misconceptions of nonacademic origin."

One might expect that personal experience would affect responses to causal questions as well. For instance, a worker whose company has moved production offshore might be especially inclined to believe that globalization is harmful. But surprisingly Caplan has found that "interest variables" such as income growth generally do not play a large role in the formation of causal beliefs.

Bridging the Gap

What does this tell us? At least two conclusions can be drawn from the survey data. First, large segments of the public remain relatively uninformed about economics. Second, increased education can alter people's understanding of causal issues. It would seem, then, that economists should spend more time exposing the public to basic economic concepts. (A complicating factor is ideology, which as we have seen also exerts strong influence on people's causal beliefs. Insofar as the ideologically faithful have already been "converted" to a specific set of policy proposals, exposure to new ideas might do little to change their minds.)

The incentives that academic economists face, though, are not consistent with an approach that would place more emphasis on economic education. Economists are unlikely to gain tenure by writing for a popular audience or by teaching introductory principles classes. Instead, they are rewarded for producing papers for peer-reviewed journals.

How can this problem be reconciled? There are some economists who are able to do both high-level original research and speak to the public clearly. Milton Friedman and Paul Samuelson are perhaps the two best examples. But they are rare.

Instead of relying on such exceptions, economists, in organizing their profession, might take more seriously one of the discipline's central concepts: the division of labor. Those economists who are well disposed to making high-level technical contributions could generally focus on original research, while those economists who are skilled in presenting more elementary concepts to the public could mainly focus on economic education. For economists in the latter category, this might require swallowing some pride. But if the profession agreed that it should place a higher value on speaking to the public, those economists could find that they would do well by doing good. **RF**

READINGS

Alston, Richard M., J. R. Kearl, and Michael B. Vaughan. "Is There a Consensus among Economists in the 1990s?" *American Economic Review*, May 1992, vol. 82, no. 2, pp. 203-209.

Blendon, Robert J., et al. "Bridging the Gap Between the Public's and Economists' Views of the Economy." *Journal of Economic Perspectives*, Summer 1997, vol. 11, no. 3, pp. 105-118.

Caplan, Bryan. "How Do Voters Form Positive Economic Beliefs? Evidence from the 'Survey of Americans and Economists on the Economy.'" *Public Choice*, forthcoming.

__. "What Makes People Think Like Economists? Evidence on Economic Cognition from the 'Survey of Americans and Economists on the Economy.'" *Journal of Law and Economics*, October 2001, vol. 44, no. 2, pp. 395-426.

Kearl, J. R., et al. "A Confusion of Economists?" *American Economic Review*, May 1979, vol. 69, no. 2, pp. 28-37.

Klein, Daniel B., et al. *A Plea to Economists Who Favor Liberty: Assist the Everyman*. London: Institute of Economic Affairs, 2001.

Visit **www.richmondfed.org** for links to relevant sites.

Why Economists Still Worry About

Bank Runs

Depositors crowded around barricades surrounding Abacus Federal Savings Bank in New York's Chinatown on the second day of a run that began April 22, 2003. After a week, the bank had paid out $30 million to depositors but remained solvent.

PHOTOGRAPHY: AP/WIDE WORLD PHOTOS

They may be rare today, but the costs they impose can be large — and so can the measures we take to prevent them, says a Richmond Fed economist

BY DOUG CAMPBELL

You're thinking of this place all wrong, as if I have the money back in a safe. The money's not here. Well, your money's in Joe's house, that's right next to yours. And in the Kennedy house, and Mrs. Macklin's house, and a hundred others. You're lending them the money to build, and then they're going to pay it back to you as best they can. Now, what're you going to do, foreclose on them?"

— George Bailey (Jimmy Stewart) pleading with panicked depositors in the bank run scene from "It's a Wonderful Life."

Thomas Sung remembers thinking there was no way it could be happening. It was Tuesday, April 22, 2003, and Abacus Federal Savings Bank, which he founded almost 20 years earlier to serve Chinese immigrants in New York City, was experiencing a run. Jumpy depositors lined up five-deep outside to withdraw their money. They were incited by rumors that Sung had fled the country along with another employee, supposedly stealing $50 million from the bank's vault. What actually happened was that an employee had been fired for alleged embezzlement, but Abacus as a financial institution remained strong.

"It was awful," Sung recalls. "I never thought we would have any problems because we had so much liquidity. I went there to calm the crowd and shake hands with customers. I said, 'I'm here. Abacus isn't going anywhere.'" But inside, as Sung tells it, bank managers were scrambling to secure liquid funds. Agents of the Office of Thrift Supervision were faced with the question of whether to close the $282 million-asset bank's doors.

The crisis deepened and spread through the bank's six branches in New York and Philadelphia. For days, depositors continued to queue up, unswayed by public statements from regulators that Abacus was safe and sound and federally insured. Sung had to move fast. If he couldn't convert some $20 million worth of assets into cash by Monday, Abacus Federal Savings might fail. "We'll find some way," he told his staff as they hunkered down for 48-straight hours of work over the weekend. He kept to himself the gnawing suspicion that Abacus was hanging in the balance.

Preventing Panic

The plight of Abacus Federal Savings turned a lot of heads. Bank runs hardly ever happen anymore in the United States, though many did occur in the 19th and early 20th centuries. The 1929 market crash and ensuing depression, with its flurry of bank panics (between 1930 and 1933, one out of every three U.S. banks failed), prompted Congress to introduce federal deposit insurance.

George Bailey explained to the panicky people of Bedford Falls how the system works — and how easily it can break down. One problem is acute: When a cascade of people start withdrawing their money, irrationally or rationally, it becomes increasingly difficult for even safe and sound banks to pay off depositors. The other problem is chronic: In the long term, if fewer people keep their money in banks, then banks have fewer dollars to lend out for development.

Initially, deposit insurance was seen as a means to protect "the small, unsophisticated depositor," writes Arthur Rolnick, director of research at the Minneapolis Fed, in an article about the costs of preventing bank runs. It also carried the apparent virtue of discouraging bank runs.

The original amount insured by the Federal Deposit Insurance Corp., created in 1933, was $2,500; today it's $100,000. That insurance fund is a pool to which insured banks contribute; it's not taxpayer money. (But if the funds ran out, then taxpayers could be on the hook.) Banks don't match deposits dollar for dollar but rather 1.25 percent of insured deposits in the aggregate.

These protections have made a difference. Since Jan. 1, 1934, according to the FDIC, no U.S. depositor has lost even a penny of insured funds from a bank or thrift failure.

But as the events around Abacus Federal Savings proved, bank runs are more than a theoretical possibility in the 21st century. Economists regularly go back and reevaluate the costs and benefits of having policies and systems in place that reduce the possibility of bank runs. Understanding the economics of bank runs is essential for those calculations. Deposit insurance may seem like a bulletproof solution, but many economists dislike it because of the moral hazard problem. Because their deposits are insured, customers have reduced incentive to monitor their banks' behavior, which can lead to more risk-taking than is desirable. Many blame the 1980s savings and loan crisis at least in part on this disconnect.

For these and other reasons, bank runs remain fertile ground for economic inquiry. A lot of the intuitive ways to prevent bank runs or diminish their fallout have turned out to be questionable. Some of the most influential research has been led by economists with ties to the Richmond Fed. What they have concluded may shape banking policy in the years ahead.

The Diamond-Dybvig Model

Douglas Diamond, an economist at the University of Chicago and a visiting scholar at the Richmond Fed, co-authored in 1983 with economist Philip Dybvig the landmark paper "Bank Runs, Deposit Insurance, and Liquidity." It contained what's regarded as the first coherent mathematical model on how bank runs work.

Their story began by asking why banks are subject to runs in the first place. The simple answer is that banks finance illiquid assets — like loans — with very liquid short-term liabilities, meaning deposits. That means that if depositors want their money, banks can either call or sell their loans before they reach maturity — but either way they don't get full value. As a result, it's unlikely there will be enough to go around to all depositors. Runs are caused by sometimes rational responses of depositors who know that if they get in line for payment too late, there may be nothing left for them.

Diamond and Dybvig suggested that banks offer contracts that encourage people to withdraw their deposits only when they need the funds. To make such a system work, there has to be some coordination among depositors so that they won't all demand payment or panic at the same time. Of course, such coordination can be difficult. That's why banks in the Diamond-Dybvig model remain vulnerable to runs, and that's a problem for the entire economy.

Seemingly the only surefire way to prevent the possibility of a bank run in the Diamond-Dybvig model is to specifically forbid more than a certain percentage of withdrawals in any given period of time — so-called "suspension of convertibility." But even this system is not perfect. To ensure that only depositors who are in financially dire straits can withdraw funds, Diamond and Dybvig propose a taxation authority with the power to take back money from depositors who came first in line but turned out not to really need the money. "That's our model of what deposit insurance is. It would be useless without taxation authority," Diamond says. Researchers also point out that although almost all actual deposit insurance systems are government-run, the theory itself does not rule out the possibility of private solutions.

In the years since Diamond and Dybvig's paper, scores of economists have added to the model's robustness. But still questions remain about its practicality for the real world. Many economists continue to study ways that might help ease the negative economic impact of the very possibility of bank runs.

The Ennis-Keister Model

Huberto Ennis, a research economist at the Richmond Fed, recently tackled the problem from a new angle. In a 2003 paper, Ennis and Todd Keister of Instituto Tecnologico Autonomo de Mexico (also known as ITAM) ask whether runs, and the very possibility thereof, are bad for the long-run performance of the economy. The short answer: Yes, but with some caveats. In fact, one of their more counterintuitive conclusions is that eliminating deposit insurance might have the beneficial effect of spurring more economic growth.

In "Economic Growth, Liquidity, and Bank Runs," Ennis and Keister created a mathematical model which simulates an economy where deposit insurance doesn't exist. In this environment, runs definitely happen. Their model was different from the Diamond-Dybvig version in that they fused together a simple bank-run model with a simple growth model. Then they produced artificial data to investigate the optimal kinds of contracts that banks and depositors could engage in and their effects on economic growth. There were three key findings, all of which suggested that the absence of deposit insurance could be harmful to capital formation, plus one surprising result.

First, banks enduring a run will liquidate their assets for cash. As a result, new capital creation is slowed, thus tamping down overall growth. Second, consumers react to the hypothetical possibility of runs by keeping more of their money safe at home. This again keeps money that might be used for investment out of the system, hurting overall economic growth. Finally, banks likewise protect themselves against runs by putting more money in liquid investments that don't generate high returns. "The mere possibility of a bank run reduces capital formation, even when a run does not occur," Ennis and Keister write.

Even though banks may be shifting relatively small amounts of assets into liquid forms, the consequences can be large and last for a long time, Ennis says. It becomes an intertemporal problem: The way resources are allocated in the banking system hurts the future economy.

But Ennis and Keister also discovered a new twist: In certain cases, banks might actually choose to hold less liquid portfolios in response to the probability of runs. And that, theoretically, would not only be good for economic growth prospects but also decrease the probability of runs.

How can this be? It is a matter of incentives. Banks attract deposits by promising solid returns. By necessity (and regulator-mandated capital requirements), they set aside liquid funds for depositors who may legitimately need to withdraw their money before their investment vehicle has reached maturity. But the rest of any given bank's depositors ought to wait for higher returns instead of pulling out early in fear of a run.

To pay off as many depositors as possible in the event of a run, banks can set up contracts that pay lower interest rates to those who withdraw early. Depositors who otherwise don't need immediate cash are dissuaded from trying to withdraw early because they know the funds are both limited and low in value; they might as well wait it out. On the flip side, banks in this scenario are placing more money in long-term, high-return investments, and less money in liquid assets. That's good for economic growth.

"What's important is that the behavior of banks facing runs is complicated," Ennis says. "The most obvious thing is to increase liquidity; it's an easy way to think about it. But the other way is that under certain conditions it's going to be more advantageous to actually lower interest rates on the front end as opposed to increase liquidity. A lot of it depends on the promised returns on long-term investment."

Now, what's good for economic growth is not necessarily the same as what's good for individuals' welfare. Some depositors could be harmed by a system in which banks hold less liquidity. That is one of the many reasons why deposit insurance endures, and why Ennis, for one, remains agnostic on the topic. "One has to be careful," Ennis says. "We are not necessarily always interested in growth. If there's a situation where you grow slower but provide more insurance and that gives you improved welfare, then that's a good thing."

Wounded Survivor

Two and a half years later, Abacus Federal Savings Bank endures. After working through day and night over the weekend, Sung showed up at Fannie Mae headquarters in Virginia at 8 a.m. Monday, April 28. He needed to sell a pool of his mortgage loans as soon as possible. By 10 a.m., Fannie Mae — after buying the loans at a discount — had sent over enough money to effect the release of Abacus' notes from the bank's primary lender. Abacus was liquid. By the time the crisis ended a couple of days later, the bank had paid out about $30 million to depositors, but the doors remained open.

But the panic took a toll nonetheless. For one thing, Sung earlier this year gave up the CEO's post, handing it over to his daughter, though he remains chairman. Short term, the bank took an earnings hit because it had to convert mortgage loans into cash assets which would have earned higher returns if allowed to reach maturity.

Long term, Abacus is keeping an unusual proportion of its assets in cash or near-cash reserves, Sung says. The bank is doing this on the advice of its regulators, Sung says, who suggested Abacus "pre-position" itself for the possibility of runs. Unlike institutions that are perceived to be "too big to fail," community banks are largely on their own, Sung says.

Sung insists that he had plenty of liquidity back in 2003; if only funds had been released to him on a timely basis there would have been no scramble, he says. To this day, Sung thinks he was wronged by the system. It's not his depositors who are to blame, he says — they were possibly making rational decisions based on the actions of fellow depositors.

He is skeptical that it was a cultural phenomenon, driven by Abacus depositors' ignorance of deposit insurance and the workings of modern-day finance. "The problem is that when you have a run, you have a frenzied type of feeling. People forget. They worry about it.

"Maybe people need to be more educated in that. Maybe that would have prevented some of it. But I honestly don't believe that would have prevented a run like this." **RF**

READINGS

Diamond, Douglas W., and Philip H. Dybvig. "Bank Runs, Deposit Insurance, and Liquidity." *Journal of Political Economy*, June 1983, vol. 91, no. 3, pp. 401-419.

Ennis, Huberto M., and Todd Keister. "Economic Growth, Liquidity, and Bank Runs." *Journal of Economic Theory*, Spring 2003, vol. 109, no. 2, pp. 220-245.

Peck, James, and Karl Shell. "Equilibrium Bank Runs." *Journal of Political Economy*, February 2003, vol. 111, no. 1, pp. 103-123.

Rolnick, Arthur. "The Alarming Costs of Preventing Bank Runs." *Fed Gazette*, April 1991.

Visit **www.richmondfed.org** for links to relevant sites and supplemental information.

How Oil Price Changes Affect the Economy

BY DOUG CAMPBELL

"Oil Prices and Consumer Spending." Yash P. Mehra and Jon D. Petersen, Federal Reserve Bank of Richmond *Economic Quarterly*, Summer 2005, vol. 91, no. 3, pp. 51-70.

When Hurricane Katrina hit, the country expected — and got — higher oil prices. With supply disrupted in the Gulf Coast, motorists nationwide paid more than $3 a gallon at the pump. Some believed this would have a negative impact on the wider economy. Northwest Airlines cited the hurricane's impact on fuel prices as a leading reason for its Chapter 11 bankruptcy filing in September.

Economists have long known that hikes in oil prices can sometimes (but not always) produce ripple effects beyond hurting consumer pocketbooks. Big jumps can raise inflation and tamp down growth. But incongruously, the flip side usually isn't true. When oil prices drop, we do not experience significant improvements in economic output. The experience is asymmetric. How come?

In a recent paper for the Richmond Fed, Yash Mehra and Jon Petersen tackle that question with particular attention to consumer spending. Their research confirmed that, as has long been assumed but not wholly understood, oil price shocks work differently on consumption depending on their direction.

This conclusion is based on analysis of how price swings work their way through economic channels. The key is what Mehra terms the "allocative channel," which is when the costs of shifting labor or capital happen in response to changes in oil prices.

Here's how it works: Energy-producing sectors of the economy would likely seek to hire more labor and expand their capital in response to increases in oil prices. Meanwhile, sectors experiencing declines because of oil prices would be trying to shed labor and capital. But the cost of all this resource allocation is significant, Mehra says. In fact, it is so significant that it can hold back growth.

"Those allocative effects work to depress the overall level of economic activity because you can't just move labor and capital that efficiently in the short run," Mehra says.

Monetary policy may also play a role. While the Federal Reserve may try to fight inflation during oil price spikes by raising interest rates, it generally doesn't respond to oil price drops with expansionary monetary policy. "The Fed may be very happy to have that oil price decline," Mehra says.

Mehra thinks that's just about the way it should be. "You will have better economic outcomes in the long run if the Fed focuses on stabilizing inflation and inflation expectations instead of trying to stabilize real output," Mehra says. In cases of oil price increases, "The proper policy response would be to keep focus on curtailing inflation rather than trying to offset effect on output through stimulative monetary policy."

"Credit and Identity Theft." Charles M. Kahn and William Roberds, Federal Reserve Bank of Atlanta Working Paper 2005-19, August 2005.

Computer hackers grab headlines when they seize control of huge amounts of personal data, but much more pervasive a problem is the everyday theft of credit cards and social security numbers. In a recent paper, Atlanta Fed economists Charles Kahn and William Roberds ask how policymakers should deal with this problem, which affects more than one in 10 Americans. How strict should data-gathering activities be for banks in a world where easy collection of personal information is crucial to the process of allocating credit?

The authors largely reject technological changes as the solution, such as moving from magnetic-stripe to chip-based payment cards. Instead, their model suggests that identity theft can be better controlled by allowing more — not less — monitoring and information collection by credit bureaus and other data aggregators.

"Our results on money and credit suggest that the availability of money may improve this trade-off: There are some circumstances where the best type of 'payment card' is one with no one's name on it."

"The Household Spending Response to the 2003 Tax Cut: Evidence from Survey Data." Julia Lynn Coronado, Joseph Lupton, and Louise Sheiner, Federal Reserve Board of Governors Finance and Economics Discussion Series Paper 2005-32, July 25, 2005.

The Jobs and Growth Tax Relief Reconciliation Act of 2003 was supposed to be a textbook case of economic stimulus. In their recent paper, the authors use survey data to conclude that's pretty much what happened: Personal consumption spending in the second half of 2003 grew by $9.7 billion as a result.

Economic theory posits that the effectiveness of tax policy depends mostly on the extent to which consumers spend in response to the tax changes. There is a wide range of estimates about how much of a given cut will be spent, from zero to one-half. The authors found in the 2003 tax cut, households spent about one-quarter and reacted equally to the child credit rebate and their reduced withholdings — which is contrary to the assumption that households should have spent a smaller share of the child credit rebate. **RF**

ECONOMICHISTORY

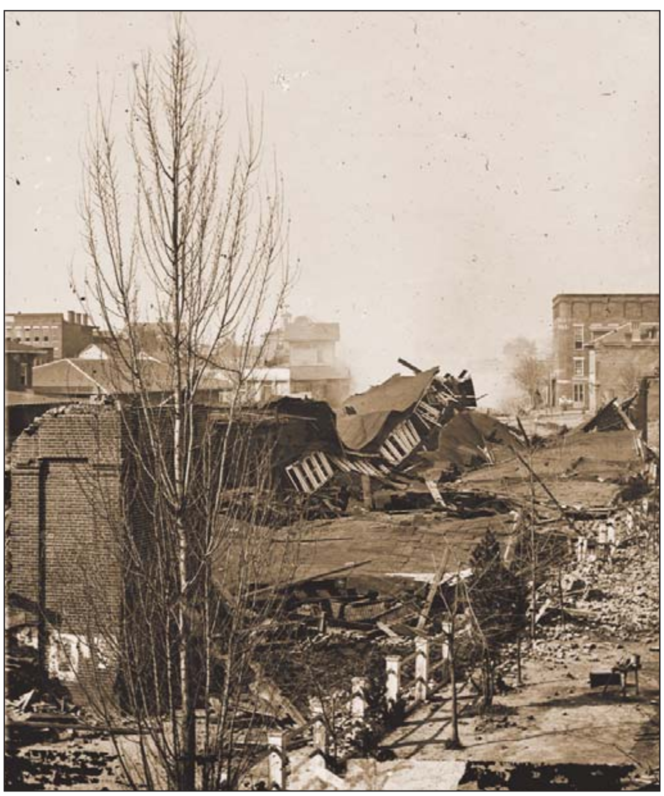
Monetary Policy in the Confederacy

BY ERIC NIELSEN

Unable to finance the war effort through taxation, the South turned to the printing press, and the result was hyperinflation

Wars may be won or lost on the battlefield, but generalship, bravery, and organization are of little use to an army if its government can't pay its expenses. The ability of a government to finance a war is often critical to the war's outcome, even if the effects of financing seem far removed from military action. In turn, a government's voracious appetite for resources to fund its military and the peculiar strain on production that characterize times of war further complicate good monetary and fiscal policymaking. These tensions clearly played a significant role in the conduct of the American Civil War.

The need for wartime funding in the North and South led to policies that illustrate basic tenets of monetary economics while precipitating a dramatic restructuring of the national financial system, changes that had repercussions long after the war ended. The conduct of monetary policy in the Civil War is not simply of interest to historians. The era also provides important lessons for monetary policymakers and researchers. The experience of the Confederacy in particular illustrates the consequences of poor financial infrastructure and governance. It also shows the power of a generally monetarist explanation of inflation.



After the fall of Atlanta in July 1864, the Confederacy's prospects looked dim. Southerners started spending their Confederate notes rapidly, increasing money velocity — and with it, prices.

PHOTOGRAPHY: LIBRARY OF CONGRESS, PRINTS & PHOTOGRAPHS DIVISION [LC-B8171-2715]

At the start of the war, the Confederacy faced many daunting barriers to the conduct of sound monetary policy. Perhaps most important of these was the decentralized power structure of the Confederate government. The Southern states had seceded under the banner of states' rights and were reluctant to obey the economic policies of President Jefferson Davis or Secretary of the Treasury Christopher Memminger. The South also lacked a well-developed financial infrastructure since in the antebellum period most large banking operations were in the North, where most of the gold was held.

Each state could charter banks, and there was considerable heterogeneity in banking and regulatory practices across the Southern states. Since each bank could issue its own currency notes, the government had limited ability to conduct coordinated monetary policy. Further, the absence of a central bank to act as a lender of last resort made the banking industry prone to liquidity crises. The only source for centralized economic policy was the Confederate Treasury under Memminger, but this office was subject to the vagaries of the executive and legislative branches of government, meaning that policy could be influenced for political, not economic, reasons as argued by economist Eugene Lerner.

The structure of the Southern economy also impeded effective monetary policy. Heavily dependent on agriculture, the South had little industrial capital and few liquid assets. The lack of liquidity made tax collection in the rural South very hard, while the lack of economic diversification made the economy prone to adverse shocks in its few export goods such as cotton. Finally, the South had a relatively uneducated population which led to constant worker shortages in the Treasury's office in Richmond and in other posts requiring a high degree of literacy.

The combination of these structural problems coupled with shortsighted policymaking by the Confederate Congress meant that taxation and borrowing ultimately failed to raise sufficient funds to conduct the war. So the Confederacy had to finance itself through the excessive printing of money, which led to hyperinflation.

Increased taxation, the most direct and obvious way of raising additional revenue, failed to finance a significant portion of the war for the Confederacy. Only 8 percent to 11 percent of all wartime revenue in the South came from taxation, despite the introduction of many new taxes on income, professional licenses, and property. In addition, a new excise tax on cotton, the most significant export crop in the South, also failed due to the surprisingly effective naval blockade orchestrated by the Union.

Prior to the Civil War, the Southern states enjoyed one of the lightest tax burdens in the world; when the war started there was thus no infrastructure in place to efficiently levy and collect taxes except for duties on imports and exports at major ports. Many state governments were very hostile to collection efforts by the Confederate government and actively aided their citizens in tax evasion as documented by Lerner in his classic study of Confederate economic policy. For instance, only South Carolina paid for the Tax of 1861 by collecting duties from its citizens; the other states simply took out loans to pay their share.

As more and more tax bills were passed, the tax code became increasingly complicated, further hindering collection efforts. Indeed, the only taxes that could reliably raise revenue were taxes-in-kind, which meant that goods were confiscated directly. But Lerner argues that this practice ultimately led to a decline in market activity, as farmers began to produce only enough to support themselves, fearful that their surplus crop would be captured by taxation agents.

Jefferson Davis and Secretary Memminger were also stymied in their attempts to raise revenue through borrowing. Though their initial bond offering of 50 million Confederate dollars sold well, subsequent issues did not sell well except in some foreign markets. One problem with these later bond issues was timing — the war started in April just as farmers were planting and strapped for cash. Also, the 6 percent to 8 percent coupons paid by most of these bonds were more than eaten up by high inflation.

Throughout the entire course of the war, the South managed to secure only one overseas loan, from Erlanger & Co. in Paris. The loan had a face value of $15 million and was issued at a time when things looked bright for the South, on the eve of the battles of Vicksburg and Gettysburg. The Confederacy's defeats at these two pivotal battles caused the value of the loan to plummet so that after commission, Erlanger likely netted the South only $3 million in real terms, not enough to make much of a difference to the war effort.

With no other avenue open, Secretary Memminger reluctantly turned to the printing press to meet the Confederacy's financing needs. Memminger was aware that such a move would likely cause a rise in the price level and warned the government repeatedly about this danger, to no avail. The Treasury bills issued during the war had a peculiar feature: They were redeemable for gold two years after the war ended, which meant that the value of the bills was partially tied to expectations of victory for the Confederacy. So rapid was the expansion of the Confederate money supply that at one point during the war, the orders for new currency exceeded the printing capacity of the Treasury's presses. To fill the order, the Treasury began to accept counterfeit currency as valid to further expand the supply of money.

The enormous increase in the quantity of currency precipitated an era of hyperinflation in the Confederacy as more dollars chased fewer goods. The price level in the South rose by roughly 10 percent *per month* during the conflict and by the end of the war, the price level had increased in the Confederacy by a factor of 92, though imports tended to inflate more quickly and exports more slowly. At the same time, the blockade, military destruction, and the loss of workers to the war caused real wages and output to fall dramatically, with per-capita consumption falling by 50 percent in real terms. Indeed, if banks had not sharply increased their reserve ratios for fear of bank runs, the inflation created by excess money in the South would likely have been even more severe.

Hyperinflation had a number of negative effects on the Southern wartime economy. As currency became useless as a store of value, the rate at which people spent their cash reserves — the velocity of money — increased, driving prices still higher. In many areas of the South, Confederate dollars became worthless unless accompanied by some valuable underlying commodity such as cotton or leather, impeding the smooth economic exchanges on which healthy economies depend. In border areas, the Union greenback currency became the preferred medium for exchange due to its superior stability. Faced with the danger of imminent invasion and the burden of supporting and hosting the military, the border areas tended to be particularly harmed by the war.

The Confederate government passed the Currency Reform Act of 1864 in an effort to stem the rampant inflation ravaging the South. The Act effectively removed one-third of all currency in the South from circulation by mandating that all large denomination bills be converted to 4 percent Treasury bonds before April 1, 1864, and imposing a 3-to-2 redemption ratio for small bills after the deadline. As people tried to get rid of their large notes, velocity spiked and in the months prior to the deadline, inflation rose to 23 percent a month. In the summer of 1864, though, price levels in the Confederacy finally stabilized and even declined slightly, just as monetary theory would predict following a contraction in the money supply. However, in the face of continuing pressure to meet war obligations, Congress authorized the printing of an additional $275 million in August of 1864, mostly reversing the effects of the Currency Reform Act.

In contrast with the South, the Union successfully raised the $2.3 billion necessary to fund its war effort without causing hyperinflation. Though inflation was high in the North during the war — prices doubled in most Northern cities — it paled in comparison to the hyperinflation that plagued the Confederacy. The North drastically changed its tax collection system and financial infrastructure to accommodate the burdens of a long, expensive war. These wartime changes ultimately helped reshape the economic face of America.

Whereas the South was mostly unable to raise funds through loans, the North financed roughly 65 percent of its war effort through borrowing. Wealthy Philadelphia financier Jay Cooke successfully orchestrated the sale of huge numbers of war bonds. In order to sell these issues, Cooke launched a massive advertising campaign aimed at middle- and working-class families who traditionally were not seen as a major source of funds. His campaign was a success, with almost 1 million working families purchasing war bonds. This advertising effort presaged the modern era in which bond issues to the general public were used to help pay for wars.

During the war, the Union also managed to expand its tax base and revamp its collection system. After some initial tax measures in 1861, including the first federal income tax in U.S. history, the Union passed the Internal Revenue Act of 1862 which raised the income tax, enacted luxury and consumption taxes, and created the Bureau of Internal Revenue. In contrast to the Confederate bureaucracy where central control was weak and administrative capability lacking, the Bureau of Internal Revenue streamlined federal tax collection, a process so effective that the North raised 20 percent of its wartime revenue through taxation.

The Union Congress also passed several important pieces of financial legislation during the Civil War. In 1861, the financial demands of the war began to deplete the gold reserves of both the banking sector and the Treasury. In response, private banks ceased redeeming currency for gold, and soon the Treasury followed suit. The government passed the Legal Tender Act of 1862, which allowed the issuance of legal tender currency not backed by gold. This marked the first time in U.S. history that a fiat currency, or a currency not backed by some underlying commodity, was used as legal tender. A year later the Union government passed the National Banking Act of 1863 which created a system of nationally chartered and regulated banks to ensure a market for Union war bonds. Preexisting banks were given very strong incentives to become nationally chartered. Once chartered they were subject to federal reserve requirements, had to accept all other national banks' currencies at face value, and had to hold federal bonds as collateral against note issue.

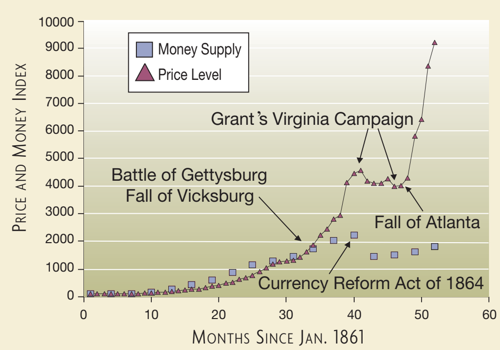
Both the Legal Tender Act and the National Banking Act were intended to be temporary measures to meet the exigencies of war. However, both sets of reforms lasted long after the conflict ended. More broadly, these acts, coupled with the expansion of taxation and the creation of the Bureau of Internal Revenue, marked an important shift in the power of the U.S. government. After the Civil War, the federal government had much more control over banking regulation and monetary policy, and much more power over the states generally.

In hindsight it is easy to point out where the South went wrong and what the government could have done better. However, at the time the situation was much less clear to government officials. Politicians and generals on both sides of the conflict began the war with extremely optimistic assessments of its outcome and duration. Southern confidence in a quick victory, coupled with a political climate that distrusted taxation and centralized authority, meant that short-term expedients were repeatedly selected as fiscal problems arose. Had the Confederates known that the war would take years instead of months, they may well have seriously attempted to overhaul their banking and tax collection systems instead of relying so heavily on the printing press.

One major reason the South was reluctant to reform its financial system was the faith its leaders and citizens placed in the ability of

Money Supply and Inflation in the Confederacy

As the South increased its money supply during the first three years of the war, inflation followed. Later, battlefield events led to soaring prices.



SOURCE: Roger Ransom, "The Economics of the Civil War"

The vignette in the center of this 1862-issued $5 Confederate note shows the Capitol building in Richmond. The portrait on the right is of Secretary of the Treasury Christopher Memminger.

FEDERAL RESERVE BANK OF RICHMOND

"King Cotton" to win the economic side of the war for them. The South had planned to use the good to finance the war and to induce Great Britain, heavily dependent on cotton for its textile mills, to grant the Confederacy diplomatic recognition. The effectiveness of the Union blockade prevented the South from realizing either of these goals.

The Confederate experience lends considerable support to the thesis that inflation is largely a function of the growth in the supply of money. Economists Richard Burdekin and Marc Weidenmier of Claremont McKenna College have taken advantage of a geographic peculiarity after the 1864 Currency Reform Act to further examine this relationship. The act removed one-third of the currency in circulation once it went into effect. However, by this time the South had lost the battle for Vicksburg, and with it the Mississippi River, thus isolating the eastern and western halves of the Confederacy. After the Currency Reform Act went into effect in Richmond, inflation slowed and even reversed for a short time as the currency stock decreased. Yet in Houston, the major Confederate financial center in the West, inflation continued virtually unabated since transportation difficulties severely muted the effect of the currency reform.

Given that by mid-1864 the military situation had begun to look rather grim for the Confederacy, it is particularly notable that the price level fell in Richmond. As Sherman and Grant steadily fought their way into the Confederacy, expectations of a Southern victory must have fallen. People should then have become more eager to spend Southern notes (trading a potentially worthless currency for real goods), thereby raising inflation by increasing velocity. Even with the external military threat looming ever larger, a reduction in the currency stock halted and then reversed inflation.

However, it should be noted that following the fall of Atlanta in September 1864, inflation grew very rapidly despite relatively stable growth in the money supply. It had become clear that the Confederacy was on the verge of collapse, so Southerners wanted to spend their currency while it still had some value. In April 1865, Robert E. Lee and his Army of Northern Virginia surrendered at Appomattox, effectively ending the war.

In many ways, the Civil War was a watershed in U.S. history. It brought a sudden end to slavery in the South, and wrought tremendous destruction in the South and border states. The war was also extremely expensive, and the enormous and unprecedented expenditures severely strained the financial systems of both governments, spurring innovation and centralization in one and monetary suicide in the other. The wartime finance policies of the North set the stage for much more modern currency and banking systems. At the same time, the defeated Confederacy showed the dangers of excessive money creation. Shortsightedness, political resistance to taxation, and a lack of liquidity led the South down the disastrous path of the printing press. The Southern experience should serve as a cautionary tale to policymakers about the dangers of bad financial institutions and rampant money creation. **RF**

READINGS

Burdekin, Richard C.K., and Marc Weidenmier. "Inflation Is Always and Everywhere a Monetary Phenomenon: Richmond vs. Houston in 1864." *American Economic Review*, December 2001, vol. 91, no. 5, pp. 1621-1630.

Eugene M. Lerner. "The Monetary and Fiscal Programs of the Confederate Government, 1861-65." *Journal of Political Economy*, December 1954, vol. 62, no. 6, pp. 506-522.

__. "Money, Prices, and Wages in the Confederacy, 1861-65." *Journal of Political Economy*, February 1955, vol. 63, no. 1, pp. 20-40.

Roger L. Ransom. "The Economics of the Civil War." In Whaples, Robert (ed.), *EH.Net Encyclopedia of Economic and Business History*.

__. "The Historical Statistics of the Confederacy." In Carter, Susan, and Richard Sutch (eds.), *The Historical Statistics of the United States, Millennial Edition*. New York: Cambridge University Press, 2002.

"Weidenmier, Marc. "The Market for Confederate Cotton Bonds." *Explorations in Economic History*, January 2000, vol. 37, no. 1, pp. 76-97.

Visit **www.richmondfed.org** for links to relevant sites.

BOOKREVIEW

Calculated Risk

FISCHER BLACK AND THE REVOLUTIONARY IDEA OF FINANCE

BY PERRY MEHRLING

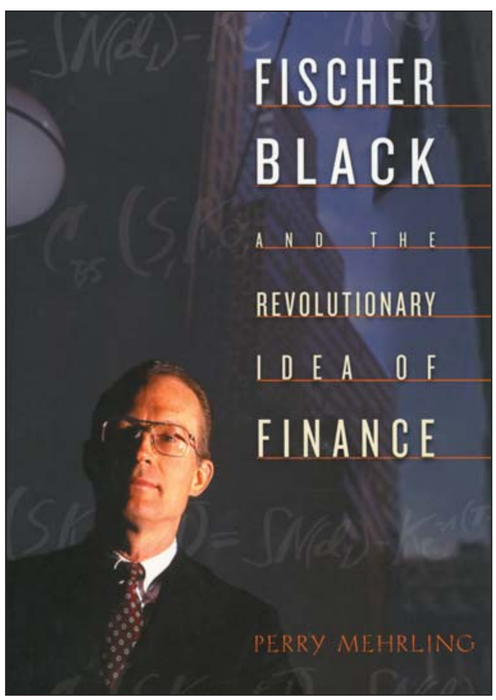
HOBOKEN, N.J.: JOHN WILEY & SONS, 2005, 374 PAGES

REVIEWED BY ERIC NIELSEN

The financial world has changed immensely in the past 30 years. Through the use of derivatives (assets whose value is determined by another, risky asset) and elaborate hedging schemes, firms can now buy and sell risk, protecting themselves from virtually any unwanted eventuality. This innovation has been made possible by the contributions of a select group of financial economists and the growing numbers of mathematically trained analysts known on Wall Street as "quants." Finance theorists build models for pricing securities, and quants figure out practical ways to implement these models and to profit from them.

For all the technical sophistication of modern financial markets, it may seem at times that our understanding of the inner workings of these markets has not greatly improved. For instance, the sharp drop in equity prices of many high-tech stocks in 2000 wiped out billions of dollars in assets, demonstrating that financial markets can still be subject to high levels of volatility. How much, then, should we trust financial models, and how much do they really tell us about the world?

These and other questions are addressed in Perry Mehrling's excellent new biography of Fischer Black, one of the great innovators of modern finance theory as well as one of its earliest practitioners. In covering this unusual and brilliant man's life, Mehrling, an economist at Barnard College, also provides an engaging history of the development of quantitative finance and a solid introduction to some of its central concepts.



An Eccentric Vision

Described by a colleague as "the only real genius ... in finance," mathematician-turned finance professor Fischer Black embraced the inherent difficulties of finance en route to uncovering some of its deepest principles. Among academics, Black stands out both for the depth and originality of his research and for his significant contributions in the private sector as one of the first and most celebrated quants. He was also something of an eccentric; for instance, he was well-known for his massive note-taking system which comprised many thousands of single note cards in individually labeled envelopes and for his great love of video games.

His ideas about finance were no less unusual; he spurned large areas of modern economics and finance, preferring instead to focus on a few simplified, intuitive models and practical ways to make financial markets operate more smoothly. With an academic background in physics, logic, and artificial intelligence, Fischer Black began his career skeptical of abstract formulations in finance and the power of economists to influence a highly uncertain world. Black extended this line of thinking into many subfields of economics, positing unorthodox and highly controversial theories about monetary policy and the cause of business cycles.

Fischer Black is described by Perry Mehrling as the "CAPM man," and in a way this moniker is the key to understanding much of his idiosyncratic approach to finance. CAPM, which stands for "Capital Asset Pricing Model," mathematically describes a rational way to price risk in an idealized economy. Developed independently by several economists in the mid-1960s, CAPM gives a simple formula for the excess return or "risk premium" for holding a risky stock compared with the return to holding the market index, and uses this relationship to price all securities in the market. Though CAPM makes several empirically false predictions, such as that all investors will hold only the same combinations of stocks and trade very little, it does provide a rigorous framework with which to analyze questions of risk and reward. We might not live in a CAPM world, but Black thought that through financial innovation we could someday, and that this was a worthy goal.

From his early days as a consultant when he urged his clients to adopt financial instruments which have now become standard (index funds, hedged options positions, etc.) to his last days as a partner at Goldman Sachs where he could see many of his innovations in practice, Black always remained focused on the idea that risk is simply the price of reward, and that the better we understand this relationship, the better off we will be. He even applied CAPM to his personal life; he took academic risks constantly since these promised great rewards with little downside while at the same time eating ascetic, unadorned meals to mitigate a family history of health problems. Ultimately, these efforts were for naught as throat cancer claimed Black's life prematurely in 1995 at the age of 57.

Protection against Uncertainty

Working as a business consultant in the late 1960s, Black mastered CAPM and began thinking of ways to apply it to financial and economic questions. Starting from a CAPM-like equilibrium, he and finance professor Myron Scholes of the Massachusetts Institute of Technology were able to make their most celebrated discovery, the Black-Scholes Options Pricing formula which gave a rational method for valuing derivative securities.

Two years after Black's death, Scholes and Robert Merton were awarded the Nobel Prize for this contribution to mathematical finance. Black-Scholes set off a wave of research and model building that allowed firms to control their risk much more precisely than before. So successful was his formula that Black was given academic appointments at the University of Chicago and then MIT. Black's meteoric rise in economics is particularly remarkable since his doctorate was in applied mathematics; Black had never taken an economics or finance course in his life, yet in a few years working on weekends and evenings he was able to move to the forefront of his field.

Black always remained focused on the idea that risk is simply the price of reward.

Throughout his working career, Black was able to construct powerful, intuitive models, many of which, like Black-Scholes, have stood the test of time. One reason for this strength lay in Black's deep respect for the uncertainty involved in life; like CAPM, his models describe only a moment in time and are not dependent on historical trends in data which may change without notice. Black scorned econometrics and other forms of economic modeling for introducing spurious precision where none lay. He, perhaps alone among economists, was not surprised when the stock market plummeted unexpectedly in October of 1987; he thought that congestion on the trading floor and a change in sentiment were enough to account for the fall. If we think that the world is volatile and unpredictable, then we should not be surprised when dramatic and unexpected things happen. Rather, we should seek to protect ourselves adequately against such shocks.

Interestingly, when offered the chance to join Long-Term Capital Management (LTCM) in 1994, a firm whose principals included Scholes and Merton, Black declined. Though his former colleagues believed they could profitably exploit some simple arbitrage opportunities at virtually no risk, Black believed quite the opposite — that they were "loading up on risk." The firm did very well for a period, with its assets growing from $1 billion to $7.5 billion in just three years, but in 1998 LTCM faced collapse. Black believed that LTCM's strategy was based on a dangerous assumption: that markets are inefficient in a way that can be exploited for systematic profit. Such opportunities may arise for limited periods of time, Black acknowledged. But over the long haul markets are efficient, and any strategy based on a contrary assumption is likely to fail, sometimes spectacularly.

Black and Macroeconomics

Black took his peculiar, CAPM-derived ideas beyond Wall Street. He was interested in macroeconomic questions, and it was his inability to get his papers on monetary theory and business cycles published that prompted him to leave the academy for Goldman Sachs. For instance, while at Chicago, he debated Milton Friedman about the power of the Federal Reserve. Black argued that it could not affect the money supply unless people let it, since otherwise one would have to assume untaken profit opportunities before the Fed acts. Essentially, Black assumed equilibrium before a Fed action, and asked what incentives would prompt financial institutions to alter their behavior after a Fed policy change. Friedman responded by saying that Black's position was "utterly fallacious." Despite hours of debates in monetary theory seminars, Friedman was unable to convince Black that he was wrong. While Black remained unpersuaded, his theory remains a distinctly minority view among monetary economists.

At MIT, Black clashed with Robert Solow and other neo-Keynesians by arguing that business cycles arise naturally when production cycles are mismatched with consumer tastes. In his view not much could be done by the government to smooth out these cycles, whereas Keynesianism recommended active government intervention to stabilize macroeconomic fluctuations. Though well thought-out, Black's ideas were so radical that he had a difficult time even engaging his colleagues in debate.

Unlike other economists, Black did not care if his models were easily testable because he thought the purpose of economics was to provide insight, not testable predictions. He liked to approach each new problem with a fresh eye — his friends and collaborators often commented that it was difficult to tell where Black would stand on a given topic based on his other stances. The only constant that he permitted himself was a belief in equilibrium as the appropriate lens with which to view a highly unpredictable future. His approach to macroeconomics was thus ultimately rooted in his understanding of risk and uncertainty — that is, in CAPM, the revolutionary idea of finance. Mehrling's book provides an excellent discussion of that idea and the unique man behind it. **RF**

INTERVIEW

Robert Moffitt

Editor's Note: *This is an abbreviated version of RF's conversation with Robert Moffitt. For the full interview, go to our Web site: www.richmondfed.org*

When the 1996 welfare reform act was passed, pundits expressed heated opinions about how the legislation would affect the nation's poor. Some claimed it would finally end the "culture of dependency" and help people move up the economic ladder. Others said that it would send single mothers and their children into destitution.

Now almost a decade after the legislation was enacted, Robert Moffitt, a labor economist at Johns Hopkins University in Baltimore, has looked carefully at the data. He has found that the facts are somewhat more complicated than the punditocracy predicted. In general, former welfare recipients have been successful in joining the labor force. But there remains a segment of the population for whom regular work has proved elusive.

Moffitt's research also has addressed such issues as income inequality, the effects of marginal tax rates on labor supply, and the economics of marriage. In addition, he has made a number of important methodological contributions, and is a Fellow of the Econometric Society. Since July 2004, he has served as chief editor of the *American Economic Review*.

Prior to joining the Johns Hopkins faculty, Moffitt taught at Brown University and Rutgers University. He also held visiting positions at the University of Wisconsin and the University of Maryland, and worked at Mathematica Policy Research, Inc.

Aaron Steelman interviewed Moffitt at Johns Hopkins on July 27, 2005.

RF: I want to start off by asking a few questions about welfare reform. How have single mothers who have left welfare fared in the workplace, both in terms of employment rates and the wages they have been able to command?

Moffitt: The employment rates of single mothers who left welfare after the 1996 legislation have been in the range of 60 to 80 percent. Those rates have generally been viewed as remarkably high. While on welfare, these women had not worked more than 20 to 25 percent of the time and were regarded as essentially unemployable. As for their wage rates, they have been in the $8 to $10 per hour range, well above the minimum. The jobs held by these former welfare recipients are not necessarily the best jobs in the world — they are still quite unskilled, often unpleasant, and sometimes unstable — but they pay decent wages. The combined result of their increase in employment and increase in wage rates has been an increase in their earnings as well. But their total incomes have not risen much, on average, because their lost welfare benefits have been close to their increased earnings. But one of the goals of the welfare

PHOTOGRAPHY: SCOTT SUCHMAN

reform legislation was to get welfare recipients into employment and out of dependence on federal support, and from that standpoint it appears to have worked.

RF: The welfare reform act was implemented during a period when labor markets were unusually strong. Were the women who moved from welfare to work disproportionately affected by the recession of 2001?

Moffitt: The results on the recession are pretty surprising. The employment rates of single mothers and former welfare mothers fell only slightly during the 2001 recession. So instead of 70 percent, they were about 68 percent — still far higher than they had been in 1996 when the legislation was enacted. I'm less familiar with the data on wage rates, but I would suspect that they didn't fall much either. Consequently, the recession does not appear to have driven many former welfare recipients back into unemployment or back onto welfare.

This finding really reinforces the first one. The first major concern about welfare reform was the fear that a substantial share of women on welfare would not be able to handle the reform and would be unable to find jobs and would possibly become homeless, resulting in widespread destitution. That did not happen and, in fact, the majority of women successfully negotiated the reform. The second concern was that this success was only a result of the good economy, and that the women who had left welfare would be in trouble once the economy slowed. That appears not to have happened either.

So, in retrospect, it appears that many of these women did have sufficient skills to work and that welfare reform gave them the push to enter the labor market and establish themselves. Again, however, it is always necessary to caution against too rosy a picture. The jobs held by former welfare recipients are not particularly good jobs, and most of the evidence shows that those jobs do not lead to much wage growth or advancement. Moreover, many former recipients have serious problems of other kinds. But, on average, welfare reform has been a success story. I don't think even most of the legislation's original critics would object to the gist of this conclusion. Virtually everyone agrees that we should stick with the basic approach of the legislation, though many would argue that we should fine-tune it to better protect the most vulnerable people in the system and perhaps to go back and do a bit of patching up of the holes in the safety net.

RF: For several decades — in fact, almost since the inception of Aid to Families with Dependent Children (AFDC) — there were calls for reforming the welfare system. Yet we didn't see major legislation until the mid-1990s. What were the constellation of events that made such legislation possible?

Moffitt: The public's attitude toward welfare and many other transfer programs has become more conservative over time. The 1960s were probably the high watermark of government activism and strengthening of the social safety net, and since then confidence in government's ability to deal with social problems has generally diminished. Congress attempted a series of welfare reforms in the 1970s and the 1980s that either didn't pass or that weren't particularly strong. But all those reforms were in the same direction: an increased emphasis on work and stronger work requirements. In addition, during the period when Congress was unable to craft a major overhaul of welfare, it allowed the states to experiment on their own. The states started reforming their welfare systems in a more conservative direction, before there was final federal action. So even though the 1996 legislation was a landmark, I think we need to see it as the culmination of a series of smaller steps which eventually led us to a tipping point.

On average, welfare reform has been a success story.

As for the source of the increased conservatism on the part of voters, I think that the increased labor force participation of middle-class women was part of the cause. That transformation really changed the attitude of voters. Once a large percentage of middle-class women were working and putting their children into day care, the public began to question why we shouldn't expect the same thing from poor women. There was no longer the support for paying women to stay at home with their children, which was the goal of the original legislation in 1935.

Another turn against welfare, I think, has to do with the changing composition of the welfare caseload. In the 1960s, the caseload was largely composed of divorced women. One could imagine that members of the middle class, while not looking favorably upon divorce, understood it because many of them were getting divorced too. But by the 1980s, the caseload started to become composed largely of young women who had never been married and were having children out of wedlock. That is a completely different group, and the middle class had a great deal less sympathy toward those women.

A final factor is that I think the attitudes among women receiving welfare changed. If you look at attitudinal studies from the early 1990s, many welfare recipients said that they didn't like welfare, that they thought other women were gaming the system to stay on welfare, and were not really trying to improve their lives. Welfare recipients had incorporated the social norms of the middle class. And once the legislation led some recipients to move off welfare, it had a snowball effect. They began to exert social pressure on other women to find work. I think that increased stigma within poor populations made it easier to overhaul the welfare system. But it took a major shock; incremental reform would not have done it.

RF: What's the share of former welfare recipients, in your estimation, who have very significant employment problems?

Moffitt: I mentioned earlier that about 70 percent of former welfare recipients are working at any time. One could take this to mean that the other 30 percent are the ones with significant employment problems. But that would be an overestimate, because some of those women aren't working at the time and yet have some job skills which make it possible for them to find work in the private sector. Instead, there is a smaller group composed of women who have one or more serious problems such as cognitive limitations or poor education which make it difficult for employers to want to hire them, or serious health issues, or substance abuse, or domestic violence.

Many women have multiple problems of this sort, and it is difficult for them to get help if they are off welfare — an irony is that if you are on welfare, you get identified, you have a caseworker, and you are directed to relevant programs. But once you are off welfare you have to find that help yourself, and many women simply don't have the wherewithal to do that effectively. There have been studies trying to count the number of women with each of the problems I listed, how many have multiple problems, and so on. My estimate would be that the share of women who are in this category is no less than 5 percent and no more than 15 percent. Some might think that the percent is slightly higher.

I think that most observers agree that the next step in welfare reform is to address the problems facing this segment of the population. That is going to be very difficult, especially given the fiscal situation the states have faced recently. Many of the social programs that were designed to help these women were conducted at the state level, and when state budgets got tight, those programs were often among the first programs to have their funding reduced. Perhaps their funding will be restored now that revenues are growing again at the state level.

Robert Moffitt

➤ Present Position
Professor of Economics, Johns Hopkins University, and Editor of the *American Economic Review*

➤ Previous Faculty Appointments
Brown University (1984-1995) and Rutgers University (1978-1984)

➤ Education
B.A., Rice University (1970); M.A., Brown University (1972); Ph.D., Brown University (1975)

➤ Selected Publications
Author or co-author of dozens of articles in the *American Economic Review*, *Journal of Political Economy*, *Journal of Labor Economics*, *Econometrica*, and other academic journals

RF: You have done some work on the growth in wage inequality. Please tell us a little bit about your findings.

Moffitt: My work, mostly with Peter Gottschalk at Boston College, began by addressing the perception of all analysts that the increase in wage inequality arose entirely from a change in what we may call permanent earnings, driven by such factors as increased demand for high-skilled labor. But when Gottschalk and I used the panel data and calculated changes in individual earnings over time in the 1970s and 1980s, we found that 50 percent of the increase in the cross-sectional variance was due instead to increases in the transitory component of earnings. In other words, earnings have become more volatile over time and this has been a major contribution to the cross-sectional increase in inequality, yet it has a very different interpretation than the usual one.

Increases in the transitory component have occurred at all levels of the skill distribution but your view of increases in volatility might be different depending on whether you are examining the top or the bottom. If you examine the very top, much of the increased volatility comes from skilled workers who earn big bonuses in one year but don't the next. These workers are doing well and their average earnings are rising, but they are in occupations where their earnings can fluctuate widely from year to year. This strikes me as something that shouldn't worry us a great deal and, in fact, could be argued to be a sign of a more productive and more competitive labor market. But at the middle and the bottom of the distribution, I think there is more of a concern. Earnings on low-wage jobs have become more unstable at the same time that average earnings on those jobs have been declining, making it seem as though the jobs themselves are getting worse in multiple dimensions.

I don't have a conclusive answer for the cause of this change in the labor market, but I wonder if there has not been an increase in the general volatility of many industries in the United States today. Competition is stiffer today in many industries than it used to be, with firms rising and falling faster than they used to, which can produce large peaks and valleys in the earnings of those who work for those companies.

RF: In the early 1960s, Milton Friedman pushed for the implementation of a negative income tax. That program was never implemented in the form that Friedman advocated, though certain elements have shown up in policies that subsequently have been enacted. How do you think the negative income tax has influenced the policy debate regarding aid to low-income people?

Moffitt: The negative income tax is a topic that has fascinated economists for a long time. The basic idea of a reduction in the implicit tax rate on working for welfare recipients appeals to basic economic principles. When I left graduate school in the 1970s, for example, it was the hope among many economists that the United States would adopt something similar to a negative income tax. It has been extremely popular among academics and scholars, but it has turned out to be less popular among policymakers.

There was a reform of the AFDC system in the late 1960s which lowered the marginal tax rate on earnings for women in the AFDC program. But the reduction was pretty small, so the effects on labor force participation were limited. It wasn't really until the welfare reform of 1996 that major reductions in the marginal tax rate have occurred; for most of these last few decades, the rate has been at or very close to 100 percent.

The negative income tax had a number of other features which have likewise fared pretty poorly in the public domain. Perhaps the most notable was that the negative income tax was supposed to replace all other transfer programs — that there should be one simple program that covered all needs. That was an essential part of the idea according to Friedman, but it is an idea that has been decisively rejected by Congress and the voters.

We still have numerous special programs for food, medical care, housing, child care, and the like. Indeed, the pure general-purpose cash programs have become very small relative to everything else. From an economist's standpoint, this is problematic. We generally believe that the most efficient way to help people is to give them a direct cash transfer, because they know better than us what their needs are and how they should allocate their resources. But the public, I think, believes that the poor have demonstrated that they do not make good choices on their own, and that we should give them the services we believe they need rather than allowing them to purchase them on their own. The voters, I believe, are basically paternalistic toward the poor and this has shaped the policies we have adopted.

There are only two cash programs of any significance today, and they both reinforce this conclusion. One is the Supplemental Security Income program, which goes to aged, blind, and disabled people with low incomes. Those individuals are not viewed as having bad preferences or bad habits. Instead, they are in their situation through no fault of their own, and the public believes we ought to treat them as such. The second program is the Earned Income Tax Credit. This program is targeted at earners; by definition, you have to be working in order to qualify for the program. So with both of these programs, the recipients are seen as having good preferences, and that they can be trusted to wisely spend money that is transferred to them.

RF: Have you looked at the effect recent reductions in marginal income tax rates have had on the labor supply of high-income male workers? If not, can your work on the effects of the 1986 tax reform act shed light on the responsiveness of such workers to alter their labor decisions when faced with lower marginal rates?

Moffitt: I haven't done work on the recent reductions in marginal income tax rates, but I do have some thoughts on the topic given my previous research. It is an interesting topic because there has been a sharp change in the way economists view the evidence. In the 1960s and 1970s, most economists did not think that lower marginal rates would have much of an effect on the labor supply of high-income workers. The first person who really challenged that view was Jerry Hausman, who found that there were some nontrivial effects at the top that led to significant deadweight losses. But when other analysts looked at his data more closely, it wasn't clear that the evidence supported such a conclusion because sample sizes at the top were very small.

Then Marty Feldstein began examining this question by using tax data with much larger samples of high-income workers, and he, too, argued that there were significant effects on the labor supply of high-income males — as marginal tax rates went down, the amount of taxable income reported increased. Another new point made by Feldstein was that much of the responsiveness was in increased wage rates that came from increased incentives to find better employment opportunities and even entrepreneurial activities; the response was not entirely in hours of work.

In my work on the issue, conducted with Mark Wilhelm, we went back and looked at hours of work following the 1986 tax cuts, focusing again on the very top of the income distribution. We found no effect. The reason turned out to be fairly straightforward: The workers at the very top were already working extremely long hours (3,000 to 4,000 hours per year) and really couldn't work much more. There simply wasn't room for them to respond to lower marginal tax rates in the way that others had argued or that theory might predict. So how can we square our findings with Feldstein's findings? One is simply that the response was in earnings, not hours of work, as Feldstein pointed out. But I think that there is another factor at work as well, which relates to the way that workers at the very top structure their compensation packages.

We have fairly good evidence that high earners pay close attention to the tax treatment of their income. When tax rates were high, they received more of their compensation in nontaxable forms. But when tax rates fell, there was less reason to do this, so more of their compensation began to move into taxable forms. This process can make it appear that lower marginal rates increase earnings when in fact it was just a change from nontaxable to taxable form.

As I said, I haven't looked at the data from the most recent rounds of tax cuts. But I would be surprised if the evidence was much different from what we found in the 1980s. I would doubt that the biggest earners in the economy have increased their labor output much as a result of lower marginal tax rates.

How about elsewhere in the income distribution? Here, too, I think the evidence is fairly mixed. For males, it is not clear that lower marginal tax rates induce them to work more. Many males in the labor force are already working 35 to 40 hours a week and they do not have much opportunity to increase that number. Their employers simply do not offer them overtime or flexible hours. In order to increase their labor supply, they would have to find a second job. But for females who are not in the labor force, lower marginal rates can have a significant effect on their decision to work. When rates are high, they may decide that work is not worth it — that there are important things to do at home which are more valuable than working. But when rates are lowered, their calculation changes. They are now able to keep a larger share of their earnings and may decide that entering the labor force is worthwhile.

I should also add that the self-employed face different incentives too. Unlike adult males working for someone else, the self-employed generally have an opportunity to alter their work patterns — that is, to increase their labor supply in response to lower marginal tax rates. So I wouldn't be surprised if this were to show up in the data.

RF: How does increased compensation affect soldiers' decisions to re-enlist?

Moffitt: I have tried to build some simple models which assume that soldiers are forward-looking agents. Much of this work was co-authored with Tom Daula. I have found that the bonuses the military has offered to get soldiers to re-enlist do not have a large effect. They simply are not big enough to change most soldiers' decisions. What is more important is the type of training that a soldier can expect to get in the military. Let's say that you join when you are 18 and that you make a career of it, meaning you spend 20 years with the military. That means you get out when you are 38. Sure, you get a nice military retirement package when you leave. But at 38, you are still a relatively young man and you will want to have acquired skills that will allow you to have a career on the outside at a good job. Those type of issues tend to dominate compensation issues, especially when the compensation takes the form of a one-time bonus payment for re-enlistment.

RF: What do you see as the major challenges facing the *American Economic Review* and academic publishing in economics more generally?

Moffitt: I took over as chief editor of the *AER* in July 2004 and have therefore been in the job now a little over a year. There are both specific and general issues with the *AER* and with economic journals in general. By far the most important specific issue is turnaround time for papers, the time it takes from when a paper is sent to a referee to when I finally get enough reports to make a decision. At the *AER*, this time is often quite long, six months or more, and that has become a serious problem. It is worse at some other journals but better at some others, but it is a systematic problem at all economic journals. I do not quite understand why this is the case, because you don't see it in the other social sciences. There have been a number of explanations offered — Glenn Ellison has done the best work on this — but none of which I find completely convincing. But one thing is certain: When I talk to those economists interested in submitting papers at the *AER* and elsewhere, this is their biggest complaint. Working on this problem at the *AER* is one of my highest priorities.

Another less specific problem one hears from authors is that the quality of the referee reports is low, sometimes occurring when reports express very divergent opinions. Many authors feel as though a paper has not received a fair reading by at least one of the referees. While there are limits to how this perception can be changed, because it is only human nature to feel that way when your work is rejected, the one thing I have done at the *AER* to address this problem is to increase the number of co-editors on the journal. This introduces more expertise among the editors and allows a better choice of referees and better judgements after the reports come in.

Finally, my major goal for the *AER* is to see it build upon its niche. The number of journals in economics has been growing sharply, but there are still really only three leading general-interest journals: the *AER*, the *Quarterly Journal of Economics*, and the *Journal of Political Economy*. I think that the *QJE* and the *JPE* have become increasingly associated with specific schools of thought. Both of those journals are affiliated with university economics departments — the *QJE* with Harvard and the *JPE* with Chicago — and I think many of the papers that appear in those journals reflect the perspectives dominant in those departments.

In contrast, the *AER* is the official journal of the American Economic Association and, as such, it should be expected to represent the profession as a whole. I would like to see the *AER* open to a wide variety of perspectives, methodological and substantive, and to publish the best work that is conducted in all of those perspectives. I think that the *AER* has been fairly successful in that regard in the past, but there are areas for improvement, and it is a very important objective that deserves constant attention. **RF**

HURRICANE KATRINA DISRUPTS DISTRICT ECONOMY

BY ROBERT LACY

It takes a steady stream of petroleum to keep a modern economy running smoothly. When the flow is disrupted and prices begin to soar, as in the wake of Hurricane Katrina in late August, we are reminded of just how important gasoline, diesel fuel, and other petroleum products are to the economy. Although hundreds of miles from the Gulf Coast, the Fifth District region quickly experienced gasoline shortages and soaring prices because of the damage to oil production and refining facilities caused by the storm.

When Hurricane Katrina moved through the Gulf of Mexico toward landfall in Louisiana on Monday, Aug. 29, hundreds of oil platforms and rigs in the region were evacuated. Many Gulf area refineries were shut down as well. As of late September, four major refineries in Louisiana and Mississippi remained closed because of damage sustained during the storm.

Problems transporting petroleum products out of the Gulf area made matters even worse. The Colonial and Plantation pipelines, which carry most of the gasoline, diesel fuel, and jet fuel coming into the Carolinas and Virginia, shut down during the storm because of a loss of power at pump stations in Louisiana and Mississippi. They were back in operation by Thursday, Sept. 1, but only at partial capacity; it wasn't until Sept. 5 that capacity on both returned to normal. As a result, consumers and businesses throughout the District were forced to cope with spot shortages of gasoline for several days.

Although the flow of gasoline into Fifth District states improved during the week after the storm, prices continued to rise. The interruption in oil production and refinery operations in the Gulf Coast sent retail gasoline prices above $3.00 per gallon around the nation. (According to the Department of Energy, the average price of regular grade gasoline in the Lower Atlantic region of the country, which includes all of the Fifth District states except Maryland, rose from $2.57 to $3.11 between Aug. 29 and Sept. 5.) Although gasoline prices had fallen below $3.00 per gallon by mid-September, they remained more than 50 percent higher than a year earlier.

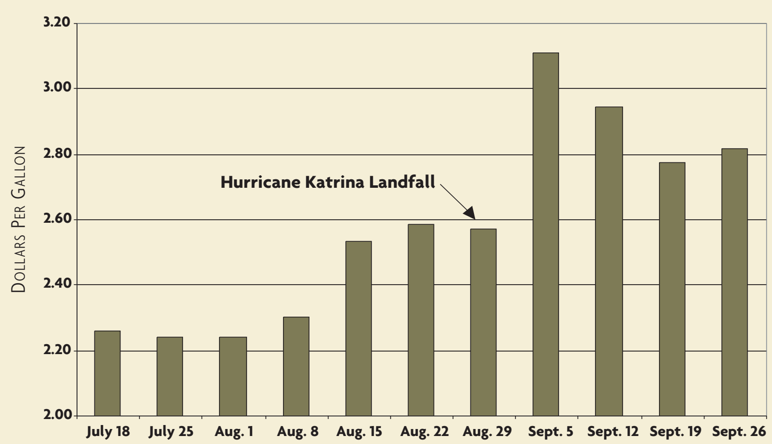
The run-up in prices of petroleum products rippled through the economy. District manufacturers paid higher prices for a variety of fuels and petroleum-based raw materials, including petroleum coke and propylene. (Within the District, Century Aluminum with a plant in Ravenswood, W.Va., uses petroleum coke in the manufacture of aluminum, while a number of firms use propylene to make plastic products.) In the days following Hurricane Katrina's landfall, some District manufacturers also reported shortages of petroleum-based goods, in part because barges for shipping goods up the Mississippi River were in short supply.

Looking ahead, District manufacturers anticipate even higher energy prices and, in some cases, lower profit margins. Our canvass of manufacturers in late August indicated that 91 percent of them expected energy prices to continue to rise through the end of the year. In addition, though many plan to push a portion of the higher costs through to their customers, most manufacturers said it would not be enough to fully offset the costs they were paying.

District services businesses struggled with higher fuel prices as well. Airlines and large trucking firms, many of which consume thousands of gallons of fuel per day, received particularly large fuel bills as jet and diesel fuel prices rose. And while there weren't widespread fuel shortages in the Fifth District, Hurricane Katrina exposed the vulnerability of fuel supply networks, spurring some companies to reevaluate their supply arrangements. Jim Evans, Manager of Business Development at Newport News/Williamsburg International Airport in Virginia, for example, said that airport did not suffer major service disruptions as a result of Hurricane Katrina, but they were now planning to increase fuel oil storage capacity by 25 percent, "just to make sure we don't run out of fuel."

Note: *Within a month after Katrina's landfall, another major storm, Hurricane Rita, pounded Louisiana and Texas. Ten days after Rita came ashore, retail gasoline prices were back above $3.00 per gallon.*

Gasoline Prices (Regular Grade), Lower Atlantic Region



SOURCE: U.S. Department of Energy, Energy Information Administration

District Economic Overview

BY ROBERT LACY

The Fifth District economy continued to expand at a solid pace in the second quarter of 2005. Retail sales growth picked up a notch; automobile and light truck sales in particular were exceptionally strong during the period. Real estate markets remained vibrant, and home sales and construction activity accelerated in a number of metropolitan areas. But still, there were soft spots in the District's economy: Manufacturing was sluggish, employment gains were disappointing at times, and high energy prices became a growing concern to consumers and businesses alike.

> The Fifth District economy continued to expand at a solid pace in the second quarter of 2005 despite escalating energy prices.

Output Grows

Services businesses reported relatively strong sales gains in the second quarter. Retail sales were markedly higher, boosted by a surge in automobile and light truck sales. Dealers said that "employee pricing" and other incentive programs had been quite effective in stimulating vehicle sales, though some worried that steep price discounts had cut into profit margins.

Real estate markets flourished, and growth in construction and home sales continued apace in the second quarter. The number of residential building permits issued in Fifth District states was 10.5 percent higher than a year ago, well above the pace nationwide.

Commercial real estate activity picked up as well; demand for investment property and lease space was particularly strong in the Washington, D.C., metropolitan areas. District realtors noted, however, that the departure of thousands of civilian defense workers and private contractors from leased office space in Northern Virginia, as recommended by the Base Realignment and Closure (BRAC) Commission, could dramatically change the office market there.

Manufacturing output rose at a moderate pace during the second quarter. Other measures of manufacturing activity were not as positive, though; new orders tailed off by June and capacity utilization flattened. While many manufacturers expected new orders to pick up again in the second half of the year, they were less optimistic about maintaining profit margins in the face of rising energy costs.

Moderate Job Growth

Second-quarter payroll employment was 1.4 percent higher than a year earlier. As in the first quarter, the District's growth rate was slightly off the pace nationwide. The smaller state economies—South Carolina, West Virginia, and the District of Columbia—experienced the weakest employment growth during the period. In South Carolina, employment expanded by a scant 0.23 percent from a year earlier, in large part because of declining employment in the manufacturing sector.

Manufacturing employment in the District as a whole, however, was stronger in the second quarter, rising by 2,700 jobs. North Carolina, the District's largest industrial state, recorded an increase of 4,500 durable goods manufacturing jobs, more than offsetting the loss of 1,500 jobs in textiles, apparel, and other nondurable goods industries.

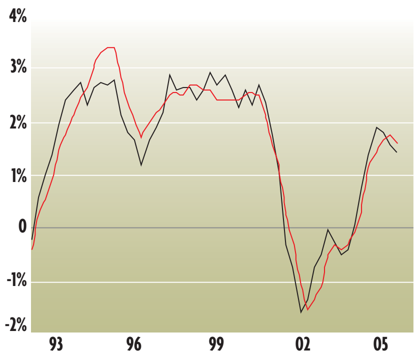
Energy Prices Up

Rapidly rising oil and natural gas prices weighed a little more heavily on the District economy in the second quarter. District manufacturers and builders reported much higher materials costs for petroleum-based products. As gasoline prices moved toward $3.00 per gallon at the pump, consumers began to feel their budgets pinched. According to the consumer price index, energy prices in the Washington, D.C.-Baltimore metropolitan area in May 2005 were 11 percent higher than a year earlier.

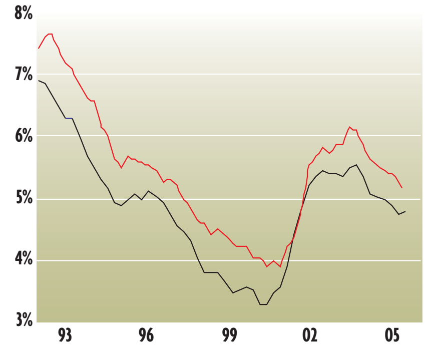
Economic Indicators

	2nd Qtr. 2005	2nd Qtr. 2004	Percent Change (Year Ago)
Nonfarm Employment (000)			
Fifth District	13,331	13,142	1.4
U.S.	133,426	131,325	1.6
Real Personal Income ($bil)			
Fifth District	889.2	851.0	4.5
U.S.	9,229.0	8,885.3	3.9
Building Permits (000)			
Fifth District	69.7	63.1	10.5
U.S.	590.1	562.5	4.9
Unemployment Rate (%)			
Fifth District	4.8%	5.0%	
U.S.	5.1%	5.6%	

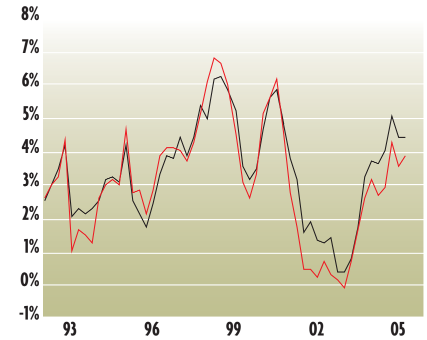
Nonfarm Employment
Change From Prior Year
First Quarter 1992 - Second Quarter 2005



Unemployment Rate
First Quarter 1992 - Second Quarter 2005

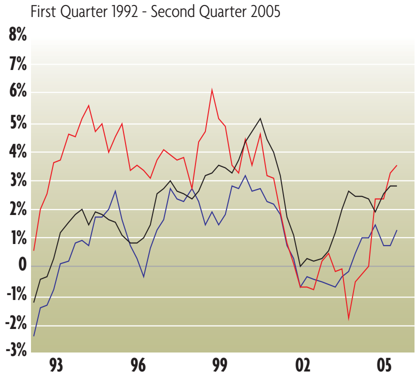


Real Personal Income
Change From Prior Year
First Quarter 1992 - Second Quarter 2005



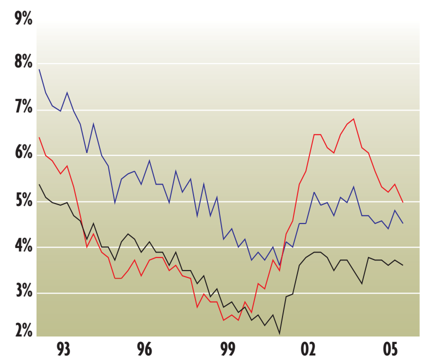
Fifth District — United States

Nonfarm Employment Metropolitan Areas
Change From Prior Year
First Quarter 1992 - Second Quarter 2005



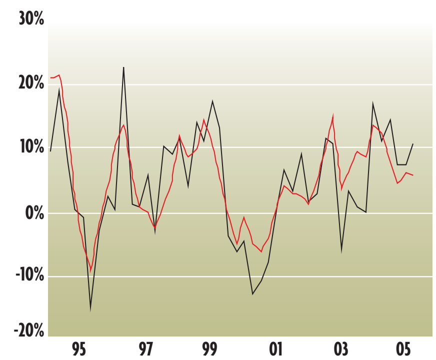
Charlotte Baltimore Washington

Unemployment Rate Metropolitan Areas
First Quarter 1992 - Second Quarter 2005



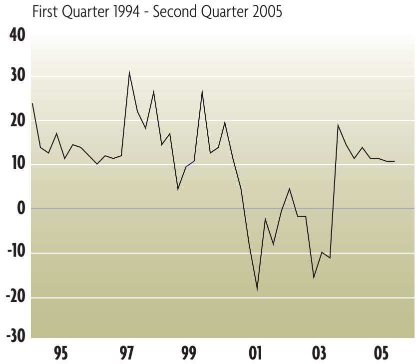
Charlotte Baltimore Washington

Building Permits
Change From Prior Year
First Quarter 1994 - Second Quarter 2005

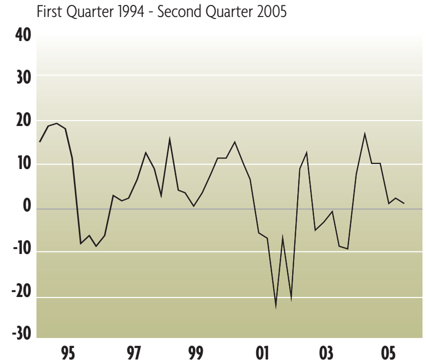


Fifth District United States

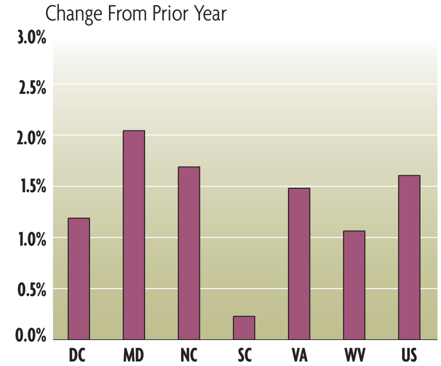
FRB—Richmond Services Revenues Index
First Quarter 1994 - Second Quarter 2005



FRB—Richmond Manufacturing Composite Index
First Quarter 1994 - Second Quarter 2005



Nonfarm Employment 2005 Quarter 2
Change From Prior Year



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) Metropolitan area data, building permits, and CPI are not seasonally adjusted (nsa); all other series are seasonally adjusted.

SOURCES:
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.

For more information, contact Robert Lacy at 804-697-8703 or e-mail Robert.Lacy@rich.frb.org.

State Economic Conditions

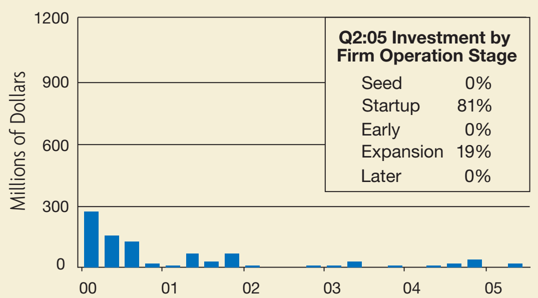
By Andrea Holmes

District of Columbia

Recent economic data suggest that the District of Columbia's economy expanded solidly during the second quarter. Indicators of employment and household and business financial conditions picked up, and real estate activity remained generally positive.

According to the Bureau of Labor Statistics (BLS) establishment survey, payroll employment rose 4.4 percent in the District of Columbia during the second quarter, the strongest pace among district jurisdictions. Nearly all sectors posted solid growth, with professional and business services establishments accounting for nearly half of the net gains. The only sectors not adding jobs were education and health services and government.

DC Venture Capital Investment, Q1:00-Q2:05



SOURCE: PricewaterhouseCoopers/Thompson Venture Economics/National Venture Capital Association MoneyTree™ Survey

The positive tone was mirrored in the BLS survey of household employment. The District of Columbia's jobless rate moved 0.3 percentage point lower in the second quarter, though it remained well above both the national and Fifth District averages. Less encouraging was the rise in the number of first-time claimants for unemployment insurance. The second-quarter measure rose 2.5 percent, after having declined for two quarters.

The pickup in jobs coupled with the decline in unemployment has had a positive impact on income measures in the District of Columbia. Compared to a year ago, personal income expanded 4.7 percent in the second quarter.

Higher incomes in the District of Columbia combined with lower interest rates continued to drive a flurry in home sales. Second-quarter home sales however, expanded at a slightly slower clip — possibly feeling the effects of rising home prices, which showed no signs of moderating yet.

With annual price appreciation of 24.1 percent in the second quarter, the District of Columbia ranked sixth nationwide in terms of home price growth. Higher prices did not appear to have discouraged new construction activity, though — new housing permits expanded at a breakneck pace in the District of Columbia, posting the strongest growth rate districtwide in the second quarter.

Other indicators of business activity were also encouraging. Venture capital investment made a strong comeback in the second quarter — inflows increased to $16 million, following flat activity in the first quarter. As shown in the chart, the majority of the funding — 81.4 percent — went to firms in the startup phase, suggesting increased confidence on the part of investors.

Maryland

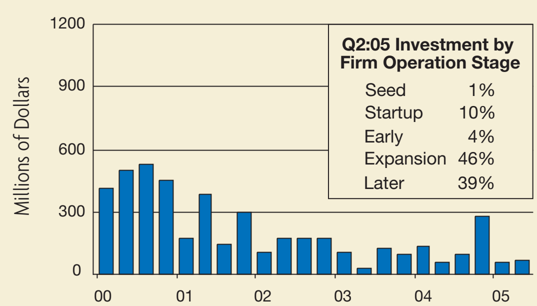
Maryland's economy forged ahead in the second quarter. The employment situation and financial conditions at Maryland households and businesses improved markedly while the real estate market continued to post solid expansion.

Maryland businesses boosted payrolls by 2.6 percent, or 16,300 jobs, in the second quarter with only manufacturing establishments trimming jobs over the period. Professional and business services firms were responsible for the bulk of the increase, accounting for nearly half of the payroll gain.

The employment situation at Maryland households also continued to look up, with unemployment insurance claims retreating 16.1 percent in the second quarter. The jobless rate inched 0.1 percentage point higher to 4.3 percent, but the increase was likely due to the 31,600 person surge in the labor force — the largest gain since the third quarter of 1990 when the labor force spiked by nearly 38,000. Looking at the larger picture, even with the slight uptick in unemployment, Maryland's jobless rate remained nearly a full percentage point below the national rate of 5.1 percent.

Strong job creation helped boost incomes at Maryland households. Personal income expanded 3.9 percent over the year in the second quarter, matching the nationwide gain.

MD Venture Capital Investment, Q1:00-Q2:05



SOURCE: PricewaterhouseCoopers/Thompson Venture Economics/National Venture Capital Association MoneyTree™ Survey

With more disposable income, Maryland households increased their levels of investment — particularly in real estate. Existing home sales posted a 5.9 percent gain in the second quarter, despite escalating home prices. The most recent data from the Office of Federal Housing Oversight reported that the median-priced home in Maryland was 23.0 percent above the year-ago level. As such, Maryland ranked seventh nationally in terms of annual home price acceleration. In addition, the state was one of eight nationwide where the annual gain exceeded all previous gains over the history of the data series, spanning roughly 30 years.

Rising real estate prices did not appear to deter speculative construction markets either. New building permits soared 82.0 percent in the second quarter.

Outside of the real estate market, a pickup in business conditions was also evident. Maryland posted steady venture capital inflows in the second quarter, following solid activity a quarter earlier. As shown in the chart, the majority of the second-quarter capital was slated for firms in the expansion stage.

North Carolina

North Carolina's economy continued to dig in during the second quarter. The most recent information suggests that employment activity and household and business conditions in the state remained on trend, and growth in the residential real estate market continued to expand, albeit at a slightly slower pace.

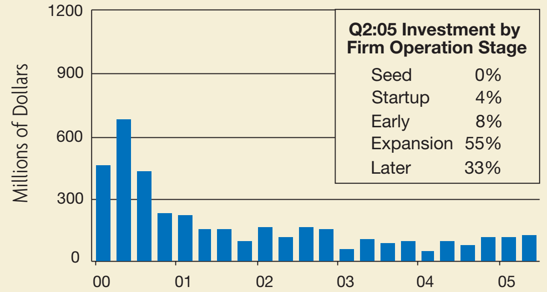
North Carolina businesses added 29,067 jobs in the second quarter, the largest net gain districtwide. All industry sectors tacked on jobs — even the much beleaguered manufacturing sector — which added 1,533 factory workers. By sector, the strongest growth was recorded at professional and business services and government establishments, while the information and natural resources and mining sectors posted the weakest growth.

The improving tone of the labor market was reflected in North Carolina's initial unemployment insurance claims. New claim submittals declined 20.5 percent in the second quarter, following three straight quarters of gains. Despite the improvement in payrolls and claims, though, the jobless rate remained fixed at 5.2 percent in the second quarter, in part because of the 22,233 person surge in the labor force, the strongest quarterly gain since late 2003.

In line with higher payrolls and fewer jobless claims, earnings rose in almost all North Carolina industry sectors in the second quarter – including manufacturing – boosting total personal income in the state. Compared to a year ago, personal income expanded 4.8 percent in North Carolina, the second highest growth rate districtwide.

News on the business front was also more upbeat, with venture capital investment into North Carolina continuing to increase. Investment into the state totaled $127.3 million in the second quarter, marking the third consecutive period of expanding inflows.

NC Venture Capital Investment, Q1:00-Q2:05



SOURCE: PricewaterhouseCoopers/Thompson Venture Economics/National Venture Capital Association MoneyTree™ Survey

North Carolina's real estate market advanced at a slower pace. Compared to the first quarter, new building permits climbed but existing home sales were off 11.0 percent. As a result, North Carolina was one of only two District jurisdictions not to see an increase in second-quarter home sales, despite comparatively modest house price acceleration of only 3.2 percent during the period.

South Carolina

South Carolina's economy has not posted as strong an upturn in recent months. A definitive turnaround in statewide labor markets and household and business financial conditions has yet to materialize, though real estate activity continued to forge ahead.

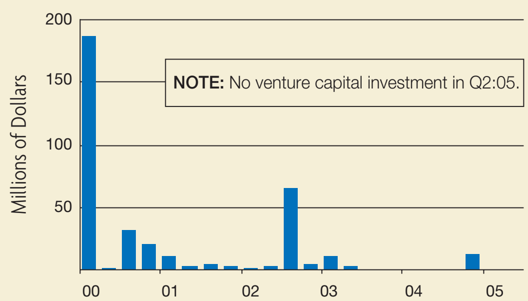
Nonfarm payroll job numbers drifted lower in South Carolina during the second quarter. According to the BLS survey of establishments, job numbers shrank 0.8 percent for the period, making South Carolina the only Fifth District jurisdiction not to boost payrolls. Job losses were concentrated primarily in the goods-producing sectors; natural resources and mining, construction, and manufacturing establishments all saw fewer jobs. By comparison, activity in the services sector was generally upbeat, with only the leisure and hospitality sector shedding jobs in the second quarter.

Data collected for the BLS household survey contained mixed news. Although South Carolina's second-quarter jobless rate declined 0.5 percentage point to 6.4 percent, the state's unemployment rate remained high compared to the national average of 5.1 percent in the second quarter.

In statewide performance, sluggish employment conditions continued to weigh on South Carolina households. Personal income growth was weaker over the year in all but one other District jurisdiction in the second quarter, recording only a 3.6 percent gain.

Indicators of financial conditions at South Carolina firms also failed to impress — second-quarter venture capital inflows were flat. As such, South Carolina was the only District state not to record any investment.

SC Venture Capital Investment, Q1:00-Q2:05



NOTE: Y-Axis rescaled to accommodate low base.
SOURCE: PricewaterhouseCoopers/Thompson Venture Economics/National Venture Capital Association MoneyTree™ Survey

Not all of the recent economic data were lackluster, though. Conditions in South Carolina's real estate markets continued to firm. The number of second-quarter building permits exceeded the number authorized in the first quarter by 52.4 percent. In addition, existing home sales in South Carolina expanded 9.8 percent, the second strongest pace districtwide. Modest home price acceleration in South Carolina could be spurring the prolonged strength in home sales. South Carolina recorded an 8.5 percent jump in house prices in the second quarter — second only to West Virginia.

Virginia

The latest data suggest that Virginia's economy continued to make solid headway in the second quarter. The labor and real estate markets advanced at a slightly slower pace, but nearly all indicators of household and business financial conditions posted strong gains.

According to the BLS establishment survey, business hiring in Virginia slowed but remained generally on track in the second quarter. Payrolls in the state expanded 0.2 percent, marking two years of positive job growth. By industry, the trade, transportation, and utilities sector added the most jobs while the leisure and hospitality sector trimmed the most.

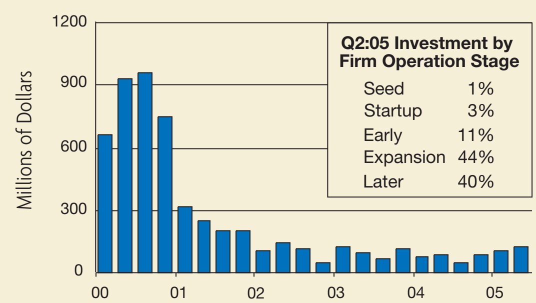
The BLS household survey, which measures household employment conditions, suggested a generally upbeat tone. Though Virginia's jobless rate rose 0.3 percentage point in the second quarter to 3.6 percent, unemployment remained well below the national rate of 5.1 percent as well as the districtwide rate of 4.8 percent. Other reports tracking Virginia households were also encouraging. For instance, initial unemployment insurance claims fell 23.1 percent in the second quarter, exceeding the 15.5 percent decline nationwide.

Personal income is another telling measure of household financial conditions. Compared to the second quarter of 2004, incomes expanded 5.2 percent in Virginia, highest among District states and well above the national growth rate of 3.9 percent.

Rising personal incomes have helped sustain Virginia's residential real estate markets. Second-quarter existing home sales in Virginia were 2.7 percent higher compared to year-ago levels, and the number of new building permits issued expanded 1.4 percent over the period.

Home sales activity — though positive — was more moderate in Virginia than in other District jurisdictions, possibly due to the rapid escalation in home prices. The most recent data from the Office of Federal Housing Oversight reported that a median-priced home in Virginia was 20.9 percent more expensive than it was a year earlier. As such, Virginia ranked eighth nationally in terms of annual home price acceleration. In addition, the state was one of eight nationwide where the annual gain reached a new high over the 30-year history of the data series.

VA Venture Capital Investment, Q1:00-Q2:05



SOURCE: PricewaterhouseCoopers/Thompson Venture Economics/National Venture Capital Association MoneyTree™ Survey

Outside of the real estate market — other indicators of a pickup in business activity were apparent. Venture capital investment, for example, rose by roughly $22 million, marking a full year of expansion. By funding type, the majority of the capital went to firms in the expansion stage, while the least amount of funding went to firms in the seed and startup stages.

West Virginia

Economic activity has been relatively strong in West Virginia in recent months. Labor market activity and household and business financial conditions firmed, while the housing market expanded at a steady pace.

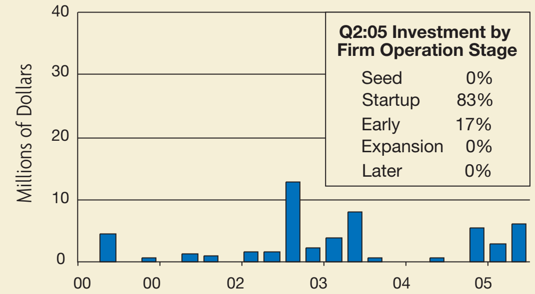
West Virginia payrolls rose 1.9 percent in the second quarter, marking nearly a year and a half of positive employment growth. By sector, job growth was recorded in all sectors except education and health services and trade, transportation, and utilities.

The unemployment rate also eased statewide, dropping 0.2 percentage point to 4.8 percent in the second quarter — the lowest rate since 1976, when records were first tracked. Also suggesting solid employment conditions was initial unemployment insurance claims statistics, a forward-looking measure of labor market activity. Second-quarter first-time claims dropped 26.6 percent in West Virginia, the largest decline among District jurisdictions.

With a decline in unemployment, measures of personal income in West Virginia also picked up in the second quarter, though growth was slower than recorded in other District states. Incomes grew 3.5 percent compared to the second quarter of last year.

Beyond household financial conditions, indicators of West Virginia business activity also perked up. For example, venture capital investment into the state expanded strongly in the second quarter, more than doubling from the first-quarter level. At $6 million, second-quarter inflows marked the largest infusion in exactly two years. Also positive, the majority of the funding — 83 percent — went to firms in the startup phase. Startup firms typically present more risk to investors, and the funding increase could signal an increase in investor confidence.

WV Venture Capital Investment, Q1:00-Q2:05



NOTE: Y-Axis rescaled to accommodate low base.
SOURCE: PricewaterhouseCoopers/Thompson Venture Economics/National Venture Capital Association MoneyTree™ Survey

The residential real estate market continued to gain ground in the second quarter, in some cases outpacing activity in other District states. Building permits rose 78.8 percent, and existing home sales posted an 11.7 percent gain during the same time period — the strongest sales increase districtwide. A likely reason for strong sales growth could reflect the relatively slower appreciation of West Virginia's housing stock. Home price acceleration in West Virginia was modest compared to other District states. The second-quarter 11.4 percent jump remained well below the districtwide increase of 17.4 percent.

Behind the Numbers: Bankruptcy Filings Climb

The pace of personal bankruptcy filings in the United States surged to a record high during the second quarter of 2005. Some analysts have attributed the rise — which accompanied otherwise decent economic performance — to the newly enacted Bankruptcy Abuse Prevention and Consumer Protection Act, which took full effect on October 17. The conventional wisdom is that consumers were sprinting to file for debt relief to avoid the approaching tougher standards.

This view may not be completely accurate. For many debtors, it may simply be a preference for the devil they know. "I don't believe the idea that everyone is catching on to the idea of how good a deal it is to file for bankruptcy under the current rules," says Kartik Athreya, an economist at the Richmond Fed. "My gut feeling is that for most people it has to do with the uncertainty associated with switching to a new regime."

At the same time, Athreya notes, the new rules do in fact come with higher costs, chiefly in the form of stepped-up due diligence for the processing of debtors' assets and liabilities. The new law also prescribes credit counseling, which could increase the "burden" of putting off filing for some households. "It makes sense for people who are financially strapped to be fairly sensitive to any new costs," Athreya says, and that could be leading some to declare bankruptcy now.

Meanwhile, the rush to file hasn't been as sharp in the Fifth District — with the notable exception of West Virginia, where the second-quarter increase was well above the national rate. It may take a few more quarters for the real trend, and the reasons driving it, to become clear. — Doug Campbell

Region	Q2 Personal Filings	% Change
United States	458,597	11.1
Fifth District	35,043	3.2
District of Columbia	498	0.4
Maryland	7,436	-6
North Carolina	9,763	7.8
South Carolina	3,686	-5.1
Virginia	10,018	-2.8
West Virginia	3,642	25.8

SOURCE: American Bankruptcy Institute

State Data, Q2:05

	DC	MD	NC	SC	VA	WV
Nonfarm Employment (000)	682.1	2,562.6	3,880.4	1,830.7	3,630.3	744.8
Q/Q Percent Change	4.4	2.6	3.1	-0.8	0.2	1.9
Y/Y Percent Change	1.2	2.0	1.7	0.2	1.5	1.1
Manufacturing Employment (000)	2.5	139.3	577.5	264.3	298.3	63.2
Q/Q Percent Change	11.6	-3.3	1.1	-1.2	-0.4	3.4
Y/Y Percent Change	2.8	-2.3	0.0	-1.6	-0.3	-0.1
Professional/Business Services Employment (000)	146.9	388.1	442.6	187.5	588.2	58.3
Q/Q Percent Change	10.7	7.9	7.0	9.8	-1.5	1.9
Y/Y Percent Change	2.4	4.4	4.4	-4.3	2.7	1.1
Government Employment (000)	230.1	464.3	656.4	332.5	655.4	143.7
Q/Q Percent Change	-0.7	2.0	3.2	3.6	0.6	0.8
Y/Y Percent Change	-0.1	0.2	1.3	2.7	0.9	0.4
Civilian Labor Force (000)	300.1	2,927.7	4,306.2	2,067.7	3,905.6	792.8
Q/Q Percent Change	-6.4	4.4	2.1	-1.0	5.3	0.2
Y/Y Percent Change	0.8	1.6	1.3	1.3	2.5	0.4
Unemployment Rate (%)	7.7	4.3	5.2	6.4	3.6	4.8
Q1:05	8.0	4.2	5.2	6.9	3.3	5.0
Q2:04	8.0	4.2	5.6	6.8	3.7	5.4
Personal Income ($bil)	27.6	210.0	239.8	108.3	259.0	44.4
Q/Q Percent Change	1.0	0.8	0.6	0.6	0.6	0.8
Y/Y Percent Change	4.7	3.9	4.8	3.6	5.2	3.5
Building Permits	911	8,996	26,757	14,055	17,473	1,545
Q/Q Percent Change	575.9	82.0	112.5	52.4	184.0	78.8
Y/Y Percent Change	19.9	17.8	8.5	24.9	1.4	0.1
House Price Index (1980=100)	539.9	447.2	295.9	281.5	407.6	224.4
Q/Q Percent Change	24.1	25.0	3.2	8.5	22.0	11.4
Y/Y Percent Change	23.5	23.0	5.9	8.1	20.9	9.0
Sales of Existing Housing Units (000)	12.8	139.2	191.4	112.5	187.7	40.9
Q/Q Percent Change	-11.1	5.9	-11.0	9.8	4.5	11.7
Y/Y Percent Change	-9.2	0.9	8.9	14.4	2.7	21.7

NOTES:
Nonfarm Payroll Employment, thousands of jobs, seasonally adjusted (SA) except in MSA's; 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®

Metropolitan Area Data, Q2:05

	Washington, DC MSA	Baltimore, MD MSA	Charlotte, NC MSA
Nonfarm Employment (000)	2,933.6	1,284.0	797.7
Q/Q Percent Change	9.0	11.6	7.4
Y/Y Percent Change	2.8	1.3	3.6
Unemployment Rate (%)	3.6	4.5	5.0
Q1:05	3.7	4.8	5.4
Q2:04	3.7	4.5	5.7
Building Permits	11,715	2,635	5,804
Q/Q Percent Change	296.1	147.9	125.9
Y/Y Percent Change	9.4	-8.9	-3.7

	Raleigh, NC MSA	Charleston, SC MSA	Columbia, SC MSA
Nonfarm Employment (000)	269.2	280.7	347.0
Q/Q Percent Change	4.8	10.1	3.9
Y/Y Percent Change	0.9	2.6	0.6
Unemployment Rate (%)	4.3	4.9	5.3
Q1:05	4.4	5.6	6.1
Q2:04	4.5	5.3	5.6
Building Permits	1,227	2,559	2,088
Q/Q Percent Change	55.9	6.0	77.1
Y/Y Percent Change	-0.3	6.7	-0.5

	Norfolk, VA MSA	Richmond, VA MSA	Charleston, WV MSA
Nonfarm Employment (000)	760.0	618.0	150.9
Q/Q Percent Change	9.3	8.1	9.9
Y/Y Percent Change	1.0	2.1	1.1
Unemployment Rate (%)	4.1	3.7	4.9
Q1:05	4.2	3.7	5.9
Q2:04	4.0	3.9	5.2
Building Permits	2,562	2,437	122
Q/Q Percent Change	24.2	-44.2	936.1
Y/Y Percent Change	-24.1	1.2	22.0

For more information, contact Andrea Holmes at 804-697-8273 or e-mail Andrea.Holmes@rich.frb.org.

OPINION

Bubble Talk

BY RAYMOND E. OWENS

It's easy to understand the widespread attention to the nation's sharp run-up in housing prices. If indeed we're witnessing a "housing bubble" — and higher prices aren't supported by economic fundamentals — then a collapse would seem both inevitable and detrimental. A drop in prices could result in extensive economic fallout if increasingly leveraged consumers don't expect the decline and fail to make adjustments ahead of time. In this worst-case scenario, household wealth would take a big hit and consumption would be reduced, thus producing a relatively strong, negative macroeconomic impact. Nobody wants that.

But I think some of this concern may be overblown. To be sure, housing prices in many parts of the nation and Fifth District have risen rapidly over the last few years. Homes in Washington, D.C., fetch nearly double what they did five years ago, and Baltimore prices aren't far behind. Those areas are not necessarily experiencing a bubble, however.

In many places, economic fundamentals — supply and demand conditions — tend to explain at least part of the rise in housing prices. Even though the supply of houses has increased markedly in recent years, builders and developers in the hottest markets say that limited availability of lots has kept housing production short of demand. Against this, a variety of factors has boosted demand. Population growth in Washington has been rapid, for example, helping to drive up housing prices. And mortgage rates have dropped to historically low levels. In addition, we have seen improvements in personal income growth and a much more solid job picture since the country emerged from recession in 2001. Tax treatments also continue to be favorable to home buyers, with married couples able to make as much as $500,000 in gains on their house sales with no accompanying tax liability.

In many places, economic fundamentals — supply and demand conditions — tend to explain at least part of the rise in housing prices.

There has been some worry that new forms of financing are pushing up housing prices to unsupportable levels. Interest-only and negative amortization loans, plus the increased use of adjustable-rate mortgages, have widened the pool of potential home buyers. What if consumers don't really know how to use these vehicles and aren't aware of the risks? That's a question to consider, but also remember that financial market innovations usually yield real benefits. A big shock to the economy might indeed catch users of interest-only loans unprepared, but at the same time there are likely significant benefits that such loans have provided in the short-term. I think it's still up for debate whether these products provide benefits to consumers which offset new risks.

The price-to-rent ratio is an oft-cited statistic by analysts who believe we're in a housing bubble. It has spiked by 30 percent in the last five years. But before jumping to conclusions about what that means, consider that the demand for house ownership has increased and with it a big group of people has left the rental ranks. That means rental demand has diminished, so it's not surprising that rental prices haven't kept up with sale prices in the short run.

Finally, the national housing market actually flattened somewhat during the 1990s. Some of the recent price gains, then, might be viewed as making up for previous stagnation.

Which brings me to the question that everyone seems to be asking: Are we in a housing bubble? The answer is: I don't know. Even in hindsight, it can be difficult to identify a true bubble. Just because prices in a sector rise rapidly and then fall does not necessarily mean that a bubble has existed and popped. When weighing the likelihood of a bubble, though, it's important to keep in mind that in today's housing price appreciation we see some accompanying improvement in the economic fundamentals underlying housing prices. To assume that the current level of housing prices must be a bubble is somewhat dicey, given the mixed evidence.

The same couldn't have been said, by the way, about the run-up of stock prices in the late 1990s. In that episode, we saw companies spring up virtually over night with no earnings and no viable products but enormous market capitalizations. My view of the 2005 housing market is that it is not strictly analogous to the stock market of the late 1990s. This is not to say that the housing market is without risk, but it appears to be less risky than the late 1990s stock market.

Does this mean that housing prices will remain at their current levels? All bets are off on that question because it depends on how future events unfold. One thing we know about the future is that we know we don't know much about it. But I think it's fair to say that there are many sound reasons why housing prices have risen — and that recent increases do not appear to be the result of rampant speculation alone. **RF**

NextIssue

Urban Poverty
Baltimore consistently ranks among the poorest U.S. cities. Despite well-intended government and private-sector programs, poverty persists and even grows in some of the city's central neighborhoods. In a close look at the face of poverty in the Fifth District, we'll examine a single Baltimore neighborhood, talking to the residents who live there and the people trying to help.

Does College Still Pay?
Tuition bills are rising at colleges and universities around the country, leading some to wonder whether young people would be better off to enter the job market rather than spend four years in school. While there is no one-size-fits-all answer to that question, we'll take a close look at the data. Are the returns to higher education typically worth the costs? And are there broader social benefits associated with college attendance?

Film at 11
Producing local TV news is expensive, with six-figure salaries for on-air talent and large equipment and transmission costs. Yet the most profitable broadcasters are almost always the market leaders in local news. We'll explain the economics of local TV news and why it remains so lucrative even in a time of declining viewership and mounting competition.

Identity Theft
Financial institutions across the Fifth District and nationwide are seeking new ways to fight one of the leading crimes of the information age. But besides the steep costs of preventing identity theft come questions about how to balance the need to monitor customer accounts with concerns about privacy.

Economic History
The Fifth District experienced several major hurricanes during the 20th century. What was the economic impact of those storms, and how did they affect development in the region's coastal cities?

Jargon Alert
When constructing models, economists are concerned about isolating factors that are "exogenous" from those that are "endogenous." What does this mean?

Research Spotlight
The United States' current account deficit is now about six percent of GDP, an all-time high. Is that level sustainable? Would efforts to reduce it do more harm than good?

Visit us online:

www.richmondfed.org

- To view each issue's articles and web-exclusive content
- To add your name to our mailing list
- To request an e-mail alert of our online issue posting

The Winter 2006 issue will be published in January.

R E C E N T

Economic Research from the Richmond Fed

Economists at the Federal Reserve Bank of Richmond conduct research on a wide variety of monetary and macroeconomic issues. Before that research makes its way into academic journals or our own publications, though, it is often posted on the Bank's Web site so that other economists can have early access to the findings. Recent offerings from the Richmond Fed's ***Working Papers*** series include:

"A Quantitative Study of the Role of Wealth Inequality on Asset Prices"
Juan Carlos Hatchondo, November 2005

"A Quantitative Theory of the Gender Gap in Wages"
Andrés Erosa, Luisa Fuster, and Diego Restuccia, September 2005

"A General Equilibrium Analysis of Parental Leave Policies"
Andrés Erosa, Luisa Fuster, and Diego Restuccia, September 2005

"Asymmetric Information and the Lack of International Portfolio Diversification"
Juan Carlos Hatchondo, September 2005

"The Value of Information with Heterogeneous Agents and Partially Revealing Prices"
Juan Carlos Hatchondo, September 2005

"Should the FDIC Worry about the FHLB? The Impact of Federal Home Loan Bank Advances on the Bank Insurance Fund"
Rosalind L. Bennett, Mark D. Vaughan, and Timothy J. Yeager, August 2005

"A Theory of Political Cycles"
Leonardo Martinez, July 2005

"Firm Fragmentation and Urban Patterns"
Esteban Rossi-Hansberg, Pierre-Daniel G. Sarte, and Raymond E. Owens, June 2005

"Do Technological Improvements in the Manufacturing Sector Raise or Lower Employment?"
Yongsung Chang and Jay H. Hong, April 2005

"The Replacement Problem in Frictional Economies: A Near-Equivalence Result"
Andreas Hornstein, Per Krussell, and Giovanni L. Violante, April 2005

You can access these papers and more at: **www.richmondfed.org/publications/economic_research/working_papers/**

Federal Reserve Bank of Richmond
P.O. Box 27622
Richmond, VA 23261
Change Service Requested

PRST STD
U.S. POSTAGE PAID
RICHMOND VA
PERMIT NO. 2

Please send address label with subscription changes or address corrections to Public Affairs or call (804) 697-8109