SUMMER 2006

REGION FOCUS

THE FEDERAL RESERVE BANK OF RICHMOND

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Volcker Disinflation • The (Illegal) Immigrant Effect
• Interview with Guillermo Calvo

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VOLUME 10
NUMBER 3
SUMMER 2006

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.

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Published quarterly by
the Federal Reserve Bank
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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.

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ISSN 1093-1767

Banking on Credibility

This issue of *Region Focus* comes at a time when inflation is on many people's minds. The prices of some commodities have been shattering records, putting pressure on companies that use those products to increase what they charge their customers. Consumer prices, excluding food and energy, rose at an annual rate of 3.1 percent in the first five months of 2006, compared with 2.2 percent for all of the previous year. During such periods, attention turns to the Fed to see what policy steps it will take. And with the spotlight so intense, the Fed understands that maintaining its credibility is of the utmost importance.

A central bank's monetary policy is considered credible if the public perceives that it is committed to keeping inflation low and stable. Without credibility, it would be difficult for the central bank to anchor the public's expectations of future inflation, which complicates monetary policymaking. A central bank ultimately would like its policy to affect the real interest rate through changes in the nominal target rate, the difference between the two being expectations of future inflation. But if inflation expectations are volatile, it will be harder to pin down what the policy rate should be.

Inflation expectations tend to be self-fulfilling in the sense that the anticipation of much higher prices in the future puts upward pressure on current prices. If a central bank's record in fighting off higher prices is weak, shocks that hit the economy can easily unhinge inflation expectations and push the inflation rate upward. By contrast, if a central bank's credibility is well-established, people are less jittery about every piece of news that can affect future inflation, making it easier for the central bank to pursue price stability.

The notion that credibility is critical to monetary policy follows from the recognition that people are rational when forming their expectations. They understand a central bank's preferences for low, stable inflation and will use this knowledge to predict future monetary policy moves. Because the Fed failed to adequately take forward-looking expectations into account during the "go-stop" monetary policy of the 1960s and 1970s, its attempts to exploit the perceived tradeoff between output and employment were futile.

Each time the Fed stimulated the economy in the go phase of the policy cycle, it would wait too long before tightening policy in the stop phase. By this time, higher inflation expectations had already crept into the public's pricing decisions. After several go-stop cycles, inflation rose to its highest level in three decades. Attempts by the Fed to "fine-tune" the economy had failed.

This inflationary phase ended when the Fed, under the guidance of Paul Volcker, tightened policy until inflation was brought under control and inflationary expectations were anchored at low levels. In October 1979, Volcker introduced a dramatic policy shift that eventually resulted in the fed funds rate rising to nearly 20 percent. This aggressive tightening came at the cost of a sharp recession in early 1980 and another that began in mid-1981 and lasted until well into 1982. But the Fed understood that its credibility was at stake. In order to return the economy to more stable times, the Fed needed to send a strong and unwavering signal of its commitment to fight inflation.

In the ensuing years, the Volcker Fed remained watchful in preserving its hard-won credibility, recognizing that it can easily be lost. Former Richmond Fed economist Marvin Goodfriend has observed that although inflation was only about 4 percent in 1983 to 1984, the long bond rate, an indicator of inflation expectations, was trading significantly higher. Knowing that it should not take such signals for granted, the Fed pre-empted this threat by raising the fed funds rate to about 11 percent. Since that time, there have been several "inflation scares" in which rising bond yields warned of potentially higher inflation. But each time, under Volcker and his successor Alan Greenspan, the Fed responded to pre-empt the threat.

The success of the Volcker and Greenspan Feds at keeping inflation expectations in check paved the way for the "Great Moderation," a long and sustained period of output and inflation stability. As a result, it is widely acknowledged that maintaining price stability is the best contribution a central bank can make to ensuring sustained growth in incomes and employment. But even after 25 years of relatively sound policy, the Fed understands that in a low inflation environment, as much as in a high one, it must remain vigilant.

Signs of rising inflation have surfaced this year. How serious those signs are remains unclear — productivity growth is strong and the cost of labor relative to output has barely moved since a year ago. Even so, preserving its credibility requires reacting appropriately to keep inflation low and stable. The Fed has spent much effort establishing a reputation for making price stability its primary objective. That has been a long and hard-fought battle, one that we must continue to wage.

JEFFREY M. LACKER
PRESIDENT
FEDERAL RESERVE BANK OF RICHMOND

From Stagflation to the Great Moderation

BY VANESSA SUMO

How former Federal Reserve Chairman Paul Volcker tamed inflation and changed monetary policymaking as we know it

When Paul Volcker returned early from an International Monetary Fund meeting in Belgrade on Oct. 2, 1979, everyone sensed that something was afoot. Volcker, the newly installed Chairman of the Federal Reserve Board of Governors, had called for a special meeting on Oct. 6, which was 10 days ahead of the regularly scheduled Federal Open Market Committee (FOMC) gathering. Average inflation had rocketed to 10.6 percent in the first eight months of 1979 from 7.6 percent in 1978. In September, inflation soared to a high of 11.9 percent over the previous year.

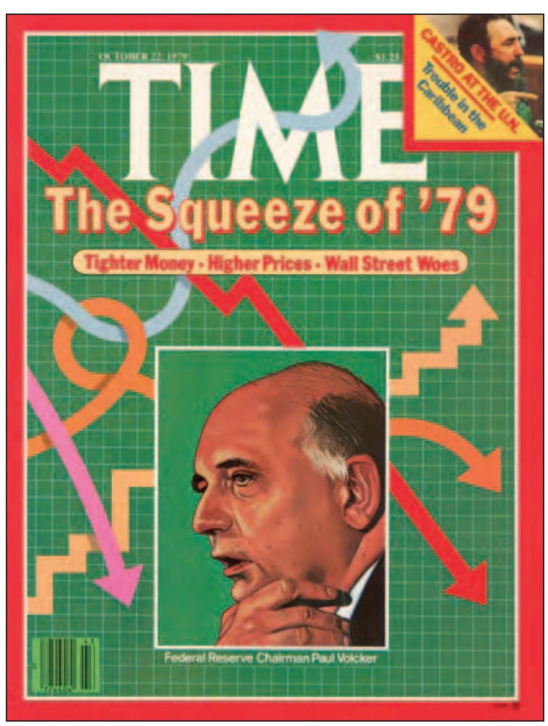
Worried about those trends, Volcker believed that the Fed had to change its policies, sharply and decisively. He opened that fateful meeting with this observation: "We wouldn't be here today if we didn't have a problem."

More than a quarter of a century ago, the Federal Reserve took a dramatic turn in monetary policy that sent interest rates soaring to their highest levels on record and triggered two recessions. But the move also finally arrested inflation's insidious rise and set the stage for a long period of prosperity in the United States.

The "Incredible Volcker Disinflation," as economists Marvin Goodfriend of Carnegie Mellon University (and former senior economist at the Richmond Fed) and Robert King of Boston University (and a visiting scholar at the Richmond Fed) hail this period, was "incredible" because the Fed was able to successfully bring down inflation from a high of 13.5 percent in 1980 to less than 4 percent in just a few years, and to keep it low for the next two and a half decades. This was a remarkable feat at a time when inflation seemed so well-entrenched in the economy and the costs of reducing it were deemed very large.

But Goodfriend and King also call this period "incredible" because the "imperfect credibility of monetary policy" complicated attempts to disinflate the economy. Stubbornness of inflationary expectations frustrated the Fed's efforts to bring down inflation permanently, even after Volcker's policy shift in October 1979. The public's deep skepticism of whether policymakers were serious about taming inflation and whether they would stay the course made it extremely difficult for the Fed to earn the credibility that was necessary to effectively rein in prices.

One of the Fed's missions is to conduct monetary policy in the pursuit of maximum sustainable growth. In many ways, The Reform of October 1979, as it has also come to be known, has led to the recognition that the Fed can best achieve this goal through its principal mission: keeping prices stable.



The Fed's decisive moves to control inflation, beginning in 1979, drew the attention of the public and media, which had grown skeptical of the central bank's resolve in pursuing price stability.

PHOTOGRAPHY: GETTY IMAGES

Great Expectations

Setting policy in the presence of high and volatile inflation expectations is like navigating a ship in a fog — it is difficult for a central bank to see where it is headed, whether it has been tightening or loosening too much or too little, and so runs the risk of destabilizing the economy. An environment with stable inflation expectations, on the other hand, makes it easier to bring about changes in real interest rates and thus carry out monetary policy effectively.

The Fed that Volcker inherited was utterly lacking in credibility. At the time, the notion that an expansionary monetary policy could permanently reduce unemployment was widely accepted and led many to believe that running some inflation was worthwhile. In time, the public would come to expect that the Fed would each time loosen money in order to stimulate the economy. But there was little understanding of how such expectations could feed into future wages and prices. Hence, there was little appreciation about the importance of anchoring inflation expectations.

This led to a "go-stop" fashion of monetary policy. In the "go" phase of the policy cycle, inflation would rise slowly as the Fed stimulated output and employment. By the time inflation reached worrying levels, higher inflation expectations had already seeped into the public's pricing decisions. Thus, an aggressive increase in the interest rate would have been needed to trounce inflation, but as Goodfriend points out, "There was a relatively narrow window of broad public support for the Fed to tighten monetary policy in the stop phase of the cycle."

This window opened when rising inflation started to become a concern, but closed quickly when unemployment began to rise. "The tolerance for rising inflation and the sensitivity to recession meant that go-stop cycles became more inflationary over time," explains Goodfriend. As a result, the public began to lose confidence in the Fed. The perception that taming inflation would always take a backseat to efforts to combat a potential recession created the reputation that the Fed could not credibly commit to price stability.

The Monetary Policy Experiment

Inflation began its ascent in the mid-1960s. From a low of 2.6 percent a year from 1964 to 1968, inflation rose to an average of 5 percent from 1969 to 1973, and 8 percent from 1974 to 1978. By 1979, it had reached a high of 11.3 percent.

The Fed that Volcker inherited was utterly lacking in credibility.

Even before he took over the Federal Reserve chairmanship from G. William Miller, Volcker was a well-known inflation hawk. In an April 1979 FOMC meeting as president of the Federal Reserve Bank of New York, he remarked, "[Inflation] clearly remains our problem. In any longer-range or indeed shorter-range perspective, the inflationary momentum has been increasing. In terms of economic stability in the future, that is what is likely to give us the most problems and create the biggest recession."

In part because of these credentials, President Carter appointed Volcker as Chairman, ushering out Miller after only 18 (widely perceived as ineffective) months on the job. But in August 1979 when he was finally sworn in, Volcker held back. In order to assure public support for taking a drastic measure to fight inflation, he would need to wait for a moment of crisis to arrive.

That happened sooner than expected. During the September 1979 FOMC meeting, the committee proposed a small increase in the federal funds rate (the overnight rate at which banks borrow reserves from each other) to 11.5 percent. There were eight assents and four dissents, but three of these dissents actually came from hawks who were disappointed at the relatively small change and favored more tightening. When the Board of Governors met afterward to decide on the discount rate (the rate at which the Fed lends to financial institutions), a half percentage step up was passed with a 4-to-3 vote, this time with all three dissents on the dovish side.

But because only the vote on the discount rate was immediately made known to the public, markets interpreted the strong dovish dissents as a signal that the Fed would forestall any further increases in the interest rate. Moreover, the markets believed that Volcker's ability to fight inflation was in question since it appeared that he was facing increasing opposition within the Fed. The vote also seemed to confirm the widely held idea that the Fed would stop fighting inflation if it meant triggering a recession. Some analysts speculate that events may have unfolded differently had the markets known that three of the four dissents on the fed funds rate vote were actually by hawks who wanted more tightening instead of less.

Nevertheless, the public's belief that the Fed would take a softer stance on inflation roiled commodity markets. Daily futures prices for precious metals such as gold and silver rose sharply and turned disturbingly volatile as speculators rushed to hedge their positions against inflation. The mania spread to most other commodities as well.

After commodity futures prices spiked on Oct. 2, rumors surfaced that a support program for the flagging dollar was on its way, sending traders skidding the other way, only to learn later in the day that the rumor was unfounded. At this point, Volcker knew that the need for a dramatic monetary policy shift had arrived.

Calling for a special FOMC meeting, Volcker was determined to push a strong program to deal with the situation. At the meeting on Oct. 6, he presented the committee with two possibilities for attacking inflation: the traditional method that would involve targeting a significant increase in the fed funds rate; or, a radical change in operating procedures.

The Fed has at its disposal two main approaches for conducting open market operations: It can target the *price* of balances — the federal funds rate — that banks hold at the Federal Reserve. Or it can target the *quantity* of those balances. The operational shift that Volcker was proposing would mean the Fed would stop directly targeting the prices of reserve balances and instead aim at a specific level of "nonborrowed reserves." Under the plan, the Fed would target a level of balances that would fall short of demand at the prevailing fed funds rate, thus causing banks to bid up the rate — accomplishing the same monetary policy goal but in a different way. However, and advantageously, this approach would mean allowing a much wider range where the fed funds rate could settle.

In speaking about these two alternatives, Volcker mentioned that changing operating procedures had occurred to him in the past: "My feeling was that by putting even more emphasis on meeting the money supply targets and changing operating techniques ... and thereby changing psychology a bit, we might actually get more bang for the buck ... I overstate it, but the traditional method of making small moves has in some sense, though not completely, run out of psychological gas." The two possibilities were put to a vote and the outcome was unanimous — switch to the new operating procedures. The Committee widened the fed funds rate band from 0.5 to 4 percentage points.

The cleverness of this simple plan, apart from the huge publicity that it created, was in taking off the Fed's hands the responsibility of where the fed funds rate may go. What tipped the decision in favor of changing operating procedures, according to economists Athanasios Orphanides of the Federal Reserve Board of Governors and David Lindsey, formerly of the Board, and Robert Rasche of the St. Louis Fed, was "the practical observation that a monetary authority deliberately setting the funds rate would be unlikely to select the level that it expected to induce that targeted money stock, because the implied volatility of the funds rate would be more than the authority could stomach." Because there was always a strong reluctance to let the funds rate rise too high, adopting the new rule would allow the Fed to fix its gaze on keeping the amount of money and credit in check while letting the fed funds rate attain the necessary level.

Rise of the Monetarists

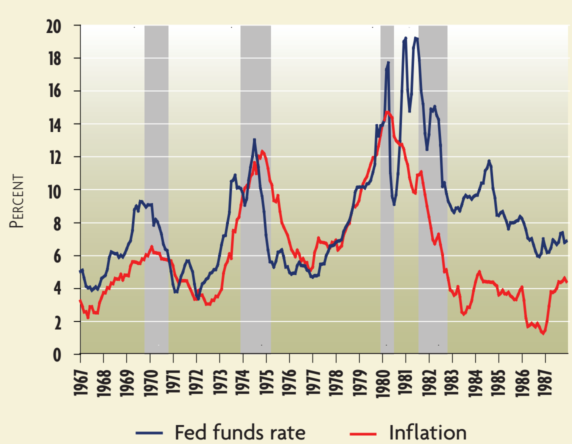
Taming inflation expectations was a central objective in this policy experiment, pushed to the foreground by Milton Friedman's monetarist ideas. Friedman pointed out that adjustments in inflationary expectations would break the perceived trade-off between inflation and unemployment if monetary policy continued to exploit this relationship. Moreover, insights from rational expectations theory taught that forward-looking agents cannot be "fooled," so their expectations and corresponding actions reflect how they perceive monetary policy is conducted. Friedman also argued that because inflation is mainly a monetary phenomenon — caused by excessive increases in the money supply — the cost of reducing inflation in terms of lost output would be much less severe than was previously thought. These ideas encouraged the Volcker Fed to proceed with its decision to drastically alter its policy.

The Fed hoped that this dramatic shift would send a firm signal of its resolve to fight inflation and its intention to return the economy to more stable times. The question, however, was whether the Fed could stick to this policy. Volcker himself had hinted that he intended to use the new operating procedure for only three or four months. But it would take much longer than that to deliver a permanent decline in inflation.

The first test of the Volcker Fed's determination to stabilize prices came on what Goodfriend identifies as the "inflation scare" of December 1979 to February 1980. During this period, the 10-year bond rate, an indicator of inflation expectations, soared from 10.5 percent to 12 percent. The inflation rate in February over the previous year was around 14.2 percent. At the same time, there were indications that the economy was weakening, which once again put the Fed in a bind. But the Fed forged ahead

The Fed Funds Rate and Inflation

The Fed aggressively raised interest rates in the early 1980s to control inflation, which had reached double digits.



NOTES: The blue line represents the monthly effective federal funds rate from January 1967 to December 1987. The red line represents the monthly year-on-year percentage change in the consumer price index. The shaded areas indicate recessions as determined by the National Bureau of Economic Research; December 1969 to November 1970, November 1973 to March 1975, January 1980 to July 1980, and July 1981 to November 1982.

SOURCES: St. Louis Fed's Federal Reserve Economic Data (FRED) and the Bureau of Labor Statistics with its tightening stance, and within two weeks of the March 1980 FOMC meeting, the fed funds rate shot up to 19 percent.

This aggressive tightening, however, would only restrain inflation temporarily, partly because the Fed felt compelled to ease the burden it had created by allowing interest rates to go so high. After credit controls (annual ceilings on both direct lending and loan guarantees in federal programs) that President Carter put in place plunged the economy into an even deeper recession, the Fed loosened policy, effectively moving the fed funds rate down to 9 percent by July 1980.

By the fall of that same year the fed funds rate and the 10-year bond rate were around 13.25 percent and 10.5 percent, respectively, roughly where they had stood the year before. This seemed to suggest that efforts to stabilize inflation in the past year had not been so successful, perhaps because the familiar pattern of go-stop policy that had plagued the Fed's credibility had not yet been convincingly shaken off.

Staying the Course

The Fed tightened monetary policy again, just as the economy was recovering from the short 1980 recession and the threat of increasing energy prices due to skirmishes in the Middle East. The fed funds rate rose to a near record high of more than 20 percent in December of that same year. Though the FOMC knew it was risking another recession, Volcker reiterated the importance of staying the course in a February 1981 meeting, "We see the risks of the alternative of a sour economy and an outright recession this year. So, maybe there's a little tendency to shrink back on what we want to do on the inflation side. I don't want to shrink back very far; that is my general bias for all the reasons we have stated in our rhetoric but don't always carry through on."

Still, nothing could stop long-term inflation expectations from climbing higher, as they did when the 10-year bond rate peaked to more than 15 percent in October 1981. Average inflation for 1981 was running high at 10.4 percent. This second inflation scare, say Goodfriend and King, was a pivotal moment in U.S. monetary history "because it convinced the Fed that the cost of a deliberate disinflation in 1981-82 was acceptable in light of the recurring recessions that would be needed to deal with inflation scares in the future."

And true enough, despite evidence that the economy was faltering and moving into another recession, the Fed was unwavering in its pursuit of stable prices. In the July 1981 FOMC meeting, Volcker once again reminded everyone of the ultimate objective. "I haven't much doubt in my mind that it's appropriate in substance to take the risk of more softness in the economy in the short run than one might ideally like in order to capitalize on the anti-inflationary momentum to the extent it exists," Volcker said. "That is much more likely to give a more satisfactory economic as well as inflationary outlook."

Finally in October 1982, Volcker announced the end of the new operating procedures that were put in place three years earlier. Inflation had begun to weaken in the spring of 1982 and by that fall, inflation had slipped to around 5 percent, the long rates dropped by 2 percentage points since that summer, and the fed funds rate fell to around 9 percent from more than 14 percent in July.

The Volcker Fed reverted to managing the fed funds rate more closely (targeting the price of balances instead of the quantity) and began taking a more accommodative stance in its treatment of the money supply. The recession ended in November 1982. Still, the Fed did not give into complacency and held the fed funds rate in the 8 percent to 9 percent range through the first half of 1983, even as inflation moved down to less than 4 percent by the end of that year, largely because long-term interest rates were still hovering over 10 percent.

The battle was not yet completely won at this point, for there were still some inflation scares that would test the Fed's mettle. Nevertheless, the hardest work had been done.

Volcker's monetary policy experiment established the credibility that the Fed sorely needed to stabilize inflationary expectations. A time of unprecedented low inflation and steady economic activity has ensued in the decades since the Volcker disinflation, a period which has sometimes been called the "Great Moderation." Most observers agree that improved monetary policy since Volcker deserves much of the credit for this era of stability. Without a doubt, Alan Greenspan and Ben Bernanke have benefited greatly from this legacy. **RF**

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JARGON ALERT

Rational Expectations

BY ANDREW FOERSTER

Many economic decisions in life depend upon predictions or expectations about the future. A new college graduate's choice of a career often depends on how he thinks earnings in certain fields will change over coming years. Investors choose stocks based upon their views of likely changes in returns. A farmer decides how much corn to plant according to his expectations of future prices.

In each of these examples, the effect of expectations on current behavior is clear. However, in each case, future prices depend upon the actions of a large group of individuals making current decisions. Earnings in a field will depend upon how many college graduates choose that occupation and how much demand exists for those skills; the price of a stock will depend upon how many shares are available and whether investors want to buy or sell them; and the price of corn will depend upon how much corn farmers have harvested and how much households wish to consume.

The rational expectations hypothesis is important for studying forward-looking decisions and markets. It rests on the premise that any discrepancies between expectations and outcomes are not "systematic." In other words, people do not make the same mistakes over and over, constantly misjudging future events. Rational expectations theory does not assume that people have perfect foresight, but it does assume that decisionmakers understand how future prices will be determined — for instance, the more corn is harvested, the lower the price will tend to be — and do the best job possible forecasting the future with the information available to them now.

Since the idea of rational expectations depends on systematic discrepancies between outcomes and expectations, events that are "surprises" can have large effects. For instance, farmers understand that droughts are possible but infrequent. As a result, when a drought occurs, they are unlikely to have predicted its effects on supply and, hence, prices for the current season. This is a surprise for which rational expectations theory can account. What rational expectations does not allow, however, is for farmers to systematically misjudge the frequency of droughts and their effects on crop yields and prices. That is, one would expect farmers to understand that if a drought occurs, yields will be low and prices will be high.

The same is true when it comes to investors. Certain stocks may be undervalued at certain points in time. But overall, investors are unlikely to consistently underestimate the future prices of equities. If there were such a discrepancy, savvy investors would realize that their expectations were too low, buy more stock, and drive up prices.

Rational expectations can also help explain people's consumption patterns. Consider a person in mid-career who has been laid off, but expects to find a new job in the next few months. Should this person, whose income has just dropped significantly, make an equal cut in his immediate consumption? Economists would argue there may be no need for a big cut, because he can use debt or savings for a short while, then repay the debt or replenish savings once he is employed again.

People tend to be forward-looking when it comes to public policy changes as well. For instance, temporary tax cuts intended to stimulate the economy may in fact be met with only slight increases of consumption, as people expect future tax rates to return to their previous higher level to raise revenue.

In addition to fiscal policy, rational expectations theory has significant implications for monetary policy. Many economists used to believe that there was an exploitable trade-off between unemployment and inflation: The Fed could cut interest rates, stimulate the economy, and lower unemployment without having to worry about runaway inflation. But this policy only worked until people figured out that inflation and expansionary policy go hand in hand. As a result, rational expectations suggested the Fed simply keep inflation low and not try to exploit possible trade-offs.

However, the Fed could have a short-term trade-off by unexpectedly letting inflation rise or fall. Alas, this policy would reduce the Fed's credibility, causing people to expect higher inflation. What's more, people would raise their expectations of a "policy surprise," making actions, and therefore results, more volatile in the future. Along these lines, Robert Lucas developed the "policy ineffectiveness proposition," which states that expected policy shifts will have little effect on the economy, as people will rationally adjust their behavior to limit the effect of the policy.

There exist some challengers to rational expectations theory. Behavioral economists, for example, tend to view people as relatively myopic. Still, rational expectations theory today occupies a central place in how most economists think about how people look to the future. For policy institutions such as the Fed, rational expectations theory suggests it is wise to be predictable with policy changes and to not try to manipulate the economy through policy surprises. **RF**

ILLUSTRATION: TIMOTHY COOK

Upended

BY VANESSA SUMO

Yield-curve watching has become somewhat of a pastime for forecasting enthusiasts. The fascination is understandable. The yield curve, or a comparison of interest rates on government bonds of different maturities, has been an impressively reliable indicator of future economic growth. And lately, the shape of the yield curve has been notably flat, leading many to wonder if it might just tip over and whether that could portend a recession.

The curve begins on the left with the shortest-maturity bonds and ends on the right with the lengthiest, from three months to 30. An inversion of the curve, or when the yield on a short-term bond is higher than that on a long-term bond, has correctly predicted every single recession in the United States since 1950, with the exception of one "false" signal in 1966. It predicted the recession in 1990 five quarters earlier, and when the yield curve inverted in 2000, a recession followed two quarters later. No wonder markets recently took notice when the yield on the 2-year bond crawled above that of the 10-year bond several times between late last year and March. In early June the yield on the 10-year bond closed lower than the fed funds rate for the first time since April 2001.

Why is an inverted yield curve so alarming? An upward sloping yield curve is the result of investors' expectations that interest rates will rise in the future. The yield curve also slopes upward because investors demand a risk premium for the uncertainty of holding a bond that matures further away in the future. Usually, a positively sloped curve indicates good times ahead. As the economy rapidly expands, markets expect future interest rates to rise because of potentially higher inflation, which the Fed will stave off through rate hikes.

An inverted yield curve, on the other hand, can be a harbinger of a recession. It suggests that investors anticipate future yields to fall because they expect a slowdown to occur, which could eventually prod the Fed to stimulate the economy through lower interest rates, as it has done at times in the past. But an inverted curve also can be a measure of the sometimes inevitable effects of monetary policy. In an effort to squeeze out inflation, the Fed can increase short-term rates high enough that a recession becomes likely.

Some analysts argue that today's flatness and periodic inversions of the yield curve need not be interpreted this way. Looking at the spread — or the slope — of the yield curve alone may not capture all the information that is useful for forecasting future output.

In a recent paper, economists Andrew Ang of Columbia University, Monika Piazzesi of the University of Chicago, and Min Wei of the Federal Reserve Board of Governors attempt to disentangle and condense the information embodied in the yield curve by choosing a small number of variables that have the most explanatory power for predicting GDP growth. They find that, first, the yield spread and, second, the level of the nominal short-term rate together capture almost all of the useful information contained in the yield curve. In particular, they find that it is the nominal short rate rather than the slope of the yield curve that provides the most predictive power.

"What Does the Yield Curve Tell Us about GDP Growth?" by Andrew Ang, Monika Piazzesi, and Min Wei. *Journal of Econometrics*, March-April 2006, vol. 131, issues 1-2, pp. 359-403.

These results lend support to former Federal Reserve Bank Chairman Alan Greenspan's view on why today's yield curve should be interpreted carefully. Like Ang, Piazzesi, and Wei, Greenspan believes that it is the short rate that underlies much of the yield curve's predictive ability. Specifically, in testimony before the Joint Economic Committee in November 2005, Greenspan noted that a flat or inverted curve could signal weaker economic growth ahead, but that depends on how far the real fed funds rate is from its long-run level.

Another reason why some economists think that an inversion may not mean a recession involves the level of another interest rate — the long-term one. Even though the Fed has increased its target rate 17 times since June 2004, inching it up from 1 percent to 5.25 percent, long-rates have remained stubbornly low at around 4 percent to a little more than 5 percent. Analysts point to low inflation expectations and increased demand for long-term bonds by foreign governments intervening in currency markets and by baby boomers preparing for retirement as some of the reasons why yields at the long end have remained subdued and the curve persistently flat. These are reasons that do not necessarily portend an economic downturn.

Greenspan points out that even as the yield curve was flat from 1992 to 1994, a long sustained period of economic expansion followed, not a recession. The yield curve is a powerful tool, but it may take a careful dissecting of levels and spreads to decipher what it's trying to tell us. **RF**

POLICY UPDATE

Breaking Down Barriers

BY VANESSA SUMO

On Feb. 8, the curtain fell on the Public Utility Holding Company Act of 1935 (PUHCA). The act was passed at the height of the Great Depression in response to the collapse of several electric and gas holding companies.

According to critics, these firms had been charging their utility subsidiaries high fees for service contracts and redirecting money to finance risky ventures — costs that were passed on to consumers. The size and complexity of many of these holding companies, usually spanning several states, helped to obscure some of their practices and made them difficult to regulate.

PUHCA granted powers to the Securities and Exchange Commission (SEC) to break up these massive interstate holding companies by forcing them to simplify their structures. Utility holding companies were required to shrink into single, integrated systems confined to particular geographic areas. This limited merger possibilities to utility companies that were physically interconnected or could operate under a single, coordinated system. For instance, it would have been virtually impossible for a utility in Illinois to justify a merger with one in California.

The act also greatly restricted the types of businesses in which holding companies could engage. An oil company was not permitted to own and control utilities unless it gave up its oil business, for example. The only way to avoid the SEC oversight eye was to become an exempt holding company, with the utility's operations limited to a single state or functioning predominantly as an operating utility.

The repeal of the PUHCA, which came as part of the Energy Policy Act of 2005, broke down these old barriers and opened the door to a variety of transactions. Utility holding companies will now find it easier to merge or acquire utilities in geographically distant locations. This was the case when Duke Energy of North Carolina acquired Cinergy of Ohio in April. In addition, Constellation Energy of Maryland and Florida Power and Light hope to complete their merger by the end of the year.

Nonutilities are likewise more free to acquire and control utility companies. Although the SEC permitted Berkshire Hathaway to acquire MidAmerican Energy Holdings in 2000 on the basis that it would have only one utility company, Berkshire Hathaway can now venture into other utilities, as it has done recently with its purchase of PacifiCorp in March.

Supporters of the repeal, including the SEC itself, the Federal Energy Regulatory Commission (FERC), and a number of economists, felt that PUHCA no longer made much sense in today's environment. Before the repeal, changes in energy policy had been introduced that carved out some exemptions for independent generating companies and foreign ownership of U.S. utilities. Moreover, the SEC had begun permitting mergers between utility companies that were only loosely interconnected.

In effect, the deregulation process had already been set in motion. The development in accounting standards and securities markets has also come a long way since 1935, making the concern of inadequate financial reporting that originally motivated the PUHCA largely unnecessary. Today, audited financial statements must follow the rules set by the Financial Accounting Standards Board, and securities markets demand a tremendous degree of transparency from companies wishing to raise money.

But those who opposed the repeal worry that there could be a substantial weakening in regulation of utility holding companies. Lynn Hargis, a lawyer with Public Citizen, a nonprofit consumer advocacy organization, worries that new players like investment banks would be more interested in buying power plants and then flipping them than in providing quality service. "Our power plants are important basic public services. But these have now been left to the market, and the market has only one thing on its mind that is to make profits," Hargis says.

Economist Paul Joskow at the Massachusetts Institute of Technology, on the other hand, is not too concerned. "In the current environment, when a hedge fund comes in and seeks to acquire an operating company they will be subject to significant scrutiny by the state," Joskow says. "And once investors become familiar with state regulation they may decide that they don't want to be in this business." Thus, he thinks the main acquirer of utilities will be other utilities. "There are too many utilities, and some are better than others. If the repeal allows companies with more expertise to expand their capabilities, then that's a good thing."

Moreover, such mergers and acquisitions will still need to be approved by state regulators and a host of federal agencies. The repeal also hands over to FERC some of the SEC's previous responsibilities with respect to access to books and records and for prescribing caps on prices charged for non-power goods and services provided within the utility holding company system.

So what about prices? Like Joskow, economist Richard Gordon of Pennsylvania State University is relatively optimistic about PUHCA's repeal. "Anything that increases the flexibility of the industry will in the long run lower costs, and that's going to be reflected in prices that consumers pay," he says. **RF**

Market Power?

BY DOUG CAMPBELL

"Can Feedback from the Jumbo CD Market Improve Bank Surveillance?" R. Alton Gilbert, Andrew P. Meyer, and Mark D. Vaughan, Federal Reserve Bank of Richmond *Economic Quarterly*, Spring 2006, vol. 92, no. 2, pp. 135-175.

Bank examiners spend a lot of time on the road. They drive around the country dropping in on financial institutions of all sizes, meeting with managers and inspecting the books. It's an expensive way to mind the banks, but necessary.

The other way that bank examiners keep tabs is through a model which summarizes a depository institution's financial condition. It's useful so far as it goes, but in recent years economists have been considering whether there might be other, more effective ways of supervising banks that complement on-site visits.

One of the leading candidates for how this might be accomplished is through financial market information — everything from stock prices to bond yields. Under one proposal, large banks would have to issue a special debt offering, with the idea that the market performance of this debt issue would flag problem banks perhaps sooner than traditional bank surveillance techniques.

In a new paper, economists in the supervisory units of the Richmond and St. Louis Feds size up the surveillance properties of jumbo certificates of deposit (CDs). Jumbo CDs are a cheap and stable source of funding for banks, and supply ample data to mine. Equally, jumbo CDs are used by even the smallest banks, which are the sort historically most likely to fail and the ones that experience the widest time lags between on-site examinations.

The authors build a model that aims to mimic surveillance practices used by bank supervisors. Then they compare how jumbo CD signals fare as a predictor of bank problems with the standard capital-adequacy model.

It turns out jumbo CDs aren't so good at providing early warnings about problem banks. Even though it costs almost nothing to add jumbo CDs to a model of bank surveillance, doing so produces little in the way of valuable information.

It may be that the jumbo CD results were less than fruitful because they were produced through a model that tracked the healthy economic period of 1992 to 2005. This could mean that other market data could produce meaningful information for different time periods. At the same time, the findings on jumbo CDs suggest that no single source of market information can replace existing bank monitoring techniques. The authors conclude, "Our findings — when viewed with other recent research — suggest the supervisory return from reliance on a single market signal through all states of the world may have been overestimated."

"A Leaner, More Skilled U.S. Manufacturing Workforce." Richard Deitz and James Orr, Federal Reserve Bank of New York, *Current Issues in Economics and Finance*, February/March 2006, vol. 12, no. 2.

The U.S. manufacturing sector continues to shed jobs, but a growing number of the remaining ones require relatively high skills and, as such, they come with higher pay.

Manufacturing employment fell 9.3 percent in the United States between 1983 and 2002. But economists at the New York Fed found that during the same period, the percent of high-skill manufacturing jobs rose 36.6 percent. Among the biggest-gaining regions in this regard was the South Atlantic (which includes the entire Fifth District); it saw a 63.4 percent gain in high-skill manufacturing jobs, countering the region's overall 8.8 percent loss of manufacturing positions.

These results are in keeping with economic theory. Global trade has combined with technological advances to lower demand for the least-skilled U.S. workers, whose jobs can be done cheaper by workers overseas or by machines. Meanwhile, high-skill jobs are being created in engineering research and development, and export industries. As a result, the authors conclude, "a manufacturing workforce is emerging that is at once leaner and more skilled."

"The Decline in Teen Labor Force Participation." Daniel Aaronson, Kyung-Hong Park, and Daniel Sullivan, Federal Reserve Bank of Chicago *Economic Perspectives*, 1Q 2006, pp. 2-18.

In the late 1970s, the labor force participation rate of working-age teenagers (16 to 19 years old) peaked at about 59 percent. It's been downhill almost ever since, including a steep 7.5 percentage point fall between 2000 and 2003. Are teens hanging out the mall and playing video games, or are they devoting themselves to their studies as never before?

The answer may be important for the economy and its future productivity. Investments in human capital — be they in the labor market or in schooling — ought to increase teens' future earning power. The authors find that the long-term decline in teen labor force participation is "a supply-side development," triggered principally by "the significant increase in the rewards from formal education."

There remains a possibility that demand has also dropped for teen labor, but the authors note that the recession ended four years ago and labor force participation among 16- to 19-year-olds still hasn't picked up. More to the point, today's teens simply aren't looking for jobs. They appear to be hitting the books instead. **RF**

COMMON GROUND

Big Business and the Environment Shake Hands

A recent business deal has married a global paper company's profit-maximization goals with conservationists' environmental objectives. International Paper Co. (IP), one of the world's largest private landowners, sold 218,000 acres of forest land to The Conservation Fund and The Nature Conservancy in what was billed as the largest conservation deal the South has ever seen.

The two conservation groups will transfer much of the land to respective state governments within several years. The remaining land will be recycled back into the private market in the form of easements which require strict abidance to preservation rules.

The $300 million deal encompasses ecologically important land stretching across 10 states, including more than 20,000 acres in Virginia and 116,000 in the Carolinas. In a news release, The Conservation Fund's president Larry Selzer forecasts that the preserved land will protect the wildlife habitat, enhance air and water quality, and provide outdoor recreation opportunities. Moreover, the deal links existing public and private conservation areas. The groups believe that linking these forests and waterways will increase animals' space for mobility and further improve water quality.

Linking pre-existing conserved areas, like South Carolina's Waccamaw National Wildlife Refuge (pictured here), with the land acquired from International Paper will better benefit waterfowl and protect water quality.

The conservation groups obtained significant financial backing from two private timber investment funds, Conservation Forestry, LLC, and Forest Investment Associates. Public reimbursement is a possible source of funding too. Virginia's Department of Forestry has expressed interest in purchasing some of the land sold by IP, Brian Van Eerden of The Nature Conservancy told the *Virginian-Pilot*. Funding for the North Carolina lands could flow from any of the state's three existing environmental trust funds. North Carolina lawmakers also are considering a $1 billion land-bond issue that could make its way on the November ballot. In South Carolina, such public funding is not unprecedented, as Gov. Mark Sanford recently approved the borrowing of $32 million for a separate forest acquisition.

The deal is part of International Paper's larger "transformation plan" in which it is shedding vast swaths of domestic land. Citing North America's mature markets, rising raw material costs, and a changing global environment, IP is scaling back production in the United States. The company has announced its intentions to explore selling an additional 6.8 million acres of its domestic land, expecting proceeds of up to $10 billion from its divestures.

While the land is "of the highest conservation value," as The Conservation Fund's Selzer labels it, it may not be entirely suitable for developers' purposes. The swampiness of land located along rivers and estuaries can render it unsuitable for building, for example. Hence, the mixed quality of the land for development could have decreased competition from commercial firms interested in bidding for it.

As part of the agreement, IP will continue to harvest timber from the sold land until native plants regrow, which could be another 20 to 50 years. This is a large benefit that IP likely would not enjoy had they sold the land to developers.

In addition, IP says it has a genuine interest in environmentalism. The company has prohibited the harvest of endangered forest land and placed limits on the amount of timber that it harvests from any given area.

"Coming to a compromise like this hasn't been done before and could be a model for future transactions," says IP spokeswoman Amy Sawyer. The U.S. Department of Agriculture projects some 44.2 million acres of privately owned U.S. forest land, particularly in the East, will be sold by 2030.

— Clayton Broga

GOING ONCE

West Virginia Banks Bid for State Deposits

West Virginia invested $24.8 million via online auctions in a variety of state and local banks on May 16. The money, from $2.8 billion in state operational funds, went to banks offering the best rates on six-month certificates of deposit. Only banks with branches in the Mountain State were eligible to bid.

"As everyone knows, banks are crying for deposits," says Joe Ellison, chief executive of the West Virginia Bankers Association. "This gives smaller banks the opportunity to participate and keep the money invested in West Virginia."

That was the idea, according to Glenda Probst, executive director of West Virginia's State Board of Treasury

PHOTOGRAPHY: KAREN BESHEARS

Investments. The board approved $100 million for the auction program. The next auction is in August.

"Since it was our initial auction we wanted to start small and generate competition for the funds and increase earnings," she says. "From talking to other states and the auction administrator we understand it takes time to get the banks informed, registered, and trained. It takes awhile to get full participation so we thought $25 million was a good number." The money is from state agencies with revenues that are allowed to be invested and includes the state's rainy day funds. The fund does not include pension money.

The auction was efficient, according to Probst. "For us to go out and meet with 10 or 15 different banks and negotiate CDs would be much more time-consuming," he says. The treasurer's office in 2005 took over the job of managing the state investments. Operational funds previously were invested outside the state. The online auction allowed the state to receive the most competitive rates as well as keep money in the state, and boost the local economy.

The highest bid was 5.16 percent, by United Bank Inc. of Parkersburg, W.Va. The bank got $5 million. "I think that was probably more than we could have negotiated on our own," Probst says. There is a $5 million ceiling per parent bank for each auction "so that one large bank couldn't come in and bid on $25 million."

Among smaller banks, Capon Valley of Wardensville, W.Va., which just reached $100 million in deposits, got $500,000 for its 4.99 percent bid and Main Street Bank, with about $90 million in deposits, received $500,000 for a 5.15 percent bid.

West Virginia is the 11th state to offer online auctions for deposit money. South Carolina began using the online auction process in 2000, the second state to do so behind Ohio.

— Betty Joyce Nash

ON THE HOME FRONT

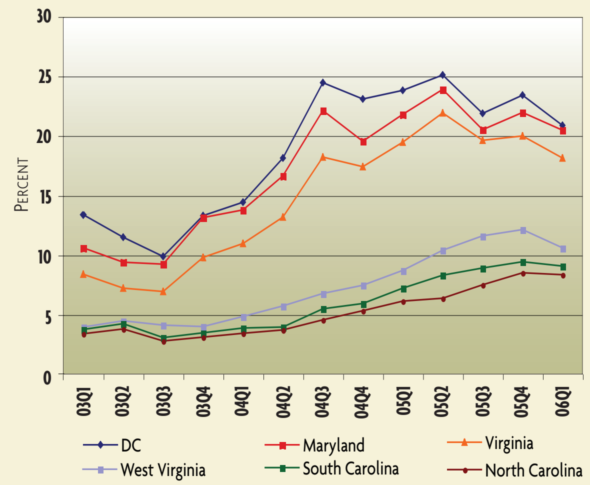
Housing Markets Cool Off in Some States but Not in Others

In the once-hot housing market of Northern Virginia, a slowdown is afoot. Residences in the cities of Alexandria, Fairfax, and Falls Church, as well as the counties of Arlington and Fairfax, were sold for only 97 percent of the list price in May, compared with 101 percent a year ago (though it should be noted that those asking prices were still higher than a year ago). Sellers are reducing prices as people become more cautious about buying a house. On average, a home for sale in this area lingered for 51 days on the market in May, compared with just 15 days a year ago.

The country's housing market has indeed begun to cool down like many analysts predicted. More and more homes are being offered but not enough buyers are willing to take up the increase in supply. In April, the inventory of existing unsold homes across the country rose to 3.38 million, the highest on record. This suggests that the inflation in house prices may start losing steam after the booming rates of the past two years.

Converging markets

Growth in house prices has slowed in the hotter markets, but is still drifting upward in their less bubbly neighbors.



NOTE: The chart shows year on year growth rates of house price indices for each quarter.
SOURCE: Office of Federal Housing Enterprise Oversight

A closely watched indicator, the Office of Federal Housing Enterprise Oversight's quarterly index, shows that median house prices in the United States increased by 12.5 percent in the first quarter of 2006 over the previous year, easing somewhat from the peak of 14.1 percent in the second quarter of 2005.

But the slowing has been uneven throughout the country. In the Fifth District, we see a tale of two housing markets — one that has expanded rapidly in the past three years and the other which has grown at a more modest pace. In particular, it seems that the rates of appreciation in house prices between the brisker and the more moderate markets in the Fifth District are starting to converge, according to Ray Owens, a regional economist at the Richmond Fed. "Where house prices have gone up the most, the cooling has been more pronounced. But where prices have gone up the least, they continue to move somewhat higher," Owens says.

Median house prices in the rapidly growing markets of the District of Columbia, Maryland, and Virginia rose by 13 percent to 18 percent in the second quarter of 2004, peaked at 22 percent to 25 percent a year later, but have since slowed to 18 percent to 21 percent in the first quarter of 2006. While house prices in these areas are still appreciating at high rates, they have perceptibly cooled down.

On the other hand, price increases of homes in North Carolina, South Carolina, and West Virginia have been drifting upward, rising by 8 percent to 11 percent in the first quarter of 2006 from only 3 percent to 5 percent two years before.

A few years ago, the economies of these states were growing sluggishly, partly because they had relied heavily on the manufacturing sector, which took a severe hit during the recession five years ago. "More recently, [the] economies of the Carolinas are starting to rebound somewhat," says Owens. He adds that buying a home is still affordable for most people because house prices have not appreciated as much. — VANESSA SUMO

CAROLINA DREAMING

Newspapers Get New Owner in the Carolinas

McClatchy Co. didn't exist in the Carolinas as recently as 1990. But now, the California-based newspaper chain owns the two largest dailies in North Carolina, the largest in South Carolina, plus a handful of small to midsize papers across both states.

For $4.5 billion, McClatchy picked up 32 newspapers from Knight Ridder Inc. The purchase, which closed June 27, included the *Charlotte Observer* in North Carolina and *The State* of Columbia in South Carolina, adding to a Carolinas portfolio that already included the Raleigh *News & Observer* and the Beaufort (S.C.) *Gazette*. The company entered the Carolinas in 1990s with the buy of three South Carolina dailies. The *News & Observer* was acquired in 1995.

Wall Street analysts were mostly positive about the deal, though McClatchy's stock price fell immediately after the announcement. "The assets [McClatchy] is acquiring look very similar to the company's existing asset base," wrote media analyst Paul Ginocchio with Deutche Bank. Union activity is virtually nil at the acquired papers, which otherwise might drive up labor costs, he added.

McClatchy quickly sold 12 of the Knight Ridder papers — including the two Philadelphia dailies and two large papers in northern California — deeming them misaligned with its high-growth-market strategy. But the remaining 20 new papers still make McClatchy the second-largest U.S. newspaper company, trailing only Gannett Co., owner of *USA Today* and many others.

To be sure, newspaper readership is in decline. Substitutes abound — from broadcast media to the ever-growing Internet offerings. (In June, the *News & Observer* joined a growing number of papers to dump daily stock listings, putting the bulk of its quotes online instead.) The latest national circulation report noted declines of 2.5 percent for dailies, continuing a decades-long trend. Local U.S. newspapers saw advertising spending drop 6.1 percent during the first three months of 2006, for example, while Internet advertising rose 19 percent.

But John Morton, a newspaper analyst in Silver Spring, Md., says that calling newspapers a dying industry "is a gross exaggeration." Newspapers still earn about 19.2 percent operating margins, the sort that "a lot of other businesses would love to have half of," Morton says.

For one thing, newspapers tend to be the most popular online providers of local news, so those Internet advertising gains are going directly to their pockets (though Web advertising still represents only about 5 percent of total revenues). Readers continue to seek out journalism, it seems, but less so in print.

With McClatchy's holdings in the Carolinas, the company will be able to sell advertising in bundles. That's a more appealing approach to retailers, who these days are more likely to be regional or national chains. "No other media business is organized to gather mass amounts of news, only newspapers are, and it's a function that will continue," Morton says. "Whether the income comes from the newsprint product or the Internet, all the money falls into one pocket." — DOUG CAMPBELL

BACK-TO-SCHOOL BONANZA OR BOONDOGGLE?

Virginia Joins Sales-Tax Holiday Bandwagon

During a contentious three months of budget negotiations earlier this year, Virginia legislators did manage to agree on one thing without much fuss. The state joined the rest of the Fifth District in offering an annual reprieve from the sales tax on selected goods.

Such "sales-tax holidays" have been popular throughout the country since New York held one in 1997. The loss in tax revenue is relatively small compared with a state's overall budget, plus lawmakers say they are helping constituents save money. But while major retailers like this tax policy, some supposed benefits touted by its advocates aren't as clear.

Starting this year, Virginia will have its sales-tax holiday from the first Friday to the first Sunday of every August. Consumers won't have to pay the 5 percent general tax on school supplies priced $20 and below, or on clothing and footwear selling for $100 and below. In addition, retailers can choose to pay the sales tax themselves on goods that aren't exempt and advertise them as tax-free.

Virginia officials believe the sales-tax holiday will help retailers increase their sales and compete with stores across the state's border in West Virginia, Maryland, the District of Columbia, and North Carolina, all of which have held similar holidays during the summer and fall. (South Carolina has held a sales-tax holiday since 2000, the longest record in the Fifth District.) Judging from retailers' past experiences, these tax-free events appear to rival the shopping sprees between Thanksgiving and Christmas.

More generally, states push for sales-tax holidays as a way to boost their economies. However, many tax policy analysts and economists believe that the savings during the holiday are too small to induce a significant amount of new spending, except perhaps in communities which border another state that isn't having a holiday or has no sales tax whatsoever, like Delaware. (In Virginia, for example, the projected consumer savings from the three-day event will total just $3.6 million.) Instead, the increased sales may represent purchases that consumers decide to make during the holiday instead of at other times of the year.

Retailers are tight-lipped about how much money they make, so there is little data available to empirically support either viewpoint. But anecdotal evidence abounds. Members of the Consumer Electronics Association and the National Retail Federation have reported increased sales of exempt items during sales-tax holidays, but — unlike what some economists say — not at the expense of other periods.

"If we said everything is 5 to 8 percent off today, consumers would laugh at us," says NRF spokesman J. Craig Shearman. "But when we offer the same savings by way of a sales-tax holiday, they flock into the stores."

Finally, advocates of sales-tax holidays say they want to help families prepare their children for school, especially those on low incomes for whom the sales tax is a relatively high burden. The problem is consumers in higher-income brackets spend more than those in the lower brackets. Also, richer people are able to change the timing of their purchases, while poorer people are less financially flexible and may not have the money to "stock up" during holidays and maximize their savings. As a result, the intended beneficiaries of a sales-tax holiday may end up benefiting the least.

Also, the sales-tax holiday creates a disincentive for discounting goods. Some retailers reportedly cut prices of nonexempt goods to take advantage of the marketing buzz surrounding a holiday. But others may scale back their usual markdowns on exempt items in anticipation of higher sales, says David Brunori, who teaches state and local tax law at George Washington University. "The sales tax is the draw," he explains.

Retailers may even increase prices on exempt goods to reap greater profits. Brunori and a group of researchers at the University of West Florida have found evidence of such markups in New York and Florida during their holidays.

If the goal is helping low-income families, Brunori and others suggest that state governments give tax rebates or direct grants for low-income people to purchase school supplies, clothing, and computer technology. Or governments could eliminate the sales tax year-round, as New York did in April 2006 for clothing sold for $110 or less. — Charles Gerena

BORDER WAR?

New Study Examines Relocations from North Carolina to South Carolina

Outsiders know Charlotte, N.C., as a thriving metro area. With its financial services headquarters, big-league sports teams, and bustling downtown, Charlotte is the very embodiment of the New South.

But in recent years, the local headlines began to take their toll on Ronnie Bryant, president of the Charlotte Regional Partnership, the area's economic development group. The stories said Charlotte was fast losing jobs to just across the border in South Carolina. In 2002, Wells Fargo Mortgage moved 700 jobs to York County, S.C. In 2004, it was CitiFinancial shifting 700 jobs to York County. Earlier this year, Inspiration Networks, a religious cable TV network, took its headquarters — and 200 jobs — to Lancaster County, S.C.

People called it a "border war," Bryant says. And the complaints mounted: Was the rivalry getting too hot? Did North Carolina need to entice firms with better incentive packages? "We wanted to step back and look at what was going on to get some objective data to see if we really had a problem," Bryant says.

The partnership commissioned a study and the results arrived in June. Since 2001, said the report, Mecklenburg County — where Charlotte is located — lost an announced 3,150 jobs to South Carolina. To Bryant, this was exceedingly good news: 3,150 jobs represents only about 0.5 percent of the county's job base. Meanwhile, since 2001 alone the county picked up almost 63,000 new jobs from business expansion and relocation, more than offsetting the border crossings. It was hardly a bull rush of firms going south.

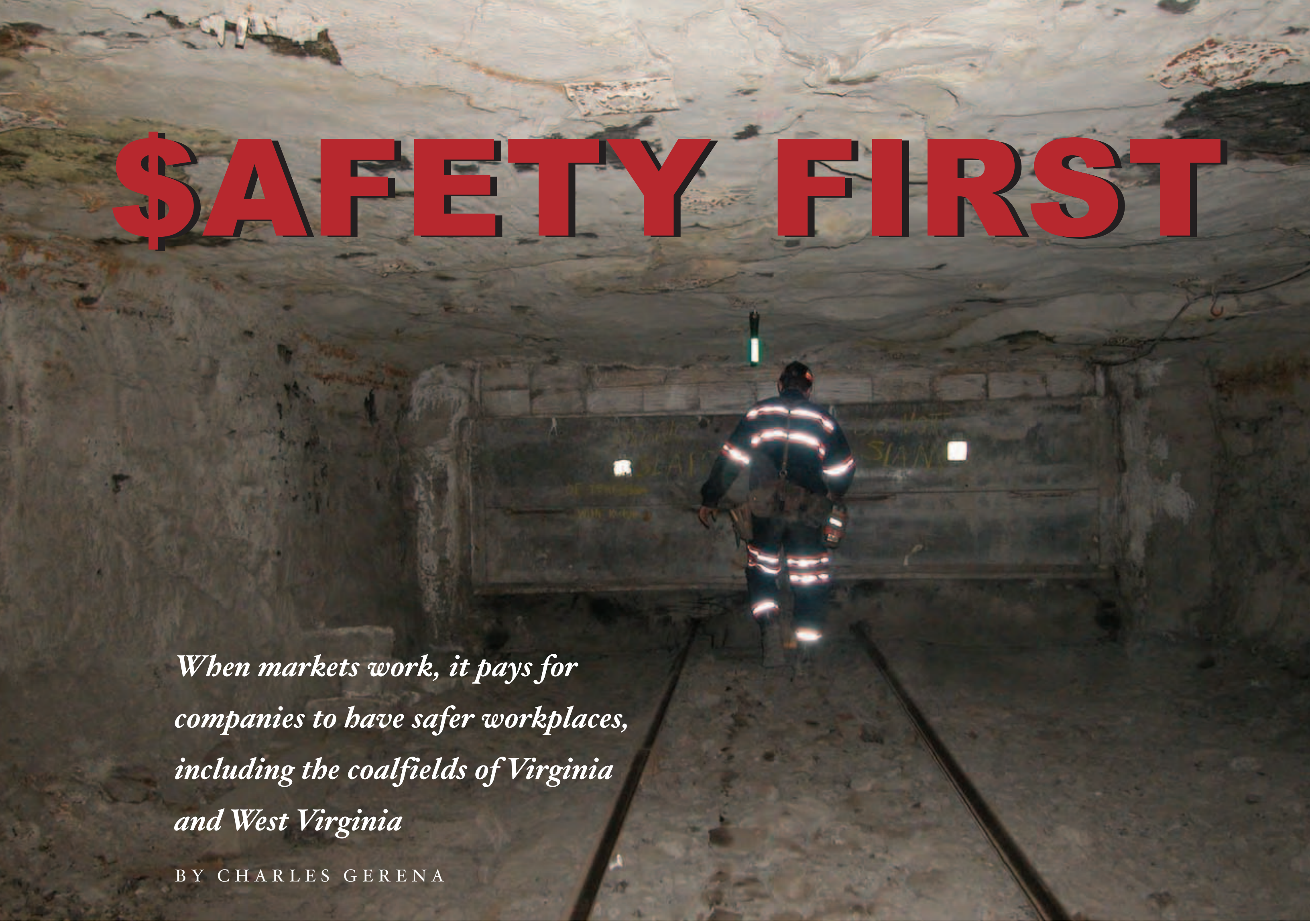
The report, prepared by Ticknor & Associates of Illinois, also had a few cautions about the role of incentives. It said that job movement to South Carolina was "decentralization" and "a natural market force in every American region." (Witness the fast growth at the fringes of the Washington, D.C. metro area, for example.) The costs are simply lower in South Carolina, just outside the core of the Charlotte metro area, providing all the incentive many firms need to relocate operations.

The real drivers of these intra-regional moves aren't South Carolina business recruiters but consultants. Incentives are at best a secondary draw. "I advocate incentives within a competitive environment," Bryant says. "But economic developers would be the first to admit that the use of incentives has gotten totally out of hand. To some extent, decentralization is a natural occurrence, and we should not be influencing these moves with incentives."

Michael Luger, a management professor at the University of North Carolina who studies economic development issues, says land and utilities tend to be the biggest corporate expenses. The importance of incentives in wooing companies depends on which business they're in. South Carolina's incentives for manufacturing firms are marginally more favorable than North Carolina's, Luger says, citing his own research. Meanwhile, the overall land costs in South Carolina are lower, as is the corporate income tax — but property tax rates are higher, though South Carolina, unlike North Carolina, has abatement programs. The bottom line, Luger says, is that not every firm is worth trying to lure with incentives.

The 16-county Charlotte Regional Partnership, of course, already encompasses four counties in South Carolina, including the aforementioned York and Lancaster counties. An economist might not be so concerned about which side of a state boundary a company locates. What's important is how the overall economy is affected and whether resources are being put to their most efficient use. But politicians and economic development officials often take these narrow location issues seriously.

"It's an uneasy tension between North Carolina and South Carolina and the Charlotte region," Luger says. "They recognize the importance of working together, but they also recognize that they're competing sometimes. I don't think that's necessarily unhealthy." — Doug Campbell



$AFETY FIRST

When markets work, it pays for companies to have safer workplaces, including the coalfields of Virginia and West Virginia

BY CHARLES GERENA

Coal mining is the heart of Logan County, W.Va. When the industry prospers, Logan prospers. And when something bad happens, everyone prays for a miracle.

On Thursday, Jan. 19, two crews of miners were working in separate sections of Alma Mine No. 1, not far from the town of Logan. Around 5:30 p.m., an atmospheric monitoring system detected high levels of carbon monoxide about two miles from the mine's entrance. The source of the toxic fumes was a fire on one of the conveyor belts that carries coal out of the mine.

According to initial reports, a dispatcher told everyone inside to get out. Among the 12 men closest to the fire, 10 managed to evacuate. Thick smoke had replaced the fresh air they were breathing, obscuring their view and choking their lungs before they slipped on their portable oxygen packs. The miners locked hands and made their way through miles of passageways carved into the earth until they met up with the other crew and rode a diesel-powered railcar to the mine's entrance.

Amid the smoke and intense heat, two men were somehow separated from their crew. Family, friends, and co-workers gathered at a nearby church on Friday to await news of the lost souls, recalling the heart-wrenching scenes less than three weeks earlier in Tallmansville near the Sago mine explosion. It wasn't until Saturday when rescuers finally tamed the fire enough to expand their search and found two lifeless bodies.

Friction generated from a stuck or misaligned conveyor belt could have sparked the deadly fire. Or, an electrical problem in the motor that drives the belt could have occurred. Speculation on the fire's cause will continue until the federal Mine Safety and Health Administration (MSHA) and the West Virginia Office of Miners' Health, Safety and Training complete their investigations. In the meantime, federal prosecutors are also investigating the accident for possible criminal violations.

Coal mine workers in West Virginia, Virginia, and other parts of the country face an unpredictable, challenging workplace. "By its very nature, a mine is so dynamic. It never sits still," says Patrick Graham, director of safety and human resources for Bluestone Coal Corporation in Beckley, W.Va. Every time someone tunnels into a mountain or blasts through layers of dirt and rock to reach a coal seam, miners' work conditions change geologically. If

PHOTOGRAPHY: BETH GORCZYCA/THE STATE JOURNAL nothing changed, "there would be no production."

Graham believes coal mine operators control the conditions as best as they can and minimize risks through careful planning. But with West Virginia losing 19 mine workers in seven accidents between January and May, it might seem logical to side with union leaders, some lawmakers, and other safety advocates who say companies put profits before people and ought to invest more in safety. Aracoma Coal, owner of the Alma mine and a subsidiary of Richmond, Va.-based Massey Energy, has been cited for numerous violations related to its fire suppression systems and procedures to control the amount of coal dust and other combustible materials in the mine.

Despite these concerns, the American workplace, including mines, has become safer over the last 100 years. Textile workers no longer toil behind locked doors in poorly ventilated workshops, while coal miners use roof bolts instead of hastily placed timbers to prop up underground tunnels. The rate of work-related fatalities continues to improve, going from 5.2 deaths per 100,000 full-time workers in 1992 to 4.1 deaths in 2004. The rate of nonfatal injuries and illnesses also declined over the same period, dropping from 8.9 incidents per 100 full-time workers to 4.8 incidents.

Safety advocates credit tougher regulation on the state and federal level, especially since the creation of the U.S. Occupational Safety and Health Administration (OSHA) in 1970. Also, companies are more aware of hazards and the human toll of accidents. Executives point to technological advances that have made workplaces both safer and more productive.

Firms are profit-maximizing entities. Managers usually base their decisions on whether they benefit the bottom line. What some economists are quick to point out is that these very same financial incentives can have a positive influence on workplace safety.

An unsafe workplace is costly. Accidents result in direct costs, from the replacement of capital equipment to higher workers' compensation premiums. They also have indirect costs such as decreased productivity and higher wages paid to employees.

Of course, people still get hurt or killed more often than we would prefer, and certain occupations like coal mining, commercial fishing, and truck driving have their inherent dangers. Overall, government policies, in combination with private-sector initiatives, have improved workplace safety by raising the financial toll of poor safety practices and supporting the development of better practices.

Boom Times and Red Hats

Safety was a significant problem in the early days of the nation's industrialization. Over time, the economy has shifted from producing goods to producing services and substituted labor with capital. The result has been fewer workers put at risk in relatively dangerous occupations like manufacturing and fewer dangers associated with manual labor.

For example, coal mine workers use remote controls to operate massive continuous mining machines that cut into coal beds deep underground. "[The mine worker] is standing back at a considerable distance from where the machine is operating," describes Chris Hamilton, senior vice president of the West Virginia Coal Association, a trade association representing mine operators. "He is standing within a safety zone, as opposed to being on the machine … and being subjected to roof falls, coal bed gases, or other environmental problems."

While economic progress has helped improve workplace safety, that progress hasn't been uninterrupted. Workplace safety deteriorated during the 1960s, according to Mark Aldrich, former senior economist at OSHA and a professor emeritus at Smith College. Unions clamored for the federal government to do something, which it did by creating OSHA, but Aldrich believes the real culprit was the business cycle. "It wasn't that American industry was getting worse. There was a long boom beginning in the Kennedy-Johnson years, and you could see the injury rates pick up in manufacturing."

As companies ramped up production, many new employees entered the work force. "When the economy is booming, labor turnover goes up," Aldrich explains. So, even the best safety program becomes overwhelmed by a flood of inexperienced new hires, diluting the effectiveness of training.

Yet fatalities and accidents in the coal mining industry fell to an all-time low in 2005 despite recent growth in demand. Production levels have been fairly steady and payrolls have picked up in the last few years, but neither has accelerated at a pace that would endanger safety, in Aldrich's view.

What if the price of coal remains high and mine operators keep facing pressure to staff reopened sites? "That is a recipe for trouble," Aldrich says. "The companies are going to hire people who don't have much experience. Unless they have really good safety procedures," the level of workplace safety could decline.

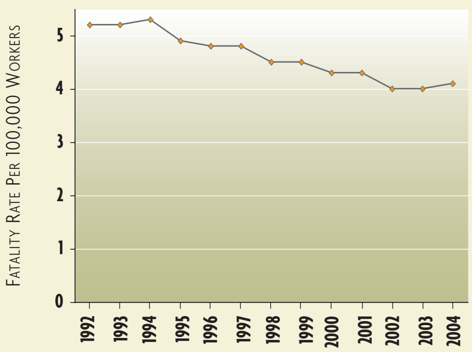
Experienced workers are already harder to find. Judy Steele Horne, a certified mine safety instructor based in Cedar Bluff, Va., says a lot of seasoned miners couldn't handle the instability in the industry and retired or moved. This has left fewer veterans to call upon, forcing mine operators to hire a lot of people who aren't accustomed to working together or at a mine.

These inexperienced workers, also known as "red hats," must face the rigors of the job and pressure from companies eager to boost production. "They have to be fast learners," Horne adds.

The miners who died in the Alma fire weren't red hats, however. Don Bragg had spent almost half of his adult life in coal mining — nine and a half years — while Ellery Hatfield was a miner for 11 and a half years. Other recent mining accidents have involved experienced workers. Horne says that when miners move to a new site, it is a time of transition. Plus, there is peer

Getting Safer

The annual fatality rate for American workers declined 21 percent between 1992 and 2004, despite occasional upticks.



SOURCE: Bureau of Labor Statistics

pressure to perform, so workers may put themselves in situations that compromise safety.

Accidents Have a Price

Beyond shifts in the overall economy, a more significant influence on workplace safety is the expense of occupational injuries and fatalities to individual firms. Companies will invest more in equipment upgrades, better training, and other safety improvements as long as these investments are less than the cost of work-related accidents that are avoided.

For example, accidents result in lost output. Production comes to a halt, equipment has to be repaired or replaced, and new workers have to be hired and trained. The closure of the Alma mine reportedly cost Massey Energy $18.5 million in labor and lost sales during the first quarter of 2006. (Some areas of the mine are now open except for the section damaged by the fire.)

"Safety improves the regularity of the production process," notes Peter Dorman, an economist at Evergreen State College who authored a 1996 book on occupational safety.

Along these lines, reducing the number of accidents may also increase a company's productivity. However, some safety measures can slow down the pace of production, such as the use of manually operated machine guards on power saws and other equipment. Therefore, the net effect of safety investments on productivity varies from company to company.

Patrick Graham says safety improvements like coal dust controls and automatic temporary roof supports, which protect workers as they install bolts to support the ceiling of a mine tunnel, have benefited Bluestone Coal. "You can't have a productive, profitable mine if something is unsafe," he insists. "Either you move that mountain safely or you've lost a $1.5 million bulldozer."

Premiums for workers' compensation insurance are another cost associated with work-related accidents. Before states began introducing workers' compensation in the 1910s, injured workers could sue for damages. But they had to prove that the employer's negligence was solely to blame, which was difficult to do. Workers rarely won their lawsuits and, when they did succeed, only a few settlements were large enough to cover lost wages and medical expenses.

Now, companies must pay a fixed percentage of an employee's wage for injuries or deaths in the workplace, regardless of who is at fault. In addition, they have to purchase insurance or self-insure in order to cover future claims. The premium is usually the payroll multiplied by a base rate calculated for the firm's industry and an "experience modification factor" based on the company's claim history. As a result, an unsafe work environment should affect a company's bottom line, thus providing an incentive to make conditions safer.

Hazard Pay

Perhaps the most noteworthy financial impact of accidents is the higher salary that relatively riskier companies may have to offer. Economists like W. Kip Viscusi at Harvard University believe that the desire to avoid these additional labor costs is a strong incentive for firms to invest more in workplace safety, while others question how often this happens in real life.

The idea is that less desirable jobs, including those with relatively high accident rates, pay better wages in order to attract and retain workers. But there are always risk-averse people who would never set foot in an underground mine regardless of the salary — they want lower-paying, safer work. Therefore, firms that are relatively more dangerous theoretically have a choice. They can spend more on safety, saving the money they would have spent trying to entice workers. Or they can continue paying a risk premium, also known as a compensating wage differential.

"They are two sides to the same coin," notes Devra Golbe, an economist at Hunter College who specializes in finance and industrial organization. For each company, "there is a balance that is struck" between the wages and safety that it offers in order to generate a given level of profit.

In theory, labor markets should match up companies that are offering different combinations of wages and safety with workers looking for similar conditions. Those who care more about maximizing their income should end up in relatively riskier, higher-paying occupations, while those who want to maximize their comfort and safety should get what they want.

Research by Viscusi and others shows that risk premiums do account for differences between safe and unsafe industries. For instance, the average salary of a mining machine operator was $20.31 an hour in 2004 compared with a shoe salesman's salary of $8.80 an hour, partly reflecting the fact that the mining industry has a higher number of occupational fatalities per capita than the retail sector.

The question is how well risk premiums reflect varying levels of safety at companies within an industry, notes Price Fishback, a University of Arizona economist who has studied workplace safety in coal mining and other industries. "Can workers identify which are the safe and unsafe mines, and do they see a premium for being in an unsafe mine? There is still some premium [paid by companies within industries], but it's harder to detect."

The theory underlying risk

premiums has other caveats. It assumes that employees are fully aware of workplace risks, can adequately factor those risks into their decision-making, and have job mobility.

In fact, information asymmetries exist in labor markets. For example, OSHA regulations require chemical producers to disseminate safety information to employers that use their products in the workplace. In addition, companies must train their employees on how to access and apply this information. According to a 2002 article by researchers at Harvard University's Transparency Policy Project, these rules have helped ill workers figure out what chemicals may have harmed them and secure proper treatment and compensation. But the descriptions for chemical products are complex and hard to understand and apply, limiting their usefulness in accident prevention.

In addition to the challenges of obtaining information on risks, people don't always evaluate that information accurately. "Depending upon the way a risk is perceived, you can respond in all kinds of ways. People don't process information like computers," notes Mark Aldrich at Smith College. So, while workers might be properly compensated for their perceived risks, how well those perceptions meet reality is an open question.

Even when people accurately gauge the risks of the work they perform, they have to be able to act upon that information. This isn't always easy to do, especially during times of rising unemployment or for individuals with limited alternatives in the job market.

"You make the best choices you can, based on the opportunities you have," economist Devra Golbe notes. "It may be that the alternatives are poor and people have only relatively risky, low-paying jobs to choose from based on their education, where they live, or other constraints."

There is evidence that competition for labor and job mobility was sufficient at the turn of the 20th century for coal miners and other workers to switch jobs when work conditions proved too hazardous, according to Fishback's research. But rather than improve safety, companies initially paid some risk premium to their employees instead. By the 1920s, high turnover in certain sectors like coal mining prompted companies to begin improving work conditions.

All in a Day's Work

Today, coal mining is a lot safer than it used to be. But it's still a risky enterprise that commands a wage premium, making it attractive for small-town residents in southwest Virginia and West Virginia. Generations of miners have developed a thick skin when it comes to risks, so they likely accept higher wages over greater safety.

This attitude was evident among the students at a recent safety certification class taught by Lindell Goode, a part-time instructor at Triangle Safety Services in Pineville, W.Va. Workers must take the course and pass a test before setting foot in a mine, plus they have to take an eight-hour refresher class annually.

On day four of the five-day class, Goode reviews proper blasting procedures for surface miners. As he describes how to mix ammonium nitrate pellets with diesel fuel to make an explosive, several students asked if they could do the same thing with fertilizer from Wal-Mart.

"We need to have a demonstration right here," jokes one student, who has been chewing the fat with his classmates at the rear of the blue cinderblock classroom. Goode jokes right back that everyone is welcome to experiment in their basement or backyard. "No, I want to blow up a mountain," the guy replies.

Later, when Goode covers what can happen to a miner's lungs without proper protection, the guys in the back start muttering to one another. Goode admits that he didn't like to wear a respirator either, but he also didn't want to be one of those retired miners who can barely catch their breath when they walk. "You can either do it now, or pay for it later."

With the training that miners receive today, not to mention the media blitz that usually follows an accident, it would be hard for a red hat to plead ignorance about the dangers that lie head. It wasn't always that way. Most of what Don Cook knew about coal mining came from his father and grandfather, both of whom were miners. He didn't have the information that new miners receive today in courses like the ones he teaches at Triangle Safety.

When Cook started mining in the 1970s, the only thing new employees had to do was visit the safety director's office. "The guy gave you a little book and a brass tag for your belt that had

The Price of Danger

The premiums charged by BrickStreet Mutual Insurance, a private firm that took over West Virginia's workers' compensation program in 2006, generally reflect industry differences in workplace safety.

	Workers' Comp Premium, 2005*	Nonfatal Injury/Illness Rate, 2004**
Timbering	$52.20	14.8
Underground Coal Mining	$39.86	9.3
Surface Coal Mining	$12.98	3.2
Street and Road Construction	$10.89	4.6
Chemical Manufacturing	$2.80	2.1

* Per $100 in payroll

** Number of occupational injuries and illnesses per 100 full-time workers. It is the most recent data available and was selected to closely match categories used by BrickStreet Mutual Insurance.

SOURCES: BrickStreet Mutual Insurance; West Virginia Bureau of Employment Programs your name and Social Security Number," he recalls. "He'd say, 'Put that on your belt so if you get killed, we'll be able to identify the body.' [Then] he'd talk to you for about 30 minutes and … you'd go to work."

Rules of the Road

Safety training is just one component of the regulatory structure that state and federal legislators have created to protect workers. A combination of rigorous standards and strict enforcement are supposed to provide an incentive for improving safety. In order to avoid the wrath of agencies like OSHA, companies are expected to invest more in protecting their workers.

Many economists contend that while OSHA inspections and interventions can jolt specific companies into addressing safety problems, their ability to influence these firms diminishes over time and their effect on the aggregate level of workplace injuries and illnesses across all industries is limited.

One reason is the low probability of being caught red-handed. Despite efforts to increase the pace of inspections, it would take 117 years for OSHA to check each workplace under its jurisdiction at least once, according to the AFL-CIO. The probability of a follow-up visit to check on a company's compliance is also low.

Another reason is that many safety regulations merely codify what are already common practices that address obvious hazards, notes the University of Arizona's Price Fishback. "Where regulations are really helpful is in identifying issues and preventing things that are really hard to detect or might not show up for several years."

A separate federal entity handles workplace safety in the coal mining industry: the Mine Safety and Health Administration. MSHA is a product of legislation passed in 1977, five years after a fire killed 91 workers at a silver mine in Idaho. Increased government regulation of mining followed other major mining accidents in 1940 and 1968.

Most mine penalties are based on six criteria outlined in the 1977 Mine Act, including the size of the mine, its financial condition, and its history of violations and remediating those problems. Still, "most fines are so small that they are seen not as deterrents, but as the cost of doing business," argued Wes Addington, a lawyer with the Appalachian Citizens Law Center, in a *New York Times* article (March 2, 2006).

Since the Sago incident in January, there has been a concerted effort to improve mining safety. Federal lawmakers have made several proposals and West Virginia passed several new regulations in a special session. But some question how effective those proposals would be in bettering working conditions.

Some businesspeople believe that the best way to make workplaces safer is to target proven "bad apples" for government scrutiny instead of inspecting everyone the same way. Since 1997, OSHA has operated an inspection program that targets companies which have reported 12 or more injuries or illnesses resulting in days away from work, restricted work activity, or job transfer for every 100 full-time workers.

Research by Golbe and economist Randall Filer suggests that firms with the thinnest operating margins and in danger of bankruptcy have more dangerous workplaces. This implies that safety regulators should focus on the companies closest to the financial edge. Currently, financially troubled mines can have a fine reduced if they can prove that it would be a hardship.

Industry officials have also asked for tax incentives or grants to help pay for improvements beyond current safety standards. But economists caution against subsidies that would not yield benefits to safety in excess of their cost to taxpayers or would add another layer to an already complex tax system.

Others have also called for greater federal spending on basic research and development. Generally, incremental advancements over time can enable companies to improve safety at a lower direct cost without hurting productivity. "Very often, safety comes into workplaces with new factories and equipment," Mark Aldrich notes.

Time appears to be the best ally of occupational safety. As the human and financial toll rises, politicians rally to protect workers while companies realize the bottom-line value of improving safety and pursue new technologies. **RF**

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The (Illegal) Immigrant Effect

A young boy watches his migrant worker mother pick grape tomatoes in Rocky Point, N.C.

The economic impact of unauthorized migrants isn't as big as you might think

BY DOUG CAMPBELL

Javier, who does not give his last name, says that he is 29 years old and works in construction, usually earning about $400 a week. Two years ago he walked dozens of miles through the desert, eventually crossing the Mexican border into Texas. Today he lives with two brothers in Raleigh, N.C., where lately there is an abundance of construction jobs. Javier came to the United States, he says, because "it was a necessity." He needed to earn a living and to this day he regularly sends home what cash he can to his family in Mexico.

He wants to stay in the United States. "Everyone wants to stay here," he says. "Here, the life is much better." But he is unsure about whether this is possible and whether he should even be talking about his residency status in public.

On the question of his legality, Javier's actions probably speak louder than words. On this day he is one of about 150 other people queued up at the Consulate of Mexico in Raleigh, which is housed in a two-story, brown-brick building at the edge of a strip shopping center. This office opened less than six years ago and its main job is issuing "Matricula Consulars" to Mexicans living in the United States. Last year, the Raleigh consulate handed out 23,553 of these documents, which are photo identification cards recognized by the Mexican government and informally accepted by some U.S. employers as proof of identity. But if you're in the country legally, there is no reason to have a Matricula Consular.

By now Javier and his 12 million or so unauthorized peers across the country need no introduction, especially in Fifth District regions where the immigrant population has surged over the past decade. Depending on your view, he is either an essential part of the U.S. labor market or a criminal who is taking jobs from native-born Americans. But a close look at the real economic effects of illegal immigration reveals a more ambiguous answer. The overall gains to the economy from unauthorized migrants do not appear to be huge, nor do the losses. Perhaps the only thing that can be said with certainty about immigration's economic impact is in identifying its main beneficiaries: They are the immigrants themselves, people like Javier.

Influx

Immigration policy in the United States in the late 20th century was

PHOTOGRAPHY: AP WIDE WORLD PHOTOS

principally shaped by two acts. The Immigration and Nationality Services Act of 1965 did away with national origin quotas in favor of setting visa limits for immigrants from the eastern and western hemispheres. The Immigration Reform and Control Act of 1986, which was envisioned as a way to slow illegal immigration from Mexico, granted amnesty to many illegal aliens while at the same time criminalizing the hiring of undocumented workers.

Immigrants kept coming. The foreign-born population grew from 9.6 million, or 4.7 percent of the total population, in 1970 to 19.8 million (8 percent of the total) in 1990 to about 34 million (12 percent of the total) today. Annual immigration peaked in the late 1990s at about 1.5 million persons, according to the Pew Hispanic Center, a nonprofit research organization supported by the Pew Charitable Trusts, then fell to 1.1 million in 2003.

A lot of these immigrants were born in Latin America. In 1990, there were 22.4 million Hispanics in the United States, or just less than 10 percent of the total population. In 2004, according to Census estimates, Hispanics reached 40.5 million, or 14.2 percent of the total population, many of whom were born in the United States.

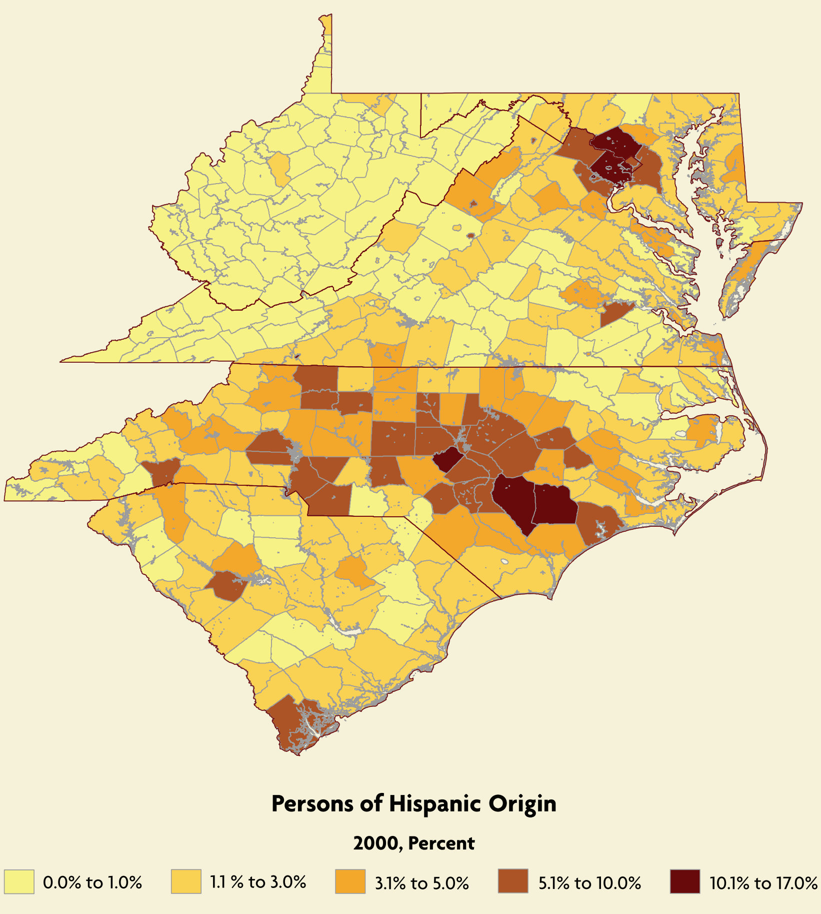
The last few years saw a significant change in the composition of immigrants. Since 1995, there have been more illegal immigrants than legal immigrants to the United States, according to the Pew Hispanic Center, with an estimated 700,000 undocumented migrants each year, compared with closer to 610,000 legal immigrants.

As recently as the early 1990s, there were an estimated 450,000 illegal immigrants entering the country each year. These were just the ones that made it — border apprehensions averaged more than 1.4 million a year in the late 1990s, though dropped to less than 1 million in 2001 and 2002 before turning up again recently.

Unauthorized migrants, the vast majority of which are Hispanics, today make up almost 5 percent of the labor force, according to the Pew Hispanic Center. In general, illegal immigrants tend to have less education, fewer language skills, and more limited bargaining power with employers than their legal counterparts. As a result, they may depress wages for the least-skilled Americans, with whom they compete for jobs, though by how much remains in debate.

Immigration Growth Spurt

The Hispanic population, which was tiny just two decades ago, has now grown substantially. Because of immigration, there are many counties in the Fifth District where Hispanics make up more than 10 percent of the total population.



SOURCE: U.S. Census

The Impact on Jobs and Wages

In April 2004, Sen. Lamar Alexander, R-Tenn., posed a question to then-Fed Chairman Alan Greenspan: "If we have 8.4 million unemployed, according to our official statistics, and if 6 million illegal immigrants are working, are these 6 million taking the jobs that 8.4 million want?" Greenspan did not directly answer the question, but most any economist would tell you the answer is, in general, no.

For one thing, there isn't a fixed number of jobs in the economy; it can contract and expand to meet supply and demand. In fact, by their very presence, immigrants — both legal and illegal — create demand for new jobs. Additionally, some people argue that immigrants are taking jobs that natives don't want. Washing dishes, harvesting grapes, roofing houses, scrubbing hotel rooms — these tasks are increasingly performed by Hispanic workers, many of whom (and despite their sometimes dubious legal status) are more highly prized by employers than native workers. "Native-born workers aren't very happy in these jobs and so there would be higher turnover with them," says Harry Holzer, a labor economist at Georgetown University.

The North American Free Trade Agreement chiefly covers trade of goods. But there are plenty of economists who contend that the same free trade principles behind that 1993 act ought to apply with immigrant labor because of the benefits to both parties. In a trade arrangement, where production of, say, textiles is moved to a lower-cost country, domestic capital can be put to a more profitable use. Likewise with immigration, low-skilled jobs are filled with lower-cost workers, allowing companies to produce goods more cheaply.

The mistaken notion that both legal and, increasingly, illegal immigrants are taking jobs one-for-one from natives detracts attention from a more plausible scenario: Illegal immigrants may be driving down the wages of the least-skilled American workers.

Here is why: A large share of U.S. immigrants are relatively less skilled. Foreign-born U.S. working-age residents are far more likely to be high school dropouts, for example, than natives. About 32 percent of illegal immigrants have less than a ninth grade education, compared with 15 percent of legal immigrants and 2 percent of the native-born population.

Economic theory is fairly clear on the impact of this sort of immigration: It should reduce the wages of less-skilled native-born Americans. Basically, the supply of low-skilled labor is going up while the demand for such labor is remaining flat, thus tamping down wages for this segment of the population.

There is agreement among economists that this latest wave of immigration has delivered this anticipated wage effect. The disagreement is over its intensity.

Among the most influential observations on how the wage effect may not be so significant are:

- Robert Topel, an economist at the University of Chicago, said in a 1997 paper that, "Most evidence suggests that the effects of immigration on wages have been minor," principally because the size of immigrant labor was still too small to have much effect.
- David Card, an economist at the University of California at Berkeley, in a 2001 study, found only small impacts on local unemployment and on native-born wages in areas where there was a sudden inflow of immigrants seeking jobs. Another Card study in 2005 similarly finds "evidence that immigrants have harmed the opportunities of less educated natives is scant."

And the leading studies that point to possibly significant effects are:

- A 1997 report by a panel of demographers and economists for the National Academy of Sciences estimated that the 4 percent increase in labor supply during the 1980s (driven in large part by immigration) "could have reduced the wages of all competing native-born workers by about 1 or 2 percent."
- Harvard University economists George Borjas and Lawrence Katz give the upper bound wage effect in a 2005 paper. They looked at the effect of immigration on native-born wages between 1980 and 2000 and saw a 3 percent decline for average workers and as much as 8 percent for high school dropouts.

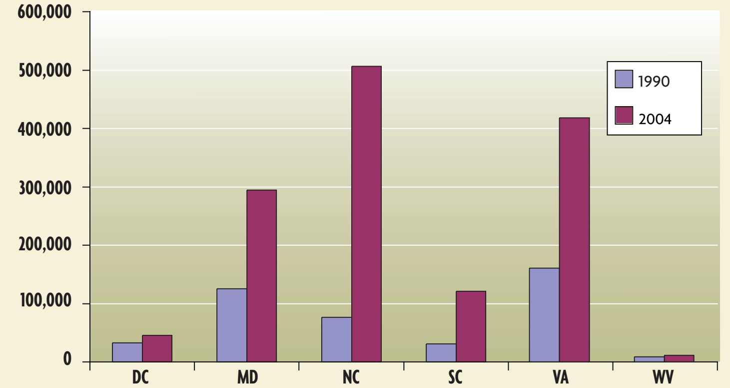
Granted, none of these studies distinguished between illegal and legal immigration. But that's because to economists, the distinction isn't all that important. Immigrants represent a new pool of labor, whether they're here legally or illegally.

Referring to his own studies, Borjas (who migrated from Cuba as a child) says it's a simple function of supply and demand. "You have more labor coming in, in the short run, holding all other things equal, it will create a decline in the wage level," Borjas says in an interview. "It's also a distributional impact. The wage of those workers who supply the most labor will fall relative to the wage of the workers who don't have a huge increase in labor supply."

Ethan Lewis, an economist at the Philadelphia Fed who studies immigration, grants that some less-skilled U.S. workers may see their wages drop by a small amount. But he takes a big-picture perspective. "For native-borns in general," Lewis says, the impact of immigration (both legal and illegal) is "positive. The reason, of course, is that most Americans are not as unskilled as

Growth in the Hispanic Population

While the number of Hispanics living in the United States has almost doubled since 1990, from 22.4 million to 40.5 million, growth in some Fifth District states has been even greater.



SOURCES: U.S. Census; Pew Hispanic Center

Hispanic immigrants. So mostly, they're tilting the wage structure favorably for native-born workers who tend to be more skilled."

But this does not answer other concerns about the costs imposed by illegal immigrants. Do they drain resources from hospitals, K-12 public schools, and corrections facilities?

The Center for Immigration Studies, a nonprofit group that wants fewer immigrants, said that households headed by illegal immigrants in 2002 cost the federal government about $26.3 billion but paid only $16 billion in taxes. That equates to each illegal household costing the government $2,700 a year.

Jeff Passel, a demographer with the Pew Hispanic Center, for one, is skeptical of that figure. He says that his study of the New York metro area found that while natives and legal immigrants paid about 30 percent of their income in taxes, enough illegals were on the books that their overall tax rate (even including those who are paid off the books and thus don't pay taxes) worked out to 20 percent — not as big a difference as conventional wisdom or the Center for Immigration Studies has it.

Another myth is that immigrants arrive in the United States to collect welfare payments; in reality, they are not eligible for them. They come to work, and about 90 percent of the nation's undocumented immigrants are in fact working. What's more, the majority of them are paying payroll taxes and contributing to Social Security (an estimated $6 billion each year), even though — because they are illegal — they are ineligible to claim these benefits.

Moreover, immigrants have many other positive impacts on the economy. If employers are able to keep wages down by hiring illegal immigrants, then presumably they pass on those savings to consumers in the form of lower prices for the goods and services that rely most heavily on immigrant labor. (The overall impact on the economy of these lower prices may not be so great, however, with some oft-cited studies putting the savings at about one-tenth of 1 percent of Gross Domestic Product.) In addition, illegal immigrants themselves add to consumption, though by how much depends on which study you consult, and estimates vary.

Size of Unauthorized Population – 2004

Illegal immigrants increasingly are coming to Fifth District locations to settle.

DC	20,000-35,000
MD	200,000-250,000
NC	300,000
SC	20,000-35,000
VA	200,000-250,000
WV	<10,000
U.S.	11.5M

SOURCE: Pew Hispanic Center

New Immigrant Destinations

The impact of illegal immigration is increasingly relevant in the Fifth District. Today's undocumented immigrants are traveling far beyond traditional destinations like California, New York, Texas, and Florida. Passel says a principal trend he sees today is that illegal immigrants, while still making California their top destination, are seeking out new places to work and settle. The percentage of illegal immigrants going from Mexico to California has dropped from 33 percent to 22 percent in the past decade.

In 2004, about 300,000 illegal immigrants came directly to what Passel terms the "New Growth States," areas where immigrants have only recently started moving to in large numbers. Among these are North Carolina, Virginia, and Maryland. Arguably no state has experienced an overall immigration impact as large as North Carolina over the past 15 years. Its Hispanic population since 1990 has swelled more than sixfold to an estimated 600,000. Its growth rate of Hispanics in the late 1990s was the fastest in the nation.

Today, almost half of the state's Hispanic population is thought to be unauthorized migrants. Earlier this year, the North Carolina Bankers Association, believing it was looking at a largely untapped business opportunity, commissioned a study that tried to peg the net economic impact of Hispanic immigrants (both legal and illegal) on North Carolina. The authors estimated that the spending by the state's Hispanics had a $9.2 billion impact in 2004. In all, their presence and work created 89,600 jobs in the North Carolina economy, the study finds.

In addition, Hispanics were found to pay about $756 million in taxes. (By the authors' estimate, 65 percent of illegal immigrants nonetheless are working "on the books," and thus getting taxes taken out of their paychecks. This estimate is in line with other national studies.) The tax boost almost entirely offset the costs of illegal immigrants to the state budget. Namely, costs for K-12 education, health care (usually delivered in hospital emergency rooms), and jail, totaling $817 million.

Jim Johnson, a University of North Carolina business professor and a study co-author, argues that immigrants, whether legal or illegal, actually help improve the welfare of native-borns. "Hispanics did a couple of things," Johnson says. "They were filling newly created jobs and filling vacancies as native-borns moved up in the queue. Does that mean they're taking jobs that natives don't want? Yes."

This line of reasoning in part gives rise to the most provocative claims the study makes: that Hispanic immigrants of all stripes virtually saved the state's construction industry. In 2005, there were an estimated 111,630 Hispanics working in construction in North Carolina, the study found, accounting for almost half the state's total workers in that industry. Johnson says that absent the legal and illegal immigrant labor, the value of North Carolina construction work would have been cut by 29 percent (ignoring labor substitution effects). This is based on the assumption that the immigrants drove down wages by about $1.9 billion, sometimes allowing (such as in the case of home building) employers to keep their prices to consumers lower and not lose business to out-of-state firms employing immigrant (or lower-cost) labor themselves.

This claim is difficult to prove, however. Borjas, for one, is skeptical. "I have no idea what that means that you 'save an industry' with immigrant labor. It makes construction cheaper, yes, which makes construction more profitable as a business. But it doesn't save the industry. It just makes people who employ immigrants laugh all the way to the bank."

Granted, in a competitive market employers must eventually pass on their cost savings to consumers. But Borjas notes that this passing on of cost savings is not immediate and not complete. He asks rhetorically that if all savings really were passed on to consumers: "Why do employers lobby for more immigration? Why would they care? I think the answer is obvious."

Lewis, too, has doubts about the precision of the North Carolina estimate. Though he agrees that the state's construction costs would go up and output down in the absence of immigrant labor, the 29 percent estimate is "probably a bit exaggerated." That's because Hispanic workers (whether documented or undocumented) probably aren't responsible for the full 29 percent of output even if they represent 29 percent of employment. Also, eventually equipment could be brought in to do some of the work of the lost Hispanic workers, Lewis says, though this would take time and certainly cause a short-term impact on the sector.

Eye of the Beholder

On balance, all these studies on the economic impact of immigration, even those that look directly at the illegal sort, portray a mixed bag of costs and benefits. Borjas, who worries more than other economists about illegal immigrants, believes that immigrant labor on net is "a wash" for the U.S. economy. There may be important policy questions posed by immigrants — from border security to national identity — but these mostly fall outside the purview of economics.

And what about the impact of illegal immigration on immigrants themselves? Almost everything you need to know is this: Studies have found that immigrants earn between double to 30 times their homeland wages, depending on their occupation. A study by University of California at Davis economist Edward Taylor found that Mexican immigrants left behind homes where average per-capita income was $1,372 per year.

This is why even those who know they could be arrested upon arrival risk their treacherous journeys across the border. It may not be so much that opportunity is so great here as it is that back home is simply much worse. And for the most part, immigrants find opportunity here, no matter whether they come with the proper papers or not. Though about 15 percent of newly arrived undocumented Mexican immigrants were without work during their first six months here, unemployment rates fall to 5.7 percent — close to or better than native-born rates — after that.

"The real question is why more aren't coming," says the Pew Hispanic Center's Passel. "Especially with regard to Mexico compared to California, there's a huge wage differential."

These gains come despite the fact that being illegal in the United States exacerbates the difficulties immigrants encounter in trying to raise their wages. Patricia Cortes, as a Ph.D. candidate at M.I.T., found that a 10 percent increase in the share of low-skilled (read, illegal) immigrants in the work force lowers wages for other low-skilled migrants by 8 percent, compared with a 0.6 percent reduction for low-skilled natives. Unauthorized migrant pay tends to stay low, perhaps because these workers lack bargaining power and are unable to move up to higher-paying jobs strictly because of their illegal status.

An illegal immigrant like Manuel, who recently turned up at the Mexican consulate in Raleigh, is thinking principally about his own short-term survival. He came to the United States about one year ago and now works as a landscaper, taking home about $300 a week. Those earnings would place him below the poverty line.

By mainstream American standards, it's not exactly prosperity. But to him, it's all relative. "Everything is nice here," Manuel says. "Things are good." **RF**

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SHORT FALL

Commodity producers are expanding capacity to meet growing demand, but lags in supply are putting pressure on Fifth District manufacturers. Will this round of short-term pain spread to consumers?

BY CHARLES GERENA

Globalization has lowered prices for a variety of goods, making a trip to the local big-box retailer a pleasure for value-oriented shoppers. It's also made life downright unpleasant for manufacturers like Martinsville, Va.-based Hooker Furniture.

Aluminum prices weren't high enough for Alcoa to invest new capacity during the 1980s and 1990s. Now, the company is starting to build new smelting facilities like this one in Iceland.

PHOTOGRAPHY: GUDMUNDUR INGOLFSSON/COURTESY OF © BECHTEL CORPORATION

Increased competition from furniture makers in China and other Asian nations has forced the 81-year-old company to lower its own prices, says Lewis Canter, vice president of manufacturing. "Furniture is more of a value for the consumer today than it was 10 years ago," he says. What makes this price war all the more challenging is that many of Hooker's raw materials — which account for a third of total expenses — are more expensive and the company hasn't been able to pass along most of these added costs to customers.

"With the foreign competition in the last few years, the price increases have come fewer and farther between. We have to make sure we don't price ourselves out of the market," Canter says. A small price increase last year and a planned one this fall may cover about half of the added expense for materials like foam, a key component in leather and fabric upholstered furniture.

Hooker Furniture isn't the only company in this predicament. More than half of the 60 large industrial manufacturers surveyed by PricewaterhouseCoopers reported higher material costs in the first quarter of 2006, while 53 percent reported that their own prices either stayed the same or were lower. Overseas competitors also pay more for materials, but domestic manufacturing executives complain that costs associated with health and pension benefits and regulatory compliance are making it difficult to compete with foreign firms.

Many production inputs have become a lot more expensive in the last five years. For example, the price of copper — used in everything from water pipes to circuit boards — more than doubled to $8,000 a ton between May 2005 and May 2006. Copper had traded for less than $3,000 a ton on the London Metal Exchange during the last two decades.

Supply interruptions, such as the shutdown of natural gas production after last year's Gulf Coast hurricanes, have led to price spikes. But several demand-side forces have also pushed up the cost of production inputs over time. The rapid growth of China and India has added to demand from expanding economies around the world. Additionally, many analysts believe that hedge funds and institutional investors have been buying up commodity contracts in lieu of more traditional investments, thus driving up their prices. Of course, hedge funds may be doing this based on their belief that there will be more demand in the future.

Despite higher prices for many commodities, supply continues to lag behind demand. "The global community was really surprised by the huge increase in demand from Asia for oil and industrial metals over the last three years," says Earl Sweet, an assistant chief economist at Toronto-based BMO Financial Group who tracks commodities. However, "investors have been burned badly over many decades of investing in commodities and were slow to [take] the bait. Now that they are, it's going to take several years to develop new supplies."

Economic theory says that rising prices should entice suppliers into the market and encourage existing suppliers to increase their output. Eventually, the increased inflow of goods should stabilize prices and then drive them down. In reality, commodity suppliers don't leap into action like firefighters responding to an alarm. Each company's response to a price signal is different and depends on several factors, chiefly the returns that executives expect to make from investments in production capacity.

So, when will commodity supplies come back in alignment with demand? Some economists expect prices to become high enough to decelerate economic growth and accelerate the production of materials in short supply by early 2007. Prices of various industrial metals have already reacted to this anticipated market shift. They fell for five weeks before recovering in mid-June.

In the meantime, higher costs for production inputs will continue to squeeze the margins of manufacturers like Hooker Furniture. Whether household budgets will be squeezed further is another question.

Going From Zero to 60

Producers of various crude and intermediate goods are just beginning to boost their capacity after decades of putting their money elsewhere. Jason Schenker, an economist with Charlotte-based Wachovia, explains how this situation happened.

After the end of the Cold War in the 1980s, Russia dumped its metals into world markets because it needed money to finance its government. Then, the Asian financial crisis in the late 1990s and subsequent recessions in the United States and elsewhere reduced demand for materials. This left many global inventories flush with supply, keeping prices low and diminishing the potential return on investment for new mines and processing facilities. So, companies directed their capital into real estate, high-tech startups, and other investments that promised better returns.

Now, countries around the world are expanding again. China's rapid industrialization has made a big splash in the global marketplace, while North American and European economies are strong. This global surge in demand has drawn down inventories of production inputs like copper and zinc to the point where supply increases are finally practical, and prices have spiked to reflect that need.

A good gauge of this trend is the Producer Price Index, which measures the average change over time in the prices received by domestic firms. The PPI for crude goods, such as industrial metals and minerals, increased 111 percent from December 2001 to December 2005. Meanwhile, the PPI for intermediate goods that are partially processed, such as cement and lacquer, rose 27 percent over that period.

The problem is that new supplies don't show up with the push of a button. "It's like turning an aircraft carrier," Schenker says.

While coal mining firms have been reopening abandoned underground mines and nonferrous metal exploration has been rising, discovering and developing enough new mineral reserves to meet demand takes years. Also, it takes time to get financing, obtain permits, buy equipment, and hire workers, whether it's for a new mine or processing plant. Firms may see high prices and strong demand now, but favorable market conditions have to last long enough to make it worth investing in new capacity.

Paul Campbell, Jr. says this is what happened at Alcoa while he was president of the aluminum producer's Southeast region. (He retired in 2005 and serves as a consultant based in Charleston, S.C.) The company lagged in creating new capacity during the 1980s and 1990s because the price of aluminum wasn't high enough.

"You couldn't justify building the plant," Campbell recalls. "Now that prices are up, it's taking awhile to build the facilities to produce the raw materials." Alcoa is putting a new smelter in Iceland and designing another one for installation in Trinidad and Tobago. It is also expanding its aluminum plants in Australia, Jamaica, and South America. "We're looking to take advantage of the situation."

Betting the Farm

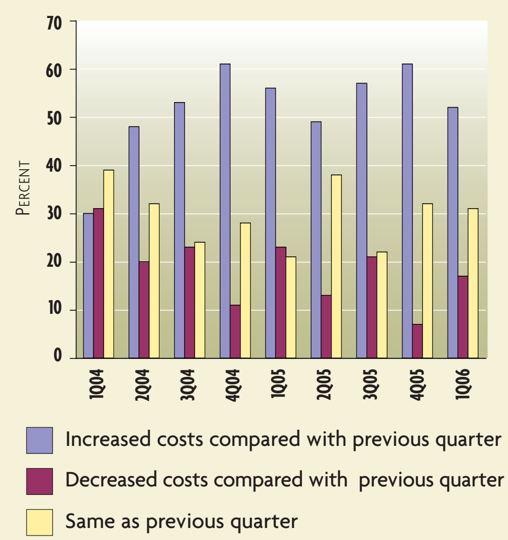
Futures contracts are a good indicator of how long the market expects current conditions to last. They represent an obligation for the buyer to accept delivery of a commodity for a specified price at a future date.

While spot prices can rise dramatically, futures may not rise as much, indicating that current market conditions are expected to be only temporary. However, if futures are persistently higher, then commodity suppliers should have greater confidence in making long-term investments in production capacity.

The Reuters/Jefferies CRB Index averages the futures prices of 17 commodities in six broad categories,

Input Costs Up

Since 2004, more large manufacturers surveyed by PricewaterhouseCoopers are reporting higher input costs, while fewer have seen lower costs.



SOURCE: PricewaterhouseCoopers

including energy and precious metals (which comprise 35 percent of the total). Judging from the index's movements over the last four years, producers appeared to have grounds for optimism. The index was up 23 percent in 2002; 8.9 percent in 2003; 11.2 percent in 2004; and 16.9 percent in 2005. Yet that didn't seem to have much of an effect on supply levels.

Several factors have raised the bar for the return on investment necessary for a company to justify increasing its production. Higher oil prices have added to production costs for makers of asphalt, plastics, and other petroleum-based products, costs which can be hard to pass on to consumers.

Finding reserves of raw materials is also challenging. Some are located in areas of political instability, making investors cautious about committing their money to multiyear exploration and development projects, according to BMO's Earl Sweet.

For instance, New Caledonia has about one-fourth of the world's known nickel reserves, but efforts by the island nation's indigenous population to break from French rule has periodically threatened mine development and expansion. Labor unrest has disrupted copper production in Chile and Mexico.

Finding an optimal location for a processing facility is difficult as well. Kenneth Simonson, chief economist of the Associated General Contractors of America, says producers of construction aggregates prefer to build their plants as close to a sufficient supply of raw materials as possible to save on transportation costs. In addition, they must have access to a plentiful supply of electricity and water. But companies can't build just anywhere. "For many kinds of manufacturing, it's really hard to get zoning and environmental permits. Asphalt and cement plants aren't very appealing neighbors," Simonson notes.

It's Only a Matter of Time

Economists expect this supply lag to correct itself. However, while prices will likely fall from their current heights, Sweet and other economists don't expect them to return to their previous lows of the late 1990s, either. Therefore, Sweet notes, producers should get an adequate return on investment for expanding their capacity. Higher futures prices for copper and other minerals suggest the market shares that assessment.

On the other hand, there are still some significant question marks. Todd Clark, an economist at the Federal Reserve Bank of Kansas City, says everyone is still trying to figure out the impact of China's and India's increased demand for nonrenewable resources. "There is reason to be worried about that and look hard at the issue," he says. Historically, technological advances have led to better ways of extracting natural resources and using them more efficiently, but it's not clear if they would enable commodity producers to meet future demand.

Until things straighten themselves out, what will be the impact on consumers? It may not be as big as one might expect. Even if higher commodity prices start trickling down to consumers beyond the neighborhood gas station, Clark says the effect on cost of living will be limited, since the goods portion of the economy has declined over time. Excluding food and energy, goods represent only 25 percent of consumer spending.

Also, Clark says manufacturers haven't passed much of their increased costs to consumers in the past, and he doubts that trend has changed. Previous research did uncover a statistically significant relationship between prices of less processed goods and prices for more complete goods. However, recent studies have suggested that this relationship weakened during the 1980s and 1990s.

Indeed, global competition has convinced many companies that their customers won't tolerate higher prices to cover input costs. Instead, they have chosen to sacrifice some of their profit margins in the name of protecting market share. Also, they have tightened their belts by using cheaper inputs, substituting capital for labor, and hedging against price increases with futures contracts.

Back at Hooker Furniture, Lewis Canter looks for ways to improve efficiency. For example, the company trains its workers to reduce overspray of finishes. Canter explains, "Furniture is coming by real fast, so if your technique is sloppy, then you waste more."

Some companies have shifted their attention to niche markets with less competition. Cheaper Asian imports have lowered demand and margins for Hooker's bedroom, home office, and home entertainment offerings. So, the company closed three plants in North Carolina and focuses on producing high-end leather chairs and sofas. It also sells more furniture imported from China, Mexico, Honduras, and other countries.

Canter doesn't see any relief from input price pressures until oil markets cool down. And, even then, Hooker will continue to face pressures on the output side. "Chinese furniture makers pay the same raw material costs as we do, but their labor and overhead costs are so much lower," he remarks. "We are trying to drive down overall costs and determine where the biggest opportunities are." **RF**

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Love, Money, and Marriage

There are many reasons why being married makes economic sense. But do they make promoting marriage suitable for public policy?

BY DOUG CAMPBELL

Summer is wedding season, the traditional time for bridal gowns and ring shopping, multilayered cakes, and festive receptions. And, of course, the vows. But in truth, to the disappointment of romantics everywhere, the institution of marriage in the United States is past its prime.

Witness the U.S. marriage rate, which is dropping like a rock. Since 1970, the number of marriages per 1,000 unmarried adult women has declined 50 percent. Meanwhile, the percentage of all adults who are married has slipped from 66.7 percent in 1970 to 55.1 percent in 2004. About one out of three U.S. births is now to an unmarried woman.

Social, scientific, and economic factors seem to be driving these trends. For many folks, the sexual revolution put to rest the notion that sex had to happen within the boundaries of marriage, and birth control likewise reduced the inevitability of offspring. Increasingly uncommon, too, is the single-earner household, where men go to work and women stay home. Today's woman also works outside the home, and with that financial freedom comes more choice in whether to commit to a lifelong partner.

All of this may be just fine, except for one thing — marriage, it turns out, is associated with a lot of positive characteristics. Studies have shown married people have better health, better sex lives, and are said to be happier. And here's the trump card: Being married means you have a greater chance of being well-off. People who never marry have 75 percent lower wealth than continuously married people, according to one study. Or consider data from the Census Bureau showing the median income of married-parent families at almost $66,000 and of lone-parent families at about $25,000. Eight out of 10 "nonpoor" families are headed by married couples; poor families are headed by married partners only four out of 10 times.

These facts give rise to marriage as a public policy issue. Economics has become a key component in promoting pro-marriage policies — everything from retooling welfare eligibility rules to earmarking taxpayer funds for marital counseling. "Poverty, crime, substance abuse, special education, foster care, child abuse services, teen pregnancy — there is hardly a single major domestic program that state, local, and federal agencies spend money on that is not the result of social problems driven in part by the decline of marriage," says the nonprofit National Fatherhood Initiative. "This growing consensus on the importance of marriage has led to new efforts to generate public policies that may help reduce rates of unmarried childbearing and divorce."

But the emergence of marriage as a public policy issue raises an important question: How much of the "marriage effect" is directly attributable to people's marital status, and how much is just a selection effect? Does marriage make you economically well-off, or are already economically well-off people more likely to marry?

Marital Economics

Some of the economic advantages of being married are obvious. Thanks to economies of scale, two can live more cheaply than one. There are fixed costs to running a household. First, there's the house itself. Instead of paying two mortgages (or rents), a married couple pays just one. The same is true with things like utility bills. Finally, there are smaller items like grocery expenses, which tend to be lower on a per-person basis for couples. Then there are legal realities: If you're married, you get to take advantage of your spouse's possibly superior health and other benefits, plus many other legal privileges.

Contributing to the relative wealth of married couples is the changing dynamic of the "marriage market." Married partners tend to have similar education levels. And unlike 40 years ago when men still greatly outnumbered women in college, more women are now seeking higher educations, providing more opportunities for on-campus relationships that may last beyond graduation. Workplace romances have increased, too, as female labor force participation has risen. These twin trends reflect how it has become relatively easier for high-income and high-education people to meet up, helping to explain why people with college degrees and higher incomes are more likely to marry.

Economist Gary Becker of the University of Chicago pointed out how wedded couples can develop "marriage-specific capital," in which partners specialize in what they do best, to the benefit of both. Traditionally, this has meant men go to the workplace and women raise the children. Mostly because of this arrangement, married men earn as much as 40 percent more than single men. This is what's called the "marriage premium," and, though there are many factors that may contribute to it, one of the biggest is thought to be increased married male productivity from labor specialization. Among other things, married males may spend more effort building human capital which can translate into higher

ILLUSTRATION: AILSA LONG

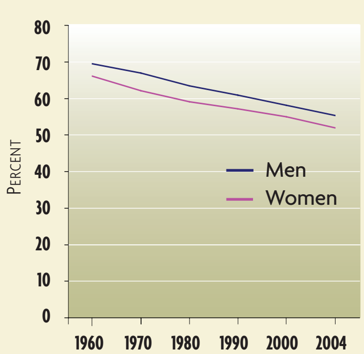
earning power, especially in today's economy. Cohabitating couples can specialize, but their implicit lack of commitment means that they don't as much as married couples, and hence don't reap the same economic returns.

(Importantly, Becker's research also finds that when women work, the gains from specialization are reduced. In a nation where 60 percent of households have two wage earners, this may count as another reason why couples don't bother to marry.)

There are other benefits of married life. Like a college degree, a marriage certificate sends a sort of economic signal. (A surprising fact: In any given year, college graduates get married at a clip three times greater than high school dropouts.) Steven Nock, a University of Virginia sociologist and co-director of the Marriage Matters project (a research effort funded by the National Science Foundation), says that in this way married couples project "commitment, stability, and maturity, among other things." These are the kind of attributes that employers value and the sort of character traits not necessarily signaled by cohabitating couples — though one can also imagine some high-powered jobs where employers would worry that people with children wouldn't be able to commit as many hours to work as their unmarried colleagues.

People Age 15 and Older Who are Married

The percentage of people who are married at any given time in the United States has dropped since 1960.



SOURCE: National Marriage Project

Maybe most important is that marriage is great for kids. In 1970, 10.8 percent of U.S. children lived with single mothers. By 1998, the proportion was up to 23.3 percent. Economists Isabel Sawhill and Adam Thomas at the Brookings Institution and Harvard University, respectively, found that if the proportion had remained at its 1970 level, the rate of child poverty would have been 3.4 percentage points lower by 1998. That's almost 2.3 million children. In their simulation model, among those children whose (until then single) mothers married, the poverty rate fell by two-thirds. This happens both because of the "two can live more cheaply than one" rule of thumb as well as from the labor specialization of married couples. "Certainly if more people were married, we would have a lot less child poverty," Sawhill says in an interview.

Getting married is one thing, but staying together is also economically important. Divorce is harmful to children. The Center for Law and Social Policy, a nonprofit organization whose mission focuses on improving the lives of poor people, found that the primary custodial household's income falls 70 percent for children in divorce's immediate aftermath and remains 40 percent lower compared with intact households as long as six years after divorce. The process of divorce itself is expensive to taxpayers, costing state and local governments about $30,000. The National Marriage Project, a research effort at Rutgers University, says that the 1.4 million divorces in 2002 cost governments more than $30 billion because of factors ranging from higher use of food stamps to increased Medicaid spending to greater use of public housing.

Public or Private

Given the apparent link between marriage and economics, the question of whether government intervention is necessary in this most private of relationships deserves consideration. At present, U.S. marriage policy is shaped mostly by the tax code and the welfare system.

The so-called "marriage tax" still exists — filing jointly, a man and a woman with high earnings may jump into a higher tax rate than they would if filing separately. Also, under the welfare transfer system, single-parent households may actually be eligible for higher payments than married households when it comes to housing and child care subsidies as well as cash benefits. On the flip side, low-income parents who marry may enjoy a sort of "marriage subsidy" by collecting more of the earned income tax credit than they did as separate filers.

However, following passage of 1996 welfare reform, states were given wider discretion in implementing rules, and many responded with policies that aimed to keep couples together. Since 2002, Nock says, 36 states have eliminated rules that made welfare available only to single-parent families. Another 11 states have partially made this change.

Indeed, there is no shortage of proposals and programs that aim to encourage more marriage. What we have is a "seemingly endless array of contemporary public and private efforts to promote marriage, reduce out-of-wedlock births, encourage responsible fatherhood, and persuade unmarried parents to marry," Nock writes.

In 2001, the Bush administration launched its Healthy Marriage Initiative, a project that urges unwed parents to consider marriage for the sake of their children. Another program promotes healthy marriages in local communities. At the state level, South Carolina is one of 10 states that since 2001 have introduced major efforts that establish and fund programs "designed to specifically promote and strengthen marriage and reduce divorce," according to the Center for Law and Social Policy.

Whether marriage promotion programs like these can be effective depends on what the real objective is: 1) increasing the number of married people or 2) improving people's economic well-being. This second objective may not hinge on being married after all.

Selection Effect

Much of the academic debate over marriage centers on whether the positive economic effects seen in married people are causal — that is, does getting married make people better off? Or are better-off people the type who get married, anyway? Economists writing for the conservative Heritage Foundation say: "Moving from a single-parent to a married family is a straightforward way to rise above the poverty threshold."

But pressed on this subject, many scholars are ambivalent. "We'll never be able to totally untangle this issue," says University of Virginia's Nock. "I don't think anybody fully understands it." Even the Institute for American Values, in promoting its "Why Marriage Matters" report, includes a disclaimer about selection effects, acknowledging that "reasonable scholars" disagree over the causation/correlation effects of marriage but concluding that, "the benefits of marriage extend to poor and minority communities."

Sawhill, the Brookings economist, is also torn. "You can't explain away the fact that there seems to be something about marriage itself that is helpful to children," Sawhill says in an interview. "I would never argue that all of the differences between outcomes for children in married families versus single families is due to the fact that there's marriage in one case and not in the other. Some of it is the fact that people who marry tend to have other characteristics that are good for children, a selection effect. I think there is something causal, but it isn't all causal."

The Real Issue

Some sociologists have argued that poor people need no reminders about the economic value of marriage. The real issue for poor people is that marital status is low on their list of concerns. Policymakers "are acting upon the premise that not being married is what makes so many women and children poor," write Kathryn Edin and Maria Kefalas, sociologists at the University of Pennsylvania and Saint Joseph's University, respectively, in their book, *Promises I Can Keep: Why Poor Women Put Motherhood Before Marriage*. "But poor women insist that their poverty is part of what makes marriage so difficult to sustain."

Yes, married people tend to be better off — on this there is little disagreement. But to many social scientists, this misses the point. Instead of encouraging marriage in the hopes of lifting general welfare, there may be a more direct approach in helping people — regardless of marital status — take on the most positive characteristics of married people; namely, that they work and provide stable environments for raising children.

Andrew Cherlin, a sociologist at Johns Hopkins University, says that, reducing barriers to work can help all sorts of households, be they headed by married partners, cohabitating couples, or single parents. That's why Cherlin generally favors universal preschool or generous parental leave policies over marriage promotion efforts.

"I don't think policies should be narrowly focused on marriage," Cherlin says. "Marriage is a good thing. But I think promoting stability in child-parent relationships, whatever form they may take, is also a good policy goal. A single mother who doesn't have to quit her job when her child gets sick is a single mother who is more able to maintain a household."

Similarly, Brookings economist Sawhill thinks that discouraging births among teenage mothers is paramount. The emphasis on marriage as an economic development program is OK, she says. But, she adds, "That's tackling the problem a little late, once a child is born outside of marriage. It would be far preferable if we prevented people from having babies before they're married in the first place." Instead of marriage education, Sawhill favors programs aimed at preventing teen pregnancy with the aim of delaying unprotected sex and unwanted births.

We come away from this analysis with some question marks. Studies clearly show that children are made better off when they live in stable, married households, though there are differences of opinion over whether this justifies pro-marriage policies. The data also show that married people make more money, but whether that's directly attributable to tying the knot is unclear. Meanwhile, marriage is far from dead. Most people still get married — about 90 percent of all American women by the age of 45, in fact. And the pace of U.S. divorces has fallen since 1980. Nobody doubts that a nation of abundant, healthy marriages is desirable. But if the goal really is in reducing poverty, then there may be more direct remedies than matrimony. **RF**

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PRODUCTIVITY POSTPONED

The late 20th century witnessed huge leaps in information technology innovation, but gains in productivity were slow to follow. Economists, including two with ties to the Richmond Fed, help explain why

BY VANESSA SUMO

Almost every company has a story to tell about how the power of information technology, or IT, has transformed its business. Dell, the world's largest personal computer manufacturer, takes orders directly from customers via the Internet, builds computers exactly to their specifications, and ships, all within 24 hours. Wal-Mart's Retail Link system shares actual sales, forecasts, and inventory data from its 6,200 stores with 30,000 suppliers worldwide, which allows the company to respond effectively to customer demand and minimize inventory costs. On-board computers enable dispatchers and truck drivers to communicate, and thus make decisions that keep big rigs fully loaded and on the road.

An improvement in productivity, or the ability to produce more goods and services for the same amount of effort, generates higher profits for the company and its owners and wages for its workers, and therefore a better standard of living over time. Technological progress is key to productivity growth because it offers a better way of doing things, of pushing out an economy's frontier of production possibilities. Sometimes this progress is subtle — for instance, when marginal improvements are made to existing technologies — while in other cases, it is stark. History counts several examples of major innovations. The steam engine, electricity, and the internal combustion engine are just some of the creations that have raised living standards over the centuries.

Similarly, many believe that the advancements in IT, triggered by the invention of the microchip, have ushered in a period of fast productivity growth in America. "Technological innovation, and in particular the spread of information technology, has revolutionized the conduct of business over the past decade and resulted in rising rates of productivity growth," remarked former Federal Reserve Bank Chairman Alan Greenspan in December 2000. Average labor productivity, or the amount of output produced for each hour worked, grew by 2.6 percent a year for the nonfarm business sector between 1995 and 2004, double the pace between 1973 and 1995, according to data from the Bureau of Labor Statistics.

Labor productivity depends partly on the amount of capital each worker is equipped with — the more machines per worker, the higher his productivity. But labor productivity also depends on something called "total factor productivity," or TFP, a term which measures the growth in output that is not due to changes in either capital or labor. TFP is usually associated with technological change because it tries to capture the efficiency with which labor and capital inputs are used. For instance, TFP rose by 1.3 percent per year from 1995 to 2004, accounting for half of the overall growth in labor productivity. And like the growth in labor productivity, TFP has increased much faster than in the two previous decades.

But it was not always so evident that IT could be a driving force for productivity growth. A period of weak productivity gains in the two decades to the mid-1990s spurred many economists, including Andreas Hornstein of the Richmond Fed and Per Krusell of Princeton University (and also a Richmond Fed visiting scholar) to attempt to explain this period. They find that after rising by 1.9 percent a year from 1954 to 1973, labor productivity actually reversed to -0.2 percent a year from 1973 to 1979 before recovering to positive territory of 1.1 percent a year from 1979 to 1993 (although still trailing the pre-1973 pace).

Changes in TFP were similar. This was puzzling in the wake of widespread introduction of robotics and microprocessor technologies. Why hadn't these innovations boosted productivity? One could not blame Nobel laureate economist Robert Solow when he famously observed in 1987, "You can see the computer age everywhere but in the productivity statistics."

Dissecting the Slowdown

Perhaps a good way to understand this productivity paradox is to reach even further back in history. The invention of the dynamo (the electrical generator) and the course of electrification that followed beginning in 1880 had promised profound transformations to every factory, store, and home. But the realization of such a vision was hardly imminent at the turn of the 20th century, according to Stanford University economist Paul David.

Aside from the slow pace of electrification and the durability of the old manufacturing "group drive" system of power transmission, machines had to be fitted with electric motors (which meant that old machines and new ones operated alongside one another), factory structures had to be radically redesigned, and the stock of factory architects, electrical engineers, and workers familiar with the new machines needed to be built up. This protracted adjustment made gains in productivity slow to come.

Similarly in the 1970s, computer technology did not manifest itself immediately in a revolutionary way, and maybe this isn't surprising. Some research shows that the transition to a new technological regime can actually slow productivity growth as firms take time to learn how to use the new technology. This period of "learning-by-doing" is one of the more intriguing explanations, proposed by Hornstein and Krusell, for the slowdown of measured TFP growth during the two decades to the mid-1990s.

"The idea is that new machines require an investment in learning that is not measured. Since a rise in unmeasured investment spending leads to an underestimated output growth, measured TFP growth is lower," explains Hornstein. "Another way of looking at it is that if we assign the same experience level across all equipment, including the new ones, then we will tend to overestimate the contribution of the new capital equipment to output growth, hence underestimating observable productivity growth."

This problem arises if new technologies embodied in the latest equipment are introduced at a rapid pace, forcing workers to learn faster on the job. The 1970s offers a neat example. Faster and better computers flooded the market every year, such that the quality-adjusted price of their components (processor speed, memory, etc.) dropped dramatically. Hornstein and Krusell find that prior to 1973, the price of producers' durable equipment was falling by 2.9 percent a year, whereas after 1973 it was falling by an additional 0.6 percentage point per year. The cheaper prices encouraged firms to accumulate more and more IT capital.

But in a world where a new machine cannot simply be plugged and played, the adoption of a new technology can temporarily reduce a worker's productivity simply because the effective use of the new equipment is initially overestimated. The evidence suggests this is what happened in the 1970s. As the pace of capital-embodied technical change quickens, TFP growth will initially be lower because only a fraction of the new equipment is actually operable. Firms need time to learn how to best integrate the new technology in their production plans and workers need to update their skills. As this adjustment moves forward, the process of learning-by-doing will bring in additional productivity gains.

Other studies have treaded along similar lines as those of Hornstein and Krusell; that is, the idea that there is some delay in reaping the benefits of investments in IT. Economists Susanto Basu of Boston College, John Fernald of the San Francisco Fed, Nicholas Oulton of the London School of Economics, and Sylaja Srinivasan of the Bank of England find that in order to benefit from IT, there must be "substantial investments in learning, reorganization, and the like, so that the payoff in terms of measured output may be long delayed."

This study follows naturally from where Hornstein and Krusell left off. Although TFP growth is initially underestimated because such investments are not measured, it is actually overestimated once these complementary investments become an increasingly important part of the production process. Indeed, the authors find that the surge in measured TFP growth in the late 1990s in the United States is positively correlated with high IT capital growth rates in the 1980s or early 1990s, but negatively correlated with the growth rate of IT investment in the same period.

These investments are in intangible assets such as new organizational designs, worker knowledge, and monitoring and incentive systems. Although intangible, these assets are not invisible and so would likely show up in the market's estimation of a firm's value. No wonder that when Johnson & Johnson finally discovered its winning formula for combining computer-based flexible machinery with a carefully designed work plan for manufacturing adhesive bandages, it ordered its factory windows painted black to prevent competitors from running away with its valuable blueprint.

Measured productivity growth can also understate actual improvements in

The use of personal computers became widespread in the 1980s, but may have done little to boost workers' productivity until years later.

PHOTOGRAPHY: AP WIDE WORLD PHOTOS

productivity, according to Hornstein and Krusell, if the quality component of a final good or service is very high. For instance, simply comparing the number of cars produced today to 20 years ago does not reflect the significant quality changes that a typical car has undergone. It would be more appropriate to adjust a good or service for its quality content, but that is often difficult to do.

In addition, this understatement is exacerbated the more capital-intensive the production of the quality component of output is relative to quantity. Computers, for example, are a big part of how banks are able to offer customers increasingly convenient ways of transacting. In that case, a large portion of the increase in the capital stock actually reduces TFP growth because the output growth that it generates goes unmeasured. Hence, measured improvements in TFP can slow during a period of rapid technological change because IT capital goods are factored into the equation — but the quality and convenience of these new services eludes output statistics.

The late economist Zvi Griliches emphasized the consequences of poor measurement for the "unmeasurable sectors" of the economy, mostly the services industries. He showed that despite heavy investments made in computers and other information-processing equipment, more than three-quarters of this investment went into the unmeasurable sectors, thus its productivity effects were largely invisible in the data.

To make matters worse, the structure of the economy has changed significantly whereas data improvements have come slowly. The share of the services sector in total output, for instance, has increased substantially over the past half-century, weighing in today at about three-quarters of GDP.

The services sector is singled out by Hornstein and Krusell, as well as others, as the most problematic in this respect, because innovations from these industries are trickier to identify than the new products that come from the goods sector. Until a few years ago, bank output was measured by extrapolating from the number of bank employees, which surely would not capture the convenience and time-saving benefits from the rise of ATM networks.

Much has changed, however. Because of new and improved ways of measuring services output in the U.S. industry data, recent estimates by economists Jack Triplett and Barry Bosworth of the Brookings Institution were able to uncover the robust growth in productivity that had always been there after all. Using the new data, they find that the services sector no longer lagged behind the goods industries in terms of productivity growth. Labor productivity in services increased by 2.6 percent a year between 1995 and 2001, outpacing the 2.3 percent a year improvement in labor productivity in the goods sector.

Still, unlike Hornstein and Krusell, Triplett does not believe that measurement errors are the reason for the slowdown in productivity growth during the 1970s and 1980s. "That's still a big puzzle," says Triplett. "I suspect that it was a lot of different things like the oil shock, regulation, baby boomers entering labor force." Each of those may have had a small effect, but taken together, the result was significant.

Another view of the productivity slowdown offered by Northwestern University economist Robert Gordon, in a comment to Hornstein and Krusell's paper, is that the slowdown in productivity growth may be partly due to the "new economy" of IT simply falling short of some of the remarkable inventions of the past. It just did not have the potential to spur a massive acceleration in TFP. "The one big wave of American economic growth during 1915 to 1965," writes Gordon, "reflects the combined influence of several central inventions that, taken together, had a much more profound impact on the way the economy and society operated than has the electronic computer."

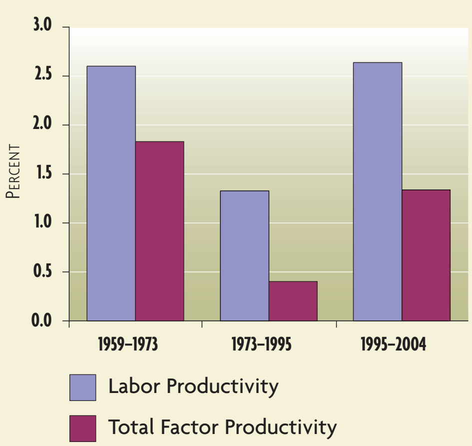
The Revival

After a long dismal period in the two decades to 1995, productivity growth began to surge to heights that would be expected of an economy booming with IT-stimulated innovations and investments. Dale Jorgenson and Mun Ho of Harvard University and New York Fed economist Kevin Stiroh find that average labor productivity grew by 2.64 percent a year over the period 1995 to 2004 compared with 1.39 percent from 1973 to 1995, representing a gain of 1.25 percent a year. Of this difference, 0.62 percent a year was due to capital deepening (the increase in the amount of equipment used per worker) and 0.72 percent was due to faster TFP growth.

The remarkable contribution of technological progress in IT production is reflected in the 30 percent share of the IT-producing sector to the increase in TFP growth over the two periods, contributing far more than the 3.9 percent share of IT equipment and software in aggregate output. This impressive productivity performance

Labor Productivity and Total Factor Productivity Growth

Despite the growing use of computers, productivity growth slowed between 1973 and 1995 but finally surged between 1995 and 2004.



NOTES: Labor productivity growth is the average annual percentage change in output per hour for workers in the nonfarm business sector. The growth in labor productivity partly depends on total factor productivity growth, which is the average annual percentage change in output that is not accounted for by changes in either capital or labor. Average annual growth rates are computed using a geometric average.
SOURCE: Bureau of Labor Statistics

has played an important role in the fall in IT prices and thus in boosting IT investment. This has led to the wide diffusion of IT capital across all sectors, reflected in the two-thirds share of capital deepening attributed to IT.

But one thorny issue is whether these gains have actually spilled over to industries outside of the IT-producing sector. The services sector comes to mind since these industries are heavy users of IT capital, but some also believe they have been afflicted with "Baumol's Disease" — a theory developed by New York University economist William Baumol which supposes that the inherent nature of services causes them to languish in terms of productivity improvements.

Triplett and Bosworth, who were among the first to look at productivity growth in the services sector, discover evidence to the contrary. They find that most of the acceleration in labor productivity growth after 1995, and all of the acceleration in TFP growth, took place in the services industries. This lays to rest previous assertions that the productivity growth of the 1990s was fragile because no improvements in productivity, particularly TFP, occurred outside the electronics manufacturing sector. Moreover, they find that four-fifths of the total contribution of IT to aggregate labor productivity growth between 1995 and 2001 is thanks to the services industries.

Strong productivity growth continued after the late 1990s, even beyond the end of the 1991 to 2000 expansion. This has led to the consensus that the resurgence was not cyclical, that it would not fade away even as output growth slowed down. Rather, it represents something more sustainable, suggesting that the American economy could continue to expand, raising standards of living.

Will this strong productivity growth continue? "It depends on what the innovations are going to be and in what ways we can expand the variety of products in an economy," Hornstein says. "I think there is still some potential there, for the application of IT and for productivity growth." Jorgenson, Ho, and Stiroh anchor their projections critically on factors such as the evolution of semiconductor technology and business investment patterns. Nevertheless, they find "little evidence to suggest that the technology-led productivity resurgence is over or that the U.S. economy will revert to the slower pace of productivity growth of the 1970s and 1980s."

Gordon likewise predicts that productivity growth rates will stay firm, similar to the growth rate of the late '90s, but doubts that IT will be the main driving force. "I tend to think we have now exploited the low-hanging fruit of the Internet revolution," says Gordon. Electricity and the internal combustion engine were mega-inventions, in terms of their direct effects and the importance of their spin-offs and complements. On the other hand, he considers the semiconductor, computer chip, and digitalization merely "first-rate" inventions that likewise spawned other first-rate inventions, particularly the Internet. Beyond that, he sees only a slew of second-rate innovations, a string of bit-by-bit technical improvements instead of the revolution that we enjoyed during the last decade.

A look back shows that IT has had a profound impact on productivity growth, even during periods when this bond may not have seemed so strong. But there is less of a consensus about the role of IT in propelling productivity growth in the future, in part because some puzzles still remain. One lingering question is why IT did not spur a similar productivity revival in Europe when, after all, a computer is the same anywhere in the world. The tumultuous affair between technology and productivity looks certain to continue. **RF**

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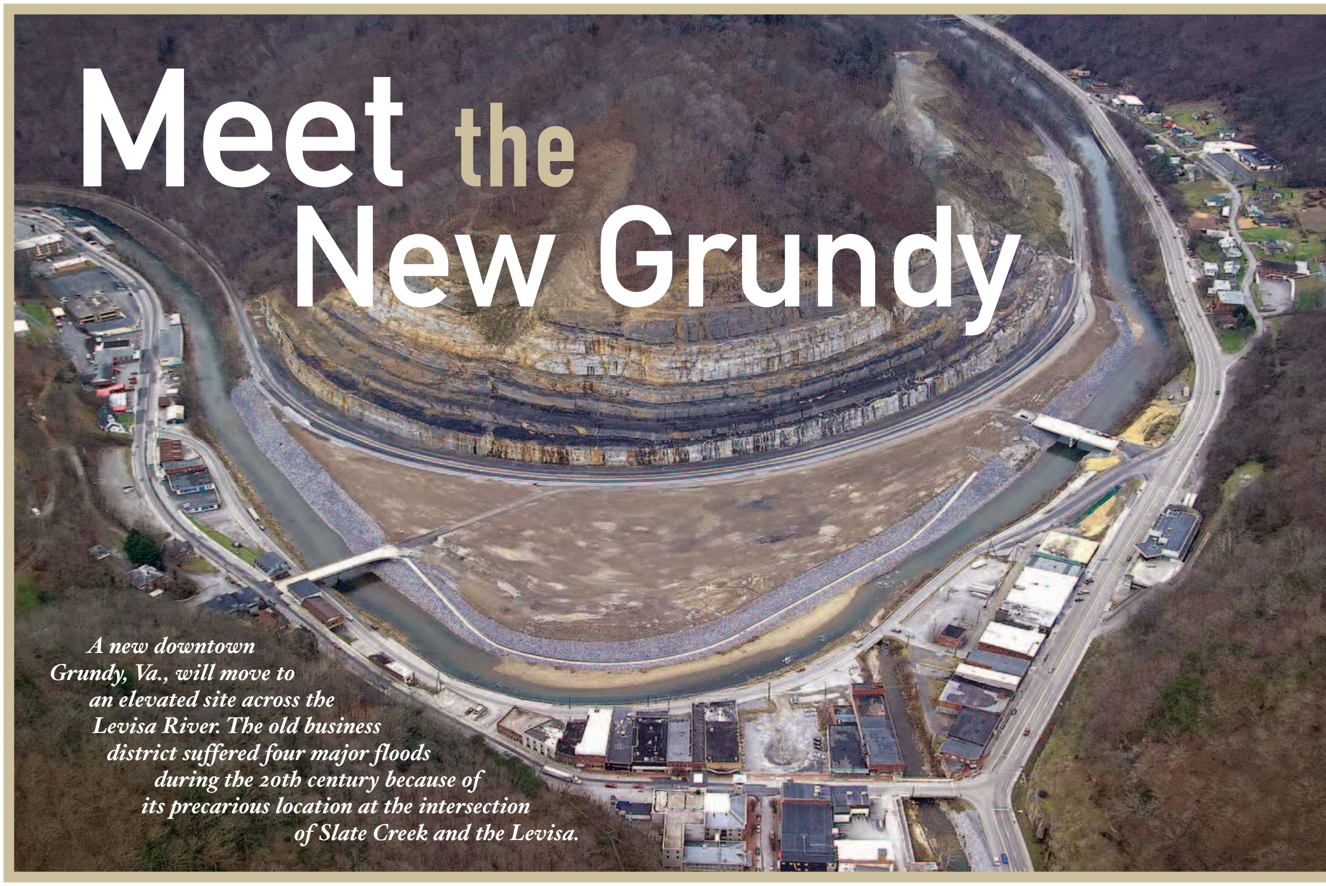
Meet the New Grundy



A new downtown Grundy, Va., will move to an elevated site across the Levisa River. The old business district suffered four major floods during the 20th century because of its precarious location at the intersection of Slate Creek and the Levisa.

PHOTOGRAPHY: COURTESY OF U.S. ARMY CORPS OF ENGINEERS

Public works, private education revive Appalachian town

BY BETTY JOYCE NASH

The sign taped to the door of the Comfort Inn in Grundy, Va., warns guests to remove muddy boots before entering. That says a lot about the construction business in this coal mining mountain town of about 1,200 where the Levisa River and Slate Creek meet in southwest Virginia. There's the new strip mall going up by the motel, apartment buildings under way, one with 88 units, and construction of a second campus for the new pharmacy school that should be finished by August. The 10-year-old law school occupies a renovated schoolhouse.

But all that's nothing compared with the empty 13 acres awaiting construction across the Levisa from the flood-prone downtown. It's hard to find much flat land in one place, so a piece of mountain was shaved off for more space, leaving geological time visibly stacked up behind the future Grundy.

To demolish a town and literally build a brand-new one on higher ground is about as dramatic and rare as flood solutions get. But that's the plan for Grundy.

Between the highway, a floodwall, and the town site prep, the rebuilding of Grundy is costing taxpayers at least $130 million. The economic hope is that the public works will lift the region's spirits and leverage growing private investment. Along with the law and pharmacy schools, Grundy's got a new Chinese restaurant and the promise of a Wal-Mart.

Long-Term Investment

Nobody expects the public investments in Grundy to pay off overnight. Maybe never, in any traditional economic sense. "The way I think it would be justified would be that you're going to set it on a new path," says Brad Mills, an economist at Virginia Tech. "Eliminating the risk is going to create a better environment for investment and growth."

While that may turn out to be true, spending lofty sums on chronically flooded communities raises economic questions, similar to those being mulled in the wake of Hurricane Katrina. Edward Glaeser, an economist at Harvard University, wrote in *The Economists' Voice* on the merits of rebuilding New Orleans: "We could try to make good on the idea that the government provides insurance by rebuilding the city. Alternatively, we could provide residents with checks or vouchers, and let them make their own decisions about how to spend that money — including the decision about where to locate, or relocate, themselves." As Glaeser points out, in the old days, towns sprouted beside rivers, the transport mode of the day. Such locations may no longer be desirable or viable.

Of course, in many mountain communities like Grundy, the only flat land around lies near rivers and streams — and the major industry remains coal. John Bock is project manager for the U.S. Army Corps of Engineers' Huntington, W.Va., district office. He says flood control projects in southwest Virginia, eastern Kentucky, and southern West Virginia yield benefits that can't necessarily be captured in typical analyses. "Are we providing direct protection for a coal mine? No. But we are providing livable communities so people can work these coal mines," he says. "We still have to find the most efficient way [to floodproof], but we're going to do it."

Private investment will develop the new town across the river. The U.S. Army Corps of Engineers will build a floodwall, and the Virginia Department of Transportation will reroute U.S. Highway 460 on top of a new earthen levee.

Grundy is the county seat of Buchanan County, next to West Virginia and Kentucky. The county may have been built by coal, but it's also been burned by coal. "Coal is booming right now, but we have to look at the future," says Grundy Town Manager Chuck Crabtree. "In the 1970s nobody planned ahead."

At least the coal jobs resurrected by the current demand will buy time for the town to develop its retail and for the new universities to reach capacity, Crabtree thinks. New retail businesses plus the higher education institutions surely will bring new people and help attract new employers.

During the coal boom, everybody shopped downtown Grundy. In 1979, the county was home to about 38,000 people with a personal income that almost met the state and national averages. But a decade later, the population had fallen to 32,000, and the per-capita personal income slid to 66 percent of the state average and 70 percent of the national average. By 1999, the 27,500 people brought in 63 percent of the state average and 66 percent of the national average. Its 2004 population of about 25,143 again was at 63 percent of the state average and 69 percent of the national average. And almost 6,000 people in the county live below the federal poverty level, about 23 percent, compared with 10 percent statewide and 16 percent in Appalachian Virginia, according to 2000 data.

"We have gone from nearly 40,000 people down to about 25,000 people; you've got to remember there were no jobs," Crabtree says. The largest employers are the school system, the government, and the hospital. "For a young person to get a job he's going to have to go out and weed eat somebody's yard."

April 1977

Flora Rush did something most kids don't do anymore; she moved back to Grundy after college in 1978. She had just finished at Virginia Tech. Rush is an extension agent today with the Virginia Cooperative Extension and works with entrepreneurs. She returned, she says, because of the community spirit that prevailed during the hard times after the flood. "The people made the town, the people and the coal companies working together."

In April 1977, Grundy got the worst — the 100-year "flood event." Sixteen inches of rain in three days filled creeks and rivers and sent it all down to Grundy. Before the river crested at 22 feet above flood stage, five feet of water stood on Main Street. That flood killed three people and slammed 228 homes and businesses to the tune of $15 million.

Roger Powers, who is Grundy's mayor and owns several businesses, remembers the flood of 1977; his grandfather owned Jackson Hardware, located in the 1930s-era downtown. "I don't think the town ever recovered; several people just didn't bother to fix up their buildings and left mud in the basements," he says.

The flood of 1977 wasn't the last flood, but it was the one people still talk about. (People talk about the 2002 flood for different reasons. It inundated nearby Hurley, Va., and muddied the county's reputation, as 16 men were convicted in Operation Big Coon Dog, a bribery scheme involving federal disaster funds.)

It has taken almost 30 years, but Grundy's flood protection is under way. Authorized 25 years ago by special legislation covering flood-prone counties in the coalfields, Grundy's solution is costly. The Corps investigated floodwalls, diversion tunnels, and upstream reservoirs before deciding to move the town. But the town didn't have the required 25 percent cost share.

The Virginia Department of Transportation was also looking to upgrade U.S. 460 through Grundy and continue it on to the Kentucky border. The town, the Corps, and VDOT

Vital Stats

Buchanan County, Va. – Home of Grundy

Population: 25,143 (estimated 2004) **Median household income**: $22,213 (1999 dollars)
Median age: 38.8 **Single-family owner-occupied homes, median value**: $55,400

SOURCES: U.S. Census; Bureau of Economic Analysis came up with this: A levee will run underneath a portion of the new highway, between the Levisa and downtown Grundy. The town was allowed to use VDOT's buyouts of downtown properties as its cost share.

Businesses have either closed or relocated, many to an empty new building owned by the town's Industrial Development Authority, also headed by Crabtree. Many of the businesses on the redevelopment site will be new to Grundy. The town manager, after countless and fruitless calls, finally flew to Bentonville, Ark., to sell Grundy to Wal-Mart. It happened that founder Sam Walton's son was at the meeting when Crabtree pitched Grundy to the executives. The younger Walton remembered Grundy because he and his father had investigated the town three times looking for possible sites.

It was a done deal once they found a private developer. The town will own the site and lease it to the developer for 99 years. The infrastructure includes 9,600 feet of fiber-optic conduit. "We have another chain coming, and other stores to be announced here shortly; these are people who we could never, ever get to look at us before," Crabtree says. Wal-Mart will anchor the new town and perch on a public parking garage. "Before we got Wal-Mart we could not give anything in this town away," he says of his ardent pursuit of the retailer. "They are successful, they know where the markets are, and where they go, retailers follow them."

Appalachian Economics: Education

In a county where only about half, 53 percent, of adults have high school diplomas and a sliver, 8 percent, hold bachelor's degrees, compared with 82 percent and 30 percent, respectively, statewide, education tops everybody's wish list. Eddie Hannah is the director of the Education Opportunity Center at Southwest Virginia Community College to help adults get to college to break the cycle of poverty. The mini-boom in coal is making his job harder. "Now people are saying, 'I can go back into the coal mine.'" Coal trucks once again travel the highway, and coal-loaded rail cars wait by the river. Chunks of coal spew from a chute at the Apollo Mine in nearby Maxie.

But, over the longer term, higher incomes are associated with education. Hannah notes that it takes a smarter worker today, even in the coal mines, where the skill levels required have increased. Education can raise standards of living and draw jobs.

The Appalachian School of Law in Grundy, Va., trains lawyers primarily for solo and midsize practices in the Appalachian region. The school in June was fully accredited by the American Bar Association.

PHOTOGRAPHY: BETTY JOYCE NASH

The county snatched up a law school waiting to happen in nearby Wise County, which had backed off of the plan, and admitted its first students in 1997. Buoyed by the law school's success, the Appalachian School of Pharmacy opened in the fall of 2005 with 69 students, to meet a growing need for pharmacists. (States in the Fifth District with the highest demand for pharmacists include North Carolina, West Virginia, Virginia, and the District of Columbia, according to the Pharmacy Manpower Project.)

Both colleges are private and nonprofit. Plans call for the pharmacy school to add a forensics department. The school has gotten a variety of public and private money from the Virginia Coalfield Economic Development Authority (VCEDA), the county Industrial Development Authority, and private money to renovate another old school building, just like the law school.

"We've already created some jobs; when we max out with 200 students we will have created 60-some full-time and some part-time jobs," board Chairman Frank Kilgore says. Direct spending once the schools reach capacity could reach about $5.5 million by 2009, according to a study by the Southwest Virginia Office of the Weldon Cooper Center for Public Service of the University of Virginia. That includes retail sales, some taxes, and visitors to the school, among other expenditures.

Economic development projects are as scarce as flat land in this region for obvious reasons, and so when the Buchanan County Board of Supervisors asked Kilgore, its attorney, to find projects, he suggested the law school. The VCEDA, funded by severance taxes, has given $1.6 million to the law school and $3.3 million to the pharmacy school, according to Jonathan Belcher of VCEDA. "The model of private education has made a lot of sense. It's a niche market there that is really working well," says Belcher. "It's not something we could see work elsewhere."

The law school has tapped into old wealth, including old coal wealth. Its endowment is at $3.5 million, says President Lucius Ellsworth. "We have had good support from a number of benefactors from the beginning — our first campaign goal of $7 million raised $11 million." Most donors have ties to the county.

The Appalachian School of Law has attracted well-paid faculty members from top schools such as Harvard. In 2002, a dean, a professor, and a student were murdered by a disgruntled student. Ironically, the crime led to publicity and actually increased the

continued on page 40

bypassing BANKS

Prosper aims to directly link individual borrowers with lenders using an eBay-type model. But will it work?

BY AARON STEELMAN

You have just started a small business. You have used most of your savings to get the company off the ground. But you need a little more money to really get things going. Where do you go? For decades, people turned either to family or friends or to a commercial bank. But each of those options had downsides. Borrowing from loved ones can be fraught with problems, leading to ended relationships should the business turn sour. And many people perceive, rightly or wrongly, that borrowing from banks can be a real hassle — there's too much paperwork and, at the end of the day, the little guy is unlikely to get the loan anyway. So why bother?

Filling this niche in the marketplace is a new Web site: Prosper.com. Launched in February 2006, Prosper wants to directly link borrowers with lenders — that is, individuals who need money with individuals who have some to lend. Chris Larsen, who co-founded the online loan broker E-Loan, started drawing up plans for Prosper a few years ago. At the time, he thought "the ultimate goal would be to have an eBay for money." Now about five months since Prosper's launch, it's possible to draw some tentative conclusions about how the site has been working and what the future may hold for it.

Nuts and Bolts

Let's say you want to borrow $5,000. How do you go about it on Prosper? The first thing you do is provide some standard information to Prosper, which the company will use to assign you a credit score (in conjunction with Experian, one of the largest credit rating agencies). Credit scores range from AA (the highest) down to HR (high risk), the lowest. There is also a NC (no credit) ranking. After you have been assigned a credit ranking, you will fill out a profile, describing why you want the money and for what purposes you intend to use it. Finally, you will state the maximum interest rate you are willing to pay.

Lenders will then bid on your loan. On rare occasions, one lender may decide to fund your entire loan request. But more frequently, many people will bid on the loan, so that you may receive, say, a hundred $50 bids from different lenders. This allows lenders to diversify their portfolios. Should your loan become fully funded, you will pay Prosper a 1 percent origination fee. In this case, $50. In addition, you will pay the interest on your loan to all of the people who agree to lend you money. All loans are extended on a three-year basis, and they are only made if you receive the full amount of money you requested. For instance, if your loan attracts only $4,500 in bids, your loan request has failed and you have to go back to the drawing board.

How about from the lender's side? Any individual can lend up to $25,000 at one time. The same is true with borrowers: The maximum that any individual can request is $25,000. (Some states do not permit loans this large. Likewise, some states set caps on the amount of interest that can be charged. For instance, in states like Pennsylvania, where the interest rate ceiling is relatively low, you see very few loans being made.) In order to bid on a loan on Prosper, you first must transfer money to the company, which will handle the transactions for you. If you successfully bid on a loan, Prosper will assess a 0.5 percent annual servicing fee. Just as with any other type of loan, there is a chance that borrowers will default. Should this be the case, Prosper will contract with a collection agency to try to recoup your money.

The basic setup on Prosper is in some ways similar to eBay but has some important distinctions. For instance, eBay is a one-to-one auction platform. Someone puts up a good for sale and it goes to the single highest bidder. Larsen says that he didn't think that model would "work with money. You had to have a one-to-many auction system, where multiple lenders provide money to a single borrower." Also, as mentioned, Prosper handles all the administration, effectively

COURTESY OF PROSPER.COM

acting as the middleman. That has some benefits, Larsen says. "First, the borrower and lender never have to worry once they make a match. Second, the borrower and lender can remain completely anonymous if they choose. Third, we have the complete data about what actually happens so we can reliably create an objective ranking system."

The Group System

On eBay, feedback plays a crucial role in determining bids. Sellers with poor feedback ratings often receive lower prices for their items. But the feedback is subjective. It is based on the buyer's perception of how closely the item matched the description and how quickly it was sent. With Prosper, the ratings seem much more clear-cut — you either paid your loan on time or you didn't.

Eventually, Larsen hopes that individuals with particularly good records will pool themselves into groups. For instance, you might get a number of real estate investors with AA or A credit rankings who will form a group, signaling to potential lenders that they are good risks. Once that reputation is established, members will have a strong incentive to monitor the behavior of other members, lest they damage the reputation of the group and drive up the loan rates that others receive. This type of community-based peer pressure, Larsen hopes, will help Prosper, well, prosper.

"The big dilemma is how to get diversification and familiarity working together. That's how the group system came in," says Larsen. "Even though the money is coming from a broad set of lenders, we want the borrowers to always feel a strong sense of obligation to the community to which they belong."

Jim Bruene, the editor of Online Banking Report, who did a study of Prosper about a month following its opening, concurs. "For this thing to work, there has to be some information that goes beyond the credit score that lenders can rely on. I think Prosper is hoping that the group system does that. The problem is the groups don't really have much of a track record now, but over time, groups could become large enough and credibly signal to lenders that their members are good credit risks."

Myron McCrensky is a group leader. In other words, he started and organizes one of Prosper's groups, in this case the "Business Owners Cooperative." McCrensky, who spent most of his career working for the federal government, retired about seven years ago and started a pet-care business in Alexandria, Va. He created an account on Prosper about a month after the site opened. He initially intended to serve as a lender, but he quickly decided that he wanted to start a group for small business owners in Virginia. Eventually, though, he decided that he should expand the geographic range of members and now accepts applications from around the country. For his efforts as group leader, he receives a one-time payment when a member's loan gets funded. In addition, when loan payments are made, he receives a small amount of income that he can share with other members of his group. McCrensky currently divides those proceeds on a 50-50 basis with the 120 or so members of his group.

McCrensky says he is fairly open when considering applications. But he has established a stricter set of guidelines recently. "I think the big fear that people have about Prosper right now is that it's still possible for someone who wants to defraud others to accomplish that. There is still a lot of good faith that has to go into making a loan." So in recent months, he has rejected a few people. "There was one guy last week who had belonged to another group and the loan description he wrote — why he needed the money — began to change from one posting to another and that, naturally, made me a bit suspicious."

His experience with Prosper has made him skeptical about how well the group system will actually work in transmitting information to potential borrowers. The reason: The monitoring costs for group leaders can be prohibitively high, if all you are interested in doing is turning a profit. "I think that I am fairly hands-on, but it takes a lot of work to adequately screen all of your members, and you are not going to be perfect. And for what a group leader gets in terms of financial rewards, the money is pretty nominal. It's really a labor of love more than anything." The one way this can work, McCrensky thinks, is for group leaders to take on a lot of members, increasing the number of loans and, thus, fees received. "But, of course, that also increases your monitoring costs. So it's not clear to me in which direction the group system will move."

Distribution of Loans on Prosper.com

Borrower's Credit Grade	Average Interest Rate	Average Loan Amount	Successful Loan Account	Percentage Successful
AA	9.37	$7,142	174 of 654	27
A	10.88	$6,859	161 of 611	26
B	13.96	$6,653	206 of 804	26
C	16.81	$4,982	328 of 1,508	22
D	20.64	$3,893	287 of 2,106	14
E	23.55	$3,496	310 of 4,307	7
HR	25.13	$2,504	333 of 12,937	3
NC	21.41	$2,322	31 of 448	7

NOTE: Data last updated on July 10, 2006
SOURCE: www.savagenumber.com

Who Wants to Borrow and Who Gets Funded?

Intuitively, it makes sense why a person with a D or E credit rating might head to Prosper instead of his community bank. Indeed, many of these people are not interested in getting small businesses off the ground. Instead, they are looking to make consumer purchases, such as home improvements or travel plans. A large share are trying to borrow to finance other debt they have accumulated, mostly high-interest credit card debt.

But what about people with AA or A ratings? "At the beginning, I think there were some good deals out there. There was some seed money and you could get a 6 or 7 percent loan, which was very competitive. But now you go to Prosper and you see the loans don't appear to be as competitive — they are 10, 11, or 12 percent," says Bruene. "So now the question is: Looking at it rationally, why would you choose to get one of these loans instead of taking a good credit card deal?"

Overall, the number of loans approved is relatively small. This is true even for people with very good credit ratings. As you drop down to people with E and HR ratings, the share approved becomes miniscule — and this is off a pretty big base. For instance, the number of loans requested by people with HR ratings is more than every credit rating combined. (Larsen says that at any one time there are about 1,000 loan listings on Prosper. The listings last for 10 days, so there are always some that are ending and others that are beginning.)

So who is taking a shot on the people looking for money on Prosper? It runs the gamut. There are some people who loan only to those with AA and A credit ratings. They figure that they are going to get a relatively small return on their money, but they like the safety of lending to people with good track records. Meanwhile, some lenders "are willing to put up a lot of $50 loans to relatively high risk people at high interest rates, hoping that, say, 80 percent of the people wind up making good on their payments," McCrensky says.

Finally, there are some people who see their activity as something akin to providing a public good. They may serve as both borrowers and lenders. They borrow money through Prosper and then wind up loaning it out to activities they deem worthwhile. Larsen says that he remembers "one person with an AA credit score who was borrowing on Prosper and using the loan proceeds for microlending in Africa." Of course, there are other people who serve as both borrower and lender with strictly pecuniary interests in mind. They believe they can effectively use Prosper as an arbitrage opportunity: borrow at, say, 10 percent and then loan at 20 percent, pocketing the difference.

When asked if this type of activity violates the community standards of Prosper, Larsen is agnostic. "I have definitely seen that. I don't endorse that. But I also don't want to prohibit it," he says. "We don't want to squeeze too hard by saying this type of borrowing is OK, but this type isn't. We have looked at social networking sites and those that have failed have usually squeezed too hard early on. The ones that have thrived have operated on the assumption that most users will act responsibly and have made systems that filter out the exceptions."

If there is one guiding principle for Larsen and his colleagues it is this: "We have to make sure that the market is safe, secure, and transparent." That, more than anything else, they believe, will determine Prosper's fate.

A Missing Market?

In a world with an extremely well-developed banking system why is Prosper necessary? What type of market opportunities currently exist that Prosper can exploit? At the most basic level, Larsen argues, there are still large information asymmetries. "I was involved in the effort to increase the transparency of credit scores. But for a long time the lending side had all of this information on potential borrowers, while on the other side everyone had a score, but you couldn't find out what it was," he says. "One side having fundamentally more knowledge than the other can create real inefficiencies. And I think that's still true to some extent today."

In addition, Larsen thinks that one side of the market — individual lenders — currently has no place to go. "It always seemed to us the element that was missing in consumer finance markets was that people with a little bit of money to lend really didn't have access to directly compete with banks or with payday lenders. We thought Prosper was one way to remedy that. People who saw an opportunity could now compete in the capital markets."

Consumer psychology — at least among some segments of the population — may also make Prosper a viable business opportunity. "For instance, some people just inherently don't want to work with banks, others may have had bad experiences with banks, and others may believe that the paperwork needed to do business with a bank is too burdensome, especially if they don't have standard W-2 forms to show to loan officers," Bruene says. Some of these people might qualify for loans at relatively good terms through banks, he says. "But they just don't like those institutions and instead want to borrow in a way that has more of a community feel to it. So it's like a virtual credit union, in a sense."

Which gets us to the personal aspect of Prosper. All borrowers are given the opportunity to compile a personal history, explaining possible credit problems in their past, why they want the money now, and what good they will do with it. Many borrowers feel this is information that many banks simply ignore — but that may be vital in assessing their creditworthiness. Apparently, many lenders agree.

"The lenders are no fools," says McCrensky. "They are trying to acquire every piece of information available to them. Borrowers have to convince lenders that they are a good risk and have a good business plan. They have to be able to write seriously and provide a compelling case. Otherwise, they probably won't get funded."

The amount of personal information provided by lenders has surprised Larsen. He expected more people to go on the site anonymously, simply listing their credit grade and the amount of money they would like to borrow. Instead, most people provide detailed stories and even photos. "And I think those people are probably getting better bids," says Larsen.

How long this will last, though, is unclear, says Bruene. Already, there have been a large number of blogs that have grown up around Prosper. Many of these blogs have analyzed which loan solicitations have been most successful and offer advice on how to copy those approaches. "So when that information becomes widespread, lenders may realize they are getting less meaningful data from the profiles and discount that in the future," says Bruene. "In a few more months, are those descriptions going to have any value anymore?"

Getting back to the larger picture, Bruene has his doubts about how successful Prosper will be. "In total, this is not a market that is underserved. There may be some pockets that are underserved — in fact, I'm sure there are — but whether Prosper can find them and provide adequate service is hard to say." **RF**

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Meet the New Grundy

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number of applications. In 2006, there were 1,500 applications for 145 spaces.

Students who live and shop nearby add to the liveliness of the community and spend money, for example, at the Internet café across the street. A few students on a Sunday afternoon play a quick football game out front. Some students stay in the area after graduation, and many settle in the Appalachian region.

"I think the idea of the schools is that the students will have a higher propensity to remain in the region; it's increasing the human capital," says Brad Mills of Virginia Tech. "The idea is that you create human capital, and you'll get an adequate skilled labor market. Jobs do tend to cluster around people … there definitely is evidence of that."

The school aims to train lawyers for a solo or midsize practice, and specializes in community service. (For example, the students work in elementary schools teaching conflict resolution.) Each law class starts with about 140 students; about 100 stick around to finish. Seventy percent of the students come from the local five-state Appalachian area, with 28 states represented at the school.

Beth Maurer, a third-year student from Asheville, N.C., chose the school because it's small and personal, like her undergraduate college in West Virginia. Plus she enjoys outdoor recreation, and there's plenty of that, especially at the Breaks Interstate Park on the Kentucky border. (There are also few distractions to studying, she adds.)

Associate Dean Stewart Harris, like many faculty members, sought the school because of the region and the mission; he and his family moved from the University of Florida, where he taught law. "This is really an unusual school, focused as it is on community service, community leadership," he notes. "We've been lucky in recruiting top people." There's also an emphasis on arbitration and mediation, a growing need in legal circles.

The University of Appalachia's School of Pharmacy also thinks regionally, although its applicant pool is rising. "We've got applicants from 30 states in this second go-round," says Kilgore. The school's mission is to improve health care in Appalachia so those applicants get priority. "You could fill your class with California applicants if you wanted to, but that wouldn't help your region."

Roger Powers, the mayor, says the town's population is slowly growing, and that can only accelerate with the town reconstruction project. The schools, the flood control project, and the new town are all finally coming together. The law school alone probably brought in 39 or 40 jobs, plus students. "A lot of people I know say, 'A school in Grundy?' Look at Blacksburg [home to Virginia Tech]," he says. In the 1950s, it was just another small Appalachian community.

Grundy's sprucing up. "It's like the whole town is getting a facelift," Flora Rush says.

After all, they hope they've got company coming. **RF**

On the Waterfront

BY BETTY JOYCE NASH

Two million immigrants entered the United States via Baltimore in the 19th century

It's 8 a.m. at Fells Point in Baltimore, and people are washing windows or unloading beer at taverns in the salty breeze. If it weren't for rehabbed waterfront warehouses and homes selling for upward of $300,000, it could be 1817. Back then, though, the waterfront reeked of waste and runoff. Also missing from the 2006 tableau are sailing ships with cargoes of immigrants from war-weary Europe or famished Ireland, some with money in hand to buy farmland, others redemptioners whose time would be sold for the price of passage.

Those bakers, butchers, iron workers, cabinetmakers, laborers, retailers, shipbuilders, and financiers built Baltimore, its turnpikes, bridges, the B&O Railroad, and many, many houses. The city grew from 13,503 people in 1790 to 212,418 in 1860 to become the nation's third largest, behind New York City and Philadelphia. A quarter of Baltimore's residents that year were foreign born, among them 15,536 Irish and 32,613 German, according to history professor Dean Esslinger of Towson University. He has written of Baltimore's little-known immigration history.

They were drawn by the same forces that have always drawn immigrants — the opportunity to work and improve their lots in life. Baltimore's influx never reached the likes of Ellis Island in New York Harbor, or its predecessor Castle Garden. But by some estimates, as many as 2 million immigrants arrived through Fells Point and later Locust Point between the late 18th century and World War I, forever branding the city's character.

The earliest immigrants after the English were primarily Irish and German. Starving Irish, reports one author, "arrived at Thompson's Sign of the Harp on Ann Street near Thames in 1847." Later came Italians and Russians, Ukrainians and Poles, Greeks and Czechs, among others. Immigration effects reverberated, producing, for example, insurance based on ethnic efforts to protect the newcomers, or the German concept of graduate school, unknown in the United States before the 19th century.

Baltimore still absorbs immigrants. The old ethnic neighborhoods, with a church on every block, festivals, and restaurants, exist alongside Spanish Town, the most active Hispanic enclave in the state, says Ellen von Karajan, executive director of the Preservation Society in Fells Point. Among other projects, she is working to save from the wrecking ball a Polish sanctuary on the second floor of the 1880s-era St. Stanislaus church. "Baltimore has always been hospitable to immigrants and still is," she says. "Immigrants are always city builders. That is still going on."

West by Water

The Chesapeake Bay snakes inland from the Atlantic to Baltimore, the farthest west that immigrants could venture via ship, farther west than Philadelphia, farther west than Charleston. The point of Fells Point

Immigrants wait for a train at the B&O Baltimore facilities at the Locust Point, Pier 9 or "Immigrant Pier."

PHOTOGRAPHY: FROM THE COLLECTIONS OF THE B&O RAILROAD MUSEUM hooks out into the Bay; the land was settled by the Fells family, Quakers from England.

Early on, the planter economy needed only river landings to load supplies and product. But as the first Germans drifted south from Pennsylvania to western Maryland, they brought wheat farming, establishing mills near the rivers and streams that emptied into the Chesapeake. Historian Dieter Cunz wrote: "The grain farms of the west demanded an intermediary, a port of deposit, an urban center." And demand for grain in the sugar colonies of the West Indies was growing.

By about 1800, there were a dozen grain mills on a 14-mile stream on the nearby Jones Falls, a stream that stretches from northwest Baltimore County to the harbor. Converted later to textiles, there were some 350 mills by the mid-19th century. Some made canvas for the U.S. Navy sailing ships, including the famous *Constellation*. Baltimore gained from the War of 1812, and the city was feeling its economic oats. Fells Point had become famous for the Baltimore Clipper ships, many of which were privatized for great profit during the war. (Some 126 privateers used Baltimore Harbor during that war, seizing more than 500 British ships. Many investors made fortunes on cargoes of wheat or flour at wartime prices.)

Besides the growing maritime industries of shipbuilding and sailcloth-making, there were clothing manufacturers. The spate of wars also had stoked the chemical industry, including powder mills. Government pamphlets in boom times advertised Maryland in Western Europe to attract workers.

The National Road beckoned immigrants to Baltimore. The road was completed from the coast to the Ohio River at Wheeling in 1818, and immigrants flocked to Baltimore knowing the path inland was cleared.

"From only a few hundred immigrants per year, the total of newcomers climbed to nearly two thousand by the end of the decade. In 1828, Baltimore further improved its position by establishing the nation's first commercial steam railroad," writes Esslinger. Many headed for the Midwest or even farther west. Before rails became reality, canals to move goods inland were under construction, providing work. By 1867, the B&O Railroad joined with the North German Lloyd Line and offered one ticket from Bremerhaven, Germany, to Baltimore and beyond.

"Baltimore was the favorite port for Europeans and especially for Germans during these decades, partly because of the tobacco trade, partly because of the close relations that existed between Baltimore and Bremen," writes Cunz in his 1948 book *The Maryland Germans*. Germans had a taste for American tobacco. Ships loaded with tobacco sailed down the Chesapeake and returned "down the mouth of the Weser packed full of German emigrants."

As early as 1783 a German Society had been founded to care for the mistreated and indigent. Immigration dwindled during the Napoleonic wars, but by 1817, the society was revived as immigration gathered steam and redemptioners suffered abuse once more.

Here's an often-told story: A ship anchored in the Bay in a February freeze in 1817 offered passengers' labor to would-be buyers with these words: "These people have been fifteen weeks on board and are short of provision. Upon making the Capes, their bedding having become filthy, was thrown overboard. They are now actually perishing from the cold and want of provision." In a move that speaks to how influential the German Society had become, it pressured the state Legislature to pass laws drawn up by the society to supervise the redemption system. Later, the society collected $1.50 from each immigrant to support the poor; the Hibernian Society (Irish) did likewise.

Ethnic societies also established employment bureaus, among other services. For example, the German Society's Intelligence Bureau formed in 1845 and found jobs for 3,500 immigrants by 1846. "Such effort and success could only have bolstered Baltimore's reputation as a favorable port of entry when immigrants wrote home to their friends and relatives," Esslinger writes.

Many newcomers — some estimate half — did stay to ply trades or work in construction jobs in growing Baltimore, especially in the transportation industry. Major turnpike, rail, and canal projects, under way to keep goods (and money) circulating, required strong backs. For immigrants in bustling Baltimore, there was construction galore on houses, streets, bridges, and wharves. Esslinger notes that some 2,000 houses a year were going up in Baltimore by mid-century.

With the multi-ethnic labor force, though, tension sometimes erupted over competition for jobs. For example, Irish workers attacked German-built sections of the C&O Canal in 1839, according to reports. Federal troops shot rioters, razed worker shanties, and took prisoners. Wages dropped to 87.5 cents a day from $1.25, according to *Baltimore: The Building of an American City* by Sherry Olson. Free black workers really felt the brunt of depressed wages as white immigrants took unskilled jobs as caulkers, or coal and brick yard workers. In some yards, the black caulkers' $1.75 per day jobs went to whites who worked for 50 cents less.

By the Civil War, immigration and Baltimore's economy had slowed. "Its only growth sectors were closely tied to its role as a strategic transportation center," according to Olson. The Union plopped troops on Baltimore's Federal Hill to ensure control of the vital harbor.

Some businesses prospered, however, Olson wrote. "William Wilkens was another enterprising German immigrant of the '40s. In the '50s, he had sent agents to the battlefields of the Crimea, and now he followed the Army of the Potomac to Richmond and Petersburg, to clip the tails from dead horses. At his curled hair factory on the Frederick Road, horsehair and hog bristles were spread out like hay over the hillsides to dry."

The German community was active politically, and many opposed slavery. German newspapers editorialized against the practice, making them targets of attacks by nativists and Southern sympathizers in this border town.

From Bremerhaven to Baltimore and Beyond

After the Civil War, Baltimore's economy rebounded. The steam age accelerated manufacturing and immigration, too, as it speeded transatlantic service and reliability. With better connections, Baltimore became even more attractive to German immigrants. In September 1865, Olson reports that 18 first-class steamers made regular trips to Havana and Liverpool, the latter city being one of the hubs of the Industrial Revolution. In 1867, the B&O Railroad and the North German Lloyd Line teamed up to offer immigrants one ticket that would take them from Bremerhaven into the prairie states via steamer and B&O passenger train. More than 10,000 immigrants entered through the port in 1867 compared with fewer than 4,000 in the previous year, according to Esslinger.

But a casualty of the steamships was Fells Point, as they docked at Locust Point. Fells Point's shipyards folded and were replaced by the lumber, canning, and packing industries, all of which needed workers.

Most immigrants coming through Baltimore via the Lloyd's Line in the immediate post-war years hailed from somewhere in what was then the Austro-Hungarian empire, including modern-day Germany. For example, 12,000 arrived in 1868.

And so by the 1870s, Baltimore exuded a German flavor and feeling. Earlier generations of German immigrants had become entrenched, with four German American banks, factories, breweries, German newspapers, churches, clubs, halls, and opera houses, as well as German housing developments. And Germans ran their own schools, many connected with churches. "But the success of the German educational institutions ironically produced their decline: by popular demand, the city in 1872 added to its public schools a network of 'German-English' schools," Cunz wrote.

The German American Society in Baltimore is active today, with many descendents carrying vivid memories of forbearers' tales. Ted Potthast grew up in the furniture-making business founded by his grandfather and three great uncles, Potthast Brothers.

The first brother, Vincent, arrived in Baltimore on the Lloyd's Line in 1892, and Potthast relates the family legend: Vincent got in a bar fight in his hometown and, thinking he had dealt a fatal blow, fled upriver to Bremerhaven. Even as he was preparing to depart his native land, friends arrived to report the victim simply knocked out. Vincent emigrated anyway. "He was a cabinetmaker, and there was plenty of work," Potthast says. Germany was in a depression and work there was scarce. Three brothers joined Vincent and all worked at the Knabe factory, a building of seven stories that covered a city block, where the Orioles play baseball today, Potthast says.

"In those days, the only entertainment was music and every family had a piano, so pianos were selling like hotcakes," he says. The brothers worked in their off hours building their own furniture business, replicating fine Colonial furniture. Potthast Brothers closed in 1975. Potthast Brothers furniture pieces remain in museums and private collections nationwide.

Immigration through Baltimore was largely managed through private enterprise. For example, between 1868 and 1914 the steamship companies contracted with a woman named Mrs. Koether to run a boarding house on Locust Point. For each immigrant she fed and housed, she received 75 cents a day, according to Esslinger. The boarding house did not inspect passengers, as stations in New York did, because officials boarded ships at the mouth of the bay and examined passengers and papers before arrival in Baltimore.

But by 1913, with immigrants averaging some 40,000 a year, the federal government constructed three buildings to process immigrants. World War I shut down immigration, and Germans were viewed with special suspicion, virtually ending Baltimore's role in reception. The structures became military hospitals.

All but forgotten, Baltimore immigration deserves recognition, according to people who are raising money for a memorial. But the necessary $4.2 million is hard to come by.

Brigitte Fessenden is working on the project and is also president of the German Society of Maryland. "This memorial will not only honor and commemorate those who came before us, but also today's immigrants whose dreams and aspirations are probably not so much different from those of their predecessors," she notes. **RF**

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INTERVIEW

Guillermo Calvo

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

Why are some countries rich and others poor? It's perhaps the most important question in all of economics. Although many economists have tried to answer it and much progress has been made, there are still many issues that are unclear. Latin America provides a good case study. While a few countries, such as Chile, have experienced steady rates of economic growth for many years, the region as a whole still lags well behind the developed world in standards of living. Moreover, other countries have continued to suffer large financial shocks, which have introduced volatility in their economic and political institutions.

Guillermo Calvo has spent much of his career looking at problems facing developing countries, first as an academic and later as a policymaker. Calvo, who formerly held faculty positions at Columbia University and the University of Pennsylvania, now teaches at the University of Maryland and has written several influential papers on a wide range of topics in macroeconomics. From 1988 to 1994, he was a senior adviser in the research department at the International Monetary Fund (IMF). During his time at the IMF, he visited several countries of the former Soviet bloc, examining what could be done to help ease their transition to more market-oriented systems. Since 2001, Calvo, a native of Argentina, has served as chief economist at the Inter-American Development Bank (IDB), where his focus has largely been on Latin America.

In addition to his teaching and policymaking responsibilities, Calvo is president of the International Economic Association.

Aaron Steelman interviewed Calvo at the IDB on May 31, 2006.

PHOTOGRAPHY: LISA HELFERT

RF: This is a very broad question, but I think it will help lay a foundation for the rest of the discussion. How do developing economies differ from developed economies? Are there some attributes of the latter that are typically lacking in the former?

Calvo: You could make a very long list of differences, but the ones that I think are most important and that have captured my attention have to do with the financial sector. There is often market incompleteness, which means that many countries have to borrow in terms of foreign exchange denominated bonds. There is also imperfection with domestic capital markets. In particular, there is often poor protection of credit, which makes people suspicious that there will be a devaluation or confiscation. That can lead to bank runs. So these two things seem to play a central role in developing countries.

Now, one might wonder whether the institutions are so different from developed countries or whether the shocks are different, because the relative price changes are much wider? If the United States were subject to those kind of shocks, perhaps there would be the same type of political pressure that we see in developing countries, and that would affect the structure of institutions. It's very difficult to tell.

RF: You have argued that there is no one correct choice of exchange rate regimes for developing countries. Could you please discuss why that choice should depend, at least in part, on the characteristics of a country's economy?

Calvo: Consider heavily dollarized economies. It's very difficult to have a floating exchange rate because balance sheets are mismatched in terms of currency denomination. Let's take the example of Bolivia. Eighty percent of deposits in the banking sector are denominated in dollars. Those loans go mostly to the private sector, denominated in dollars, and therefore if you were to devalue all of a sudden, you would have a financial crisis. So I think the financial characteristics of an economy play a large role in determining its exchange rate policy.

I think many analysts may overestimate the policy changes occurring in Latin America. I don't see the region, in general, as veering off course.

Now, in general, markets are seriously incomplete in developing countries. You have structures that are not very reliable and you have poorly functioning futures markets. That makes it difficult for the policymaker. It's very risky to float. As a consequence, developing countries, whether they like it or not, tend to peg. I'm not saying that pegging is optimal, but it's a system that, at least in the short run, does not interfere very much with the working of the economy and, thus, it becomes appealing to the policymaker.

There are exceptions to this as you noted in the question. Some developing countries have adopted floating exchange rates with some success. But this is because they have already developed the appropriate financial institutions.

RF: How important is the choice of an exchange rate regime relative to other macroeconomic policy choices?

Calvo: My answer may sound a bit paradoxical. On the one hand, as I have said, the choice of exchange rate policies is heavily dependent on institutions; it is not much of an *independent* policy variable. On the other hand, it is a very critical variable. For countries to grow, at least for developing countries, exports are key. It's very difficult to find an example where exports are not the driving force. The exchange rate can be thought as of a *bridge* between the domestic and international economy. Exports have to go over that bridge, and if exchange rates are highly volatile and noncredible, coupled with incomplete futures markets, the life of the exporter can be very difficult. That will have negative effects on trade and, consequently, on growth.

RF: The import-substitution model was quite popular in Latin America in the 1960s and 1970s. Why do you think that was the case?

Calvo: It catered to the domestic producers and it also promised to lessen income inequality, which is a big problem in Latin America. So it was popular for those reasons. The period in which those policies were implemented also happened to be a period of relatively high growth for the region. So if you just look at the numbers and don't do any deep analysis, you may reach the conclusion that high growth was a result of import substitution.

By the early 1980s, opinion changed and the conventional wisdom said that the model was exhausted. I'm not so sure that was the case. The region is very sensitive to external credit conditions, and during the early 1980s interest rates were going through the roof. So this led to some very serious problems in Latin America. But the simple-minded analysis concluded that the model was exhausted, just as the simple-minded analysis today says that the "Washington Consensus" is exhausted because it, too, has experienced some problems. Our theory is that there is a strong parallel between the two. While the import-substitution model is not a system that I like, it may be unfair to say that it simply had run its course and failed. It was certainly vulnerable to shocks, to be sure, but any system is vulnerable to shocks.

RF: You mentioned that income distribution is a problem in Latin America. Could you please elaborate on that? For instance, is it slowing economic growth in the region?

Calvo: The World Bank has done work that shows some evidence of a link between inequality and slower economic growth. I can imagine the mechanism: Inequality causes political tension, which causes politicians to pursue policies that cater to the poor by taxing capital, which induces capital flight, which lowers growth. Eventually, the situation gets so bad that even left-of-center governments change policies and adopt a more market-oriented approach. That works for a while — you get increased growth but income distribution deteriorates again. That's the story and it seems to fit the facts. If it's true, then it's a real trap. It's not clear how you get out of it.

RF: How can policymakers in developing countries effectively signal that they are committed to economic reform?

Calvo: I don't think that there is a formula for that. I think certain devices are useful, such as an independent central bank. But that doesn't mean it's going to be a fail-safe solution because, in the final analysis, it can still be subject to political pressure if the economy becomes very bad. International agreements, such as the Free Trade Area of the Americas (FTAA), can also be useful. They can help establish credibility. But, again, the success of such agreements depends on the political support that you can conjure up at home, both in adopting them and then complying with them.

RF: What is your opinion of central banks in developing countries adopting inflation targets?

Calvo: When developing countries adopt an inflation target it's usually because there is a lack of credibility. So they are forced to stick to a system that is very rigid. That has some benefits, but it also makes it quite difficult to deal with shocks and, unfortunately, developing countries can experience quite crippling shocks. For instance, let's say there is a financial shock and you need to rescue the banking sector. The intense focus on controlling inflation may make that very difficult. So an inflation target could push the central bank toward pursuing policies that are counterproductive and ultimately unsustainable from a political point of view. That's why I cannot be too excited about inflation targets in developing countries.

I should say that I'm also not a big supporter of the United States adopting an inflation target. There have been cases, such as the period immediately following the stock market crash of 1987 and the collapse of Long Term Capital Management in 1998, where the Fed pursued policies that were good for the economy but that would have been difficult to implement had it been committed to a rigid inflation target.

RF: How would you rate Latin America's efforts at greater trade integration and openness?

Calvo: The 1990s was a period of trade liberalization. It's questionable whether that is sustainable. I am not particularly optimistic. My hope was that something like the FTAA would be ratified. Unfortunately, many countries seem to have given up on the FTAA and instead are pursuing bilateral trade agreements with the United States. That's not very tidy. One of the benefits of something like the FTAA would be to open up regional trade. There is not much trade going on between Latin American countries now. So there are some real opportunities that could be exploited even if trade with the United States did not increase substantially. And, in that context, it would be very useful to have a currency union.

Also, it goes beyond just trade. Latin America is a low savings region, and in order to grow you need investment. So if you are low savers, you need to attract foreign capital. That requires creating an attractive environment. I think the FTAA would have helped move the region in that direction.

RF: You mentioned that a currency union would help intra-regional trade. What's your opinion of Latin America adopting a currency union more generally?

Calvo: The jury is still out on how it has worked in Europe. We don't know what is going to happen with Italy or Portugal, for example, where officials have been lax in their enforcement of rules established by the European Commission. I have been a fan of currency unions for some time, but my enthusiasm for them has cooled off recently. I am beginning to see many more potential difficulties with them now.

A currency union requires commitment among the policymakers in the member countries. In a region that has typically had a lot of political instability, politicians are naturally inclined to give high priority to domestic issues. They want to make sure that they are popular at home so that their governments do not come under pressure from competing factions or are toppled. This makes it difficult for many of them to credibly commit to the type of policies that are required by a currency union. For instance, many will be unlikely to hit the fiscal targets if that means they will risk domestic unpopularity.

So I think it is a bit premature for Latin America to adopt a currency union. But this doesn't mean that the region shouldn't begin taking steps toward that goal. For instance, Europe did not adopt its currency union overnight. It took many years, indeed decades, to establish how the system was going to work and then to implement it.

RF: Many South American countries seem to be undergoing an ideological shift. A number of leaders have gained power running on an anti-Washington platform, arguing that their countries should resist the type of "neoliberal" policies favored by many in the develop-

Guillermo Calvo

➤ Present Position

Chief Economist of the Inter-American Development Bank and Distinguished University Professor of Economics at the University of Maryland

➤ Previous Faculty Appointments

University of Pennsylvania (1986-1990) and Columbia University (1973-1986)

➤ Education

Ph.D., Yale University (1974)

➤ Selected Publications

Author or co-author of dozens of papers in such journals as the *American Economic Review*, *Journal of Political Economy*, *Quarterly Journal of Economics*, *Journal of Monetary Economics*, and *Journal of Macroeconomics*

➤ Awards and Offices

President, International Economic Association; Fellow, American Academy of Arts and Sciences; Fellow, Econometric Society; Research Associate, National Bureau of Economic Research

ment community. How widespread is this sentiment? And how large of an obstacle does it pose for economic growth and stability in the region?

Calvo: I would say that it is more talk than action, at least at the macro level. For instance, in Brazil, President Lula said that he would not repay international loans, but now he is making those payments, and implemented a fiscal program that is even tighter than the one agreed with the IMF. There are some exceptions. And in some countries, it is too early to tell whether the rhetoric we have heard will translate to big policy changes. But the majority of countries are generally pursuing sound macroeconomic policies, and I don't anticipate that changing.

Now, it is true that there is a lot of talk in Latin America about the "Washington Consensus" not working, and those voices are joined by some prominent economists here in the United States. My opinion is that the "Washington Consensus" is really a misnomer. It is, for the most part, the "Latin American Consensus" also. Most people agree that the decalogue of policy proposals that are closely associated with it are reasonable and generally should be followed. But it's an incomplete list. For example, it does not adequately address how to reform the financial sector. We need to work on those problems, but that doesn't mean the decalogue is itself bad or counterproductive.

Also, I think it is important to mention the spread of democracy during this period and the role it played. In many parts of Latin America, democracy was a relatively foreign concept. Then all of a sudden, the world opens up, democracies are established, and politicians start making promises to a populace that doesn't understand democratic politics and which takes those promises at face value. So when the decalogue was proposed, some political leaders both at home and abroad perhaps oversold what it would mean for the region. When those things didn't happen — indeed, when there were severe financial crises — the populace became skeptical of liberalization. Unfortunately, it also led to skepticism about democracy. The public associated democracy with economic liberalization — and, in their minds, those things brought instability and financial trouble. That's not how things actually worked, but the timing of events led them to believe it was true.

So I don't want to downplay the opposition that does exist to the "Washington Consensus." But, as I said before, I think that many analysts in the United States may overestimate the policy changes that are occurring in Latin America right now. I don't see the region, in general, as veering off course.

RF: How do you account for some rather dramatic differences in economic performance within the region? For instance, countries like Chile have been relatively stable and grown relatively quickly, while some of its neighbors have experienced significant and persistent problems.

Calvo: Actually, we have a paper comparing Chile with Argentina and how they responded to the crisis of 1998. Chile suffered from that crisis, but the implications for Chile were very different than they were for Argentina. In Argentina, the system shut down almost completely. In Chile, the growth rate went from about 6 percent to zero, but then it bounced back. One of the major reasons has to do with differences in financial systems and institutions. Chile wasn't dollarized, while Argentina was and that caused a whole host of problems.

As for the broader question of Chile's relative success in the years leading up to the 1998 crisis and following it, I think there are a number of factors at work. Chile, perhaps more than the rest of the countries of South America, liberalized its trade policies and generally pursued market-oriented reforms in the 1980s. On balance, these reforms were beneficial to the economy. Also, Chile experienced high rates of productivity growth. We are still uncertain about all the causes of this productivity spurt — some of it can probably be attributed to domestic policies, some of it to positive shocks, such as exogenous technological improvement — but whatever the causes, it's clear that it helped improve growth rates.

RF: Chile has a long history of American-trained economists advising the government. How common is that in other Latin American countries?

Calvo: I would say that is now commonplace. The one exception may be Argentina, where many of the American-trained economists have left the government. Also, the economists who are active often have quite important roles in the policymaking process in Latin America, much more so than in the United States. In addition, I think it is more common for Latin American politicians to cross party lines in seeking out economists for government positions.

RF: What is your opinion of Hernando de Soto's *The Other Path*? What lessons can policymakers in Latin America take from that book?

Calvo: The main lesson is that regulations must be simplified as much as possible in order to encourage the development of the formal sector and, thus, most likely enhance the pace of technical progress. However, I am skeptical that a major overhaul of government regulations will have a major effect in the short or medium term. The reason is that the informal sector strongly relies on tax evasion and, unless you implement a major tax moratorium — accompanied by substantially lowered tax rates —firms are likely not to move to the formal sector, even if all the red tape is eliminated. Moreover, a moratorium is likely to have detrimental moral hazard implications.

RF: Roughly 15 years after the fall of the Soviet bloc, what have we learned about the transition from centrally planned to market economies? For instance, is there an optimal way to sequence reforms?

Calvo: Optimal sequencing of reforms is a very complex issue which transcends economics. My view is that it is essential for politicians to get strong popular support. This enhances the credibility of reforms. Without credibility, even well-designed and good policy reforms may turn out to be counterproductive. This makes it difficult to extrapolate reforms in the Soviet bloc to other regions, for instance, like China. A sudden dismantling of state-owned firms in China, following the Soviet bloc pattern, would seriously impair growth and social cohesion in China.

RF: Debt forgiveness has gotten a lot of attention recently. What is your opinion?

Calvo: I think it raises real problems. It is one thing for the developed world to make transfers to poor countries. If they want to do that, fine. But it's quite another for those countries to make loans to poor countries and then when those countries get in trouble because of bad policies, simply forgive the debt. In those cases, you are simply pretending that you are lending money and, in the process, you are allowing policymakers to behave in a way that is not good for them. It's bad for the country that is making the loan and it's bad for the country that is receiving it. The moral hazard issues here are quite severe and I don't think they have been dealt with adequately.

RF: Could you comment on the "global savings glut" hypothesis and its implications for the path of the U.S. current account?

Calvo: In general, I am sympathetic to that argument. I think it fits the fact well. Now what could be causing it? It's possible that it could be a consequence of some of the crises we had in the 1990s. In particular, those crises might have induced Asian countries to save more, giving them the ability to finance spending in countries like the United States. Could this situation be stable? I think it could be. I think we could go along in this way for quite a while without there being a global crisis. My concern is that if there were a hiccup in the financial markets, it would not be the United States that would be most severely hurt, as some have argued. Rather, I fear that emerging markets would be hit hard. In the eyes of most investors, the United States, despite its current account deficit, is still a very stable, attractive place to put their money. If there were trouble, I think they would turn to the United States as a haven.

RF: How has your academic work helped you as a policy adviser?

Calvo: I think it has been very useful. The analysis we have to do is often very complex and there will be many things that you will not understand fully. But I have gone back time and again to basic macroeconomic principles to develop a framework for looking at the policy questions I encounter. Also, the work that sprang up from the rational expectations revolution has helped me think about problems regarding credibility. Even if I don't take the rational expectations stories verbatim, they provide a very simple but powerful way of understanding how people think about the future and how to structure policy responses. You might not get every detail right, but at least you will be working within a reasonable framework and set of parameters. In contrast, if you do not have a strong grasp of theory, I think you will eventually find yourself adrift.

RF: How would you compare your position now with the Inter-American Development Bank to your previous job at the International Monetary Fund?

Calvo: The two institutions are very different. For instance, the IMF has a much larger staff of macroeconomists, and the politics of the institution were much more difficult to navigate. Also, the events that occurred while I was at the IMF were unique. I was there when the Soviet Union was falling apart. This gave me a chance to travel to Eastern Europe and witness the problems they were facing firsthand. In academia, you are always trying to push your work to the frontiers of the field, but when I was at the IMF I had to get back to basics and deal with very simple but hard questions. For instance, what is the demand for money when prices are not well-defined because of prior across-the-board price controls as in the former Soviet Union? Those type of issues can really focus your mind. That said, for a number of reasons, it was hard to influence the direction of the IMF. Eventually, they did absorb some of the advice that I gave. So the experience was ultimately mutually beneficial, but it was also very tricky.

The IDB focuses on a broader set of questions. It deals with a lot of microeconomic questions — welfare programs, poverty, and so on — while the IMF was much more interested in purely monetary issues. Also, from a personal perspective, the number of macroeconomists is much smaller and, as a result, I have a much greater ability to influence the Bank's approach to macro issues. **RF**

BookReview

The Real Adam Smith

ADAM SMITH'S LOST LEGACY
BY GAVIN KENNEDY
NEW YORK: PALGRAVE MACMILLAN, 2005, 285 PAGES

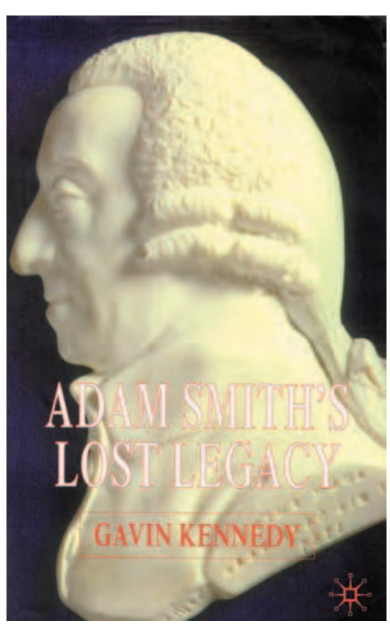
REVIEWED BY THOMAS M. HUMPHREY

Adam Smith was a great economist, arguably the most influential of all time. But this does not mean, as some would have it, that his *Wealth of Nations*, published in 1776, marks the birth of modern political economy. On the contrary, Smith's book and the economics it contains owe much to his own previous work. More important, they draw heavily from the ideas of earlier English, Scottish, and French economists as well as from continental and Scottish philosophers writing in the natural law and historical-empirical traditions.

Nevertheless, it was Smith who, more clearly and systematically than his predecessors, saw the economy as a unified system of coordinated and interdependent markets across which the play of free competition and individual self-interest produces optimal resource allocation without the need for central planning or conscious design. From his *Wealth of Nations* comes an economic growth model in which specialization and division of labor, by spurring productivity and output, act to expand the scope of the market, thus permitting further division of labor and further market expansion in an upward cumulative spiral.

To Smith we owe a price-theoretic analysis in which flows of labor and capital in response to excess or deficient rewards in particular industries cause short-run market prices to converge to their long-run natural equilibrium, or cost-of-production, levels. At this point, rewards are equalized such that no further incentives exist for resources to move and the resulting composition of output just matches that demanded by consumers. His celebrated theory of relative wages attributes wage differentials to agreeableness of work, cost of acquiring skills, regularity of employment, trust and responsibility imposed, and probability of success in different occupations.

But it is to his free trade doctrine that his name is most durably linked. He showed that trade is a positive-sum game in which all parties gain when they buy goods from others more cheaply than they can produce themselves. Smith applied this idea to explode the protectionist fallacies of the Mercantilists and to demonstrate that free trade, by expanding the extent of the market, promotes greater division of labor and growth. These contributions, together with the following additional insights, mark him as an exceptionally perceptive and creative economist: (1) national wealth consists of goods and services rather than the nation's stock of monetary metals; (2) gross domestic product resolves into its distributive-share components of wages, profits, and rent whose sum total is nothing less than aggregate effective demand; and (3) capital formation and technological progress, both of which support division of labor, are vital to growth.



Smith and Laissez Faire

In *Adam Smith's Lost Legacy*, Gavin Kennedy, an economist at Edinburgh Business School, touches on these contributions. But his main concern is to dispel the myth that Smith was a laissez faire zealot who believed that market failure is inconceivable and that government intervention is never needed. Actually, Smith argued that a strict policy of complete laissez faire is warranted only in the ideal state of natural liberty where free competition and perfect factor mobility prevail in all markets. Absent these conditions, market failure can occur making restorative intervention desirable.

Far from glorifying businessmen, Smith saw them, often operating in collaboration with the government, as the source of anticompetitive trade restrictions. He described how rent-seeking businessmen conspire to monopolize markets, restrict output, raise prices, and lower wages. To this end they lobby politicians to grant them exclusive privileges, legal monopolies, protective tariffs, and the like. When the politicians, their class interests more aligned with the lobbyists than with other groups, comply, businessmen are benefited at the expense of the community at large. A government wanting to improve the welfare of all its citizens would break free from the dictates of its business petitioners and remove all restrictive practices. It would act to restore competition, not undermine it.

Kennedy further notes that far from positing a minimum caretaker ("anarchy plus the constable") role for government, Smith charged the state with such basic tasks as providing national defense, justice, enforcement of contracts, security of life and property for its citizens, and elementary education for its poor (albeit on a fee-for-performance basis to induce diligence in teaching, diligence that would be lacking if teachers were paid a fixed stipend regardless of results). Noting that the spillover social benefits of primary schooling justify its public funding, Smith held that higher education, in which the pupils themselves capture all the benefits such that their private incentives already are aligned with the social good, merits no such funding.

The state, according to Smith, also had the duty to construct and maintain public works infrastructure in the form of roads, canals, bridges, tunnels, and harbors when these projects prove too unprofitable for private firms to undertake. Other state functions approved by Smith included the post office, public health, standards of weights and measures, coinage, regulation of the small denomination bank note issue, and imposition of interest rate ceilings so as to remove lenders' incentives to channel credit away from prudent borrowers toward riskier ones (prodigals and spendthrifts) promising potentially higher returns.

Kennedy even finds Smith occasionally approving certain state-granted monopoly privileges such as patents, copyrights, and infant-industry protection in some cases, as well as supporting tariffs levied for retaliation and bargaining purposes, not to mention navigation laws requiring British traders to ship their goods in British vessels, thus assuring the navy a plentiful reserve of sailors. Enough intervention, as one economist mischievously put it, to please a modern socialist.

What Kennedy overlooks, however, is that these were isolated exceptions to laissez faire rather than a wholesale rejection of it. Overall, Smith championed unfettered markets, favoring only interventions that removed market imperfections and promoted free competition. Indeed, Kennedy fails to realize that most of the interventions winning Smith's approval — provision of defense, justice, security of contract, and laws protecting the mobility of labor, and the like — were designed to bolster free markets rather than supplant them. Such reforms removed barriers impeding the efficient functioning of markets and established the necessary framework, institutional and legal, within which laissez faire could flourish.

In general, however, Smith was skeptical of the ability and willingness of the government to implement even these beneficial reforms. This was particularly true of the British government of his time, which he saw as corrupt, incompetent, and biased in favor of merchants and manufacturers. Worse, state officials had the temerity to believe they could do better for private individuals than those individuals, guided by their own self-interest, could do for themselves. Under these conditions, it was hardly surprising, Smith thought, to find intervention creating more monopoly power than it removed. Until the behavior of the government improved, a policy of strict nonintervention, though not theoretically the best, might in practice be the least harmful.

Order without Design

Having dispelled one myth, Kennedy seeks to dispel another, namely that selfishness is the prime motivator of economic behavior in Smith's analysis. Not so, says Kennedy. Simplistic popularizers of Smith confuse selfishness, or sheer unadulterated greed, with enlightened self-interest. Smith did not make that error. Smith realized that purely selfish traders would be doomed to perpetual frustration. Seeking to capture all the gains from exchange for themselves, they would set their selling prices so high and their buying prices so low that no trade would take place.

By contrast, self-interested, or Smithian, traders realize that all parties must find trade advantageous, that is, must share in the gains from exchange, if trade is to occur. Consequently, they willingly settle for a price that leaves them better off given that their trading partners are better off too. They take the welfare of their trading partners into account in their own utility functions. They do the same for people less fortunate than themselves when they form voluntary associations to help the poor. Sympathy with one's fellow man, as Smith pointed out in his *Theory of Moral Sentiments*, published in 1759, is entirely consistent with enlightened self-interest. Sympathy generates demand for justice. And justice is vital to the working of a harmonious, peaceful social order within which economic growth and opportunity for personal advancement thrive.

Such mutual interdependence of individuals operating in society is, Kennedy claims, the essence of Smith's famous analysis of man's propensity to truck, barter, and exchange. Indeed, Kennedy sees in Smith's analysis the prototype of a modern bargaining model, albeit with a difference. Unlike most modern models (for instance, Nobel laureate John Nash's) that depict only the properties of the final equilibrium state, Smith's model traces the dynamic adjustment process by which equilibrium is reached. Smith's bargainers start off by asserting their all-or-nothing bid and ask prices, both of which are unacceptable to the other side. The resulting disappointment triggers an iterative sequence of offers and counteroffers leading to the set of mutually acceptable prices where trade occurs. Cooperation — benefiting others in order to benefit one's self — is the name of the game for Smith's bargainers.

Conclusion

The book contains some surprises. Neither Smith's notion of the division of labor as limited by the extent of the market nor his celebrated pin-factory illustration of that concept originated with him. The former he borrowed from his teacher Francis Hutcheson and the latter he took from Denis Diderot's *Encyclopédie*. Even the invisible hand metaphor dates from Shakespeare's *Macbeth* rather than from the *Wealth of Nations*.

There is some speculation. Kennedy believes that Smith's deliberate, carefully calculated planning of his career proves that he was a judicious decisionmaker rather than the bumbling, absent-minded professor of legend. Again, Kennedy conjectures that Smith, in his last years, never published his *Lectures on Jurisprudence* for fear of appearing unpatriotic. The *Lectures*, championing as they did the kind of democratic principles adopted by the United States, might have been seen as supporting an enemy country that had just recently won its war of independence from Britain. Against Kennedy's conjecture, however, is the fact that Smith in the *Wealth of Nations* already had gone on record as favoring emancipation of the American colonies on the grounds that they as well as the mother country would benefit from such independence.

There also are some omissions. Kennedy says nothing of Smith's monetary theory. And he is silent about the tension between the division of labor and Smith's assumption of small-firm competition that operates as an invisible hand to harmonize self-interest with the common good. The tension arises because division of labor implies increasing returns to scale in production. These scale economies mean that large firms, by permitting greater scope for division of labor, possess a cost advantage over small firms and so drive them from the market, contrary to Smith's assumption. Smith did not address this contradiction, nor did anyone else until Alfred Marshall in 1890, Allyn Young in 1928, and George Stigler in 1951 tried to resolve it in their works on increasing returns, competition, and division of labor.

But these omissions do little to mar a fine book. True, Kennedy says little that scholars Jacob Viner, Andrew Skinner, D. P. O'Brien, Mark Blaug, and others haven't said before. Nevertheless, his book is a welcome addition to the literature. Its numerous, short chapters (some no longer than three or four pages) make it a convenient companion to read simultaneously with the *Theory of Moral Sentiments* and the *Wealth of Nations*. Students and other first-time readers of Smith will want to refer to it as perhaps the most accessible and accurate account available today of what Smith really meant, as opposed to what popularizers, pundits, and politicians claim he meant. Kennedy's book is a healthy antidote to these bogus interpretations. Reading him is one way to retrieve Smith's purloined legacy. **RF**

Thomas M. Humphrey, a retired long-time editor of the Richmond Fed's *Economic Quarterly*, has written extensively on the history of economic thought.

BookNote

COMMON SENSE ECONOMICS: WHAT EVERYONE SHOULD KNOW ABOUT WEALTH AND PROSPERITY

BY JAMES D. GWARTNEY, RICHARD L. STROUP, AND DWIGHT R. LEE

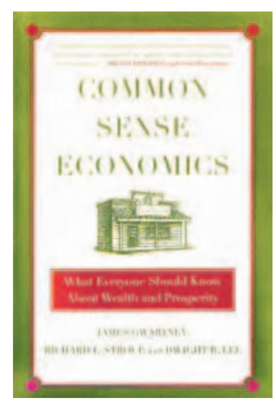
NEW YORK: ST. MARTIN'S PRESS, 2005, 194 PAGES

In general, readers should be wary of books with titles that promise to tell them, and everyone else, what they need to know about a topic. This is an impossible task. First, there is the choice of subject matter. What should be included? We live in a complex world — one in which comprehensive answers to questions are hard to find and new information is constantly being discovered, often making what was true a year ago less true or even wrong today. So where should the authors start? Just as important, where should they end?

Second, different people will open the book with different levels of knowledge. How do you successfully pitch a book to all potential readers? Some will come away thinking the way the information was presented was too basic, while others will think it was too advanced. There is a real danger that, in the attempt to satisfy everyone, you will ultimately satisfy no one.

Still, one can understand the temptation that publishers face when marketing a book. They want people to buy it, after all, and making big claims in the title will persuade some customers to make a purchase. Happily, *Common Sense Economics: What Everyone Should Know about Wealth and Prosperity* is an exception. It actually delivers the goods — well, at least most of them. Readers from various backgrounds will benefit from this book. It does an excellent job of concisely laying out basic economic principles and tying them to real-world applications at both the macro and individual levels.

Gwartney, Stroup, and Lee, economists at Florida State University, Montana State University, and the University of Georgia, respectively, start out by discussing the conceptual building blocks of modern economics, each under a separate header, such as "Incentives Matter" and "Decisions Are Made at the Margin." They then consider how countries become rich, explaining the importance of transparent legal systems, efficient capital markets, and monetary stability, among other things. Next they argue that the government should take a relatively hands-off approach to handling the economy, comparing it to food — both are essential but when consumed excessively can lead to serious problems. Most economists would agree with this general outlook, but some will think the authors are too fervent in their denunciation of state action.



The last section concerns personal finance. "Often, the world of investment advice appears to be totally divorced from the world of economics," they write. "Yet the principles that lead to financial security are largely the same ones underlying a prosperous economy." For instance, individuals, like countries, should discover their comparative advantage and invest in acquiring human capital. Finally, the authors include a helpful glossary of economic terms.

While some readers will find the book disappointing, many more, I believe, will find it a useful guide to better understanding the world around them. If so, the publishers can be forgiven for the hyperbolic title. — Aaron Steelman

District Economic Overview

BY ANDREA HOLMES

The Fifth District economy expanded at a steady pace in the first quarter of 2006. Payroll employment advanced at a healthy clip, and the unemployment rate receded sharply in all District jurisdictions. Brisk growth occurred despite some moderation in activity within services establishments and residential real estate markets. Also encouraging, manufacturers noted a sharp turnaround, with nearly all measures of output strengthening late in the quarter.

> The Fifth District economy expanded at a steady pace in the first quarter of 2006.

Labor Markets on Track

In the first quarter, District payroll employment was 1.8 percent higher than a year earlier, outpacing the 1.5 percent growth rate nationwide. The bulk of the increase could be traced back to stronger activity in the trade, transportation, and utilities sector and in education and health services businesses. Perhaps reflecting gains in those industries, some Fifth District contacts reported offering substantially higher wages to nurses and truck drivers in order to address shortages of qualified applicants in some areas.

The District's unemployment rate edged down to 4.1 percent in the first quarter, despite strong expansion of the civilian labor force. Improvement was apparent across all District states, with only South Carolina posting a jobless rate above the national level of 4.7 percent.

Services Growth Moderates

Momentum in the Fifth District's services sector wound down somewhat as the first quarter drew to a close. Retail establishments in particular noted a deceleration in activity following hefty growth at the beginning of the year. Among retailers, sales were flat at grocery stores and grew less rapidly at big-box establishments, reportedly because higher gasoline prices caused some customers to trim their purchases. Shopper traffic and big-ticket sales also declined noticeably in the first quarter, with Fifth District contacts noting automobile and light truck sales as particularly sluggish. News from District service providers was less glum — revenues advanced, but at a slower pace.

Residential Real Estate Slows

Residential real estate activity slowed in the first quarter, with home sales declining 5.6 percent compared to modest growth in late 2005. Reports from District real estate agents were generally in line with the latest data. One agent in Washington, D.C., said, "It's definitely a buyers' market and they [the buyers] are holding off." Consistent with the slowdown in demand across the District, the pace of home price appreciation also cooled in many areas. First-quarter home prices in the District were only 8.6 percent higher compared to a quarter earlier, marking the first period of single-digit appreciation in two years.

Manufacturing Rebounds

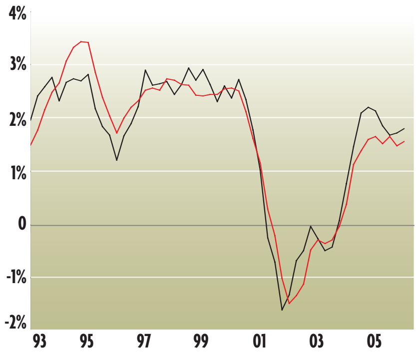
District manufacturing conditions rebounded strongly in the first quarter. Indicators that were generally subdued in January, such as factory shipments, new orders, and employment, were growing briskly by the end of the quarter. Highlighting the turnaround, the March readings of the above measures were the strongest in two years. Sizable increases in capacity utilization, vendor lead time, and employment were also reported by District manufacturers over the period. Among industries, some of the largest gains were again reported by producers of electronics and electric equipment.

Manufacturers also reported that the pace of growth in raw materials and finished goods prices was more measured in March, following a sharp uptick earlier in the year. Some manufacturers, however, noted an increased difficulty in passing higher costs to their customers. A North Carolina furniture manufacturer, for instance, said that the higher fuel surcharges he was facing on raw materials deliveries were "eating into profits."

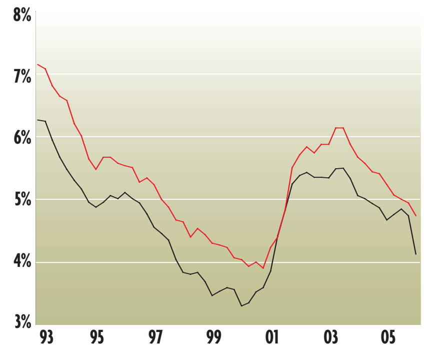
Economic Indicators

	1st Qtr. 2006	4th Qtr. 2005	Percent Change (Year Ago)
Nonfarm Employment (000)			
Fifth District	13,579	13,513	1.8
U.S.	134,722	134,161	1.5
Real Personal Income ($bil)			
Fifth District	901.6	892.1	2.0
U.S.	9,354.8	9,272.3	2.1
Building Permits (000)			
Fifth District	63.9	56.5	10.3
U.S.	492.3	480.0	4.9
Unemployment Rate (%)			
Fifth District	4.1%	4.7%	
U.S.	4.7%	4.9%	

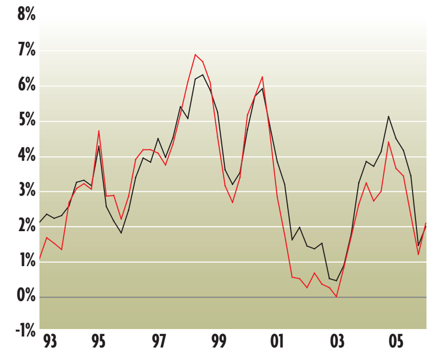
Nonfarm Employment
Change From Prior Year
First Quarter 1993 - First Quarter 2006



Unemployment Rate
First Quarter 1993 - First Quarter 2006

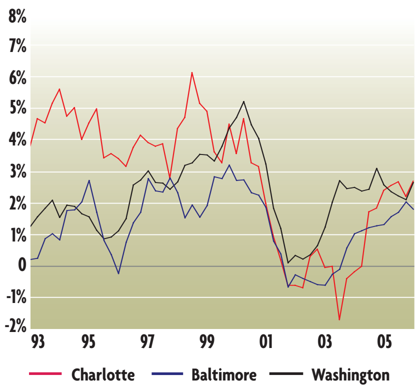


Real Personal Income
Change From Prior Year
First Quarter 1993 - First Quarter 2006

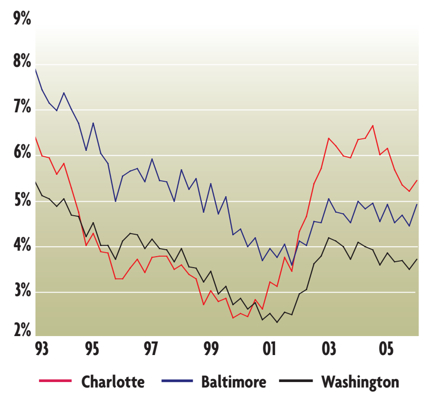


Fifth District United States

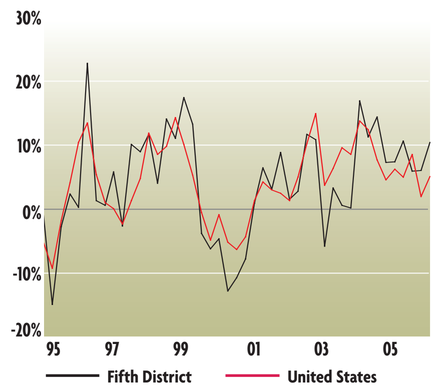
Nonfarm Employment Metropolitan Areas
Change From Prior Year
First Quarter 1993 - First Quarter 2006



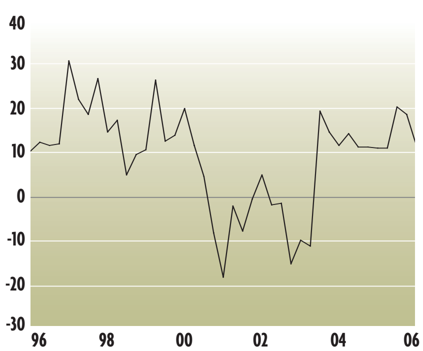
Unemployment Rate Metropolitan Areas
First Quarter 1993 - First Quarter 2006



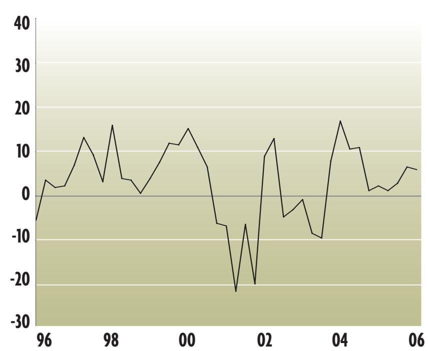
Building Permits
Change From Prior Year
First Quarter 1995 - First Quarter 2006



FRB—Richmond Services Revenues Index
First Quarter 1996 - First Quarter 2006



FRB—Richmond Manufacturing Composite Index
First Quarter 1996 - First Quarter 2006



House Prices
Change From Prior Year
First Quarter 2001 - First Quarter 2006

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 house prices 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.
House prices: Office of Federal Housing Enterprise Oversight, http://www.ofheo.gov.

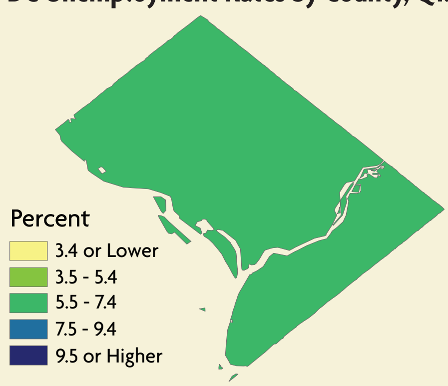
State Economic Conditions

By Andrea Holmes

District of Columbia

Economic activity in the District of Columbia continued to gain momentum in early 2006. The first quarter saw a pickup in payrolls as well as a decline in the jobless rate. On the business front, venture capital investment was robust, but the residential real estate market advanced at a slower pace.

DC Unemployment Rates by County, Q1:06



NOTE: County unemployment data are not seasonally adjusted.
SOURCES: Bureau of Labor Statistics/Haver Analytics

District of Columbia payrolls expanded 3.2 percent in the first quarter of 2006, the strongest quarterly gain posted since 2001. Robust first-quarter job growth in nearly all industry sectors, particularly professional and business services, offset modest job losses at education and health services and government establishments.

Indicators of household labor market conditions, such as the unemployment rate, also showed improvement in the first quarter. The jobless rate posted a 0.7 percentage point drop to a seasonally adjusted 5.3 percent in early 2006. Also positive, personal income continued to expand in the first quarter. Compared to a year ago, incomes stood 2.4 percent higher in the District of Columbia.

Measures of private investment into District of Columbia businesses were also encouraging. First-quarter venture capital activity rebounded strongly, with the most recent data showing a $29.3 million increase in venture investment between January and March of this year, exceeding the investment level for all of 2005.

The District of Columbia's residential real estate market, however, showed signs of cooling. First-quarter sales of existing homes were flat compared to the quarter earlier and 18.2 percent below last year's level. The slowdown in demand was reflected in slower home price growth. District of Columbia recorded price acceleration of only 6.0 percent, marking the first period of single-digit growth in nearly three years.

Maryland

Maryland's economy grew on pace in the first quarter. The latest economic reports showed a rebound in job numbers and continued strength in household finances. Private investment into state businesses, however, expanded at a somewhat slower clip, and residential real estate activity was more restrained than in late 2005.

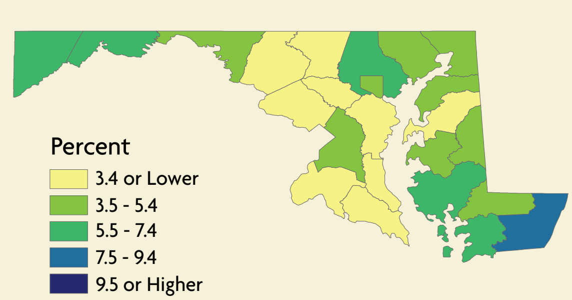
According to the Bureau of Labor Statistics, business hiring in Maryland continued to accelerate in the first quarter. Payrolls expanded 1.4 percent, equal to 8,800 jobs. By sector, the bulk of the job creation occurred on the services side of the economy, with only information and leisure and hospitality establishments reporting losses. Payrolls were also boosted at goods-related businesses, with the exception of factory jobs, which were trimmed in the first quarter.

Matching the pickup in hiring, first-quarter personal income expanded 2.6 percent from a year earlier, and state households reported a decline in the share of unemployed. Maryland's first-quarter jobless rate came in at 3.5 percent, well below measures from the prior quarter and a year earlier.

Compared to the state, unemployment at the county level was mixed, with the lowest rates recorded in the counties within the Baltimore-Washington Corridor. Baltimore City posted a low 3.9 percent jobless rate, but the strength of the measure is due in part to the city's labor participation rate, which is much lower than in the surrounding counties.

Maryland's residential real estate market advanced at a more conservative pace in early 2006. Sales of existing housing units dropped 1.9 percent in the first quarter and new permit growth fell 12.9 percent. Demand for housing, however, remained strong enough to boost prices by 13.3 percent in the first quarter, the largest quarterly jump recorded districtwide.

MD Unemployment Rates by County, Q1:06



NOTE: County unemployment data are not seasonally adjusted.
SOURCES: Bureau of Labor Statistics/Haver Analytics

First-quarter venture capital investment into Maryland, another measure of business activity, failed to match the fourth-quarter level but remained well above the year-ago amount. Early 2006 inflows totaled $95.7 million, double the level recorded a year earlier.

North Carolina

Economic conditions in North Carolina advanced steadily in the first quarter. Signals from labor markets were generally upbeat, and indicators of business and household conditions were positive across the board. Real estate conditions were more muted, with a pullback in demand cooling price acceleration.

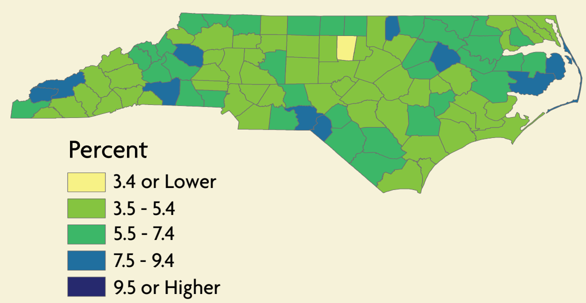
North Carolina posted the strongest net employment gain among District states in the first quarter, with jobs increasing by 23,800. Goods-producing firms trimmed payrolls, with the exception of construction establishments, which added more than 2,200 jobs. By comparison, first-quarter employment growth was more widespread at services companies, with losses recorded only in the information and financial activities sectors.

Measures of activity at North Carolina households were also encouraging. Reflecting strong payroll expansion, personal income rose 0.9 percent in the first quarter, matching activity recorded in the fourth quarter, and the jobless rate declined significantly. The share of unemployed persons in the labor force fell 0.7 percentage point to 4.5 percent, marking a return to the state's prerecession level. As shown in the map, areas of high unemployment are still scattered throughout the state, but unlike South Carolina and West Virginia, the jobless rate remains under 9.5 percent in each county.

The latest indicators of business activity in North Carolina strengthened, with venture capital investment coming in just over the $100 million mark in the first quarter. At $103 million, the first-quarter reading slightly outpaced late 2005 measures but fell a little short of the year-ago level. Compared to other District states, North Carolina attracted the bulk of the first-quarter funding — accounting for more than 35 percent of districtwide inflows.

The most recent data suggested further moderation in North Carolina's residential real estate market. First-quarter sales of existing housing units contracted 3.2 percent, marking the first quarterly decline since late 2004. Moderating demand has also slowed the rate of appreciation of North Carolina's housing stock. Home prices increased only 6.9 percent in the first quarter after growth, peaking at 11.8 percent during the previous period.

NC Unemployment Rates by County, Q1:06



NOTE: County unemployment data are not seasonally adjusted.
SOURCES: Bureau of Labor Statistics/Haver Analytics

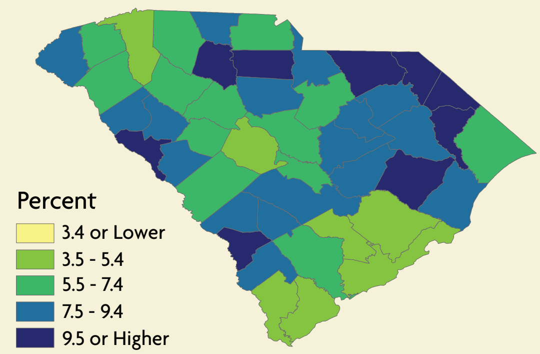
South Carolina

A long-awaited firming of economic conditions in South Carolina appears to be underway. First-quarter measures of labor market activity advanced steadily, and financial conditions at South Carolina households and businesses remained on track. Residential real estate markets showed some signs of moderation, falling in line with reports from most other District states.

South Carolina payrolls advanced 3.8 percent in the first quarter, the strongest quarterly growth rate districtwide. By sector, the strongest job gains were recorded at trade, transportation, and utilities, education and health services, and construction establishments. By comparison, the largest loss occurred among professional and business services firms, the state's largest industry sector.

The upturn in job growth over the last year aided South Carolina household finances, as personal income expanded at a 2.0 percent annual rate in the first quarter. Steady payroll expansion was also reflected in South Carolina's first-quarter unemployment rate, which edged 0.8 percentage point lower to 6.4 percent, the lowest reading in approximately three years. Notwithstanding the first-quarter improvement, South Carolina still recorded the highest jobless rate districtwide, with more than half of the state's counties posting unemployment rates in excess of 7.5 percent.

News from South Carolina's residential real estate markets was somewhat less encouraging. First-quarter existing home sales moderated 8.8 percent from the fourth-quarter level, though new permit applications expanded briskly. The abatement in sales slowed the rate of home price appreciation, which moved up only 7.6 percent in the first quarter, the lowest quarterly appreciation rate recorded since mid-2004.



SC Unemployment Rates by County, Q1:06

NOTE: County unemployment data are not seasonally adjusted.
SOURCES: Bureau of Labor Statistics/Haver Analytics

Other indicators from South Carolina's business front were more upbeat. Venture capital funding, for instance, rebounded in the first quarter. Inflows totaling $9.7 million were recorded, a significant increase from the flat activity recorded in the last three out of four quarters.

Virginia

First-quarter measures of Virginia's economy moved forward at a steady pace compared to the previous period. Employment and household conditions advanced steadily, though indicators of activity at Virginia businesses and within the residential real estate markets were less robust.

Virginia firms boosted payrolls 1.1 percent the first three months of 2006, following a 2.0 percent gain in late 2005. The first-quarter addition of 5,733 new construction jobs helped offset losses in Virginia's other industry sectors, including information and financial activities, where first-quarter payrolls were trimmed by more than 1,000 each.

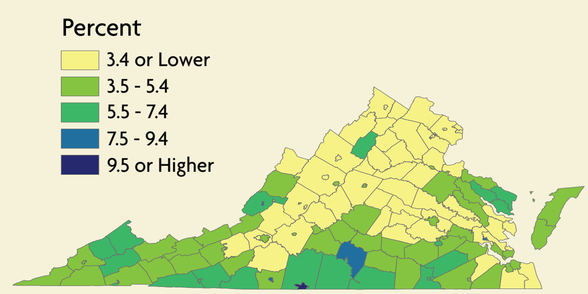
Financial conditions at Virginia households also brightened. First-quarter personal income measures were generally on track, with Virginia incomes rising 2.5 percent in the first quarter of the year. Additionally, the overall pickup in hiring at Virginia businesses was reflected in the first-quarter jobless rate, which declined 0.4 percentage point to 3.0 percent, the lowest unemployment rate districtwide. As illustrated in the chart, 85 percent of the Fifth District counties boasting a jobless rate under 3.5 percent hail from Virginia.

First-quarter reports from state businesses were less favorable. Virginia recorded a decline in venture capital inflows, tracking districtwide and national activity. In terms of attracting capital, Virginia's $55 million first-quarter influx was nearly two-thirds less than the fourth-quarter amount and marked the smallest quarterly inflow in nearly two years.

Growth of Virginia's residential real estate market was also limited in early 2006. Compared to year-ago levels, new building permit authorizations rolled in at a slightly higher pace but first-quarter existing home sales declined 17.7 percent. Moderation in demand was also apparent when viewed against data from the fourth quarter of 2005 — home sales were down 10.4 percent.

The slowdown in demand further dampened the pace of home price acceleration in Virginia. First-quarter home prices were 11.2 percent higher compared to late-2005, marking the third quarter of a deceleration in growth, following the 25.3 percent peak reached in mid-2005.

VA Unemployment Rates by County, Q1:06



NOTE: County unemployment data are not seasonally adjusted.
SOURCES: Bureau of Labor Statistics/Haver Analytics

West Virginia

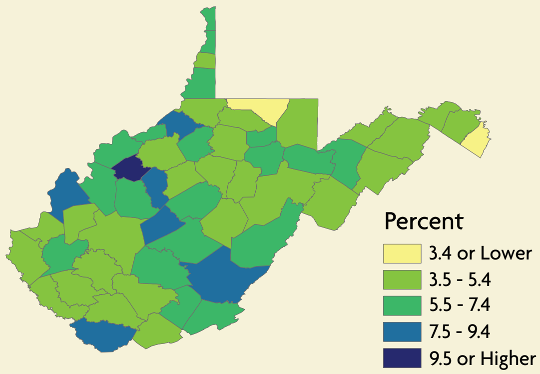
The most recent data suggest that West Virginia's economy remained generally on track in early 2006. The state's labor market tightened further, despite limited first-quarter payroll growth. Outside of labor market activity, household indicators were more upbeat than measures of business activity, and signs of moderation became more pronounced in the residential real estate markets.

First-quarter payroll activity was generally flat in West Virginia. Employment losses at natural resources and mining, construction, education and health services, and leisure and hospitality establishments dampened overall growth, resulting in a net gain of only 67 jobs during the first three months of the year.

Household financial conditions in West Virginia were more upbeat. Personal income advanced 1.3 percent in early 2006, bringing total annual growth to 1.8 percent. By comparison, districtwide annual income growth was slightly higher, amounting to 2.0 percent.

Also suggesting a rosier outlook for households, West Virginia's labor market continued to tighten in early

WV Unemployment Rates by County, Q1:06



NOTE: County unemployment data are not seasonally adjusted.
SOURCES: Bureau of Labor Statistics/Haver Analytics

2006 despite the limited rise in payrolls. According to the Bureau of Labor Statistic's household employment survey, the state's jobless rate dropped one full percentage point to 3.9 percent, marking the lowest unemployment rate recorded over the 30-year history of the data series. As shown in the chart, however, pockets of high unemployment are still prevalent across the state. For example, at 9.5 percent, Wirt County posted the highest nonseasonally adjusted jobless rate statewide in the first quarter.

Compared to household activity, certain indicators of business activity in West Virginia were less encouraging. For example, first-quarter venture capital inflows were flat, following a surge of $1.6 million in late-2005.

West Virginia's latest home sales data also moderated. According to the National Association of Realtors, first-quarter home sales were 3.3 percent below the fourth-quarter level and 7.4 percent below the year-ago level. The pullback in West Virginia home sales appears to have dampened home price growth. First-quarter prices increased only 4.4 percent, the smallest quarterly gain in three years.

Behind the Numbers: Why So Many Indicators?

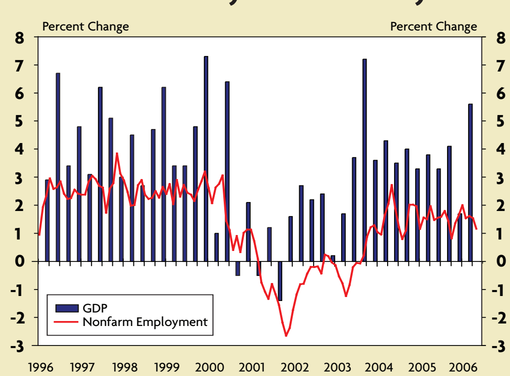
Predicting the direction of the economy can look easy sometimes. During much of the 1990s, for example, multiple economic indicators were sending consistent signals. By the end of the decade, though, things were less certain. Many economic forecasters were slow to see the technology crash and the 2001 recession that followed it.

The difficulty in identifying economic turning points is the reason why economists watch an array of indicators instead of relying on just one or two. For one thing, indicators don't always move together closely. Recently, for example, employment has grown more slowly than output. And sometimes even indicators that are supposed to be tracking the same sector of the economy don't tell the same story, such as when the so-called "payroll" and "household" employment surveys contradict each other.

Then there are cases when indicators behave differently across business cycles. As mentioned above, employment has recovered relatively slowly since the last recession. This is in contrast to many previous recoveries. One explanation is that women are no longer entering the labor force at the same strong rate as in years past. Additionally, a lot of economists right now are skeptical that an inverted yield curve means we're headed into recession, even though the curve has predicted many downturns.

Economists use time-series models to help them forecast future economic performance, plugging in an array of data from different indicators. But even after gleaning the computer-generated results, economists usually take a closer look at individual variables. "It may be that individual indicators are suggesting that something unusual is going on that might not be getting picked up in the mechanical forecasting process," says, Matthew Martin, an economist at the Richmond Fed's Charlotte branch.

Up and Down: Output and Employment Don't Always Track Closely



SOURCES: Bureau of Economic Analysis and Bureau of Labor Statistics

To deal with all this uncertainty, economic forecasters create multiple scenarios as a way to highlight potential risks: What if home prices follow a different path than expected? What if energy prices begin to pass through to core price indexes? Granted, you might not want to respond to every wiggle. But any one of these indicators could make a difference, which is why all of them are analyzed. "More information is always better," Martin says.

— Doug Campbell

State Data, Q1:06

	DC	MD	NC	SC	VA	WV
Nonfarm Employment (000)	690.7	2,575.9	3,961.1	1,889.3	3,710.8	751.1
Q/Q Percent Change	3.2	1.4	2.4	3.8	1.1	0.0
Y/Y Percent Change	1.5	1.5	1.8	1.9	2.1	1.2
Manufacturing Employment (000)	2.1	138.7	562.9	258.1	295.7	61.5
Q/Q Percent Change	14.0	-2.1	-0.9	-0.4	0.8	0.7
Y/Y Percent Change	-6.1	-2.3	-1.3	-2.7	-0.7	-1.4
Professional/Business Services Employment (000)	152.1	388.5	450.3	201.6	619.7	59.5
Q/Q Percent Change	10.0	1.1	0.7	-17.0	0.3	1.1
Y/Y Percent Change	3.1	2.2	2.4	2.4	3.8	1.9
Government Employment (000)	231.4	467.7	674.3	333.6	664.7	144.1
Q/Q Percent Change	-1.7	0.6	3.6	1.7	-0.3	1.0
Y/Y Percent Change	-0.8	1.3	1.9	2.5	1.2	0.1
Civilian Labor Force (000)	293.5	2,971.5	4,371.6	2,103.5	3,976.7	808.9
Q/Q Percent Change	0.3	2.3	0.2	-0.1	1.6	2.2
Y/Y Percent Change	-2.0	2.1	1.7	2.0	2.0	1.8
Unemployment Rate (%)	5.3	3.5	4.5	6.4	3.0	3.9
Q4:05	6.0	4.0	5.2	7.2	3.4	4.9
Q1:05	7.0	4.2	5.1	6.6	3.4	4.8
Personal Income ($bil)	27.5	214.1	240.4	110.0	264.6	45.0
Q/Q Percent Change	1.3	1.0	0.8	1.1	1.3	1.3
Y/Y Percent Change	2.4	2.6	0.9	2.0	2.5	1.8
Building Permits	1,327	6,291	26,517	14,474	13,806	1,472
Q/Q Percent Change	1,795.2	-12.9	95.0	76.5	16.3	276.1
Y/Y Percent Change	134.9	-18.8	19.7	14.4	2.6	10.2
House Price Index (1980=100)	618.6	509.4	315.0	299.5	450.6	226.6
Q/Q Percent Change	6.0	13.3	6.9	7.6	11.2	4.4
Y/Y Percent Change	20.8	20.5	8.3	9.1	18.1	10.6
Sales of Existing Housing Units (000)	10.8	126.4	231.6	112.0	154.4	35.2
Q/Q Percent Change	0.0	-1.9	-3.2	-8.8	-10.4	-3.3
Y/Y Percent Change	-18.2	-6.5	17.0	7.3	-17.7	-7.4

NOTES:
Nonfarm Employment, thousands of jobs, seasonally adjusted (SA) Bureau of Labor Statistics (BLS)/Haver Analytics, Manufacturing, thousands of jobs, SA; BLS/Haver Analytics, Professional/Business Services, thousands of jobs, SA; BLS/Haver Analytics, Government, thousands of jobs, SA; BLS/Haver Analytics, Civilian Labor Force, thousands of persons, SA; BLS/Haver Analytics, Unemployment Rate, percent, SA; BLS/Haver Analytics, Personal Income, billions of chained 2000$, Bureau of Economic Analysis/Haver Analytics, Building Permits, number of permits, NSA; U.S. Census Bureau/Haver Analytics, House Price Index, 1980=100, NSA, Office of Federal Housing Enterprise Oversight/Haver Analytics, Sales of Existing Housing Units, thousands of units, SA; National Association of Realtors®

Metropolitan Area Data, Q1:06

	Washington, DC MSA	Baltimore, MD MSA	Charlotte, NC MSA
Nonfarm Employment (000)	2,937.4	1,277.8	800.1
Q/Q Percent Change	-3.6	-8.4	-3.3
Y/Y Percent Change	2.6	1.7	2.6
Unemployment Rate (%)	3.0	4.0	4.7
Q4:05	3.0	3.9	4.9
Q1:05	3.7	4.9	5.4
Building Permits	8,691	2,377	6,148
Q/Q Percent Change	160.2	-20.7	85.5
Y/Y Percent Change	4.7	13.2	29.9

	Raleigh, NC MSA	Charleston, SC MSA	Columbia, SC MSA
Nonfarm Employment (000)	274.2	285.6	359.1
Q/Q Percent Change	1.0	2.8	-0.4
Y/Y Percent Change	2.5	4.4	2.9
Unemployment Rate (%)	3.8	5.2	5.6
Q4:05	4.0	5.4	5.8
Q1:05	4.4	5.6	5.9
Building Permits	1,179	2,566	2,057
Q/Q Percent Change	188.0	45.6	117.4
Y/Y Percent Change	7.4	1.7	13.6

	Norfolk, VA MSA	Richmond, VA MSA	Charleston, WV MSA
Nonfarm Employment (000)	757.9	618.3	147.7
Q/Q Percent Change	-6.8	-3.7	-5.4
Y/Y Percent Change	2.0	2.0	0.9
Unemployment Rate (%)	3.7	3.4	4.6
Q4:05	3.7	3.3	4.1
Q1:05	4.4	3.9	5.9
Building Permits	2,310	2,319	84
Q/Q Percent Change	-47.9	44.5	57.4
Y/Y Percent Change	-4.8	-17.8	23.5

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

OPINION

Mixing Banking and Commerce

BY JOHN R. WALTER

Many U.S. firms include both commercial and nonbank financial units. For example, Ford Motor Co. encompasses not only units that manufacture automobiles but also those, such as Ford Motor Credit, that gather funding and make loans to individuals. Firms that handle both commercial and financial activities appear to reap significant benefits which create the appeal of such combinations. One byproduct of a commercial firm's activities may be information about its customers' financial situation. The financial affiliate might then use this information to inexpensively target products to particular customers, benefiting both the financial firm and its customers, an activity commonly know as cross-selling.

While finance-commerce combinations are widespread, combinations between banks and commercial firms typically are prohibited. But the law does provide a loophole that allows nonfinancial firms to engage in a limited range of banking activities. It is through this well-traveled loophole that retail giants Wal-Mart and Home Depot recently have submitted applications to form or buy banks.

These applications have focused a great deal of attention on the controversial combination of banking and commerce. The merits of the specific Wal-Mart and Home Depot applications aside, this may be a good time to ask why banking-commerce combinations are typically prohibited in the first place.

The Bank Holding Company Act of 1956 prohibits commercial firms from owning banks. This keeps manufacturers and operators of retail stores, for example, from purchasing banks. The Gramm-Leach-Bliley Act, enacted in 1999, opened the opportunity for banks to be owned by companies engaged in the financial activities of securities dealing and insurance, but did not allow bank ownership to nonfinancial commercial firms.

The Bank Holding Company Act, however, does allow commercial companies to own industrial loan corporations (ILCs), or industrial banks. These institutions are funded with Federal Deposit Insurance Corp.-insured deposits but typically do not offer checking accounts to businesses. (Wal-Mart wants to create an industrial bank and Home Depot wants to buy one.)

According to a Government Accountability Office study, there were 57 industrial banks at the end of 2004. They held $140 billion in assets, and about 3 percent of all insured bank deposits. While many are owned by financial firms, a number are owned by commercial firms such as the automotive company BMW and retailer Target Corporation.

Why are banking-commerce combinations controversial? Observers have at times raised concerns over conflicts of interest that might arise if banks and commercial companies are owned by the same firm. They argue that such concerns justify keeping banking and commerce separate. While this argument takes several forms, the most frequent is that a bank affiliated with a commercial firm would tend to deny loans to the affiliate's competitors. Under this scenario, a bank with a commercial affiliate — say, a restaurant — would not wish to provide funding to competing restaurants. Helping the competitor would tend to lower the profits of the affiliated restaurant.

On the other hand, if competition is reasonably strong — and there is every reason to think that today's banking markets are quite competitive — denying loans to competitors only lowers overall profits of the consolidated banking-restaurant firm. If there are alternative lenders over which the affiliated bank has no price advantage, the competing restaurant would receive a loan regardless at the same interest rate the affiliated bank would offer. So, by failing to make the loan, the bank loses any profit it might have made on that loan, hurting the bank. And the affiliated restaurant gains no advantage.

Consequently, concerns regarding conflicts of interest are probably insufficient justification for maintaining the current wall separating banking and commerce and denying firms the opportunity to benefit from combinations. Nevertheless, there remains a hazard that could justify the continued presence of the wall, or at least require that significant precautions be taken if the wall is removed.

The hazard is that a combined company can be expected under certain circumstances to withdraw resources from its bank to hide problems in its commercial subsidiary, damaging bank safety. A holding company owning a bank and a commercial entity can be expected to choose this course when it can hide its commercial subsidiary losses from investors and analysts by shifting commercial subsidiary losses to the affiliated bank. Since bank assets are often considered more opaque to outsiders than nonbank assets, such losses might be better hidden if shifted to the bank. If commercial firm losses can be expected to be shifted to insured banks, and perhaps on to the FDIC, there may be reason to prevent combinations.

Potential loss-shifting presents real risks to the public. Stepped-up oversight could potentially mitigate those risks and, as a result, allow us to remove the wall between banking and commerce. For now, though, combinations through the industrial bank loophole raise legitimate concerns for bank regulators, and deserve careful consideration before being approved. **RF**

John R. Walter is a research economist at the Federal Reserve Bank of Richmond.

NEXT ISSUE

Corporate Headquarters

In the competitive world of regional economic development, there are few bigger prizes than landing a corporate headquarters. But how big is the economic impact of a headquarters, and how do business executives make their location decisions? We explore these questions and analyze the role of incentives in attracting and retaining corporate headquarters.

Electricity Deregulation

Deregulation of retail power providers was supposed to lower prices for consumers. But with rates in some recently deregulated states rising instead of easing, there is a growing perception that retail competition programs are failing. Maryland, Virginia, and the District of Columbia have already begun deregulation. How long will residents have to wait until the intended benefits materialize?

Students and Credit Card Debt

The average college student carries a $2,200 credit card balance, causing much consternation among some observers. We look into whether youth debt is the problem it's sometimes cracked up to be, or a natural — and useful — tool for students to smooth consumption as they transition from school to work.

Organic Food Market

Demand for organic foods is growing quickly, but domestic farmers are meeting only a small share of it, with most goods coming from abroad. Does it make economic sense for farmers in the Fifth District and beyond to go organic?

Interview

We talk with Martin Baily, chairman of the Council of Economic Advisers under President Clinton and now a senior fellow with the Institute for International Economics.

Federal Reserve

How Charlotte, N.C., became one of the nation's leading banking centers.

Research Spotlight

Economists investigate the role culture plays in economic growth.

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Coming Soon: Check out our *new* online weekly update

The Fall 2006 issue will be published in October.

The Economics of Household Borrowing

Throughout American history, credit typically has been seen as a good thing, while debt has had more negative connotations. Are these perceptions valid? And are today's Americans "drowning" in debt? Not necessarily, if you're looking at the *economics* of borrowing. From that vantage point, the story is quite different.

In the Federal Reserve Bank of Richmond's *2005 Annual Report* feature article, "Borrowing by U.S. Households," the Bank's Director of Research John A. Weinberg looks at the recent history of borrowing in the United States and suggests that the expansion of credit has been beneficial to most people. Generally, households make forward-looking borrowing decisions, which allow them to smooth their consumption over time. Improved technology and increased competition have driven down the average costs of borrowing, making it easier for households to service their debt. Not all consumers make wise borrowing decisions, however, and as a result greater focus on financial education may be an appropriate policy response.

The *Annual Report* also includes messages from the Bank's president and senior management, a report on the Fifth District economy, and an overview of the Richmond Fed's 2005 financial activity.

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