

»The Venture Adventure »A Century of Flight »FCC Makes Waves
»An Interview with Mickey Levy »The National Road: Trade Trailblazer

REGION FOCUS

FALL 2003

THE FEDERAL RESERVE BANK OF RICHMOND

Physical Capital

Washington's
Changing
Commercial
Real Estate
Market



REGION FOCUS

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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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The Real Value of Economic Education



“A wealth of evidence suggests that markets work impressively well even if most participants have little knowledge of economics.”

I’ve commented often in these pages on the effectiveness of markets. One of the fundamental insights of economics is that well-functioning markets generally result in efficient allocation of an economy’s resources. I’ve tried to use this column to share a few small lessons on the logic of the marketplace. This issue of *Region Focus* includes a story on a group of Federal Reserve employees who take the task of sharing lessons on the market mechanism much further than I ever could in these pages. Our Economic Education section, like those at other Reserve Banks, is a valuable resource for teachers and students, and helps enrich the public’s understanding of matters having to do with Fed policy and economics in general.

Does a well-educated populace make the economy work better? Maybe. But one of the remarkable things about economic theory and real-life market economies is that they can achieve desirable results even if individual participants possess no deep knowledge of how the economy works. All consumers or producers need to know is their own self-interest. Of course, the large outlays people make for business consultants and personal advice suggests that even knowing one’s own self-interest can be difficult. But for many decisions, it’s not that hard, especially since people often have the opportunity to learn from their own or others’ experience.

A wealth of evidence suggests that markets work impressively well even if most participants have little knowledge of economics. One type of evidence includes observations that, across a broad range of real-world settings, people respond in predictable ways to the incentives they face. One of our feature stories in this issue reports on studies that show that even people whose judgement is impaired by drug-addiction respond to monetary rewards for adhering to treatment programs. Such responsiveness to incentives is a key building block of the market mechanism.

Granted, not all economic decisions are as simple as responding to a direct monetary reward for specific actions. In many cases, individuals need to form expectations about future movements in prices or about the behavior of other market participants. Such expectations can be particularly important in deciding how to respond to a change in government policy. Consider the recent change in the tax on corporate dividends, which is discussed in our “Legislative Update.” An individual investor could certainly benefit from some knowledge of economics in thinking about how this change might affect corporate behavior and the value of corporate stocks. Economic education can make people more efficient and effective participants in the marketplace, even if it

does not greatly change the overall performance of the market.

The real value of economic education may lie more in politics than in economics. In a democracy like ours, the degree and nature of government intervention in the economy can be driven by majority opinion. It is in the formation of opinion about government policy that the expansion of economic knowledge to more and more citizens is particularly useful. Even if many or most people vote according to their own perceived self-interest, the determination of self-interest in the voting booth can be more complicated than in the marketplace. As a consumer, I need to answer questions like, “Is this item worth this price to me?” But as a voter, I may wish to consider questions like, “How will these policies affect my well-being and that of my friends and neighbors, or even of society as a whole?” This thought process requires some reliance on economics. The real value of economic education, then, lies not so much in making people better producers and consumers as in making them better observers of and participants in the formation of economic policy.

Al Broadus

AL BROADUS
PRESIDENT
FEDERAL RESERVE BANK OF RICHMOND

Economic ABCs

The Federal Reserve's Role as an Educator and a Promoter of Economic Literacy

BY CHARLES GERENA

Reading, writing, and arithmetic have long been considered the pillars of a good education. With the technological changes of the 1990s, science and computer skills quickly became part of that foundation.

In contrast, economic and financial literacy has seemed less critical. A 2002 survey by the National Council on Economic Education found that just 14 states require high school students to take economics. North and South Carolina are the only Fifth District states with such a graduation requirement. Even fewer states mandate that students learn about personal finance.

That's a big mistake, according to advocates of economic and financial literacy. They argue that knowing how to navigate an increasingly complex economy is just as important as being able to read a warning label, sign a contract, or calculate income taxes owed to Uncle Sam.

[And] we need to be savers and investors. In all of these roles, we have to understand how the economic system works and [what the] basic financial concepts [are]."

A better understanding of economics and personal finance also creates more informed politicians and voters. "In today's world, our nation's economic policies can either unleash the creative energies of average citizens and raise the quality of our lives or do the opposite ...," noted J. Alfred Broadbush, president of the Federal Reserve Bank of Richmond, in a 1997 speech to the South Carolina Council on Economic Education. "Poor economic outcomes...are the result of poor economic policies, and poor economic policies...usually rest on economic half-truths or worse."

That is one reason why economic and financial literacy has been an important priority for the Federal Reserve System. In addition to working behind the scenes to foster stability in the nation's monetary, financial, and payments systems, the Fed informs policymakers and the general public about these systems and their importance in our daily lives.

Front and center in these public outreach efforts are the Economic Education staffers at each Federal Reserve Bank. At the Richmond Fed, a group of educators partner with various organizations to promote economic and financial literacy, both inside and outside of the classroom.

David Isaacs knows first hand how the Richmond Fed reaches out to students throughout the Fifth District, from kindergartners in Maryland



Richmond Fed President Al Broaddus talks with students at John Phillip Sousa Middle School in Washington, D.C.

"You are talking about knowledge and skills that people need every day," says Dr. Carol Jarvis, executive director of the Maryland Council on Economic Education. "We are consumers. For most of our lives, we go to work.

to college seniors in South Carolina.

Isaacs liked following the stock market on television. But he felt that his high school classes at Trinity Episcopal in Richmond didn't feed his interest in business and economics. His sophomore economics teacher suggested he join the school's team for Fed Challenge, a nationwide competition held annually since 1995.

After Isaacs went to his first Fed Challenge meeting, he was hooked. "I went in knowing nothing and really got into it," he recalls. "[Now] I have a better understanding of what is going on than a lot of people, even my parents."

The Federal Reserve uses Fed Challenge to make the "dismal science" of economics more appealing and accessible to students like Isaacs. Each group of five high schoolers researches and analyzes economic data, then prepares a 15-minute presentation that recommends a monetary policy action for the Federal Open Market Committee.

"Most of them do a mock FOMC meeting and pretend they are members of the Board of Governors," says Margaret Ray, an economist who works on the Richmond Fed's Economic Education team. After the detailed presentations, judges pepper students with equally detailed and challenging questions for 10 minutes.

The heat of competition helps students get excited about studying economic theory. "If it's a class, you learn just what you are supposed to learn. When it's a competition, you can go as far as you want," describes Isaacs, who competed in Fed Challenge three years in a row. "The competition was what kept our team interested in pushing hard to pick up whatever [information] we could."

Building upon the success of the national high school competition, the Richmond Fed started a regional College Fed Challenge in 2001. Since then, many universities in the Fifth District have used the event as a learning tool, from smaller institutions like St. Mary's College of Maryland to urban behemoths like Virginia Commonwealth University (VCU).

State Of Economic Education

As of 2002, North Carolina and South Carolina are the only Fifth District states to require an economics course to be taught in public schools, and no public school in the region must offer a class in personal finance. Yet, all Fifth District states have included economics in their academic standards for the classroom. Only Maryland and North Carolina have standards for teaching personal finance.

	Schools Must Include Economics Course	Students Must Take Economics Course	Schools Must Include Personal Finance Course	Students Must Take Personal Finance Course
D.C.	No	No	No	No
Maryland	No	No	No	No
North Carolina	Yes	Yes	No	No
South Carolina	Yes	Yes	No	No
Virginia	No	No	No	No
West Virginia	No	No	No	No
Number of U.S. States With Requirements	17	14	4	4

SOURCE: *Survey of the States*, National Council on Economic Education, April 2003

The Richmond Fed supports other academic competitions as well. All three of its offices in Baltimore, Charlotte, and Richmond annually solicit essays on economic topics from 11th- and 12th-graders. Last spring, the Baltimore office hosted Maryland's first state finals for the National Economics Challenge, which was staged locally by the Maryland Council on Economic Education (MCEE).

Such events "give students a chance to show what they know and to compete in an academic environment," notes Jarvis. Also, they are meaningful to students because of where they are held. "The Federal Reserve... is a very attractive venue for kids. It makes them feel really special to get a chance to go there."

The doors to the Richmond Fed open to students in other ways. Every year, high school and college interns work in different departments, including Economic Education. "We view the internship as going two ways — there are things that interns help us do, but we also are teaching them," says Ray.

In addition, she points to a program called "A Day at the Fed." More than 30 college seniors from Virginia Union University and VCU came to the Rich-

mond office in March to learn about the Federal Reserve and potential job opportunities.

The Federal Reserve, monetary policy, and economics in general aren't a mystery to students alone. Teachers are often in the same boat, cast adrift in a sea of information and complex concepts that can be easily misunderstood.

Leah Tesney, education program manager for the Virginia Council on Economic Education (VCEE), has seen this problem in the Old Dominion. "We have some teachers from out of state who may have been in a school system that required economics, or they may have gone to a college that required them to take economics," says Tesney. "But in Virginia, we don't require high school students to take a course in economics" and not all colleges require economics coursework for certification. "[Yet] teachers are expected to teach [the subject] once they get into the classroom."

To bridge the knowledge gap, the Richmond Fed's Economic Education department produces a variety of resource materials. Some of its more popular products include bookmarks that chronicle important people in

America's economic past, an Economics Concepts calendar that it co-produces with the MCEE and the VCEE, and lesson plans that are coordinated with state educational requirements.

The Richmond Fed also publishes *Econ-Exchange* for K-12 teachers. The biannual publication is co-produced with the E. Angus Powell Endowment for American Enterprise, a Richmond-based organization that promotes economic literacy among young people.

According to Rebecca Shepherd, executive director of the Powell Endowment, her organization and the Richmond Fed choose an economics topic for an issue, then solicit innovative approaches for teaching that topic from their network of educators. Past topics have included information technology, banking, and international trade.

Shepherd says that more resource materials like *Econ-Exchange* are available today than in the past. Still, overwhelmed teachers may be unable to take advantage of them.

"Teachers don't have much time," notes Tesney. "If we sent them a curriculum in the mail, it would very likely sit on a shelf."

So, the Federal Reserve provides practical, hands-on instruction to help teachers apply materials in the classroom. This year, the Richmond Fed collaborated with the MCEE and VCEE to present several free workshops in Maryland and Virginia.

Carol Jarvis of the MCEE describes one activity conducted at a recent workshop on monetary policy. Gordon Woelper, a senior manager at the Richmond Fed's Baltimore office, split teachers into groups and provided information to help them decide whether interest rates should be raised or lowered. "[The activity] gave them a sense of the kind of data that has to be analyzed, and an opportunity to see if they understand what's happening when monetary policy is being decided," explains Jarvis.

The Richmond Fed also works with the Powell Endowment to present workshops and a national conference for AP Economics instructors. One

such workshop in Richmond last March catered to teachers at urban elementary schools in the Fifth District.

Vance Page, assistant director of the Darrell Green Youth Life Learning Center in Washington, D.C., says the course helped him understand how money works. Learning this concept "will help us teach and develop in our youth an understanding and appreciation for money, work, wealth, financial security, and responsibility."

So far, students have responded well to the 12-week economics course that Page developed after the March workshop. "They were thrilled to have their instruction linked to everyday life and daily application," he describes. "They were so eager to learn and so hungry and thirsty for knowledge they went home ... and practiced on family and friends."

The classroom isn't the only venue for the Federal Reserve System's educational activities. Most Reserve Banks offer tours where students and teachers, as well as other groups, can learn firsthand about check processing, banking supervision and regulation, and other activities.

Additionally, seven Reserve Banks operate some type of museum or visitor center with exhibits about currency, banking, or the Federal Reserve. In August, the Richmond Fed added an interactive audio tour to its 23-year-old Money Museum.

Every Reserve Bank is involved in a financial literacy campaign initiated in May by the Federal Reserve Board. Television and radio stations began airing a public service announcement starring Board Chairman Alan Greenspan. In the following month, Greenspan and Broadus shared their wisdom with middle school students in Washington, D.C. Other aspects of the campaign have included enhancements to the Federal Reserve's financial education Web site, and a poster designed by a system-wide committee of Economic Education staff that discusses how schooling positively affects future earnings.

Even if these and other efforts succeed in helping people make better

decisions, some Fed watchers argue that the Federal Reserve doesn't need to be involved in economic education. The economy has worked well without the majority of people being fully aware of the ramifications of their choices. Besides, other public and private institutions can fill any knowledge gaps.

Not surprisingly, Margaret Ray disagrees with this assessment. "We might have had a well-functioning economy given our previous level of education, but things are changing," counters Ray. She believes the market is failing to provide a sufficient level of economic education, and the Federal Reserve has the expertise and the resources to call upon.

Indeed, Jarvis notes that teachers value the Federal Reserve as a unique conduit for information. "They get to ask people on the front lines ... about the Fed and monetary policy. That adds credibility [to the information] because you are getting it from the horse's mouth."

Besides fulfilling a need in the marketplace, Ray says the Federal Reserve has a vested interest in providing economic education. "In order for monetary policy to work, people have to have a minimal understanding of the way things work," she asserts. "We can't affect interest rates—and have it affect consumer confidence and behavior—if people don't know about things like compound interest rates and savings." **RF**

READINGS

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For more information on the Richmond Fed's Economic Education department, link to www.rich.frb.org/econed/. The central Web site for the Federal Reserve's educational efforts can be found at www.federalreserveeducation.org/.

Dividend Tax Cuts

BY ANDREW FOERSTER

On May 28, 2003, President Bush signed the second major tax cut of his presidency, a \$350 billion plan that has a number of provisions:

- Increasing the child tax credit from \$600 to \$1,000;
- Lowering marginal income tax rates;
- Eliminating the “marriage penalty”; and
- Lowering the capital gains and dividend tax rates.

The dividend tax cut lowers the rate to either 15 or 5 percent, depending on income, and is set to expire in 2008. It will have to be extended or made permanent to continue beyond that date. What will be the likely effects of the dividend tax cut?

Companies probably will start paying out more dividends. According to Austan Goolsbee, an economist at the University of Chicago, “numerous firms that were on the margin of retaining earnings for capital gains or paying them out as dividends are going to lean towards paying them out as dividends.” This change may increase the number of people looking to invest in those firms. “We’re going to see a smaller, but still somewhat noticeable, shift in the composition of portfolios towards dividend-paying stocks,” says Goolsbee.

Paying investors dividends may lead to more efficient capital markets, as investors move money between companies and put it to its most profitable use. “By encouraging more dividend payout ... dividend recipients can buy stock in other companies or buy bonds issued by other companies, and move that capital around,” says Martin Feldstein, president of the National Bureau of Economic Research and an economist at Harvard University.

The price of capital should also decrease. The bill “will lead to a reduction in the cost of capital for those corporations that are ... planning to pay dividends over the next few years, and that would increase investment somewhat,” says Joel Slemrod, an economist at the University of Michigan.

The new tax change also reduces the appeal of debt to equity. Firms can deduct their interest payments on debts, but the payout of dividends is taxed, making equity less appealing. The new law reduces that gap. “The law as it was before the change encouraged companies to have more debt and to take the extra risks that go with higher leverage,” says Feldstein. “And by reducing the burden on returns to equity the new tax law reduces the incentive to take that extra risk by using more debt.”

Indeed, a few large corporations announced changes in their dividend policy after the tax change. Citigroup Inc. announced a 75 percent increase in dividend payouts, from \$0.80 to \$1.40 per share. Citigroup Chairman and CEO Sanford Weill cited the tax law as a main reason for the change. “The recent change in the tax law levels the playing field between dividends and share repurchases as a means to return capital to shareholders,” he said. Numerous other firms, including Walgreen Co., Procter & Gamble Co., and The Goldman Sachs Group Inc., also have increased their dividend payout.

This bill should increase asset values, says Alan Auerbach,

an economist at the University of California at Berkeley. Lower- and middle-income people may be helped indirectly by this, but “the [main] impact is really going to be at higher income levels where people are actually holding these assets directly in taxable accounts rather than tax-sheltered savings.”

Feldstein says that the lower rates may also encourage people to put additional money into investments. “To the extent that [lower- and middle-income households] have 401(k) or IRA income, it may actually encourage them to hold equities directly, rather than in the form of 401(k)s or IRAs,

because the tax burden has been reduced so much.”

The biggest argument against this latest round of tax cuts was that it would reduce government revenues. “Even if these tax cuts do make the economy stronger, I think it’s very unlikely that it will increase the tax base so much to offset these tax cuts,” Slemrod says. Feldstein agrees, but says the effects will not be “as large as the so-called ‘static analysis’ used by the government suggests.”

Advocates of limited government often view tax cuts as a useful way to restrain government spending, since they typically reduce revenue growth. Feldstein, for instance, notes that future governments may have to respond “by taking a harder look at some of the spending and tax subsidies that we have in the tax law today.” Auerbach agrees. But he is less sanguine about that possibility. “If you do assume [the tax cuts] are permanent, then there are pretty enormous costs in the decades to come, and we’re already in a situation where we don’t have enough money to pay for Social Security and Medicare.”

Unfortunately, economics does not provide any easy answers to this debate. It merely illuminates the multiple viewpoints people can take.

RF

From Six Brackets to Two

Single Filers' Income	Joint Filers' Income	Old Dividend Rate* (%)	New Dividend Rate (%)
\$7,000	\$14,000	10.0	5.0
\$28,400	\$56,800	15.0	5.0
\$68,800	\$114,650	27.0	15.0
\$143,500	\$174,711	30.0	15.0
\$311,950	\$311,950	35.0	15.0
>\$311,950	>\$311,950	38.6	15.0

*Dividends were taxed at the same rate as income prior to the recent change.

SOURCE: Internal Revenue Service

A NEW FOUNDATION

Manufactured Housing Flourishes in South Carolina

South Carolina often conjures up images of tree-lined streets dotted with Greek Revival homes with porticos. But more than 355,000 South Carolina families live in manufactured homes. That means one fifth of all homes in the Palmetto State are manufactured, the highest percentage in the country.



COURTESY OF MHI

According to estimates, manufactured homes will account for more than one half of single-family housing starts this year in South Carolina.

The Manufactured Housing Institute (MHI) estimates that this year, in the South Atlantic region (from Delaware to Florida) nearly one-fourth of all single family housing starts will be a manufactured home shipment. This percentage has been steadily increasing since 2000.

South Carolina has been experiencing the same trend, but on a much larger scale. Over one-half of South Carolina single-family housing starts this year will be manufactured homes. (Manufactured homes that are placed on a foundation and purchased with land may qualify for mortgage financing. Otherwise, they are considered personal

property and are financed as such, usually at a higher interest rate.)

The manufactured housing industry took off at the end of World War II when veterans returned to find a lack of affordable housing. Many consumers remained cautious about purchasing manufactured homes, though, and by the 1970s Congress passed legislation that established safety standards for the industry.

Today manufactured home builders boast that their products are on par with the quality and attractiveness of their site-built counterparts. According to the MHI, "Today's manufactured homes are built with the same building materials as site-built homes, but in a controlled factory environment where quality of construction is invariably superior to what can be done outdoors." Last year, 250,500 manufactured homes were shipped in the United States with an average retail price of \$46,000.

Also, the growing trend in the industry is to develop communities of manufactured homes. The new subdivisions offer pools and landscaping options. Oakley Pointe and Strawberry Station are two developments near Charleston, S.C. In these communities, residents usually pay a monthly fee to developers for the lot and purchase their home from a manufactured dealer. As in any subdivision, there are guidelines governing the size, age, and appearance of manufactured units.

Many believe manufac-

tured homes drive down the property values of neighboring site-built homes. But a 1997 study of residential properties by Richard Stephenson and Guoqiang Shen of East Carolina University found no such correlation. In fact, those homes built on a fixed foundation appreciated in value.

Although two-story verandas with white columns are not offered as amenities, manufactured houses are becoming an attractive alternative to a large percentage of South Carolinians who want affordable, quality homes.

—AMANDA WHITE GIBSON

NEW REACTORS

Energy Firms File Permits

Three nuclear energy companies, including one in the Fifth District, have said they will file for early permits to build new reactors. Rick Zuercher, a spokesman for Dominion Resources, based in Richmond, Va., says his company plans to file for a permit to build on its North Anna site, in Louisa County, Va.

Applying for the permit doesn't mean Dominion will actually build a plant, though. "It allows us to keep the nuclear option open," Zuercher says.

The Nuclear Regulatory Commission, under 1992 legislation, allows firms to obtain early permits valid for 20 years. New nuclear plants may loom on the horizon should energy bills under consideration in the

U.S. Congress include loan guarantees for new construction. Also under consideration is permanent reauthorization of the Price-Anderson Act. This insurance program subsidizes the industry, by placing a \$9.5 billion cap on liability for owners in the case of nuclear accidents.

Nuclear power accounts for about one-fifth of the nation's electricity generation, but no new plants have been ordered since 1978 because of high plant construction costs, worries about safety, and waste disposal issues. Costs have been estimated to average about \$3,000 per kilowatt of capacity in 1997 dollars, according to the Congressional Research Service. However, Steve Kerekes of the Nuclear Energy Institute says costs have been trending downward. "Our goal is to get our costs down on a kilowatt basis installed, to about \$1,000 to \$1,100 per kilowatt, which is what we need to be competitive," he says.

The Fifth District has 18 nuclear power plants operating in Maryland, North Carolina, South Carolina, and Virginia. In South Carolina, nuclear power accounts for about 55 percent of the state's total power generation. Tom Shiel of Duke Energy, based in North Carolina, says Duke is not planning to build any new nuclear plants but continues to apply to extend the life of its existing nuclear plants.

—BETTY JOYCE NASH

FIELD GOAL OR FUMBLE?

The Economic Score on the Atlantic Coast Conference's Expansion

Last spring, the Atlantic Coast Conference (ACC) took center stage in college athletics. Its controversial recruitment of two Big East teams — Virginia Tech and the University of Miami — had economic ramifications as well. Both schools could benefit financially from ACC membership, while current members hope the expansion will improve their bottom lines and the conference's future stability.

Seven universities in the Fifth District founded the ACC in 1953. The conference currently has nine member schools, four of which are in the Tar Heel State: Duke University, the University of North Carolina, North Carolina State University, and Wake Forest University. The other members are the University of Maryland, the University of Virginia, Clemson University in South Carolina, Georgia Institute of Technology, and Florida State University.

Being part of the ACC offers several advantages. Robert McCormick, an economics professor at Clemson University who has studied sports, says that the conference's intense rivalries energize the ACC's die-hard fan base in the Southeast, which drives ticket sales and alumni donations for member schools.

Also, ACC members divvy up net earnings from the sale of broadcast rights to conference games and branded merchandise. This additional money helps fund less visible college teams, from men's soccer to women's lacrosse.



By expanding to 11 members, the ACC hopes to boost its revenue. For one thing, bringing Miami's powerhouse football team into the conference could translate into more money from broadcasters. Second, the conference would need only one more team to obtain permission from the NCAA to hold a year-end football championship game, which can be enormously profitable according to McCormick.

ACC newcomers Miami and Virginia Tech may also benefit. Their travel expenses could be reduced since their teams won't have to travel up north to play Big East schools like Boston College or Syracuse University. Switching from the Big East could also increase their revenue, since the ACC divides its proceeds evenly versus providing a base amount plus bonuses for being in national championships. ACC members will have to split revenue 11 ways instead of nine, but they hope that increased earnings will offset this dilution.

There also is a concern that the quality of conference play could be diluted since Miami and Virginia

Tech's basketball teams aren't as strong as their football teams. Furthermore, a bigger conference means that some teams like Wake Forest will lose home games with in-state rivals. Both factors could dampen ticket sales.

Such short-term sacrifices may be necessary to ensure the ACC's long-term survival. Sports commentators say that athletic conferences will only get bigger in the future, pressuring smaller ones to either enlarge or be engulfed.

—CHARLES GERENA

WINE DISTRIBUTION

Virginia Uncorks Out-of-State Shipments

In July, Virginia became the 23rd state to allow direct-to-consumer wine shipments from out-of-state sources. Previously, Virginians could have their favorite vintage delivered to their doorsteps from in-state wineries, but it was illegal to receive wine from beyond the state's borders.

Virginia consumers and out-of-state wineries filed a grievance in November 1999 asserting that the Old Dominion's restrictions on wine shipments were unconstitutional, because they violated the Commerce Clause of the U.S. Constitution.

The courts agreed in

March 2002. Federal Judge Richard Williams ruled that allowing only in-state producers to deliver wine directly to Virginia residents discriminated against out-of-state wineries. The ruling was immediately appealed by the Commonwealth's Attorney General and the Virginia Wine Wholesalers Association, and Judge Williams issued a stay of execution.

But on April 9th, the pending legal battle was rendered moot when Gov. Mark Warner signed Senate Bill 1117. Under the new law, an out-of-state winery can ship up to two cases a month to Virginia consumers after purchasing a \$50 license.

Opponents of the law point to an increase in the risk of underage drinking and loss of state revenue as a result of direct shipments to customers. The Wine & Spirits Wholesalers of America, Inc. asserts that the existing "system of distribution has served consumers and states well for 70 years." Direct shipping "could severely damage the ability of a state to regulate the distribution of alcohol as it deems appropriate for the protection of its citizenry — especially minors — and to efficiently collect excise and sales tax revenue."

Supporters of the looser regulation argue that consumers will benefit from greater choice and lower prices. The new law also may benefit Virginia's winemakers. Around 60 percent of the 500,000 visitors to Virginia wineries each year aren't state residents. In the past, wineries

couldn't export directly to many of these out-of-state customers because it violated the receiving state's beverage control laws.

Stemming from the new law, Virginia has embarked on the process of gaining status as a "reciprocity state." This means that Virginia will allow direct shipments from other states with similar wine distribution regulations, such as neighboring West Virginia. In return, reciprocity states like California will welcome wine imported from Virginia.

"Vintners are now one step closer to gaining access to a number of new markets," says Chad Zakaib, director of sales and marketing for Jefferson Vineyards in Charlottesville. Pending the finalization of reciprocity agreements, Virginia wineries will be able to ship to 22 states, more than doubling the size of their export market.

— ANDREA HOLLAND

SHORE BREEZES

Wind Farms May Harvest Energy From Coastal Communities

Along the Eastern Shores of Maryland and Virginia, residents have been struggling to find new industry beyond fishing and farming. Wind power may offer a way to both spur economic growth and safeguard the region's natural resources.

The Eastern Shore gets plenty of ocean breezes. Most of its Atlantic coastline



Entrepreneurs have proposed building "wind farms" on the Eastern Shores of Maryland and Virginia.

gets air currents measuring 16-17 miles per hour at an altitude of 164 feet, according to the U.S. Department of Energy. This level of wind power is considered useful for generating energy.

In addition, the region's relative isolation is finally an asset. "You try to be in an area where there isn't a lot going on," says Dennis Quaranta, president of Winergy LLC. Quaranta's company has proposed a "wind farm" of 150 giant, propeller-driven turbines off the coast of Fisherman Island, Va., and 350 turbines a few miles west of Ocean City, Md. Although the Fisherman Island turbines may interfere with the routes of migratory birds, company literature notes that both offshore locations aren't near shipping lanes and don't have a lot of marine mammal activity.

When air currents are at their peak, Winergy expects to generate 540 megawatts (MW) of electricity at its Virginia wind farm and 1,200

MW in Maryland. Another company, Provento America Inc., estimates that its six land-based turbines proposed for Cape Charles will generate almost 8 MW of power at peak capacity. (One MW of electricity can power approximately 1,000 homes.)

These companies see a nascent demand for wind-generated power. Quaranta believes that residential customers will appreciate the health benefits of buying electricity from non-polluting wind turbines instead of from coal-fired plants. They may also want to help reduce America's dependence on imported fuel. As for businesses, he thinks that using wind power will improve their environmental image.

Marketers have successfully sold electricity generated by the Mountaineer Wind Energy Center in northern West Virginia. The center's 44 turbines help power about 10,000 small businesses and residences in the Washington, D.C., area, according to a report published in the *Charleston Gazette* in July 2003.

However, Provento hasn't been successful in Cape Charles. Greg Manter, director of the Eastern Shore of Virginia Economic Development Commission, says that the German firm hasn't secured contracts for the power that its turbines will generate. In his view, the problem is that wind power is priced higher than the market rate for electricity. "You need to find a buyer who is willing to do it for environmental reasons."

And, according to a Cato Institute report published in January 2002, that buyer isn't prevalent yet. "Because of higher costs, no more than 1.5 percent of the retail customers in any state have signed up for [special packages of renewable energy], and participation in utility-sponsored programs is generally around 1 percent or less."

Over the years, wind-powered turbines have been improved to lower production costs — a single turbine can produce several megawatts of power today versus only a few hundred kilowatts 20 years ago. As a result, the cost for wind power has fallen from as much as 50 cents per kilowatt-hour (kWh) to less than 5 cents per kWh. This makes wind power close to being competitive with electricity generated from coal-fired plants.

Still, the start-up costs of a wind-powered plant are quite high. For example, building transmission lines to carry wind-generated electricity to a regional power grid can be prohibitively expensive.

Given these challenges, it may take a while longer for wind-based power generation to become economically viable. That won't stop people like Dennis Quaranta from trying to harvest energy from windy spots like the Eastern Shore. "It's not that [wind power] is an unknown technology — there are 13 wind farms in Europe. It [just] hasn't been done in the United States."

—CHARLES GERENA

UNHEALTHY SITUATION

Nursing Shortage Threatens Health Care

Many states in the Fifth District and the nation face a shortage of nurses, a problem that experts project to increase as the baby-boomer generation ages.

Insufficient staffing can sometimes cause critical problems. A study published by the *Journal of the American Medical Association* suggests that patients in hospitals with severe shortages have up to a 31 percent higher chance of death than they otherwise would.

Economic theory suggests that a shortage of specialized employees should lead to higher wages, but nurses' real wages have remained relatively unchanged in recent years. The Bureau of Health Professions reports that for the past decade, nurses' wages have risen at the level of inflation, while alternative occupations for potential nurses, such as elementary

school teachers, have risen faster than the inflation rate.

Barbara Brown, vice president of the Virginia Hospital and Healthcare Association, points to the fact that many hospitals negotiate long-term contracts with insurance companies, so they cannot react easily to fluctuations in the market. "The insurance company barter with the health-care facilities and physicians as to what they will pay for certain conditions," she says. "So the ability of any facility to respond to a tightened work force by increasing wages is really limited."

To deal with the problem in the short-term, healthcare facilities, including hospitals, are trying to delegate some nursing responsibilities to lesser-skilled workers. "[The goal is] to find an individual who could assist the nurse in caring for the patient, and could free the nurse up to do the planning and to do the administrative tasks, and the care on more difficult patients," Brown says.

The U.S. General Accounting Office reports that facilities have attempted to improve the situation in the long run by looking to state governments for wage supplements. They also are changing the structure of nurse training and specialization to create a career path, thus rewarding the more experienced nurses with greater responsibility and pay.

Also, according to Cheryl Peterson, senior policy fellow at the American Nurses Association, collaborative efforts have led to media campaigns to cast a positive image on the nursing profession. She notes that general media attention will probably attract potential nurses "because people see that jobs are available [and] they'll look at nursing because they see that there's a shortage."

While these changes may have some immediate benefits, the health-care industry may need to make some structural changes to remove the constraints on wages to solve the long-term problem.

—ANDREW FOERSTER

Projected Shortages in Registered Nurses: 2000-2020

State	2000	2005	2010	2015	2020
D.C.	-219	-1,305	-2,085	-2,904	-3,851
Maryland	-545	-3,299	-7,772	-13,044	-18,954
N. Carolina	629	931	-2,046	-8,868	-17,924
S. Carolina	-104	-649	-1,555	-3,571	-6,741
Virginia	-4,736	-7,698	-11,927	-18,446	-25,111
W. Virginia	1,296	738	183	-725	-1,876
Fifth District	-3,679	-11,282	-25,202	-47,558	-74,557
Total U.S.	-110,707	-149,387	-275,215	-507,063	-808,416

NOTE: Negative numbers indicate shortages

SOURCE: U.S. Department of Health and Human Services

Benefit-Cost Analysis

BY AARON STEELMAN

When considering making a purchase, consumers weigh the pros and cons of their decision. For some items, such as a pack of gum, this may not require a lot of thought. But for others, such as education, it may prove quite difficult.

Consider the case of adults deciding whether they should go back to school for another degree. They have to ask themselves a number of questions. Should I return to school at all? If so, which school should I attend? And should I go full time or part time?

The answers to those questions can involve a lot of considerations. The most significant is often pecuniary. Can I afford it? And will the additional degree improve my earning power enough to pay for the time and money I will spend attaining it?

For others, the financial considerations may be less important. Some people return to school knowing that the choice will cost them money, but are willing to do so because it is necessary to switch to a different, more satisfying profession. Even for these people, though, there are difficult issues to consider, such as how attending school will affect the amount of time they can spend with family and friends.

In other words, the specific benefits and costs may differ from person to person but the calculus does not. In the end, everyone hopes to make the “right” choice — that is, the one that results in greater benefits than costs, whatever those may be.

Public-policy analysts often engage in a similar exercise concerning legislative and regulatory proposals. They consider whether a given proposal will yield more benefits than costs — that is, whether it will improve the well-being of society.

Not surprisingly, this analysis is often more complicated than simply taking a notepad, counting up the benefits on one side and the costs on the other, and rendering a verdict. Most fundamentally, it is often difficult to know in advance exactly what effects a proposal will have. But even if the effects are clear, there are vexing ethical issues that must be tackled. For instance, it’s not obvious what time period should be used as a benchmark.

Take environmental proposals. It is possible that, if enacted, some proposals would yield more costs than bene-

fits for current citizens. But for future generations, those proposals could be very beneficial — so beneficial, in fact, as to dwarf the costs imposed on us today. Should we consider the well-being of those people who are not even born yet? Some would say yes, while others would argue no.

In addition, some charge that benefit-cost analysis is simply too cold and calculating to be a useful policy tool. There’s an old saying that you can’t put a price on a human life. But people conducting benefit-cost analyses do it all the time. Consider the case of safety-belt laws. In order to gauge whether these laws pass a benefit-cost analysis it is necessary to provide a numerical estimate of the value of a human life. Such estimates are usually in the \$6 million range. They are arrived at, in part, by looking at the risks that people are

willing to take as they go about their daily business. What’s more, not all lives are valued the same. The Environmental Protection Agency got into hot water recently for using an estimate of \$2.3 million per life for people over 70 years of age, instead of the \$6.1 million figure it used as an across-the-board measure. Some critics say this practice is simply ghastly. But whatever imperfections there may be with benefit-cost analysis, most agree that it is a powerful tool, grounded in sound economics.

In fact, since 1997, Congress has required the Office of Management and Budget (OMB) to provide estimates of the total annual benefits and costs of all federal regulatory programs as well as estimates of individual regulations. In its first report, OMB concluded that there was insufficient evidence to recommend eliminating any specific regulatory programs. Not surprisingly, those “politicians wishing to curb the excesses of social regulation were generally disappointed with the OMB report for not going far enough,” wrote economist Robert Hahn in an article for the *Journal of Economic Perspectives*. Over the past five years, OMB has refined its methodology, and while critics believe much remains to be done, they are generally pleased to see benefit-cost analysis lent the legitimacy they think it deserves.

In the end, difficult ethical issues will always surround benefit-cost analysis. But that doesn’t mean that benefit-cost analysis should be abandoned. It simply means that its limitations must be recognized and readily admitted. **RF**



The Evolution of Property Rights

BY AARON STEELMAN

Property rights are the cornerstone of a market economy. They enable people to trade with each other and live together harmoniously. But where do they come from? How do property rights emerge?

Not all cultures have embraced formal property rights. For instance, the native peoples of the American Southwest, according to most ethnographic studies, did not recognize private property. Is property, then, a new concept, one known only to the modern, industrialized world? That's unlikely.

In a 1967 *American Economic Review* article titled "Toward a Theory of Property Rights," economist Harold Demsetz argued that property rights develop "to internalize externalities" and usually emerge when new technology arises or new markets open. Consider, for example, the case of the Indian tribes of modern-day Quebec. Before the fur trade developed, they did not recognize property rights. In this way, they were much like the tribes of the American Southwest.

"[H]unting was carried on primarily for purposes of food and the relatively few furs that were required for the hunter's family," Demsetz wrote. "The externality was clearly present. Hunting could be practiced freely and was carried on without assessing its impact on other hunters. But these external effects were of such small significance that it did not pay for anyone to take them into account. There did not exist anything resembling private ownership in land."

But the fur trade changed that. "First, the value of the furs to the Indians was increased considerably. Second, and as a result, the scale of hunting activity rose sharply." So the tribes developed territorial hunting and trapping rights to make sure that the resources were cared for prudently and to enhance long-term efficiency.

Why didn't the native peoples of the American Southwest develop similar institutions? Demsetz cites two reasons. First, in that area there were no animals of commercial importance comparable to the fur-bearing animals of the North. Second, those animals that did populate the Southwest were primarily grazing species that tended to wander over large tracts of land, making it difficult to prevent them from moving from one parcel to another. "Hence both the value and cost of establishing private hunting lands in the Southwest are such that we would expect little development along

these lines. The externality was just not worth taking into account," wrote Demsetz.

Demsetz's article has spawned a massive amount of research in the 35 years since its publication. Recently, the Northwestern University School of Law hosted a conference to discuss the implications of his work, and the papers presented there were later published in the *Journal of Legal Studies*. One of the more interesting is Richard Epstein's analysis of parking on Chicago's public streets.

Chicago, of course, receives a great deal of snow each winter. This requires people to shovel the area in front of their houses where they normally park their cars. Such labor gives one a "curb right," meaning you can continue to use that space until the street is cleared or the snow melts. What if an interloper

takes the spot? If it's a first offense, he may receive a simple warning placed on his windshield by the "owner" of that spot or by a neighbor with a strong interest in seeing the system succeed. If it's a habitual offense, he can expect to have doors dented or mirrors shattered.

Season-long access to parking spots may not be the most desirable outcome. One could argue for a more limited

right, such as a week, after which the space returns to the public domain. But that kind of fine-tuning is a hallmark of patent and copyright law, for example, not of informal social norms enforced by watchful community members. "In a world of second best, there is no need to set these [shorter] limits because everyone can easily understand that the right ends when the space disappears. So the obvious focal point dominates over lesser solutions that, however efficient, are also unattainable," writes Epstein of the University of Chicago Law School.

An even better arrangement, Epstein argues, would be to "move from a system of initial occupation to one of metered parking or parking permits" sold by auction. But many residents prefer the current system and will lobby against one that requires payment for parking spots. The "transition from one regime of property rights to another is often quite bumpy" and the "choices in question often result in odd distributional patterns that are better explained if Demsetz's basic efficiency story is tempered with a healthy dose of public choice theory," writes Epstein. In short, Demsetz's paper is likely to fuel another 35 years of interesting research. **RF**

"The Allocation of the Commons:
Parking on Public Roads," by Richard
A. Epstein. *Journal of Legal Studies*,
June 2002, vol. 31, no. 2, pp. 515-544.

BUILDING

*Several Factors Distinguish Commercial Development
in Washington, D.C., From Other Real Estate Markets*

BY CHARLES GERENA



In Uncle Sam's Backyard

During the 1990s, commercial development reshaped the Washington, D.C., metropolitan area. The expansion of telecommunications, Internet services, and other high-tech sectors fueled demand for office and retail space in suburban Virginia and Maryland.

One look at data from Julien J. Studley Inc., a New York-based commercial real estate firm, tells the tale. By the end of 2000, the availability rate — the percentage of office space on the market for lease or sublease — was just 5.1 percent for the northern Virginia counties of Arlington, Fairfax, Loudoun, and Prince William, and the city of Alexandria. The rate was only 7.1 percent for Montgomery and Prince George's Counties in suburban Maryland. In comparison, the average availability rate was 11 percent for the 13 major metropolitan markets tracked by Studley.

Then, the tech boom went bust and the effects of a national economic slowdown reached metro Washington. Between the fourth quarter of 2000 and the second quarter of 2003, availability rates more than tripled in northern Virginia and almost doubled in southern Maryland. Meanwhile, average rental rates either fell or didn't grow much.

Back in the nation's capital, the commercial real estate market looks quite different. The availability rate in Washington rose from 5 percent in the fourth quarter of 2000 to only 7 percent in the second quarter of 2003, the lowest rate among metro markets

that Studley monitors. Although the city's lease rates have fallen, they are much higher than the suburbs.

Why does Washington's commercial real estate market look so good compared to the suburbs? "There's only one answer — the federal government. It's more than half of the economy in the city," says Stephen Fuller, a public policy professor at George Mason University (GMU) who tracks the regional economy. "The federal government spent \$33.5 billion in Washington last year, up \$2.6 billion from the year before."

In fact, the presence of the federal government is just one of the factors driving the market for commercial real estate in Washington, D.C. These factors have limited both the overall supply of commercial property and the demand for retail space, but they have also kept demand for office space from dropping as quickly as it has in other markets.

Looking for Land in All the Wrong Places

The pace of commercial construction in Washington was sluggish during the last decade. Although this created a supply imbalance in the real estate market, it helped vacancy rates and rents hold up better in the new millennium.

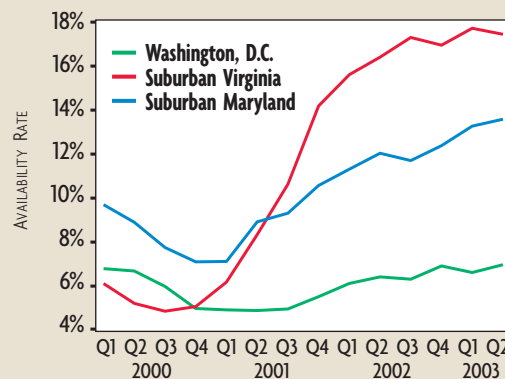
Cranes and steam shovels started moving steel and dirt in Washington again only within the last few years. More than 13 million square feet of new and renovated non-residential property has been added to Washington's total inventory since 2000, according to offi-

cials with the Downtown D.C. Business Improvement District (BID). Another 11 million square feet was under construction as of March 2003. Total rentable office space in the city exceeds 100 million square feet.

The majority of commercial development has been in areas northwest of the Capitol, including the central business district near the White House and neighborhoods like Shaw and Logan

City vs. Suburbs

Since 2001, consistent demand from the federal government and relatively less commercial development in Washington, D.C., have kept the city's availability rate from climbing as quickly as the rates in suburban Virginia and Maryland.



NOTES: The availability rate is the percentage of all office space being marketed for lease or sublease. In addition to unoccupied space, it accounts for space that is occupied but due to be vacated in the near future. Suburban Virginia includes the counties of Arlington, Fairfax, Loudoun, and Prince William, and the city of Alexandria. Suburban Maryland includes the counties of Prince George's and Montgomery.

SOURCE: Julien J. Studley Inc.

Circle north of downtown. Development also has occurred in the southwest quadrant, including new headquarters for the Federal Aviation Administration (FAA) and the Federal Communications Commission.

Washington's eastern quadrants have been quieter, mostly because they are dominated by residential neighborhoods. But there have been pockets of commercial activity there, including

the development of the Southeast Federal Center on M Street near South Capitol Street.

What held up commercial development in Washington until now? Leasing agent Geoff Kieffer says business people didn't trust the local government. "There was a lack of confidence that for every dollar of taxes you'd get a dollar's worth of services back," explains Kieffer, president of Wash-

ington-based Woodmark Commercial Services LLC. "And public safety was an issue. We were labeled the murder capital of the world."

During the mid-1990s, in particular, the city was in the throes of a fiscal crisis. An October 2002 Brookings Institution paper noted that "the city was effectively bankrupt and unable to pay its bills, collect taxes, access the credit markets, or deliver adequate services to its citizens."

These issues made investors and developers unwilling to bear the cost of building in the nation's capital.

Like any mature metropolis, Washington has physical limitations that make it expensive to expand existing buildings and construct new projects. "You have to tear stuff down to build new buildings, and some of the stuff you'd like to tear down has to be saved because it has historical value," notes Fuller. "A lot of the central city office construction involves renovation of existing structures." Such endeavors aren't cheap, partly because "the regulatory process is lengthy."

Unlike most cities, however, Washington has other constraints that make it even harder to build or expand. The Building Height Act, passed by Congress in 1910 and codified in the city's zoning ordinances, restricts a building's stature to the width of the fronting street plus 20 feet. Typically, structures on commercial corridors can be no taller than 130 feet.

As a result, the boundaries of downtown have extended into Washington's fringes. This has caused some commercial development to push against residential neighborhoods.

Combined with uncertainties about Washington's business climate, these high barriers to entry sent real estate investors and commercial developers into northern Virginia and suburban Maryland during the 1990s. But after the U.S. economy ran out of gas in 2001 and demand for office space evaporated, vacancies didn't increase in Washington as much as they did in the suburbs.

"The District of Columbia does better than the outlying areas because it doesn't build up as big a surplus when there is a lot of building," says Anthony

Creating A Capital City

More than two centuries ago, a special federal district was carved out of Virginia and Maryland to serve as the young nation's permanent capital. Both states agreed to donate the remote 10-mile square on the Potomac River that Congress chose for the new district.

Washington, D.C., isn't the only national capital planned in this manner. During the 20th century, the cities of Brasilia and Canberra were created within separate federal districts to serve as the seats of government for Brazil and Australia, respectively. Common threads weave through the unique histories of these city-states.

Scott Campbell, assistant professor of urban planning at the University of Michigan, likens a capital city to a corporate headquarters. Workers scattered across the country produce its goods and services, but the primary decisionmakers are still concentrated in one place. Accordingly, a substantial amount of economic activity in capital cities continues to come from the national government, both directly and indirectly.

"Firms seek proximity and access to government offices and bring in more jobs, construction, and tax revenues," wrote Campbell in an April 2000 research paper. "Other firms set up in the capital to serve government offices with legal, financial, communication, and administrative services. Lobbyists for corporations, trade unions, nonprofits, and other interest groups cluster in the capital."

Since a capital city is the seat of government, federal officials usually want it to symbolize their nation's economic and social status. Therefore, development of sufficient public infrastructure and architecturally grand amenities is carefully planned and often subsidized.

At the same time, planners usually design capital cities to be efficient, functional centers of government administration. As a result, these cities are sometimes derided as socially and culturally drab. Washington has made strides in encouraging the development of restaurants and entertainment offerings, but Stephen Fuller at George Mason University notes that most tourists stick to seeing the sights on the Mall and don't stroll around downtown.

The economies of Washington, Brasilia, and Canberra could be considered one-dimensional as well. In each capital, the national government is the single largest employer. The manufacturing base is also small, but there is some variety of service industries. Each city has taken steps to increase private employment so that the impact of government budget cutbacks on the local economy is minimized.

As much as these cities have in common, there are some differences.

While Washington and Canberra are near population centers, Brasilia is not. Washington was centered on the eastern seaboard to provide equal access for the industrial North and the agricultural South. Canberra came into existence between two major Australian cities, Melbourne and Sydney, in 1913 to avoid the political fallout of choosing either one as the capital. But Brasilia was built hundreds of miles inland in 1960 because the government wanted to relieve overcrowding in Brazil's populous coastline and encourage economic growth in the center of the country.

For the most part, only residential growth has been stimulated beyond the borders of Brasilia. In fact, most of the people who work in Brasilia and Washington commute from elsewhere. However, most workers in Canberra live in the city.

—CHARLES GERENA



By providing large blocks of contiguous space for retailers, it is hoped that Gallery Place will attract suburban shoppers to downtown Washington.

Downs, an economist with the Brookings Institution and a real estate expert. "...It's much easier to build more space in the suburbs, so the supply is likely to rise faster in the suburban locations than downtown." In other words, Washington's commercial real estate market can't expand its supply rapidly, so it doesn't have as far to contract during downturns in demand.

Richard Bradley, executive director of the Downtown D.C. BID, thinks that's a good thing because "it creates a sense of predictability. It's one of the reasons why Washington is considered to be the most desirable location for commercial office investment internationally," according to a recent survey by the Association of Foreign Investors in Real Estate. "It's ahead of London, Paris, and New York."

Indeed, investors are taking a second look at Washington's commercial real estate market. "A ton of money has fled out of the stock market," notes Downs. "There are investors looking for well-occupied properties with leases that aren't going to roll over. That kind of property, which is a lot of downtown Washington, has gone up in price in spite of the fact that vacancies have risen."

In addition to the relative stability of Washington's commercial real estate market, the city's fiscal situation has

improved. The local government has balanced the budget for five years in a row, boosted its credit rating, and improved services. Under Mayor Anthony Williams, "the government is being run like a business," notes Geoff Kieffer.

Real estate investors also have been attracted to the city's comparatively healthy economy. For example, the unemployment rate of 6.4 percent in Washington was about the same as Charlotte, N.C., in 2002, but it increased less than one point from 2000 while Charlotte's rate more than doubled over the same period.

With more capital available, developers are better able to finance the high cost of commercial development in Washington. Also, building owners are able to garner higher sale prices in the market, especially those with high-occupancy and high-profile properties.

However, lease rates haven't responded to market conditions as much as they have in other cities. For one thing, tenants in Washington can escape to the suburbs more cheaply and easily than tenants in places like New York City, where landlords were able to jack up rents for several years due to the higher cost of exiting the market.

Second, many Washington businesses are unable to bear substantial rent increases. "Big law firms tend to

pay the highest prices for the prettiest and newest buildings, [but] halfway through 2002 most of them redid their business plans and downsized their revenue expectations," explains Kieffer. Washington's foundations and institutes tend to be well-funded, but non-profit trade groups and associations also have been under pressure to reduce costs. "There has been no business sector that is doing well, so the money going to [these groups] has been off."

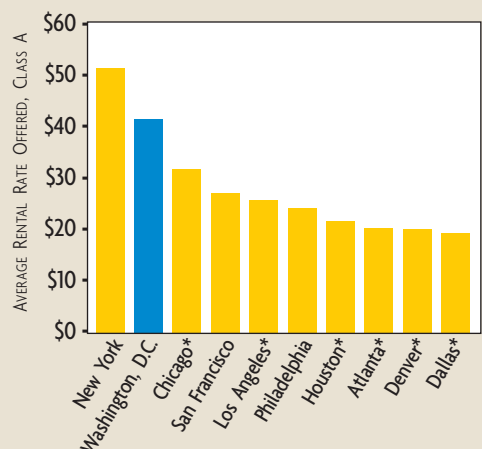
Still, rents remained higher in Washington than in the suburbs for the second quarter of 2003, according to data compiled by Julien J. Studley Inc. Class A properties — buildings that are relatively new, are in an excellent location, and have high-quality tenants — leased for about \$41 per square foot. In contrast, the average asking price for Class A space was about \$25 per square foot in suburban Virginia and Maryland. (See graph below for comparisons of Washington to other major commercial markets.)

God Bless the U.S. Government

So who has been willing to buy or lease property in Washington when there is lots of cheaper space in the suburbs?

It's All Relative

Despite stagnant growth in rental rates for office space in Washington, D.C., Class A properties managed to get more money per square foot than many major markets in the second quarter of 2003.



*Includes properties only in the city's downtown or Central Business District

SOURCE: Julien J. Studley Inc.

A Helping Hand

In an appropriations bill passed by Congress in February 2003, Washington, D.C., officials received a variety of federal payments to cover local expenses. Here are a few examples:

- \$15 million to reimburse the costs of emergency planning and security measures
- \$10 million to support bioterrorism preparedness
- \$161.9 million to cover the salaries and expenses of the local court system
- \$17 million for public charter schools
- \$50 million to implement the Combined Sewer Overflow Long-Term Plan

SOURCE: Consolidated Appropriations Resolution, 2003

The city's huge government sector is responsible for much of this demand, both directly and indirectly.

GMU's Stephen Fuller says there was 139 million square feet of office space in Washington in 2002. The federal government owned or used about 50 million square feet of that space. "The federal work force decreased by about 55,000 employees [since 1992], but their space utilization went up 17 million square feet," observes Fuller. That's because government activity shifted onto the shoulders of private contractors, who send scores of employees to work side-by-side with federal agencies in their buildings.

Then, there are the businesses and organizations that want to be near the seat of the U.S. government regardless of the cost. They range from attorneys and lobbyists to think tanks and providers of international financial services.

Uncle Sam's presence may bring businesses to Washington, but Rich Bradley of the Downtown D.C. BID argues that

they remain because the city has a critical mass of private-sector customers. For example, law firms initially provide expertise on federal regulation and taxation, then they diversify their offerings to serve local businesses like information technology companies, which need to protect their intellectual property rights.

Some federal agencies have a greater effect on the commercial real estate market than others, says Kieffer. For example, many buildings in southwest Washington are filled with companies that want to be next door to the FAA's new headquarters. Other agencies that have a large pool of contractors include the Department of Energy and the National Aeronautics and Space Administration. In contrast, less technical agencies like the Small Business Administration and the Peace Corps pull in few contractors.

Even when a federal agency is experiencing growth and looks to hire a significant amount of outside help, sometimes it can take longer than

Changing Factory Fundamentals Affect Industrial Market

Not much factory work takes place in the nation's capital. Manufacturers are more active in other parts of the Fifth District, but market forces ranging from increased imports to automation have led to work force reductions. At the same time, the requirements for industrial space have evolved.

These fundamental changes have affected the amount of industrial real estate utilized in the region. "There has definitely been a contraction of industrial space needs based on the manufacturing pullback that we have experienced in the last several years," says David Williams, senior vice president at Harrison and Bates, a commercial real estate firm in Richmond, Va.

Real estate analysts say that industrial developers usually react quickly to changes in the market. Still, as manufacturers shed workers, a lot of factory space ended up vacant.

According to Torto Wheaton Research, a subsidiary of CB Richard Ellis, availability rates for industrial space in the United States increased from 7.0 percent in 1999 to 11.3 percent in 2002. Net absorption—the change in occupied square feet from one period to the

next—went from 125 million square feet to minus 33 million square feet during the three-year period.

By these measures, the Baltimore, Washington, D.C., and Charlotte regional industrial markets have fared worse. "Overall, the mid-Atlantic area does have more available space than the national average, indicating that the area has suffered more than the nation in regard to the 2001-2002 recession," says Laura Stone, vice president and research economist at Torto Wheaton, a Boston-based firm.

Manufacturers have reoccupied some vacant industrial facilities. For example, a Pakistani company plans to use a former textile plant in Ranlo, N.C., to manufacture and distribute bedding. Other facilities have been subdivided for smaller tenants or converted for storage and distribution use.

But older plants can have physical characteristics that make them obsolete for industrial use, according to realtors in the Fifth District. They may have ceilings that are too low and floors that aren't strong enough to accommodate modern manufacturing equipment. Or their fire suppression equipment and electrical wiring

may not meet current building codes.

In addition, the plant's location may no longer be suitable. "It might be too far from a manufacturer's customer base," describes Williams. "It might be a property with inadequate access for tractor trailers [or] be in an area that has declined and is no longer considered safe."

For industrial facilities that are inadequate for modern-day manufacturers, developers have had to be more creative. A variety of properties have been transformed into retail stores, offices, or residential units, or a combination of all three. Examples abound in the Fifth District, from the high-priced apartments carved out of tobacco warehouses in Richmond to the retail complex created from a former power plant in Baltimore.

But not just any plant can be successfully redeveloped in this manner. John Moore Jr., president of the Society of Industrial and Office Realtors' Carolinas Chapter, thinks the facility must be near a population center. As development spreads into rural areas, plants in those areas may become candidates for residential or retail redevelopment in the future.

—CHARLES GERENA



VANESSA REIDIN, DOWNTOWN D.C. BID

Franklin Square North is just one of Northwest D.C.'s new office buildings.

expected for Congress to fund the space requirements of agencies and their contractors. For example, the demand for office space from homeland security-related agencies didn't materialize last year as expected.

Michael Goodwin, a lawyer at Arnold & Porter who represents real estate owners and developers in Washington, believes this is more of an issue in the city's periphery where there is little other business activity. "In those areas, you have sites that sit there patiently waiting for a number of years for the public-sector procurement process to run its course. On K Street or elsewhere in the heart of downtown, a building can compete equally for private-sector and public-sector tenants."

Don't Forget the Private Sector

Believe it or not, some demand for office space in Washington is purely private-sector driven. Rather than build in the middle of nowhere, businesses are rethinking being in an urban environment where there is a concentration of workers and better transportation access. Gerry Widdicombe, director of economic development at the Downtown D.C. BID, adds that communica-

tions firms like XM Satellite Radio Inc. and Atlantic Video Inc. have located in Washington, as well as a few high-tech firms, because of the city's rising "creative class."

There has been some hotel development as well, responding to demand from both tourists and people visiting government agencies and local businesses. A San Francisco-based hotel developer has renovated five properties in northwest Washington in the last few years, including the luxury Hotel Monaco near the MCI Center.

However, retail development in downtown Washington has been abysmal. While several restaurants and clothing stores have opened recently, the customer base isn't there for mass merchandisers because most of Washington's workers spend their salaries in the suburbs where they live. "You are not going to buy a new car or a suit at lunch time; you'll go to the mall," notes Fuller. Also, many workers don't go out for lunch because their buildings have cafeterias.

As for the city's resident population, Fuller says it peaked in the 1950s and has been declining ever since. From 1990 to 2000, the population dropped 5.7 percent to 572,000 people.

This exodus may be slowing down — Washington's estimated population rose 0.3 percent from 2000 to 2001 and fell only 0.5 percent in 2002. This could be due to renewed interest in urban living and a backlash against suburban sprawl. Residential developers seem to have responded to this trend — housing under construction in the Downtown D.C. BID region rose from 174 units as of Sept. 30, 2000, to 1,800 units two years later.

At the same time, Rich Bradley believes Washington needs to provide large amounts of contiguous property in order for retailers to locate near each other, which they can do in a mall or a shopping center. Currently, most retail space downtown is within buildings and not on street level, but that's beginning to change with projects like Gallery Place and the redevelopment of the old convention center.

Meanwhile, Home Depot, Target, and other retailers have moved into residential areas in and near downtown

Washington. Companies have already located stores in the "easiest" locations in the suburbs and want additional access to the thousands of high-income people who live in the region.

In order to encourage private-sector development, local officials removed some impediments and created new incentives. A higher tax rate for vacant property was eliminated in 1999 and wasn't reenacted until last year. The New Economy Transformation Act created incentives for high-tech companies in 2000.

The city also enacted a tax increment financing (TIF) program in 1998 to fund commercial development. This program enables developers to fund their projects with government bonds, which are repaid from the projects' future tax revenues. So far, the daunting application process has resulted in only a few TIF projects being approved, including Gallery Place and the Mandarin Oriental Hotel.

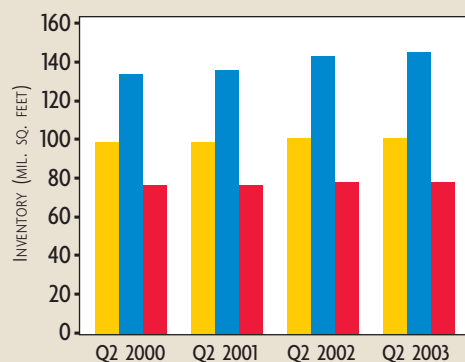
Bridging the Gap

In addition to relying on incentives, Washington may need to spend more on its schools, roads, and other munic-

A Bounty Of Space

Northern Virginia had the largest growth in office space among the commercial real estate markets in the Washington, D.C., metro area. This reflects the rapid pace of development in the region spurred by the high-tech boom.

■ Washington, D.C. ■ Virginia Suburbs ■ Maryland Suburbs



NOTES: Inventory refers to total square footage of office space. Suburban Virginia includes the counties of Arlington, Fairfax, Loudoun, and Prince William, and the city of Alexandria. Suburban Maryland includes the counties of Prince George's and Montgomery.

SOURCE: Julien J. Studley Inc.



A mixture of redevelopment and new construction is transforming the east side of Seventh Street between E and F Streets NW.

ipal infrastructure to create an attractive environment for businesses.

Such expenditures have been deferred for decades due to budget issues. But part of the problem could lie with Washington's long-term "structural imbalance," the gap between what a local government can raise in revenue, on average, and what it needs to finance an average level of basic services.

A May 2003 report by the U.S. General Accounting Office (GAO) confirmed the existence of a structural imbalance. "...The cost of providing an average level of public services exceeds the amount of revenue [the District of Columbia] could raise by applying average tax rates," noted the report. "Consequently, even though the District's tax burden is among the highest in the nation, the resulting revenues plus federal grants are only sufficient to fund an average level of public services, if those services were delivered with average efficiency."

The GAO's report placed part of the blame for Washington's structural imbalance on a higher per-capita cost of delivering services "due to factors such as high poverty, crime, and a high cost of living." In addition, "the District's significant management problems in key programs waste resources

and make it difficult to provide even an average level of services." Local government provides special services for Uncle Sam, such as added security, but it receives federal funds to help defray these costs. (See sidebar on page 16.)

The report also pointed to a basic dilemma faced by the nation's capital. The dominance of the federal government as a user of office space has resulted in lost property tax revenue. Land owned by federal agencies — as well as embassies, churches, and various non-profit organizations — are all tax-exempt, yet the organizations that operate on these properties use city services.

In addition to losing property tax revenue, Washington cannot tax incomes earned in the city by commuters. Since most workers commute, this results in a large population that utilizes municipal services but doesn't pay for them. A federal bill was introduced last year that would redirect 2 percent of federal income taxes paid by commuters into a special infrastructure fund.

Fuller disagrees that Washington has insufficient infrastructure. "The city has the best sewer system in the country — Fairfax and Arlington ship their sewage across the river to be treated," he notes. "There is plenty of ... water and lots of roads."

What Washington really lacks, asserts Fuller, is land in private hands for development. About half of the city's 61 square miles are owned by Uncle Sam or tax-exempt organizations.

With more than five million square feet in office, hotel, and retail space under construction or renovation at the end of the first quarter of 2003, developers are doing their best to boost the available supply of commercial property in Washington, D.C.

Will that be the right amount to satisfy future demand for commercial space? Real estate analysts think vacancies may increase in the short term if tenants continue to put their growth plans on the back burner until the economy improves. But the new commercial space could be gobbled up several years from now as leases expire and tenants from law firms to federal agencies hunt for space.

"There is a certain core of tenants downtown that are always going to be there," says Kieffer. **RF**

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Visit www.rich.frb.org/pubs/region for links to relevant Web sites.

*Consolidation in the Wake of FCC Decision
Will Affect Fifth District Media*

MAKING

WAVES

BY BETTY JOYCE NASH

In 1957, teenager Don Curtis got his first job in radio, selling advertising. By the time he graduated from high school, he was not only selling ads, he was announcing on the radio, too. Today, he heads the Curtis Media Group, a 15-station company based in Raleigh, N.C., with traffic and farm networks and Internet sites, among other properties. Curtis is believed to be the largest independent operator of radio stations, reaching about 900,000 people in the Triangle and Triad areas.

In this media era, a radio geek couldn't do the same thing, Curtis says, and that's a shame. But a cyber-geek could. Consider the Drudge Report, an Internet news site. It often contains gossip, but the young man behind the screen reported the Clinton-Lewinsky story ahead of the nation's biggest news organizations.

Media regulation is tricky, with some believing that only local owners can fulfill community participation roles and produce trustworthy local news. Others, saying that new technologies keep no one out of publishing, believe satellite and Internet access have added competition and diversity to media, eliminating the need for regulation.

Rules of the Game

In June, the Federal Communications Commission (FCC) approved rules that will permit further consolidation in the television and newspaper industries. While the FCC kept the ban on mergers among the top four broadcast networks, new rules would let a company own more than one television station in some markets. The FCC also increased, from 35 percent to 45 percent, the share of

the nation's television viewers one owner could reach. These rules have set off a chain reaction in Congress. At presstime, the U.S. House of Representatives had passed a bill rolling back some of the changes, with the U.S. Senate poised to do the same. And litigation brought in the wake of the new rules prompted a federal appeals court to block implementation pending the outcome of the lawsuit.

Another element of the new rules affects media companies' convergence strategies. Firms may own both television stations and newspapers in some markets under the new rules. For example, Media General, based in Richmond, Va., could purchase television stations in some of its newspaper territories.

The rules didn't go far enough to suit Media General, but they're better than nothing. "We view it as basically a good thing; we found the old rules to be antiquated and not addressing the realities of the media world," says Raphael Seligmann, Media General spokesman. "We look forward to a more complete repeal of the rules." Seligmann notes there are still small markets, including Charlottesville, Va., where Media General wants television stations but can't buy because the size of the market doesn't fit FCC criteria. Media General's biggest converged market, grandfathered by the FCC, is Tampa, Fla., where it owns WFLA and the *Tampa Tribune*. "We think our success in Tampa owes largely to the fact that the television, newspaper, and associated Web site are together under one roof. We built a facility where they could work together, assign stories, send print reporters out with video cameras, and

CHODS

cross promote stories,” Seligmann says. “We think we’re serving the public well and the operations there have won a disproportionate number of national awards for journalism.”

For radio, though, the FCC kept in place limits on the number of stations a company can own. For instance, in markets with 45 or more stations, a company can own only eight stations. And it changed the way a local market is defined in such a way that may make further consolidation more difficult. But radio veteran Curtis says this is like trying to “put the toothpaste back in the tube.”

Massive consolidation overtook radio after the Telecommunications Act of 1996, such that today one firm—Clear Channel Communications Inc.—owns around 10 percent of the 14,000 radio

stations in the United States, five times more than its nearest competitor. The new market definition may prevent Clear Channel from buying up more stations but it will not require the company to divest any it already owns.

Clear Channel Radio Stations in the Fifth District

Maryland	13
North Carolina	21
South Carolina	16
Virginia	34
Washington, D.C.	8
West Virginia	23
Total	115

SOURCE: Clear Channel Communications Inc.

Localism: Community and Diversity

People who oppose consolidation say giant firms just can’t care about the community and that it’s dangerous to let media moguls dominate a market. Don Curtis puts it like this: “I think the decisions of publicly held companies are short-term decisions,” he says. “If the price of the stock goes down, all of a sudden they call the general managers and say, ‘Cut two people.’”

But what really bugs Curtis is cross ownership. While his firm is maxxed out on the number of radio stations he can own—12 in Raleigh—that’s OK, he says, because there are some 56 other viable stations in the market. “Let’s say I’ve got a company that controls the two daily newspapers, two TV stations, the cable system and the radio station.

Who gets my public service announcements if I’ve got all this control? Now I’ve got all sorts of vehicles that I can really use to sway public opinion. I’m not sure any of that will ever happen. But it’s been illegal to this point and now it’s legal. That bothers me more than anything else.”

And there’s community involvement. Until the 1990s, most of the radio stations in Raleigh were locally owned, he says, adding that the owners were involved, civic-minded, and “less concerned about the bottom line.”

The media industry is unique, says Curtis. Opening, say, a clothing store may be simply a matter of attracting investors and having a sound business plan. “In radio you’ve gotta have a frequency—and they’re all gone.”

The Media Marketplace

Nevertheless, competition has thrived in recent decades, say some of the people who study media. One of those is Benjamin Compaine, who has researched the media for the academic and corporate worlds. Compaine is a research consultant at the Massachusetts Institute of Technology’s Program on Internet and Telecoms Convergence and the author or co-author of numerous books on the media, including *Who Owns the Media? Competition and Concentration in the Mass Media Industry*.

Compaine points out that dozens of networks have proliferated. There used to be just “30 minutes of evening news on three networks,” he says. “Today, [it’s] those plus four national 24-hour news networks: CNN, CNN Headline News, Fox, and MSNBC.” Add regional news networks, such as New England Cable News, to PBS-like networks, such as the History Channel, the Discovery Channel, and the Learning Channel, and the number of choices becomes quite large. “Even with cross ownership there are orders-of-magnitude more variety and competition on television.”

Compaine says that in the 1970s, the three networks had about 90 percent of the prime time audience. Today, there are four major broadcast networks with less than half. Further, the 20 largest broadcasters had revenue

of \$18.9 billion in 1994. By 1997 (after the Telecommunications Act of 1996), they had \$23.9 billion. But the share of the four largest fell from 72.6 percent to 70.9 percent and the top 10 from 87.8 percent to 86.7 percent. “[It’s] not much, but it belies this mantra of more and more concentration,” he says.

Radio, Compaine says, is a different story. Still, there’s only one group that owns more than 1,000 stations: Clear Channel.

Most convincingly, Compaine says, research has found no consistent evidence that viewers and listeners or readers are being ill-served by the large companies. Evidence suggests there’s more diversity in news formats than before.

Internet radio, for example, in which broadcasters old and new can stream content online, offers even more choice. In 2001, nearly 86 percent of the 12,500 radio stations in the United States had an Internet site, and one-fourth were available in real time via the Internet, according to the Radio Advertising Bureau. And access to spectrum is not an issue. “With a limited spectrum available, new broadcasters must apply for a license to that spectrum, often a long and costly process that serves as a significant hurdle for many would-be broadcasters,” Compaine writes in a paper examining Internet radio.

Local News

News organizations such as Media General say there’s no way they could survive if they ignored local news coverage.

“Big companies with a lot of money ... need to provide news to keep their market,” says Seligmann. “People look to them for news about their own lives. The theory that a media company that owns a TV station and a newspaper would skimp on local news and force material from company headquarters ... we don’t believe that’s a model for success at all.”

There is the story, though, of a chemical spill near a small town in North Dakota last year. When officials tried to get a message on the radio to let people know, there was no one to

answer the telephones at the stations. Clear Channel owned six out of the seven. (It is possible to broadcast without actually having a person in the studio, by beaming a signal from afar.)

This sort of voice tracking can be a useful tool, says Curtis, like filling in around the edges of a little newspaper with wire copy. But, he notes, “We do very little voice tracking,” Curtis says. “Occasionally we may do some overnight shows on stations that may not be on the air otherwise.”

Technology

There’s little doubt that communities can sometimes lose when local media owners sell their companies, just as there is little doubt that they can sometimes gain. Innovation, for example, often comes out of small firms. Jim Goodman, chief executive officer of Capitol Broadcasting Company Inc., in Raleigh, has pioneered digital television, paying nearly \$1 million for spectrum in a government auction. In 1996, WRAL-TV received the first experimental HDTV license in the country. He has aggressively promoted digital television and worked closely with the FCC and CBS to work out problems. But under the new FCC rules, CBS could buy out local affiliates such as Capitol, a company committed to Raleigh and its people. (Goodman, it should be noted, serves on the Board of Directors of the Charlotte branch of the Federal Reserve Bank of Richmond.)

Goodman has spoken against these regulatory changes, arguing that they will lead to less diversity in the media marketplace. “If you have more owners, you have more points of view, more ideas, more opinions, different approaches to everything that’s going on.” What’s more, he says, the FCC is charged with licensing airwaves that are publicly owned. “Nobody has a right to a TV station. You know, we make a deal, ‘Here’s the license, Jim. Serve the public interest. You’re the only one’s going to run Channel Five in Raleigh.’”

Playing Catch Up

But consolidation has been going on for years, says Adam Thierer of the Cato Institute.

“In general, the real advantage of loosening these rules is that it brings them in line with emerging marketplace realities,” he says. “There’s little doubt among those following the entertainment and media business, that there’s a fair amount of continued consolidation going on, some of which has been in violation of existing rules. Rationalization for these rules is ... basically an attempt by FCC to catch up with marketplace realities.”

A second reason the FCC revised rules is because the courts have been breathing down their necks looking for reasonable justification, Thierer says. And there are First Amendment issues. “If you are eliminating a number of affiliates and outlets, you are essentially limiting the soap box you can stand on to speak to the American people. We would not think it would be reasonable to limit the number of printing presses *The New York Times* uses to print its newspapers, why therefore would we limit the number of television or radio stations a company can own to transmit to people?”

After all, even in a tightly regulated environment, media is “extraordinarily expensive” to enter. “Many economists have said the FCC has created an artificial scarcity. There’s no such thing as a free market in spectrum licenses,” Thierer says.

“The other part of the problem is simple economics,” he says. “The world of mass media is mass, big, and expensive with big sunk costs.”

In the modern media marketplace, however, there’s the Internet, and that has brought smaller players into the media, creating more competition. “People say the Internet is not a TV or radio station. The barriers to entry, though, are far lower [and] less expensive. Nothing that regulators or legislators can do will change that underlying market reality.”

The Global Village

Consolidation is an old demon faced by small, family-owned newspapers for the last 20 years, says Jay Pace, editor and publisher of the *Hanover Herald-Progress*, a twice-weekly newspaper with a circulation of 8,000 in Ashland, Va.

He thinks continued consolidation is unhealthy. “But I don’t think you’re going to see in properties like ours any kind of direct hit.”

News operations that are totally driven by the bottom line are less effective and less of a resource to the community. “Sometimes in this business you have to confess that black ink is secondary to carrying out your purpose and mission,” Pace says. “My title is editor and publisher which means ... as an editor there are times I have to punch the publisher out.”

Although the Internet may provide significant and diverse sites, the content is rather anonymous, with many of the heavily used sites run by conglomerates. But Pace meets his readers on the street every day. “I hear people quoting the Drudge Report, for crying out loud, and maybe they get two-thirds of their reports right,” Pace says. “If I did that I’d be out of business in two months.”

Pace’s turf is small-town America. People from nearby cities and suburbs flock to the town on parade days, hungry for a taste of village life. But when it comes to news, it’s a global village and people prefer the big picture, Thierer says, noting the popularity of *USA Today*. “Those people voting with their eyeballs and ears and wallet are making the shift toward a national program.” **RF**

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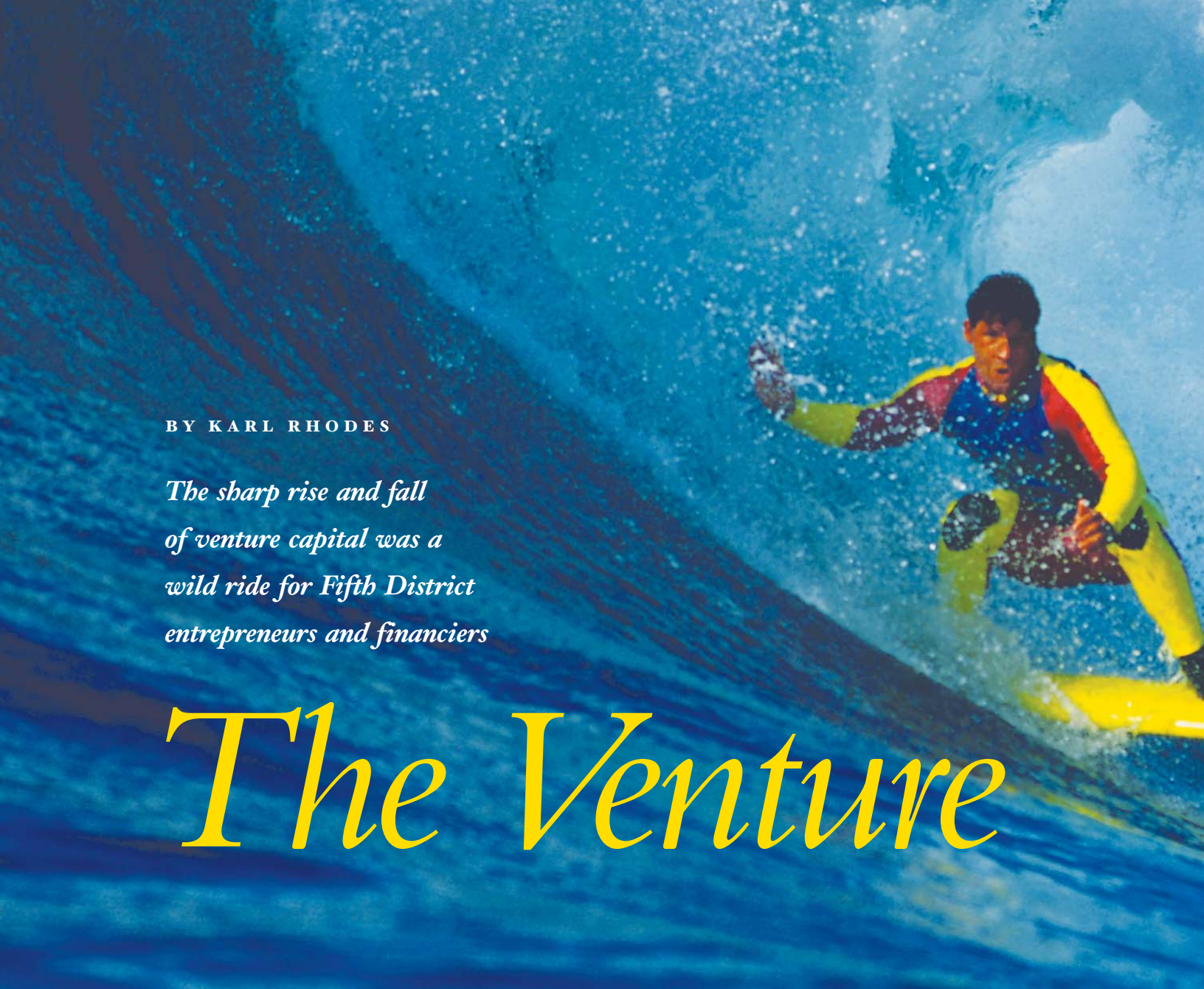
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Visit www.rich.frb.org/pubs/regionfocus for links to relevant Web sites.

A full-page background image of a surfer in a yellow and blue wetsuit riding a large, curling blue wave. The surfer is positioned on the right side of the frame, leaning into the wave. The water is a deep blue with white foam from the wave's crest.

BY KARL RHODES

*The sharp rise and fall
of venture capital was a
wild ride for Fifth District
entrepreneurs and financiers*

The Venture

Dennis J. Dougherty is the founding general partner of Intersouth Partners, one of the most successful venture capital firms in the Fifth District. Based in North Carolina's Research Triangle, the company has been at the center of the region's high-tech transformation since 1985. But in 1999 and 2000 — at the height of the so-called "New Economy" — Dougherty was struggling to recruit the best and brightest from the nation's top business schools.

"None of the MBA grads wanted to work for venture capital firms," he recalls. "They all wanted to be dot-com CEOs!"

And why not? Everyone wants to join the entrepreneurial parade when venture capital is falling from the sky

like tickertape confetti. But when the technology bubble burst, corporate valuations came crashing down. Exit doors slammed shut on acquisitions and initial public offerings, and many venture capitalists were trapped in bad deals with no way out.

For a good portion of 2001, the industry was going through triage, says Jesse Reyes, vice president of product management for Thomson Venture Economics. "They have a stable with a lot of horses. They've already shot the bad horses, but before they put any more horses in the barn, they are going to have to let some roam the range, put them out to pasture, whatever you want to call it."

Nationwide, venture capital firms invested \$106 billion in 2000. Last year they invested \$21 billion, and this year that number is expected to fall even further. Based on first-quarter numbers from the National Venture Capital Association, venture capital companies are on pace to invest about \$15 billion in 2003.

"There are a lot of people out there who believe that the industry, for the next couple of years, would be very well served to be operating at the \$10 to \$15 billion-a-year level," says John S. Taylor, the association's vice president for research.

That may not sound like much money compared with \$106 billion in 2000, but it's exactly where the indus-



Ad venture

try stood in 1997, when venture capital was all the rage.

In the 1970s, 1980s, and the first half of the 1990s, venture capital represented less than 1 percent of corporate financing in the United States, according to Taylor. During those decades, demand for venture capital began to outstrip supply as burgeoning technology sectors attracted thousands of entrepreneurs with ideas that were too risky and too specialized for banks and other traditional financial institutions.

This imbalance persisted until the mid-1990s, when market values for dot-com, telecom, and infotech companies began to climb rapidly, and investors

started throwing money at virtually any high-tech startup with plans to go public. In response, eager entrepreneurs scrambled to put together deals, many of them ill-conceived. Supply and demand surged simultaneously, and venture capital investments skyrocketed.

Even before this sharp rise and subsequent fall, venture capital had become a crucial part of the financial spectrum in the United States. Companies that received venture funding at some point from 1980 to 2000 generated 11 percent of the gross domestic product in 2000, according to a report by Global Insight Inc., a consulting firm based in Waltham, Mass. After adjusting for size, "venture-backed

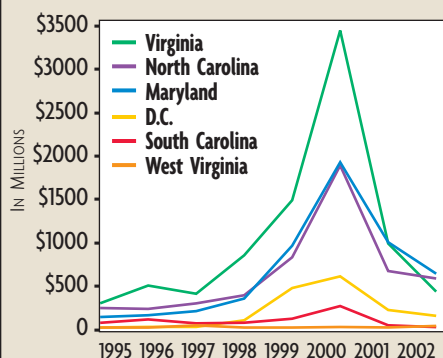
companies generate more sales, pay more taxes, export more goods and services, and invest more in research and development" than other companies, the report states.

With this much economic activity at stake, a prolonged slump in venture-capital financing would be cause for concern. Venture experts see some signs of recovery, but most of them are not predicting a quick rebound.

Venture capitalists are antsy to get back to fundraising, Reyes says. But they "are a little bit reticent to put in more money" until they see the exit markets pick up. "Without [exit markets], they can't send money back to their investors."

State by State

Venture capital flow to companies in the Fifth District.



SOURCES: Quarterly MoneyTree Surveys by PricewaterhouseCoopers, Thomson Venture Economics, and the National Venture Capital Association

Venture capital commentators have focused on the lack of demand for IPOs in the past three years, but the supply side of the IPO market also was tapped out, according to Harry Weller, a partner in New Enterprise Associates, a large venture capital firm based in Baltimore.

"You had a lot of companies IPOing very early in the R&D cycle. A lot of those failed. They didn't get to reach maturity," Weller says. "There was never

a pipeline created of maturing companies. They kept getting IPO'd or acquired."

So supply and demand slumped at the same time, and "it took three years for companies to mature to a state where they started looking acceptable to a more conservative IPO market," Weller explains.

Now, there is a pent-up supply of fairly good companies that are ready for the IPO market, Reyes agrees. "The IPO market probably would be more favorable to VCs than the merger market is. The merger market right now is looking for a lot of garage sales in the technology space."

Reyes expects both the acquisition market and the IPO market to recover somewhat in the second half of this year, but he sees no reason to panic if the IPO drought continues. "Up until the mid-1990s, the IPO market probably ran second to the merger market in terms of the way VCs exited," Reyes says. "So I don't see any real danger if the IPO market [remains] down. That's definitely the sexiest place to take your company. That's definitely the place where you have the most upside... but with that comes a lot of uncertainty" because venture capital firms are required to keep IPO shares in their portfolios for a couple of years.

Acquisitions provide quicker, cleaner exits for venture capitalists, but buyers have become far more selective than they were three years ago. Even when the acquisition market recovers, "I don't think it's going to be about just buying companies for the sake of growing anymore," Reyes says. "It's going to be about [buying] access to technology."

Weller is cautiously optimistic about the exit markets and the future of venture capital in general. "There could be more danger ahead. It could go either way," he warns. "If the exit markets disappear for another five years, yes, capital will absolutely leave the venture capital industry and go to other asset classes. And you'll see a lot of venture capital firms disappear. ... But I do think that the fundamental fact that innovation needs to be financed, and markets are created in this manner, is always going to be true."

In the late 1990s, venture capital was the milk and honey of Northern Virginia, Southern Maryland, and North Carolina's Research Triangle. Success stories abounded as venture-backed companies went public and created hundreds of instant multimillionaires.

Trying to replicate that success, civic leaders jumpstarted venture capital

From Angels To Exits: A glossary of venture capital terms

Angels – Individual investors who provide advice and venture capital (typically seed money and early-stage financing) to companies that interest them in particular. Angels tend to incur more risk than venture capital funds because they usually invest in one company at a time. To reduce that risk, many angels have formed angel networks.

Bridge Financing – Financing for companies expecting to go public within six months to a year.

Capital Calls – Collecting installments of money that investors have committed to a venture capital fund. This money is sometimes called "takedowns" or "paid-in capital."

Capital Under Management – The amount of capital that a venture capital firm manages in all of its funds.

Corporate Venture Investors – Subsidiaries of non-financial corporations that invest in promising young companies that dovetail with the subsidiaries' parent companies.

Early-Stage Investing – Purchasing ownership positions in companies that are refining their initial products or services. Typically these companies have little or no revenues, and they have been in business less than three years.

Exits – Opportunities for venture capital funds to cash in their investments. The two

most common exits are acquisitions and initial public offerings. Mergers are virtually synonymous with acquisitions.

Expansion-Stage Investing – Purchasing ownership positions in companies that have demonstrated revenue growth. These companies may or may not be profitable at this point.

Fundraising – Efforts by venture capital firms to secure financial commitments from investors to start a new venture capital fund.

Initial Public Offering (IPO) – A company's first public sale of equity, usually in the form of common stock.

funds in other areas of the Fifth District, but their timing was terrible. "It was the harvest cycle. ...1999 and 2000 were great years to get out of deals. They were terrible years to get into deals," Dougherty says.

One of these new firms, Richmond, Va.-based Monument Capital Partners, is not investing in any more companies. Meanwhile, two similar funds — Southwest One L.L.C. and Southside Rising L.L.C. — have joined forces under the management of Gryphon Capital Partners in Roanoke, Va.

Those two funds were formed to finance high-tech companies in Southwest and Southside Virginia. They have invested more than half of their combined capital in seed-stage and early-stage ventures, but they are struggling to find co-investors who are willing to shepherd these companies to the next plateau.

"We find ourselves somewhat alone," says Leigh P. Huff Jr., a partner in Gryphon Capital. The firm is trying to raise money for a third, and larger, venture capital fund that would provide expansion-stage financing and act as a bridge to later-stage financing or acquisitions by larger companies. "Everybody is in general agreement that there is a need out there in the market," Huff says. "People just have different ideas

about how to go about it. We don't have any money yet [for the new fund], but in general conversations, there is a lot of support for the idea."

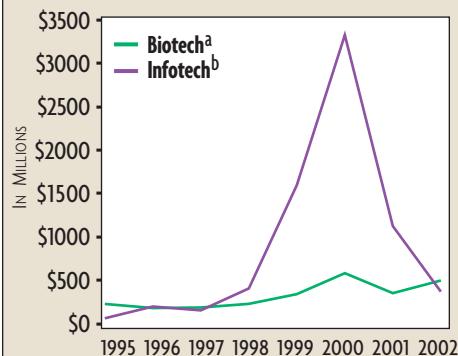
Gryphon Capital has expanded its territory to include Richmond, Charlottesville, Va., and Winston-Salem, N.C, but it doesn't want to stray too far from its funds' original geography. "We have tried to invest in companies that originated in the territories of those funds," Huff says. The firm has backed several companies in Southwest Virginia near Virginia Tech, he notes, but "regrettably, we have not been able to do a deal in Southside Virginia."

Venture capital funds that are restricted to underserved areas are at a distinct disadvantage, says Taylor at the National Venture Capital Association. "It's tough enough to be a successful venture capitalist. If you restrict him geographically, it's like tying one hand behind his back."

Entrepreneurs and venture capitalists cluster together for good reason, says Dougherty at Intersouth Partners. For one thing, recruiting high-tech talent is virtually impossible outside of major concentrations of high-tech industry. Biotech, in particular, needs to be near major research universities that provide facilities and talent, he says. In the

Biotech vs. Infotech

Venture capital flow to the top two entrepreneurial sectors in the Fifth District.



^aBiotech also includes health care services plus medical devices and equipment.

^bInfotech also includes telecommunications plus networking and equipment.

SOURCES: Quarterly MoneyTree Surveys by PricewaterhouseCoopers, Thomson Venture Economics, and the National Venture Capital Association

Research Triangle, "without the universities, there wouldn't be any venture capital, and there wouldn't be any deals."

Venture capitalists say that the capital craze of 1999 and 2000 was an aberration. They note that the level of venture capital investment in 2003 remains substantially higher than it was in the 1980s and throughout most of the 1990s.

Internal Rate of Return (IRR) – The discount rate that equates the net present value of an investment's cash inflows with its cash outflows.

Later-Stage Investing – Purchasing ownership positions in companies that have solid revenues and positive cash flows. This stage may include spin-offs of well-established private companies.

Portfolio Company – One of the companies that a venture capital fund is backing.

Private-Equity Investing – Purchasing ownership positions in companies whose stock is not publicly traded.

Seed-Stage Investing – Purchasing ownership positions in start-up companies that are just beginning to develop their ideas into products or services. Typically these companies are not fully operational, and they have no revenues.

Small Business Investment Company (SBIC) – A venture capital firm that works with the U.S. Small Business Administration (SBA) to finance companies that qualify for certain SBA programs.

The Three Fs – The most common sources of seed money: friends, families, and fools.

Venture Capital – Private-equity financing from investors who support entrepreneurial

young companies that have the potential to become highly valuable large companies.

Venture Capital Firms – Private partnerships or closely held corporations that manage one or more venture capital funds. In addition to making investment decisions for these funds, venture capital firms advise the companies in their funds' portfolios.

Venture Capital Funds – Pools of venture capital that are generally organized as limited partnerships. Investors may include pension funds, endowment funds, foundations, corporations, wealthy individuals, and the venture capital firms that manage the funds.

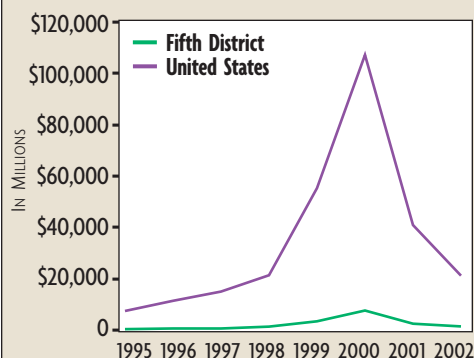
SOURCES: Thomson Venture Economics and individual venture capitalists

"When you look at what we had in 1999 and 2000, clearly those were economic conditions that were not sustainable," Taylor says. "There were new areas that people were moving into, such as the Internet, and what we saw was that some Internet investments were very good, and many of them were very bad. And yet...the Internet has continued to grow and expand...and most of the technology behind the Internet comes from venture-backed companies."

Many of those companies are in Northern Virginia. But overall, venture capital investments in the Fifth District are more diversified than those in other regions of the country.

The Rise and Fall

Venture capital flow to companies in the Fifth District and the United States.



SOURCES: Quarterly MoneyTree Surveys by PricewaterhouseCoopers, Thomson Venture Economics, and the National Venture Capital Association

"There's a heck of a lot more medical, health, biotech, and life-science investing that's going on in [the Fifth District] than in Silicon Valley," notes Reyes at Thomson Venture Economics. "That kind of diversification has probably made the VCs in your district more sanguine than those I've seen on the West Coast, where the VCs went through a very deep financial, as well as psychological, depression."

A big wildcard in the Fifth District is entrepreneurs' ability to adapt their technologies to new homeland security and national defense needs, Reyes says. "We've tried quantifying that, and it's a tough thing to do because the technology is so amorphous that it can be multipurposed pretty quickly. So where

someone was doing face-recognition software two years ago for corporate security, now he rebrands it as homeland-security technology."

The flow of venture capital in the Fifth District has followed the same sharp downslope as the national trend in recent years, but the "amount of capital on the sidelines during this period is actually growing," Weller says. "They are still raising funds in the Mid-Atlantic region—more so than most other regions of the nation."

Even though these venture capitalists are sitting on piles of cash, "they probably have a good portion of that [money] earmarked for investing in old companies and relatively little of it earmarked for investing in new companies," Reyes says.

The reason for that is arguable, Weller adds. "Some people say that a lot of that capital is really just...people not wanting to admit defeat."

Venture capitalists in the Fifth District expect the region's entrepreneurial sector to rise again, but opinion is split on how long that will take. "We think things have stabilized and that trends will be positive over the next few years," says Jay Markley, a partner in Columbia Capital Corp., based in Alexandria, Va. "But we don't expect a return to the gold-rush mentality." Dougherty at Intersouth is a bit more optimistic. "I think it's going to come back fast," he says. "In the Fifth District, we have many experienced funds that are actively investing. Many of them are managed by entrepreneurs and former entrepreneurs."

The venture-capital deployment curve has plummeted, but the venture-capital learning curve continues to rise. "The run-up of the dollars nationally has been a big benefit for the Fifth District, a region that was undercapitalized to start with," Dougherty says. "There are certain watershed moments when things change, and we think that 1999 and 2000 was one of those watershed events. We witnessed a power shift away from Boston and California to the Southeast."

Dougherty is particularly impressed with the rising quality of management



The Research Triangle area of North Carolina received a large share of the venture capital funds that flowed into the Fifth District during the 1990s.

in the region's entrepreneurial sector. Experienced managers are bringing forward good deals, he says. "They have the wounds to show that they've learned some things, but they're smarter and more realistic."

Dougherty also sees a cultural shift that will make the Fifth District more conducive to venture adventures. "In the South, if an entrepreneur tried and failed, he lost his social standing in addition to his money," he notes. "People wouldn't invest in him again because they considered him a failure. On the West Coast, he was immediately hired because he had learned some things. It has taken us a couple of decades to overcome that mentality in the South. Now, pretty much everyone gets a merit badge for failure." **RF**

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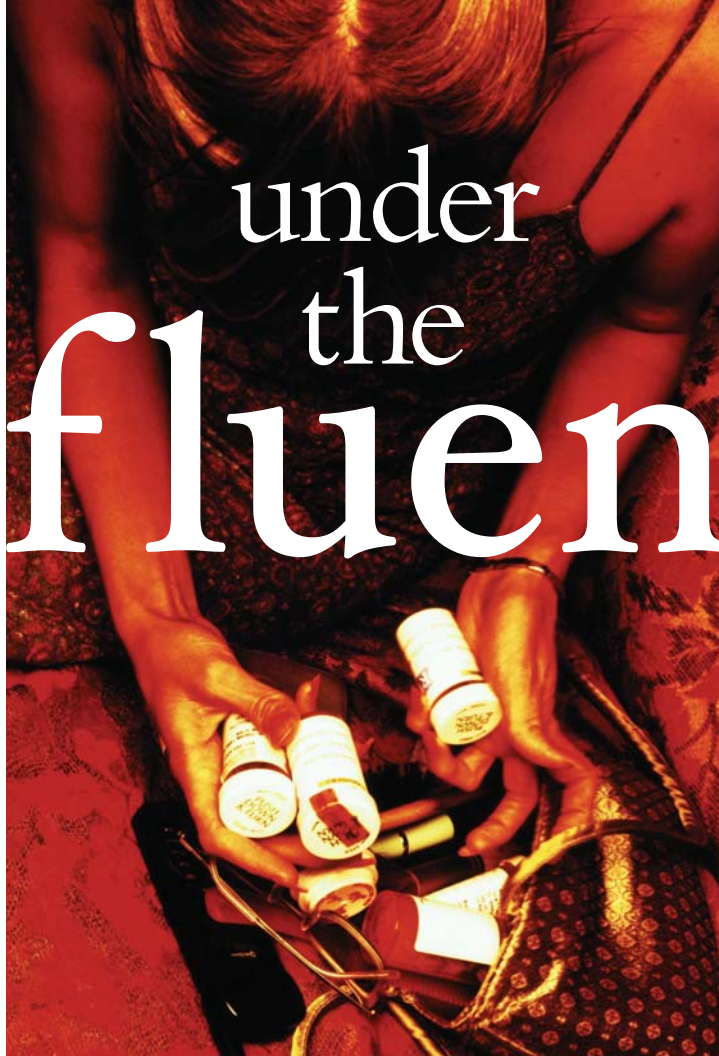
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under the influence

*The Economic
Consequences of
Substance Abuse and
Addiction, and How
Treatment Programs
Tackle Them*

BY CHARLES GERENA



Graduating from a drug treatment program should be a moment of triumph for people who fight their way out of the fog of addiction. But for Kevin McDonald, the struggle wasn't over.

With a felony record and only a high school education, McDonald had problems finding a job after leaving a drug treatment program in the 1960s. "I couldn't work anywhere except in fast food," he recalls.

That's why the Durham, N.C., program that McDonald founded in 1994 — Triangle Residential Options for Substance Abusers — emphasizes vocational training. "To me, it's not about just getting people off of drugs or alcohol ... you have to make addicts employable," he explains. "They need to be able to read and write to fill out a job application. They need a GED to get certain jobs."

The human toll of drugs and alcohol is well documented in academic literature and popular culture, but the economic impact isn't as straightforward.

Casual users of drugs or alcohol may suffer from physiological dependence and health problems, yet their extracurricular activities can have little impact on their work life. Also, not all users become addicted.

If substance users cross the line into abuse and dependence, however, they often can't function normally. Anecdotal evidence suggests that employers turn away recovering addicts like Kevin McDonald because of concerns about their economic performance. Indeed, some studies link abuse and addiction with negative outcomes such as unemployment, poor job performance, and lower wages. But other research shows no such association.

One thing is certain. The economic forces that seem to work against substance abusers and addicts can help them as well. Financial incentives and work therapy are powerful tools for drug treatment programs to use in encouraging abstinence and helping chronically unemployed addicts acquire marketable skills.

During the late 1800s and early 1900s, it was a common belief among those in the temperance movement that it took only one drink to put someone on the path to ruin. It would be decades after the lifting of Prohibition before society accepted that people could have a few drinks for pleasure without becoming alcoholics. In fact, the potential health benefits of moderate wine consumption have made headlines numerous times.

According to Jacob Sullum, author of *Saying Yes: In Defense of Drug Use*, the current view of casual drug use is similar to how Americans used to feel about alcohol. "There is no reason why you can't apply the same model [of moderation] to drug use," argues Sullum, who is also a senior editor at *Reason* magazine. "The vast majority of drug users are not heavy users."

Sullum cites the 2001 National Household Survey on Drug Abuse (NHSDA) to support this claim. Among 70,000 people age 12 and older, 13 percent reported using some sort of illicit

drug in the past year. However, only 3 percent reported abusing or being dependent on drugs. Similarly, 64 percent of interviewees said they drank alcohol in the past year, but only 6 percent had progressed to abuse or addiction.

Researchers have confirmed that substance use progresses in stages, starting with readily available items like beer or tobacco and continuing to hard liquor and illicit drugs. Nevertheless, users don't automatically move from one stage to the next, nor do they inevitably become addicts.

In general, a variety of factors influence substance users in their decision to continue or escalate their habit. "The progression from use to abuse and dependence varies with drug type as well as with factors that are specific to individuals and their environments," according to a 1994 report titled "Under the Influence? Drugs and the American Work Force." These factors range from peer influence and exposure to stressful life events to tem-

perament and family history.

The effect of casual drug and alcohol use on a person's work also involves a complex assortment of factors. Wayne Lehman, senior statistician at SHL USA, a human resources consulting firm, says it depends on the person and the type of work. "Some people have a greater tolerance [for drugs and alcohol] than others."

Economists and psychologists have shown that substance abuse and addiction is correlated with economic performance. But a direct cause-and-effect relationship has been tougher to prove.

For example, past drug use appears to negatively affect a person's employment status. In a 1992 study by economists Charles Register of Florida Atlantic University and Donald Williams of Kent State University, past marijuana use adversely affected a male's chances of being employed. Another study that year by economists

Andrew Gill and Robert Michaels at California State University, Fullerton found that illicit drug users had a lower probability of being employed than non-users.

John Atkinson at the University of Texas School of Public Health offers a possible explanation for this relationship. The amount of drugs or alcohol that individuals consume may complement their desire for leisure. Consequently, users may trade work for additional leisure time if they progress into abuse and dependence. However, they may re-enter the work force temporarily when they can no longer support their growing habit. "In this case, drug use is a substitute for leisure time," wrote Atkinson in a 2000 study of 1,100 drug addicts living in Houston.

But when the study tried to support this hypothesis, it failed. "There was no evidence of a statistically significant work/leisure tradeoff in either direction as the usage frequency of ... drugs increased," Atkinson noted.

Other research has associated substance abuse and dependence with job performance. The 2000 NHSDA reported that 12 percent of workers who had used illicit drugs within the last month had missed work for more than two days due to illness or injury, compared to 7 percent of workers who didn't use drugs. About 4 percent of drug users had skipped work more than twice versus 2 percent of non-users.

Lehman found similar results when he surveyed more than 4,000 municipal workers in several southwestern cities during the 1990s. Workers who said they smoked marijuana were less likely to commit to the organization and had less faith in management. Smokers also reported more accidents and workers' compensation claims than workers who hadn't used marijuana.

But measuring the extent of this association isn't easy. "When you do lab studies and give people alcohol or marijuana, they may behave more poorly," says Lehman. "Trying to generalize [those results] to a workplace setting doesn't work well. At work, you can find ways to compensate and achieve an average performance. You are [also] doing something ... routine and highly

Is Taking Drugs Rational?

A fundamental assumption of economics is that consumers make rational decisions. They choose alternatives that they expect will yield the greatest benefits given their limited resources. As long as the incremental benefit of consuming one unit of a good exceeds the expected incremental cost, people will keep consuming that good.

In a 1988 paper for the *Journal of Political Economy*, economists Gary Becker and Kevin Murphy at the University of Chicago went a step further with their exploration of the theory of "rational addiction." They posited that substance users and addicts continue to get high or drunk as long as the pleasure they receive outweighs the negative consequences.

How can people rationally decide to damage their lives with excessive drug or alcohol consumption? Becker and Murphy found that those who place greater value on present consumption than future consumption are more likely to become addicted to drugs or alcohol. For example, getting drunk to wash away the memories of a bad day at work is more important to alcoholics than how bad they'll feel the next day, or how much time they'll spend in the hospital for kidney treatment when they're older.

But even those who are looking for a quick

fix for their problems tend to act purposively.

Drug users, Becker and Murphy found, are quite price sensitive and tend to take their budgets into account before making a purchase.

Other economists have pointed out that many of the costs of addiction are external. Therefore, they don't have any bearing on a person's decision to continue consuming drugs or alcohol. For example, excessive drinking can lead to greater incidence of drunk driving and child abuse. Also, the long-term health effects of addiction can be borne by taxpayers who fund special government programs to help addicts.

Psychologists and other experts on substance abuse and addiction tend to be skeptical of the rational addiction theory. Wayne Lehman, senior statistician at SHL USA, a human resources consulting firm, says that substance abusers may make a benefit-cost judgment to start their drug use but that's as far as it goes.

"True addiction is characterized by a loss of control," notes Lehman. "With alcohol and addictive drugs, there is a change in brain chemistry that occurs. ...It becomes a lifetime problem that a person really has no control over. Once you get to that point, it's not a rational decision."

—CHARLES GERENA



At TROSA in Durham, N.C., drug addicts learn a trade as part of their recovery.

learned, so you can get by with less than a full brain.”

As for the potential negative effect of substance abuse and dependence on income levels, few researchers have found one. Jeffrey DeSimone, an economist at East Carolina University, discovered a causal relationship in an unpublished study of criminals who were screened for drug use upon booking. “Current use of marijuana, cocaine, and heroin each negatively affect[ed] ... current earnings from legal employment,” he describes.

On the other hand, several studies found that consumption of drugs and alcohol had a mostly positive effect on wages. How could this be possible, given the detrimental effects of these substances on physical and mental health?

In a 1999 paper for the Research Triangle Institute, DeSimone wrote, “Wages may not reflect productivity costs of drug use. Since wages are often fixed in the short term and individual output is often difficult to observe, they may not adjust quickly enough to productivity changes to reflect an effect of current drug use. Furthermore, [researchers] suggest that firms are more likely to deal with drug-using workers by terminating their employment than by reducing their wages.”

There also is a broader problem with analyzing the economic effects of substance abuse and dependence. Drug addicts and alcoholics could have

underlying behavioral issues that cause them to both abuse substances and perform poorly in the working world. For economists and psychologists, separating the real effects of addiction from the personality traits of the addict has been a challenge.

Regardless of how substance abuse and dependence relate to economic performance, the fact remains that hardcore abusers and addicts are often undesirable to employers. They typically don’t have a consistent work history, a basic education, or marketable skills. Some treatment programs have tried to address these employment challenges by using the power of financial incentives and work therapy.

For years, researchers have experimented with using inducements to reinforce drug abstinence. Patients undergoing drug treatment are given something of tangible value in exchange for proving they are clean.

Kenneth Silverman, an associate professor of psychiatry and behavioral sciences at Johns Hopkins University, has investigated voucher-based reinforcement of drug abstinence. “The biggest challenge [with drug treatment programs] is promoting abstinence,” says Silverman, “arranging the contingencies so that the largest percentage of patients stay engaged in the program, and initiate and sustain abstinence.”

In a 1996 study of cocaine addicts undergoing outpatient treatment, Silverman and his colleagues at the Addiction Research Center offered vouchers three times a week in exchange for drug-free urine samples. The first clean sample was worth \$2.50, then the vouchers increased in value by \$1.50 for every negative test result. If any sample tested positive, the patient wouldn’t receive a voucher and the “pay scale” dropped back to \$2.50. Patients who consistently provided clean samples over the 12-week testing period could earn a total of \$1,155 in vouchers, which were exchanged for goods and services purchased on their behalf.

According to Silverman, the study’s results were dramatic. “About half of the 19 patients [in the test group] who were exposed to the abstinence rein-

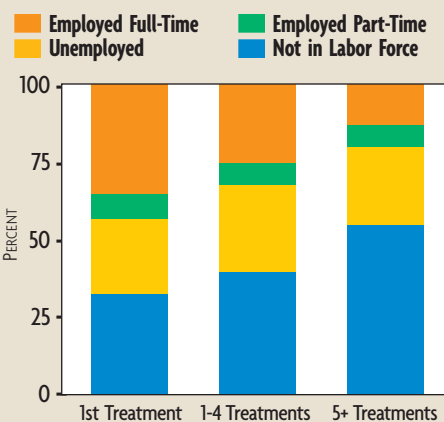
forcement with the vouchers stopped their cocaine use” for seven to 12 weeks. In contrast, only one person in the control group of 18 patients sustained their abstinence for more than two weeks.

Still, half of the test group didn’t abstain from drug use. So Silverman upped the ante in a follow-up study at Johns Hopkins’ Center for Learning and Health. He took a group of cocaine addicts that hadn’t responded to the voucher incentives and increased the value of the vouchers to a maximum of \$3,500 over a nine-week period, or the

Bad Outcomes

For many alcohol and drug abusers, it can take several attempts to successfully kick their habit. A June 2002 report found that people admitted to substance abuse treatment more than once have different socioeconomic characteristics than first-time admissions. One such difference is in the person’s employment status, as depicted below.

Employment Status of Admissions, 1999



SOURCE: Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services

equivalent of a \$20,000 annual salary. Again, about half of the patients achieved long periods of abstinence. Silverman realized that the higher the magnitude of the financial reward, the greater the ability of vouchers and other incentives to compel addicts to abstain from drugs over an extended period.

While using large financial rewards is an effective form of drug treatment, it also makes the process very expensive. That’s when Silverman started thinking about how a self-sustaining business could fund the use of finan-

cial incentives. In 2000, he started Hopkins Data Services in Baltimore to train cocaine and heroin addicts as data entry operators and put them to work.

Before they can begin a day of work, participants report to a small in-house laboratory where they provide a urine sample. If the sample is negative, they check into a data entry workroom and start earning a base pay of \$5.25 an hour. If the sample is positive, they have to leave and the production-based bonuses they receive are cut from \$5 per batch of data entered to \$1 per batch. But they can return and start rebuilding their bonus rate for every negative drug sample they submit. A similar reward mechanism is used while addicts are in training.

Currently, more than 20 people are in training at Hopkins Data Services, where for their efforts they receive vouchers that can be redeemed for goods. No one has been put on the payroll since October 2002 because the company doesn't have enough clients. In the past, as many as a dozen people were entering research data for scientists at Johns Hopkins, the University of Maryland, and various pharmaceutical firms in the Baltimore area.

Silverman says he chose the data entry field because past surveys of addicts indicated they were interested in doing office work. Also, the work could be easily tracked, which would enable him to provide various incentives for being on time and staying on task. For example, addicts can earn additional vouchers for achieving perfect scores and for surpassing various milestones during the training phase. When they are "hired" and start earning a salary, half of their pay is dependent on the number of characters they type and the number of errors they make.

"The population probably has long histories of unemployment for a good reason, so...we needed to arrange special contingencies to promote productivity," explains Silverman. At the same time, he learned that the base pay must be high enough to create a sufficient incentive to participate in the program.

The work therapy program at Triangle Residential Options for Sub-



To encourage productivity, this recovering addict in Baltimore receives bonus pay for completing data entry drills.

stance Abusers (TROSA) doesn't focus on financial incentives for drug abstinence. Instead, its 300 residents receive housing, food, clothing, and group therapy in exchange for working at one of the service firms operated by the organization in the Durham area.

The reward they receive for abstinence is the opportunity to receive on-the-job training at a wide range of businesses, from trucking and painting to catering and automotive repair. In addition, TROSA residents have access to adult literacy and GED classes, college-level courses, and computer training at an on-site classroom.

As residents progress in their training, they are entrusted with additional responsibilities, often over other people. This helps them attain a sense of self worth and connect emotionally to their co-workers. "We are putting people in places where they can succeed, because these people have felt like they have failed at everything they have done," says McDonald. "They learn how to care again."

By making them the cogs that run the organization, TROSA aims to empower substance abusers and addicts. "They say that society owes them—it doesn't," notes McDonald. "You have to earn your way." This approach also helps TROSA pay the bills—90 percent of the organization's operating budget comes from the revenue generated by its businesses and in-kind donations

solicited by residents.

Studies of work therapy programs like TROSA concluded that participants do better economically and are less likely to get arrested. But these programs can have high turnover rates—only a few people may "graduate" from the more rigorous programs.

McDonald says the average stay for residents in his two-year program is 444 days. He says an addict who honestly screws up is given a second chance—they have to clean floors and do dirty work as penance—but a positive drug test with no explanation will put the addict back on the streets.

Every treatment program walks a fine line between providing sufficient rewards for abstinence and sufficient punishments for missteps. "The longer you stay in treatment, the better off you are," concludes Wayne Lehman. "It's akin to treating diabetes or high blood pressure. You don't treat the disease once and cure it—it is lifetime maintenance."

RF

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BY ANDREW FOERSTER

On the morning of December 17, 1903, near Kitty Hawk, N.C., years of hard work paid off for Orville and Wilbur Wright. The two bicycle makers from Dayton, Ohio, successfully flew a heavier-than-air machine for the first time in history. Their invention would change the way people travel and conduct business.

From the first time they saw a flying contraption — a toy given to them by their father during childhood — the Wright brothers were obsessed with flight. However, it wasn't until 1896 that they started feeding their obsession, prompted by the death of famous glider-developer Otto Lilienthal in a crash.

In 1899, Wilbur wrote to the Smithsonian Institution in Washington, D.C., requesting materials so that he could “avail [himself] of all that is already known [about flight].” The brothers then started building and testing kites and gliders. In the process, they developed flight control techniques and other technologies that formed the basis of aeronautical engineering.

They chose Kitty Hawk to test their powered glider because of its constant winds and wide beaches. After a number of unsuccessful attempts in 1903, they successfully lifted off the ground on December 17 and did so four times that morning. The first flight lasted 12 seconds and covered 120 feet; the fourth lasted 59 seconds and spanned 852 feet.

The Wright brothers made significant progress in the following years. In 1905, they created an airplane that allowed Wilbur to fly 24.5 miles in 39 minutes. Four years later, they founded

the Wright Company to continue their work. Today, the ancestor of this company — New Jersey-based Curtiss-Wright Corporation — produces aerospace products from several plants, including two in North Carolina.

Orville and Wilbur knew that their first successful flight was significant. But they — and society as a whole — probably didn't foresee all the economic benefits that aviation would yield.

Early airplanes carried few people and traveled only short distances, making extensive passenger service unrealistic. The first regularly scheduled passenger flights didn't occur until 1914, and that service lasted only three months. The Benoist Company operated an airboat that transported the pilot and one passenger between Tampa and St. Petersburg, Fla., in 23 minutes. A one-way ticket cost \$5, which was cheap enough for businessmen who wanted to avoid the two-hour ferry ride across Tampa Bay or the six-hour train trip around it.

By the 1930s, Americans were flying coast to coast, but airplane engines consumed so much fuel that planes had to stop several times to refill. As a result, air travel was still time-consuming and expensive for passengers.

The development of the jet plane in the 1950s made commercial aviation a much stronger business. Jets could travel faster, better accommodate passengers, and go farther without having to refuel. These factors helped lower the cost of flying.

In subsequent decades, air travel has improved business communication — executives can fly almost anywhere to

meet with clients or to oversee facilities — and enabled vacationers to go practically wherever they want. The Bureau of Transportation Statistics (BTS) reports that over 595 million passengers boarded planes in the United States during 2001.

Airplanes also have facilitated the rapid transport of goods over long distances. Airlines dedicated exclusively to cargo service emerged after World War II and are a crucial part of today's economy. According to the BTS, approximately 15 billion ton-miles of cargo were shipped on airlines in 2000.

Today, planes support our integrated, “just-in-time” global economy. Businesses know they can get goods quickly and cheaply from a distributor, so they can maintain smaller inventories. Likewise, customers can order products from other states or countries, giving them more selection and creating competition between firms.

Air transportation also has indirectly fueled regional economic growth. The advent of jet planes in the 1950s led to the construction of airports away from cities, since their loud engines proved annoying. In many cases, the new airports prompted businesses to locate nearby, generating a small hub of economic activity.

It is impossible to directly discern how much economic growth over the past century has been a result of manned flight. But there is little doubt that air travel has had a huge effect on the way we do business and communicate. And it all started a century ago with two brothers from Dayton making a mere 120-foot flight. **RF**

COURTESY OF SPECIAL COLLECTIONS & ARCHIVES, WRIGHT STATE UNIVERSITY

Mickey Levy

Bank of America, based in Charlotte, N.C., is the nation's second largest commercial bank, trailing only J.P. Morgan Chase. As chief economist for Bank of America, Mickey Levy analyzes economic conditions and financial market behavior both at home and abroad, as well as conducts research on monetary and fiscal policies. His economic forecasts have consistently ranked among the top of private sector firms. (For an analysis of Blue Chip forecasting performance, see the Federal Reserve Bank of Atlanta's *Economic Review*, Second Quarter 2003.)

Before joining Bank of America, Levy worked in Washington, D.C., as an analyst at the Congressional Budget Office and the American Enterprise Institute, where he examined a wide array of public-policy issues. Since 1983, he has served as a member of the Shadow Open Market Committee (SOMC), a group of academic and business economists that meets twice a year to comment on the actions of the Federal Open Market Committee (FOMC), which conducts the nation's monetary policy. Levy also sits on the Board of Academic Advisors to the Federal Reserve Bank of New York.

In addition to his responsibilities with Bank of America, Levy continues to speak to academic and business audiences around the world and to publish his research in top policy journals. Aaron Steelman interviewed Levy in his office overlooking New York's Central Park on June 26, 2003.

RF: How has your formal training in economics and your experience working in Washington, D.C., helped prepare you for a career on Wall Street?

Levy: I try to apply sound, neoclassical economics to financial markets. Over time, the markets tend to abide by economic fundamentals, and if you stick to the fundamentals you will forecast the market direction right more often than not and avoid big mistakes. Many Wall Street economists seem to jump from theme to theme, which can provide an unstable basis for analysis.

My training in public policy also has helped. For instance, having a sound understanding of fiscal-policy research can be very useful in forecasting. I try to apply a combination of sound economics and public-policy analysis to financial market behavior.

RF: One area in which you have done a lot of work—both as a policy economist and as a business economist—is fiscal policy. How would you assess the current situation, given the increasingly large deficit projections coming from the Congressional Budget Office and other organizations?

Levy: Often, the size and structure of government—and what they imply for resource allocation and private sector decisionmaking—take a backseat to a narrow debate about the size of deficits. We need to ask: What is the proper size of government? What sort of activities should the government fund? And what should be the proper tax structure?

The emphasis on deficits also dominates the fiscal-policy debate overseas. In the European Union, fiscal policy is guided by the Growth and Stability Pact that limits deficit-to-GDP ratios to 3 percent in member nations. Recently, I presented a paper at a symposium sponsored by the Central Bank of Austria in which I argued the Pact was a poor guideline for conducting fiscal policy and recommended changes that would refocus the debate.

Using a deficit-to-GDP ratio to evaluate and coordinate fiscal policies across nations is misguided. For instance, Germany and the United States have comparable deficit-to-GDP ratios. But Germany's public spending amounts to nearly 50 percent of GDP, while the United States' ratio is about 20 percent at the federal level and about 35

percent including state and local spending. The composition of government spending varies across European nations, and they have different tax structures. So deficits often drive the debate, but they are not a good reflection of fiscal responsibility or thrust. Analogously, consider an investment analyst preparing a financial report on a business. In most cases, the company's debt level provides insufficient information. Importantly, what is the company doing with the capital? What is the rate of return on the capital relative to its financing costs? Deficits are important. But they don't tell you most of what you want to know about fiscal policy.

I would revise Europe's Growth and Stability Pact by adding two new criteria: caps on spending-to-GDP and taxes-to-GDP that are well below their current ratios. And to the extent that taxes are cut prior to spending cuts, which would temporarily increase deficits, the deficit criterion would be relaxed. What would this accomplish? Research shows a clear inverse relationship between government spending and economic growth and also an inverse relationship between taxes and economic growth. On the other hand, the impact of deficits on economic growth is ambiguous. These recommended changes would force EU member nations to shift their attention toward the true sources of their problems in order to achieve greater economic performance.

RF: How would you assess the performance of the European Central Bank (ECB), now four and a half years after the introduction of the euro?

Levy: My overall view is that the ECB has conducted itself well in that it has steadfastly pursued its mandate of price stability. It has clearly favored rules over discretion in an extraordinarily difficult environment in which it has tried to maintain low inflation and establish credibility. By its very nature as a supranational institution, though, it may be destined to never earn the credibility it deserves or desires because it will always be the fall guy for Europe's problems. Europe's lackluster economic performance, especially in the core of Europe, has little to do with the ECB and much to do with the excessive scope of government, anti-growth taxes,

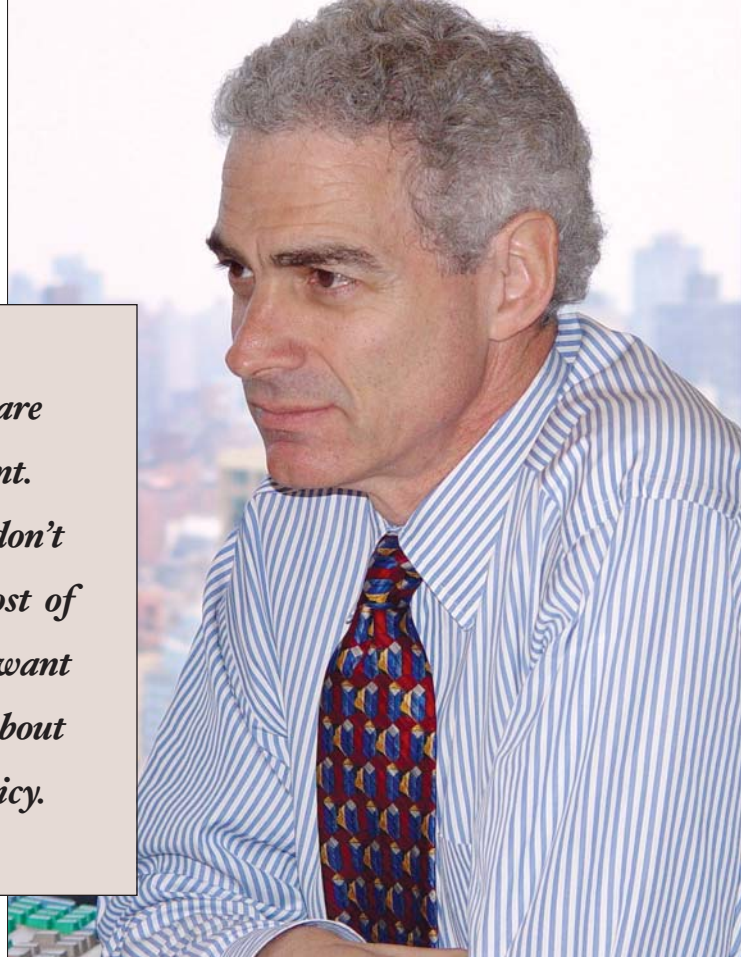
Deficits are important. But they don't tell you most of what you want to know about fiscal policy.

and burdensome regulatory policies.

I should note that some European nations enjoy healthy growth. But they are not in the core of the continent: France and Germany are struggling, while Ireland is doing very well. And when you compare the two groups, you see that sound pro-growth economic policies are rewarded by stronger economic performance while misguided policies, though often well-intended, result in poor economic performance. I don't think Ireland and other fast-growing countries in western Europe will serve as a model for the struggling countries of core Europe. That is asking too much. But as new nations ascend into the EU, they will become very attractive destinations for jobs, production facilities, and capital from core Europe. Core Europe's policymakers will then respond to the political pressure to reform.

RF: There is debate among economists about the effects that budget deficits have on interest rates. What is your view?

Levy: The empirical research does not give us an unambiguous answer on the relationship between budget deficits and interest rates. As an economist working on Wall Street who follows the markets day to day, it is absolutely clear that interest rates are driven primarily by economic performance and inflationary expectations. If deficits



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do, in fact, affect interest rates, their impact is relatively minor. Just look at history. In recent years, we have seen a dramatic shift from budget surpluses to huge deficits, and interest rates have fallen to 40-year lows. During sustained periods of the 1990s, rates were rising as deficits were falling sharply. It's interesting how certain notions persist among financial market participants and the public even though they are not supported by hard evidence. The idea that deficits strongly affect interest rates is one case; another is the Phillips Curve notion that there is a tradeoff between unemployment and inflation.

RF: You have been analyzing Social Security for more than 20 years. During that time, the program's fiscal problems have become increasingly clear, inspiring many reform proposals. How would you recommend reforming the system?

Europe's lackluster economic performance, especially in the core of Europe, has little to do with the ECB and much to do with the excessive scope of government, anti-growth taxes, and burdensome regulatory policies.

Levy: The unfunded liability for Social Security overwhelms current cash-flow deficits; this has not changed. I think you need to deal with this on several fronts. First, you need to remove disincentives to work. The elimination of the Social Security earnings test, for instance, was very favorable. Second, you need to increase the average age of retirement in order to receive full benefits. Third, I would favor a partial and gradual privatization of Social Security with income supports to help low-income people.

The arguments against privatization aren't particularly convincing. Some have claimed that ordinary people just aren't smart enough to invest their own money. I work for an organization with approximately 150,000 employees spread throughout the United States with a wide variety of educational and economic backgrounds. They seem to have little difficulty with their retirement plans and determining how to allocate their assets into investment funds. Another claim made by opponents of privatization is that Wall Street favors privatization because it would benefit at the hands of workers. This is simply wrong. Wall Street is a

very competitive place, and the management fees of the big mutual funds are below the administrative costs of the Social Security Administration. When you cut through all the smoke, the real issue is that opponents of privatization want Congress to maintain the power of the purse, and they don't want that power reallocated to private households. This theme of who controls national resources is a common theme in the debate about a number of fiscal issues.

RF: Does deflation pose problems for monetary policy that are substantively different from those associated with fighting inflation?

Levy: Let me say at the outset that I don't see destabilizing deflation as a major threat and I think the Federal Reserve has overstated the concern about it. Currently, I think three questions about deflation are relevant. First, under what conditions would it occur? Second, would it be destabilizing? Third, if it occurred, could you get out of it?

In my mind, just as inflation occurs when you have excess demand relative to productive capacity, deflation occurs when you have insufficient demand relative to productive capacity. With nominal GDP well above productive capacity, there is sufficient aggregate demand. Currently, even though the recovery has been sluggish, nominal spending has grown 3.8 percent in the last year, the Fed is pursuing a monetary policy that is easy by any measure, and the U.S. dollar is falling. The probability of a persistent decline in the general price level is very, very low. If deflation were to occur, would it be destabilizing? Not necessarily. The prices of many goods are falling because of positive supply shocks and technological innovation, while the prices of services are rising at a 3 percent pace. That's not destabilizing. In this regard, history is instructive. Certainly, the Great Depression was associated with deflation, but falling prices were a symptom of other problems. Other episodes of mild deflation have been associated with strong growth. As for the third issue, Japan has had trouble getting out of deflation, in large part because of the Bank of Japan's misguided policies and the dysfunctional banking system that has muddled the channels through which monetary policy affects aggregate demand. But in the United States, monetary policy is accommodative and the banking system is very solid and very well-capitalized. The zero nominal bound on interest rates would not inhibit required monetary easing. So there are big differences that would permit the United States to deal with the problem much more successfully than Japan.

RF: The state of monetary policy has changed dramatically since Allan Meltzer and Karl Brunner founded the SOMC in 1973. How does that change the job of the SOMC and the focus of its meetings?

Levy: Let's consider two major changes since the SOMC was founded. First, inflation has fallen dramatically from its high levels in the 1970s to close to zero. Second, in sharp contrast to 1973, virtually everybody now agrees that in the long run inflation is a monetary phenomenon. The SOMC was founded because Meltzer, Brunner, Anna Schwartz, and other early members were frustrated that policymakers didn't really understand what drove inflation.

Now, with low inflation, the focus of the SOMC has changed. In many ways, our focus has broadened to cover many issues beyond monetary policy. We discuss fiscal policy, trade policy, and a whole host of headline issues where the public debate is misguided. When I joined the SOMC in 1983, I focused on fiscal policy, and now I also contribute to the committee's thinking about the economic forecast and monetary policy. Perhaps the SOMC's role has been diluted because the Fed has followed largely the right prescriptions and the battle against inflation has been temporarily won. That's a big plus for economic performance, but there are still important issues.

Consider the issue of inflation targeting and the ongoing debate between rules versus discretion. I believe Alan Greenspan has been an outstanding Chairman — the best ever — but you have to ask: What happens next? Will the next monetary regime have the same skills and luck? I think now is the time to make institutional changes and establish guidelines, so that the recent success is not transitory. I strongly favor inflation targeting.

RF: Much of your early work focused on the economic effects of the initiative process, specifically tax and spending limitations. We are approaching the 25th anniversary of Proposition 13 in California, which limited property taxes in that state. Looking back, would you judge it to be a success? And, more generally, has the initiative process lived up to its promise and moved policy in a positive direction?

Levy: In the 1970s, inflation was rising, pushing people into higher tax brackets, and the state's tax receipts were soaring. That led to a ballot initiative in California to limit both taxes and expenditures. It failed but on the rebound an initiative to cap property taxes, Proposition 13, was enacted. It may have contributed marginally to keeping a lid

on the scope of government. But it wasn't really a well-conceived law and it created unintended distortions. For instance, by limiting property taxes, Proposition 13 drove up property values and led to increases in other taxes. In contrast, the tax-and-expenditure limitation, though very simple, would have been much more successful in rationalizing government spending programs and would have avoided many of the unintended distortions.

Fiscal policy on the state level now is extremely disappointing. In the 1990s, when the economy was expanding more rapidly than its long-run trendline and tax receipts were accelerating sharply, federal policymakers generally held the line on spending, but many state and local elected officials viewed the higher tax receipts as an opportunity to put in place very expensive programs. Since then, tax receipts have fallen dramatically, and now the states are running big deficits. To a large extent, this reflects fiscal mismanagement. What happens now? I'm very concerned that some portion of the deficits at the state and local levels will be closed by tax increases. Those increases could be sizable and could offset the stimulus provided by the federal tax cuts, while at the same time validating those costly new spending initiatives. The economy's long-run potential growth may eventually be constrained by the sharp rise in defense spending and the rise in taxes at the state and local level, which involve more government absorption of national resources that will crowd out private consumption and investment.

RF: Which economists have influenced you the most?

Levy: I have been fortunate to have worked with and learned from a number of economic scholars. Of course, Allan Meltzer has been a guiding light for me ever since I joined the SOMC. Other past and present SOMC members, like Bill Poole, currently the St. Louis Fed President, have made strong impressions. Bill Niskanen has been very influential. And I must add a non-economist to this list: the late political scientist Aaron Wildavsky, who was Dean of the Graduate School of Public Policy at Berkeley.

Mickey Levy

► Present Position

Chief Economist, Bank of America

► Previous Positions

Analyst at the American Enterprise Institute (1978-1982) and the Congressional Budget Office (1975-1978)

► Education

B.A., University of California, Santa Barbara (1972); M.P.P., Graduate School of Public Policy, University of California, Berkeley (1974); Ph.D., University of Maryland (1980)

► Selected Publications

Author of numerous book chapters and articles in such publications as the *Journal of Monetary Economics*, *Journal of Risk and Insurance*, *National Tax Journal*, *Cato Journal*, and *Milken Review*



CHRISTOPHER M. HARRIS

Trade Trailblazer

The National Road Linked Communities and Helped Expand America's Western Frontier

BY CHARLES GERENA

A green truck sits on the sloping dirt shoulder of State Route 144 in western Maryland. It's filled with fresh produce for sale, advertised by a wooden sign sitting in the truck bed. This agricultural entrepreneur hopes to take advantage of the automobiles whizzing by.

Nearly two centuries ago, a different type of traffic occupied this route and several others that led to the National Road, the nation's first multi-state thoroughfare. Farmers loaded their wagons with flour, tobacco, and other commodities, then journeyed for days in the blazing sun to reach merchants in Baltimore. They shared the road with freight wagons loaded with finished goods heading west, stage-coaches, and herds of livestock prodded along by drovers.



The National Road helped travelers negotiate mountainous terrain before the advent of railroads.

When its last stones were laid in 1839, the National Road stretched from Cumberland, Md., to Vandalia, Ill. The 600-mile roadway was complicated and expensive to build, but its economic benefits were undeniable. It helped goods and people flow between established eastern cities like Baltimore and expanding communities on the western

side of the Appalachian Mountains. It also stimulated economic growth along the way, from small towns like New Market, Md., to bigger cities like Wheeling, W.Va., providing a glimpse at how interstates would alter 20th century America.

"If you're looking for the heart of American history, it's transportation," says Joseph Weaver, a history professor at Allegany College of Maryland. "You aren't going to get any economic development unless you can get from here to there."

The Atlantic Ocean facilitated most trade during colonial times — goods flowed between Europe and port towns like Baltimore. Some colonies also traded with each other, using dirt roads and navigable rivers.

A few adventurous souls settled the fertile lands west of the Appalachians, but the remoteness of the region and fear of attacks from Native Americans kept most settlers away. Others decided to venture westward when England ceded control over the Northwest Territory at the end of the Revolution in 1783. Millions of acres that encompassed the future states of Ohio, Indiana, Michigan, Illinois, Wisconsin, and the upper portion of Minnesota eventually came under control of the newly formed American government. With few sources of revenue, officials eagerly sold this land to boost federal coffers, according to geographer Karl Raitz at the University of Kentucky.

By the early 1800s, says Raitz, farmers lived in the Scioto River Valley in central Ohio. Little towns also formed along the Ohio River north of Wheeling.

Western settlers felt safer from

Indian attacks, but trade with the eastern seaboard was still difficult. Only a few narrow dirt trails were available for land-based travel, and they turned treacherous in bad weather.

Instead, it was easier for goods to head south from the Northwest Territory. Schooners traveled downstream on the Ohio and Mississippi Rivers to the port of New Orleans in Louisiana, which France sold to the United States in 1803. This North-South trade raised concerns that “French merchants in New Orleans were going to make all the money, not the people in East Coast cities,” notes Raitz.

Political pressure from eastern merchants intensified to facilitate commerce across the Appalachians. Settlers in the future state of Ohio also clamored for better transportation access. With the support of President Thomas Jefferson, Treasury Secretary Albert Gallatin devised a plan for a nationwide system of canals and roads, including a key roadway between America’s eastern seaboard and western frontier.

But some Congressmen opposed spending money on transportation improvements. They worried that federal involvement in road building — which had typically been done by private turnpike companies under state charter — would set a precedent for Washington to intervene in other local matters. At the time, “how much power the government had and how much the states had was still very much up in the air,” notes Joseph Weaver.

Opponents also argued that the government wasn’t authorized to finance roads and canals. They believed the U.S. Constitution allowed for federal funds to further only the “general welfare” of the nation. “Back then, people conceived of roads as going from town to town or from a river port to town,” says Raitz. Consequently, roads were seen as benefiting only individual communities.

Jefferson and other supporters of Gallatin’s plan countered that it was in the national interest to build transportation links because they would help keep the United States united.

After a tax on whiskey led to an infamous rebellion in Pennsylvania’s western counties, it was thought that an east-west roadway would enable government troops to quell future uprisings, as well as defend the frontier from domestic or foreign enemies.

Moreover, farmers contended that settlement of the Northwest Territory couldn’t continue unless there was better access to eastern markets. Jefferson and others envisioned the United States as an agrarian society, so facilitating agricultural development on new soil was important to them. Plus, land sales generated revenue for the federal government.

After much debate, Congress developed a funding mechanism for an east-west roadway. When Ohio joined the Union in 1802, language in the statehood bill set aside five percent of the proceeds from federal land sales in the state for road construction. The legislation was later modified to designate three-fifths of these funds for state roads and the remainder for federal roads to and through Ohio. Similar language in the statehood bills for Indiana and Illinois also earmarked revenue for the National Road’s construction.

The only contentious question that remained was where to put the National Road. Gallatin thought the road should connect a navigable body of water that emptied into the Atlantic Ocean with the Ohio River on the other side of the Appalachians. But there were a couple of routes that would meet this goal, and several cities wanted to be part of the solution.

“Washington, D.C., leaders expected that the proposed National Road would begin in the nation’s capital,” wrote historian Norris Schneider in his 1975 book, *The National Road: Main Street of America*. “The merchants of Richmond, Va., wanted the produce of the western settlers to fill their warehouses. Philadelphia, already a supplier of goods to the Ohio Valley through Pittsburgh, took it for granted that the new road would start in front of Independence Hall.”

Anatomy Of A Road

Congress and project superintendents outlined detailed specifications for the National Road. Most contractors followed these standards fairly closely, but others may have fudged a little due to time and budget constraints.

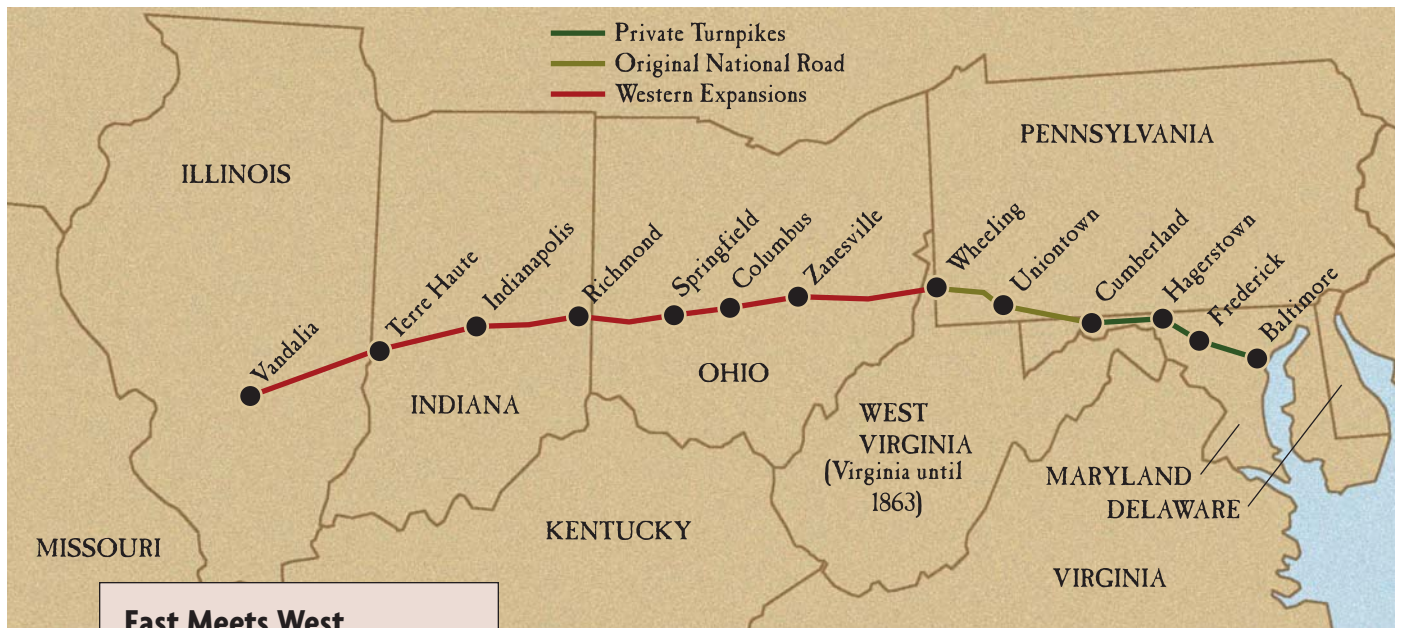
- The total width of the road was supposed to be “four rods,” or about 66 feet. This is close to the modern specification of 72 feet for a four-lane, controlled access freeway.
- The roadbed was to measure 30 feet and have a raised center. The side slopes were to be no greater than 30 degrees.
- The grade of the road couldn’t exceed five degrees above or below the horizon, even over steep hills and through narrow valleys.
- The roadbed was to consist of two layers: the base layer containing stones small enough to pass through a 7-inch ring, and the top layer consisting of soil mixed with rocks that could fit through a 3-inch ring.
- Ditches were to be added, when necessary, to carry off rainwater and melted snow.

—CHARLES GERENA

Instead, a growing city in western Maryland named Cumberland was the front-runner to become the National Road’s starting point. Roads already linked the city to Baltimore, which was closer to the Ohio River than Philadelphia or Richmond. Maryland officials agreed to upgrade these trails to support traffic to and from the National Road. Also, government officials planned to make the Potomac River navigable to Cumberland, which would create another route to the National Road.

Most importantly, Cumberland was located where the Potomac and several streams had carved a deep but narrow gap through Wills Mountain. This opening created “one of the few convenient passages through the [Appalachians] between New York and Alabama,” noted historian Billy Joe Peyton of West Virginia University in a 1996 compilation of essays on the National Road edited by Karl Raitz.

In 1805, a Senate committee recommended that the National Road



East Meets West

It would take federal and state road crews decades to piece together a continuous route between Baltimore, Md., and Vandalia, Ill. In the meantime, people and goods began traveling on segments of the National Road and private turnpikes in Maryland before they were open for traffic.

Western Expansions Of National Road – 470 Miles

- Extension to Zanesville, Ohio, completed 1828-31
- Extension to Columbus, Ohio, finished in 1833
- Extensions through Indiana built from 1829 to 1834
- Final extension to Vandalia, Ill., opened in 1839; roadway completely finished by state government by 1850

Original National Road – 130 Miles

- Started at Cumberland in 1811 and completed at Wheeling in 1818

Private Turnpikes – 140 Miles

- Baltimore and Frederick Turnpike, Hagerstown and Boonsboro Turnpike, Cumberland Turnpike, and Bank Road built between Baltimore and Cumberland from 1807 to 1823

Note: Dates and distances are approximate

begin in Cumberland and end at a tributary of the Ohio just below the city of Wheeling. The Senate approved legislation later that year to formalize the road's route and appropriate \$30,000 for an initial survey.

However, it took the House until March 1806 to approve the bill, and only by a vote of 66 to 50. Pennsylvania's representatives voted 13 to 4 against the bill, even though the National Road would go through the southwestern corner of the state, because Philadelphia wasn't the road's eastern terminus. Virginia and South Carolina representatives also were against the measure. "The South was antagonistic because it feared a western road would drain off its population and because Richmond was not included on the route," noted Philip Jordan in his 1948 book titled *The National Road*.

Despite the close vote, construction of the nation's first interstate highway was finally able to move forward.

Actually, the federal government didn't award the first contracts for the National Road until 1811. It took that long to find road builders willing to take on the project.

The scope of the National Road's construction was unprecedented. Workers had to clear a 60-foot swath through forests, dig drainage ditches on either side

of the road, break apart stone into various sizes to form the roadbed, and erect bridges to span creeks. And they had to do it all with hand tools and no earth-moving equipment.

Given these challenges and the distractions of the War of 1812, the National Road didn't reach Wheeling until 1818. By then, its construction cost soared to an average of \$13,000 a mile, more than double initial estimates.

Still, the National Road offered an easier, faster route for commerce. This helped increase the volume of trade from western farmers to eastern merchants. Ships carried agricultural goods on the Ohio River and its tributaries to Wheeling, where their cargo would be offloaded onto Conestoga wagons and sent to Baltimore and other markets to the east. While this created more competition for farmers in Pennsylvania, Maryland, and Virginia, manufacturers of processed food and finished goods in those states could access markets to the west.

Several stagecoach lines also traversed the National Road. They accelerated communications — mail took only 48 hours to travel from Baltimore to Wheeling compared to eight to 10 days previously — in addition to carrying Americans and some immigrants into the western frontier.

Besides improving interstate travel, the National Road increased local property values as development sprung up along its route. Taverns, blacksmith shops, stagecoach stations, and livery stables operated along the road to serve travelers, providing the seeds for small towns throughout western Maryland and West Virginia's northern panhandle. At the same time, the road boosted development in established communities like Cumberland and Wheeling.

Baltimore was a major beneficiary of the National Road, especially after turnpike companies completed four roads that linked the port town and Cumberland by 1823. Maryland officials pressured state-chartered banks to finance the work.

"They told banks that they wouldn't renew their charter unless they came up with the money to fix these roads," describes Weaver. Fortunately, the tolls charged on these turnpikes were able to cover expenses and generate a profit. "It turned out to be one of the best investments that the banks made."

Other communities along the turnpikes also profited from National Road traffic. Jim Higgs, vice president of the New Market Historical Preservation Society Inc., says additional inns and shops opened in New Market to serve westbound travelers who stopped in town before traversing the last 20 miles of the Baltimore-Frederick Turnpike.

"It was a place to bed down," says Higgs, who owns a former tavern in New Market. A wagoneer could also obtain water for his horses and get their shoes fixed at the blacksmith shop. All of these services were available within a block of either side of the turnpike.

Eventually, the National Road and its turnpikes became the "Main Street" for many towns. But even as the road supported trade and migration, it began falling apart.

Congress appropriated money for repairing the National Road, but it couldn't keep up with the continual wear and tear on the road. Wagon wheels constantly cut into the road's surface, while a succession of hooves pounded on it.

Some people even stole rocks from the road for construction projects.

As a result, the entire length of the National Road was never in good condition at one time. This was especially true after workers began extending the road west of Wheeling in 1825. By the time the National Road crossed the mid-sections of Ohio, Indiana, and Illinois and ended in the city of Vandalia in 1839, its older sections were in terrible shape.

Some Congressmen proposed enacting tolls on the National Road to fund maintenance costs. But others questioned the constitutionality of such tolls since the road wasn't built on federally owned land. Besides, there was growing interest in building railroads and canals, which were deemed superior to roads.

By 1831, Washington decided to get out of the road business. As sections of the National Road were overhauled for the last time, they were turned over to individual states. Lawmakers cut off federal funding for the road after 1838 and transferred ownership of the road's last section to Illinois in 1856.

Since the states could collect tolls, they immediately converted their sections of the National Road into turnpikes by setting up tollgates. Yet they were restrained from charging tolls high enough to cover maintenance costs due to the availability of alternatives, says Karl Raitz. Locals would build "shunpikes" to bypass toll roads that were considered expensive. By the 1870s, the states had relegated ownership of the road to individual counties.

Still, people and goods continued to travel between Wheeling and Baltimore on the National Road through the 1850s. Most of the road's traffic west of Wheeling was local, especially between capital cities like Columbus, Ohio, and Indianapolis, Ind.

Then, the construction of railroads to the Ohio River made the National Road obsolete. The most famous one was the Baltimore and Ohio, which connected Baltimore to Wheeling by 1852. "The travel time between Baltimore and Wheeling was several weeks by stagecoach. With the railroad, that

time was cut down dramatically," says Albert Feldstein, a regional planner for the Maryland Department of Planning who has written about the National Road's history. As a result, many people took the train to Wheeling, then transferred to wagons and continued on the National Road.

To make matters worse, the Chesapeake and Ohio Canal was completed in 1850 along the Potomac River. While most canal boats carried coal, they also offered an alternative route for produce between Cumberland and communities on the Eastern Shore of Maryland and Virginia.

The National Road became popular again around the turn of the 20th century as the railroads became congested and automobile travel emerged. Congress provided federal money in the 1920s to incorporate parts of the road and the turnpikes between Baltimore and Cumberland into one of the nation's first new highways, U.S. Route 40. Once again, the road stimulated the growth of restaurants and hotels.

Today, parts of the National Road are designated as scenic byways in states like Maryland and West Virginia. In June 2002, the Federal Highway Administration named it an "All-American Road." With these designations, small communities like New Market hope to take advantage of a new type of traffic — tourists who want to take a weekend drive or to catch a glimpse of transportation history.

"We have been hosting travelers for 200 years, and we're still doing it," says Jim Higgs. **RF**

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District Economic

BY ROBERT LACY

Economic growth in the Fifth District was subpar in the second quarter of 2003. Consumer spending was lackluster, particularly at retail establishments, and employment growth was slight, leading to increased concern about a “jobless recovery.” A few signs of accelerating growth emerged near the end of the quarter, however, raising hopes for stronger performance in the second half of the year.

Economic growth in the Federal Reserve’s Fifth District remained lukewarm in the second quarter of 2003. Consumer spending was subdued, particularly in those areas of Virginia and the Carolinas where textile and furniture manufacturers were laying off workers. Businesses throughout the District remained hesitant to make large capital investments in a still uncertain economic environment. But business sentiment brightened by early summer, and signs of accelerated economic growth began to emerge.

Services and Retail Sluggish

District retailers and services businesses we survey reported lower revenues throughout much of the second quarter of 2003. Retailers told us that sales of big-ticket items were particularly weak. Although unusually wet spring weather was partly to blame for slumping sales, modest income growth and concerns with job prospects also played a role in squelching consumer demand.

District services providers fared a little better than retailers did in the second quarter. Services revenues expanded, albeit at a modest pace, and employment in the sector grew. On a year-over-year basis, services sector employment rose at a 0.6 percent rate in the second quarter — still subpar, but better than the anemic 0.2 percent annual employment growth rate in the retail sector.

While sales and employment expanded only modestly in the second quarter, both services businesses and retailers were optimistic that business activity would pick up in the second half of the year. And evidence of stronger retail sales and employment did emerge in July, particularly at discount chains. A discount retailer in Chesapeake, Va., for example, reported substantially higher sales and employment in July, noting there was “a lot of demand for our product.”

Manufacturing Shaky

The District’s manufacturing sector wobbled in April, but steadied in May and June. Shipments and new orders were essentially flat in the last two months of the quarter. But manufacturing employment in the District continued to tumble — down 4 percent in the second quarter compared to a year ago.

The news from the District’s textiles and apparel industries has been especially disappointing in recent months. Pillowtex Inc., filed for bankruptcy in July and joined the swelling ranks of textiles and apparel companies announcing job layoffs and plant closings this year. From January through July of this year, employment in textile mills in North Carolina alone has declined by 9,300.

The Pillowtex announcement means nearly 5,000 manufacturing workers will lose their jobs in North Carolina communities such as Kannapolis and Eden, where the textile plants are located. Federal assistance, including a \$13 million job retraining grant, has been made available to laid-off workers. This assistance will help retrain dislocated workers for jobs in other fields, such as medical professions and construction trades.

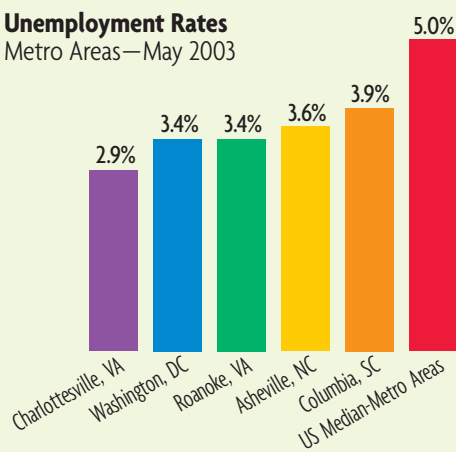
Personal Income Growth Steady

Personal income in Fifth District states grew at an annual rate of 3.4 percent in the first quarter of 2003, matching the growth of personal income for the United States as a whole. While District personal income growth has trended up over the last year, the current growth rate is well off the pace of the 1990s.

Did You Know. . .

Unemployment rates in several Fifth District metropolitan areas are among the lowest in the country. Washington, D.C.’s rate of 3.4 percent in May 2003 was the best among 51 metropolitan areas with population exceeding 1 million people. Charlottesville, Va., recorded a rate of only 2.9 percent in May, ranking it 16th out of all 331 metropolitan areas in the country.

Unemployment Rates
Metro Areas—May 2003



Developments

Nonfarm Employment

Second Quarter 2003

	Employment (Thousands)	% Change (Year Ago)
DC	663	-0.2
MD	2,495	0.7
NC	3,850	0.3
SC	1,789	-1.1
VA	3,506	0.3
WV	732	-0.1
5th District	13,034	0.1
US	129,987	-0.3

Unemployment Rate

Percent

	2nd Qtr. 2003	2nd Qtr. 2002
DC	6.8	6.5
MD	4.4	4.5
NC	6.4	6.8
SC	6.3	5.8
VA	4.0	4.2
WV	6.1	6.2
5th District	5.3	5.5
US	6.2	5.9

Personal Income

First Quarter 2003

	Income (\$ billions)	% Change (Year Ago)
DC	25.5	5.3
MD	202.1	4.0
NC	233.2	2.4
SC	106.0	3.0
VA	243.6	3.8
WV	43.5	3.1
5th District	854.0	3.4
US	9,066.7	3.4

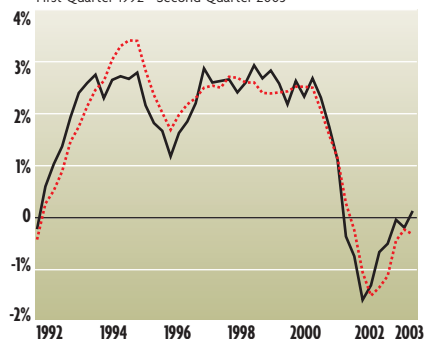
— Fifth District

- - - - - United States

Nonfarm Employment

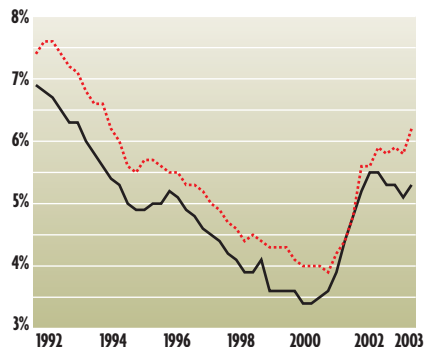
Change From Prior Year

First Quarter 1992 - Second Quarter 2003



Unemployment Rate

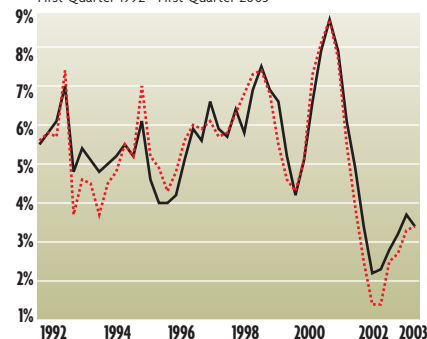
First Quarter 1992 - Second Quarter 2003



Personal Income

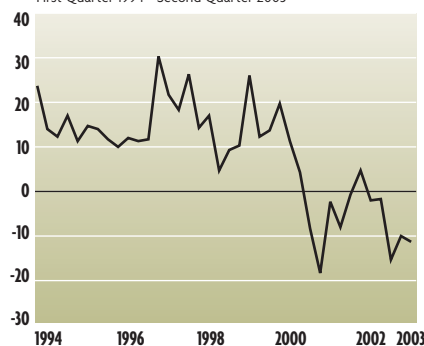
Change From Prior Year

First Quarter 1992 - First Quarter 2003



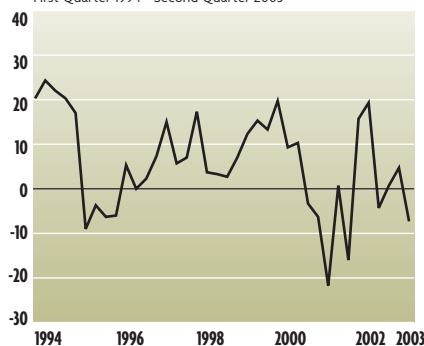
FRB—Richmond Services Revenues Index

First Quarter 1994 - Second Quarter 2003



FRB—Richmond Manufacturing Shipments Index

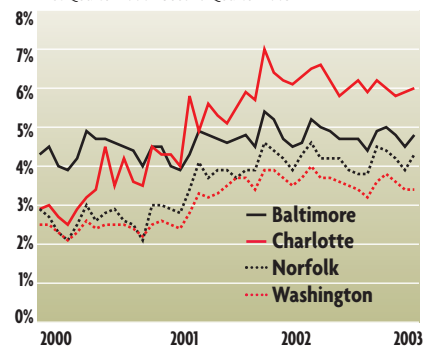
First Quarter 1994 - Second Quarter 2003



Unemployment Rate

Major Metropolitan Areas

First Quarter 2000 - Second Quarter 2003



NOTES:

- 1) All data series are seasonally adjusted.
- 2) FRB-Richmond survey indexes are diffusion indexes. Positive numbers represent expansion, negative numbers contraction.
- 3) State nonfarm employment estimates are based on surveys of establishments. These employment figures differ from those used to calculate state unemployment rates.

SOURCES:

Income: Bureau of Economic Analysis, U.S. Department of Commerce, <http://www.bea.doc.gov>
 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>

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



DISTRICT OF COLUMBIA

BY ANDREA HOLLAND

In contrast to activity in other Fifth District jurisdictions, the employment level in the District of Columbia continued to expand during the 2001 recession. As a result, although payrolls have grown only 0.3 percent six quarters into the recovery period, job numbers remain 2.9 percent higher than at the start of the recession.

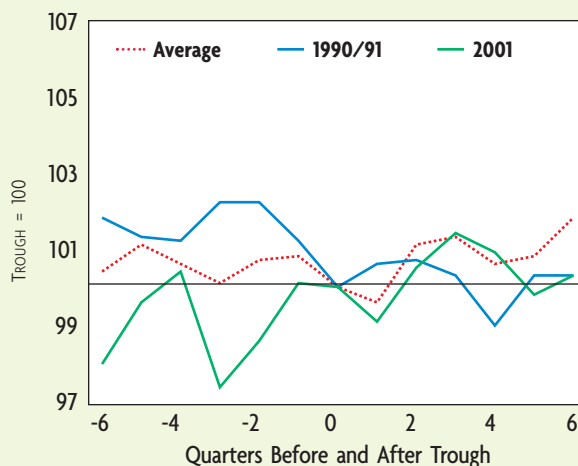
By and large, the 2001 recovery has been weaker both nationally and in the Fifth District than the 1991 recovery — except in the District of Columbia. With a 0.3 percent growth rate in jobs six quarters from the trough, the District of Columbia tied with Maryland for the highest recovery pace in the Fifth District. In contrast, the District of Columbia had an identical 0.3 percent growth rate during the first six quarters of the 1991 recovery, which at the time was the lowest recovery pace in the Fifth District.

Personal income growth, another key indicator of economic well-being, has also been robust in the District of Columbia in the post-2001 period — expanding 2.9 percent more than the average recovery pace in the postwar era. In contrast, personal income growth was 1.2 percent less five quarters into the 1991 recovery than it would have been under the typical scenario.

In part, the District of Columbia was more sharply affected by the 1990 recession than other Fifth District states because of overinvestment in commercial real estate and the downsizing of government-related jobs. By contrast, the jurisdiction was partly insulated from the 2001 slowdown because it has little employment in the hard-hit manufacturing sector and more employment in the relatively stable government sector.

Despite the District of Columbia's favorable record during the 2001 recovery, some recent figures have been mixed. Payroll employment slipped in the second quarter of 2003 and the jobless rate kicked up further. Real estate activity was also mixed: existing home sales were nearly 11 percent higher over the year, but permit authorizations declined modestly in the second quarter. In the first quarter, personal income growth was slower and personal bankruptcies edged higher. But not all first quarter news was bad. The percentage of mortgage past dues moderated, general sales and gross receipts were up from a year ago, business bankruptcy filings dropped off, and venture capital investment picked up significantly.

DC Nonfarm Payroll Employment Index



SOURCE:
Nonfarm Payroll Employment, NSA, Bureau of Labor Statistics/Haver Analytics

	Percent Change at Annual Rate From		
	2nd Qtr 2003	1st Qtr 2003	2nd Qtr 2002
Nonfarm Employment	662.8	-1.9	-0.2
Manufacturing, NSA	2.8	0.0	-4.5
Professional/Business Services	141.1	3.8	0.8
Information	25.9	5.3	0.1
Civilian Labor Force	307.5	4.3	0.9
Home Sales	14.7	11.7	10.5
	2nd Qtr 2003	1st Qtr 2003	2nd Qtr 2002
Unemployment Rate	6.8	6.4	6.5
Housing Permits, NSA	539	619	98

NOTES:
Nonfarm Employment, thousands of jobs, seasonally adjusted (SA); Bureau of Labor Statistics (BLS)/Haver Analytics
Manufacturing, thousands of jobs, NSA; BLS/Haver Analytics
Professional/Business Services, thousands of jobs, SA; BLS/Haver Analytics
Information, thousands of jobs, SA; BLS/Haver Analytics
Civilian Labor Force, thousands of persons, SA; BLS/Haver Analytics
Home Sales, thousands of units, SA; National Association of Realtors®/Haver Analytics
Unemployment Rate, percent, SA; BLS/Haver Analytics
Housing Permits, number of permits, NSA; U.S. Census Bureau/Haver Analytics

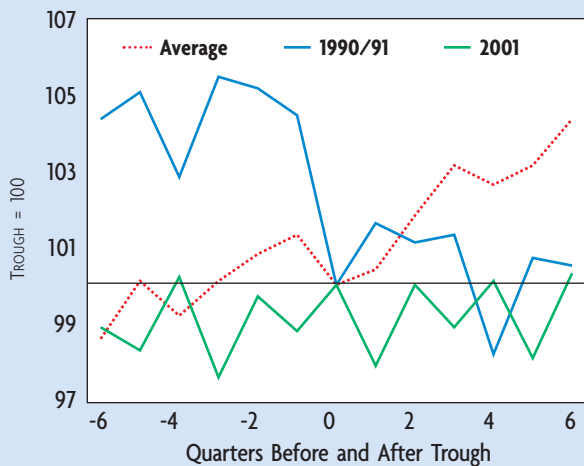
The average post-war recovery period for each state is calculated by using employment data from the business cycles between 1960 and 1989, and excludes the 1991 recovery because it is atypical.

The employment and personal income gaps are calculated by taking the difference between the current level and a theoretical level that is estimated by using the projected growth rate of an average recovery.



BY ANDREA HOLLAND

MD Nonfarm Payroll Employment Index



SOURCE:
Nonfarm Payroll Employment, NSA, Bureau of Labor Statistics/Haver Analytics

	Percent Change at Annual Rate From		
	2nd Qtr 2003	1st Qtr 2003	2nd Qtr 2002
Nonfarm Employment	2,494.5	3.9	0.7
Manufacturing	153.8	-1.9	-3.0
Professional/Business Services	367.6	7.7	1.7
Information	50.9	-2.1	-6.3
Civilian Labor Force	2,933.9	0.7	1.1
Home Sales	124.3	-29.2	-0.4
	2nd Qtr 2003	1st Qtr 2003	2nd Qtr 2002
Unemployment Rate	4.4	4.3	4.5
Housing Permits, NSA	8,849	5,931	7,427

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
Information, thousands of jobs, SA; BLS/Haver Analytics
Civilian Labor Force, thousands of persons, SA; BLS/Haver Analytics
Home Sales, thousands of units, SA; National Association of Realtors®/Haver Analytics
Unemployment Rate, percent, SA; BLS/Haver Analytics
Housing Permits, number of permits, NSA; U.S. Census Bureau/Haver Analytics

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The employment and personal income gaps are calculated by taking the difference between the current level and a theoretical level that is estimated by using the projected growth rate of an average recovery.

The pattern of employment growth following the 1990 and 2001 recessions was nearly identical in Maryland for the six quarters following the economy's trough. Emphasizing the recent sluggishness in labor markets, however, Maryland posted one of the slowest growth rates (0.5 percent) in the Fifth District in 1991, but tied with the District of Columbia for the fastest growth rate (0.3 percent) in 2001.

Maryland experienced a particularly slow recovery in jobs (relative to other Fifth District states) after the 1990 recession due largely to downsizing in the manufacturing and government sectors. Since manufacturing jobs never rebounded, this moderated the severity of the 2001 recession, as job losses in the U.S. economy were centered largely in that sector.

Despite Maryland's strong comparative performance, payroll growth remains fundamentally weak in the state. Looking at past recessions, Maryland payrolls have typically grown 4.3 percent six quarters into recovery. This record would imply average gains following the 2001 recession of 107,000 new jobs by the second quarter of 2003. Actual employment, however, expanded by only 8,000 jobs over the period, resulting in a 3.8 percent employment gap in Maryland.

Personal income growth, another significant measure of economic activity, also performed below trend during the last two recovery periods. On average, personal income in Maryland expands 6.4 percent though the first five quarters of recovery. Since early 2001 though, personal income in Maryland expanded 3.1 percent less than it would have under the average pace. But personal income growth remains stronger than in 1991, when income grew 5 percent less than it would under a typical recovery.

More recently, second quarter economic data have been generally positive in Maryland. Despite a slight uptick in the unemployment rate, payrolls expanded at a steady pace and activity in Maryland's real estate market remained favorable. New housing authorizations moved higher in the second quarter, and although existing home sales eased somewhat, they remained high by historical standards.

In addition, data available from the first quarter show commercial vacancy rates receding somewhat in the Baltimore metro area, strong income growth, and a decline in business bankruptcy filings. But venture capital investment plummeted to \$105 million and personal bankruptcies continued to edge higher.



NORTH CAROLINA

BY ANDREA HOLLAND

Typically, when output begins to expand after a recession, employment growth follows with a small lag. But in a so-called “jobless recovery,” employment growth remains weak well past the beginning of the recovery. By this standard, the last two recoveries in North Carolina have been “jobless,” the 2001 recovery especially so.

Six quarters into a typical recovery, the total number of jobs in North Carolina grows, on average, 6.1 percent. Following the 1990 recession, payrolls in the state expanded only 3.1 percent. In contrast, payroll employment has contracted 0.7 percent since the end of the 2001 recession.

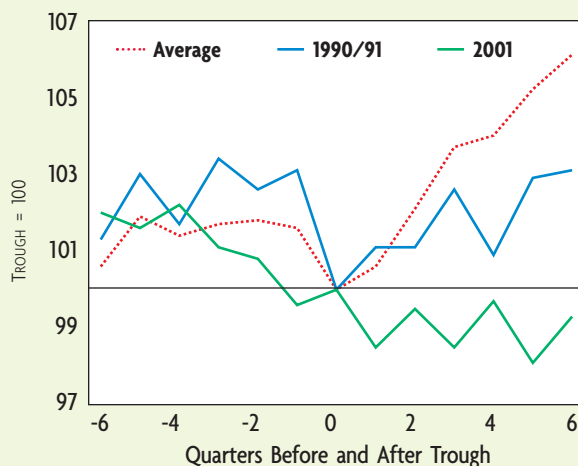
Employment growth remains well below its long-run average in North Carolina for a number of reasons. Foremost, the ongoing decline in manufacturing continues to put downward pressure on the aggregate employment level, and was likely the cause for some of the sluggishness of the 1991 recovery.

But whereas the 1990 recession was centered in the real estate and government sectors, the 2001 recession was firmly rooted in manufacturing. As a result, North Carolina was dealt a double blow because manufacturing is such a large presence in the state’s economy. Rising productivity also has allowed employers to increase output to meet demand without substantially increasing employment.

Personal income broadly tracks employment conditions in North Carolina. Five quarters into the 2001 recovery, personal income growth was significantly weaker than the historical average and during the 1991 recovery. Personal income only expanded 1.5 percent since the recent trough — 6.8 percent less than it would have under the average recovery pace. Data for the first quarter of 2003 recorded a modest expansion over the quarter, but growth remained nearly flat over the year.

Other indicators of recent economic activity in North Carolina also remain sluggish. Although payroll employment rose in the second quarter, most of the gain stemmed from seasonal adjustment factors and will likely be revised downward. In addition, the jobless rate rose by 0.4 percentage points in the second quarter to 6.4 percent. But some bright spots have emerged. Second quarter new home sales and new housing authorizations continued to climb and first quarter mortgage loans past due edged lower.

NC Nonfarm Payroll Employment Index



SOURCE:
Nonfarm Payroll Employment, NSA, Bureau of Labor Statistics/Haver Analytics

	Percent Change at Annual Rate From		
	2nd Qtr 2003	1st Qtr 2003	2nd Qtr 2002
Nonfarm Employment	3,850.2	1.9	0.3
Manufacturing	616.0	-2.6	-4.6
Professional/Business Services	422.9	5.7	1.7
Information	78.9	4.5	0.0
Civilian Labor Force	4,172.7	1.3	-0.2
Home Sales	266.8	21.2	8.7
	2nd Qtr 2003	1st Qtr 2003	2nd Qtr 2002
Unemployment Rate	6.4	6.0	6.8
Housing Permits, NSA	20,776	17,122	22,023

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
Information, thousands of jobs, SA; BLS/Haver Analytics
Civilian Labor Force, thousands of persons, SA; BLS/Haver Analytics
Home Sales, thousands of units, SA; National Association of Realtors®/Haver Analytics
Unemployment Rate, percent, SA; BLS/Haver Analytics
Housing Permits, number of permits, NSA; U.S. Census Bureau/Haver Analytics

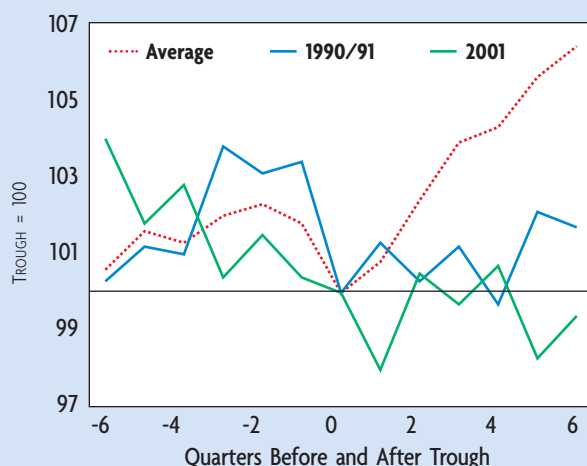
The average post-war recovery period for each state is calculated by using employment data from the business cycles between 1960 and 1989, and excludes the 1991 recovery because it is atypical.

The employment and personal income gaps are calculated by taking the difference between the current level and a theoretical level that is estimated by using the projected growth rate of an average recovery.



BY ANDREA HOLLAND

SC Nonfarm Payroll Employment Index



SOURCE:
Nonfarm Payroll Employment, NSA, Bureau of Labor Statistics/Haver Analytics

	Percent Change at Annual Rate From		
	2nd Qtr 2003	1st Qtr 2003	2nd Qtr 2002
Nonfarm Employment	1,789.0	-2.9	-1.1
Manufacturing, NSA	279.2	-3.8	-4.5
Professional/Business Services, NSA	177.7	8.9	-3.7
Information, NSA	27.5	0.5	-1.0
Civilian Labor Force	2,027.9	0.4	3.2
Home Sales	131.0	-9.5	10.9
	2nd Qtr 2003	1st Qtr 2003	2nd Qtr 2002
Unemployment Rate	6.3	6.1	5.8
Housing Permits, NSA	9,471	8,439	9,133

NOTES:
Nonfarm Employment, thousands of jobs, seasonally adjusted (SA); Bureau of Labor Statistics (BLS)/Haver Analytics
Manufacturing, thousands of jobs, NSA; BLS/Haver Analytics
Professional/Business Services, thousands of jobs, NSA; BLS/Haver Analytics
Information, thousands of jobs, NSA; BLS/Haver Analytics
Civilian Labor Force, thousands of persons, SA; BLS/Haver Analytics
Home Sales, thousands of units, SA; National Association of Realtors®/Haver Analytics
Unemployment Rate, percent, SA; BLS/Haver Analytics
Housing Permits, number of permits, NSA; U.S. Census Bureau/Haver Analytics

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Because manufacturing activity has surged during most postwar economic recoveries, South Carolina, with its large proportion of factory workers, has typically posted the strongest average job recovery rate in the Fifth District. But for the last two recovery periods, that has not been the case.

In South Carolina, job growth has been much weaker during the current recovery than after the 1990 recession. In 1990, job growth turned positive five quarters after the low-point of economic activity, or trough. Six quarters into the 2001 recovery, however, South Carolina's employment level contracted an additional 11,000 jobs.

Job losses during the 1990 recession in South Carolina were widespread across the goods-producing and service-providing industries. In the recovery that followed, manufacturing employment remained tepid, but payrolls were boosted by job gains in the non-manufacturing sector.

This time around, South Carolina manufacturing jobs continued to be lost during the recovery and there are few expectations for a rebound. So the state must see a fairly sharp turnaround in service jobs to get payrolls growing again. But the availability of temporary employees may enable employers to increase output without adding new permanent positions.

Turning to personal income, growth rates during the 1991 and 2001 recoveries have been similar. Five quarters from the 2001 trough, total personal income had expanded only 2.2 percent — 6.0 percent less than it has during an average recovery. In 1991, personal income expanded only 2.3 percent — 5.8 percent less than under the typical recovery.

As noted earlier, labor market conditions in South Carolina continue to weigh on the state's overall economic performance. Payroll employment fell 2.9 percent in the second quarter of 2003 and the unemployment rate hit 6.3 percent, the highest rate recorded since 1994. Also discouraging, personal income contracted 0.4 percent in the first quarter.

But on the upside, the percentage of mortgages past due eased in the first quarter and venture capital investment inflows increased significantly, reaching \$13 million. The best news continued to be residential real estate: second quarter new home sales were firm and new housing authorizations headed higher.



VIRGINIA

BY ANDREA HOLLAND

When benchmarked against the average postwar economic recovery in Virginia, employment growth in the both the 1991 and 2001 recoveries has been weak. Looking at the 1991 recovery period, job growth was slow, but positive, six quarters after the recession ended. In contrast, although overall economic activity has picked up since the recent trough, Virginia has yet to record job gains.

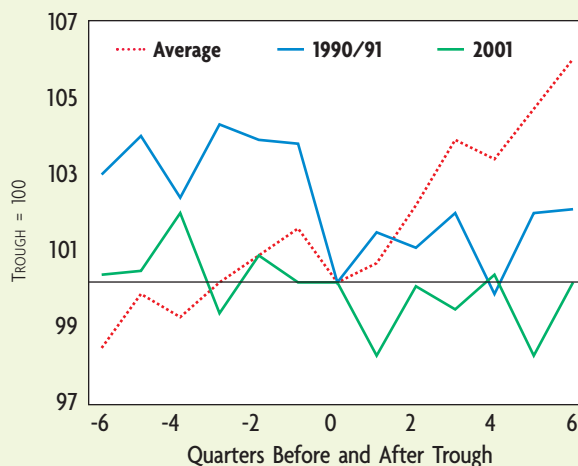
On average, Virginia employment grows 5.8 percent in the eighteen-month period following a recession. If payrolls had expanded in this manner, Virginia's job level would have reached 3.7 million in the second quarter of 2003. But actual employment growth was flat, resulting in an employment gap of about 203,000 jobs, or 5.5 percent. In contrast, the employment gap following the 1991 recession was only 3.7 percent.

Personal income, another indicator closely watched by economists, typically grows 7.5 percent in the five quarters following a recession. Personal income in Virginia expanded 1.8 percent since the end of the 2001 downturn, 5.3 percent less than it would have under the average recovery scenario. Large losses in the high-paying information services industry are partly responsible for weaker income growth.

Nationally, the 2001 recession was centered in the manufacturing sector. But states with a high concentration of information technology workers, such as Virginia, also took a hit. In particular, labor markets in northern Virginia were significantly weakened by the bursting of the "dot-com" bubble and commercial real estate conditions declined considerably as a result.

Despite flat job growth for the past six quarters ending June 2003, nonfarm payrolls expanded in the second quarter of the year and the unemployment rate dropped by 0.1 percentage points. Other positive readings included first quarter general sales and gross receipts and venture capital investment: Virginia was the only Fifth District jurisdiction to record gains for the quarter and the year. Also, first quarter personal income in Virginia grew by 2.4 percent, 1.5 percent higher than a year ago. Second quarter residential real estate activity moved forward, with home sales solid and new housing authorizations soaring.

VA Nonfarm Payroll Employment Index



SOURCE:
Nonfarm Payroll Employment, NSA, Bureau of Labor Statistics/Haver Analytics

	Percent Change at Annual Rate From		
	2nd Qtr 2003	1st Qtr 2003	2nd Qtr 2002
Nonfarm Employment	3,505.6	2.5	0.3
Manufacturing	309.8	-4.9	-3.8
Professional/Business Services	549.9	6.2	0.3
Information	100.6	-4.0	-6.4
Civilian Labor Force	3,795.7	0.2	1.6
Home Sales	169.8	-9.9	6.3
	2nd Qtr 2003	1st Qtr 2003	2nd Qtr 2002
Unemployment Rate	4.0	4.1	4.2
Housing Permits, NSA	15,801	13,278	15,172

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
Information, thousands of jobs, SA; BLS/Haver Analytics
Civilian Labor Force, thousands of persons, SA; BLS/Haver Analytics
Home Sales, thousands of units, SA; National Association of Realtors®/Haver Analytics
Unemployment Rate, percent, SA; BLS/Haver Analytics
Housing Permits, number of permits, NSA; U.S. Census Bureau/Haver Analytics

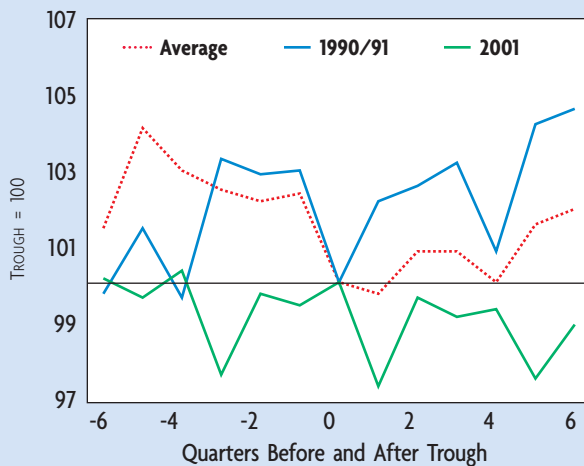
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The employment and personal income gaps are calculated by taking the difference between the current level and a theoretical level that is estimated by using the projected growth rate of an average recovery.



BY ANDREA HOLLAND

WV Nonfarm Payroll Employment Index



SOURCE:
Nonfarm Payroll Employment, NSA, Bureau of Labor Statistics/Haver Analytics

	Percent Change at Annual Rate From		
	2nd Qtr 2003	1st Qtr 2003	2nd Qtr 2002
Nonfarm Employment	731.6	-0.9	-0.1
Manufacturing	66.2	-1.4	-4.2
Professional/Business Services	59.6	3.9	5.2
Information, NSA	12.9	1.0	-3.0
Civilian Labor Force	803.5	-1.4	-0.6
Home Sales	24.5	-34.2	1.2
	2nd Qtr 2003	1st Qtr 2003	2nd Qtr 2002
Unemployment Rate	6.1	5.7	6.2
Housing Permits, NSA	1,315	860	1,156

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
Information, thousands of jobs, NSA; BLS/Haver Analytics
Civilian Labor Force, thousands of persons, SA; BLS/Haver Analytics
Home Sales, thousands of units, SA; National Association of Realtors®/Haver Analytics
Unemployment Rate, percent, SA; BLS/Haver Analytics
Housing Permits, number of permits, NSA; U.S. Census Bureau/Haver Analytics

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For more information regarding state summaries, call 804-697-8273 or e-mail Andrea.Holland@rich.frb.org.

West Virginia's labor market conditions have improved more slowly during the current recovery than during both the 1991 recovery and the typical post-war recovery. West Virginia continued to shed jobs six quarters after the 2001 trough, whereas employment had turned around and started to expand in the second quarter of 1991— just the first quarter into recovery.

Payrolls in West Virginia typically grow 1.9 percent eighteen months into recovery. Average gains following the 2001 recession would have implied 22,500 new jobs by the second quarter of 2003, but the actual employment level contracted by more than 8,000 jobs, resulting in a 3.0 percent employment gap in West Virginia.

Among Fifth District jurisdictions, West Virginia demonstrated the strongest growth in employment six quarters into the 1991 recovery, but this time the Mountain State's employment numbers have been the weakest in the region. One reason job growth was so much stronger after the 1990 recession was because the downturn was largely centered in commercial real estate and government, which plays a lesser role in West Virginia's economy than in other Fifth District states. But the 2001 recession was focused in the manufacturing sector, which encompasses a significant share of total employment in the state. Also, high worker productivity is lessening businesses' urgency to add workers, delaying the pickup in jobs.

In other sectors of the West Virginia economy, recent data suggest generally lackluster economic conditions. First quarter personal income was generally flat over the year and personal bankruptcies edged higher. Venture capital investment fell in the first quarter, as did sales taxes, with receipts slipping 2.4 percent from a year ago.

Turning to real estate conditions, West Virginia recorded modest declines in second quarter existing home sales. New housing authorizations climbed higher, however. Also positive, business bankruptcy filings and the percentage of mortgage past dues edged lower in the first quarter.

Risky Business

BY JOHN WEINBERG

The term “safety net” usually has a positive connotation, conjuring images of a caring society that looks after its most unfortunate members. The safety net that protects individuals against financial misfortunes can come from many sources: personal savings, family assistance, or community-based charities. Some of this protection also comes from the government, in the form of such programs as unemployment insurance, food stamps, Social Security, and Medicaid. Taken together, it is common to refer to such government programs as the “social safety net.”

There is a second set of government policies that come under the safety net label. These are government programs that guarantee the debts of private borrowers. Federal Deposit Insurance, for instance, guarantees part of the “debt” owed by commercial banks to their depositors. Other programs guarantee the debts of individuals (for example, the Federal Housing Administration’s home loan guarantees) or of corporations (the guarantees offered to airlines in the wake of the terrorist attacks of September 11, 2001, for instance). All such programs comprise the “financial safety net.”

The problem with government guarantees of private debts is that they affect people’s willingness to take risky actions or make risky investments. Consider a business loan. The lender accepts the risk that the borrower’s business project will not generate a return sufficient to repay the loan. Given the exposure to this risk, the lender typically has an incentive to pay attention to the borrower’s use of funds. The interest rate and other terms of the loan will then depend on the lender’s assessment of the risks to be taken by the borrower. When repayment of a loan is guaranteed by a third party, however, the inclination of the lender to scrutinize the borrower’s actions and to assess the project’s risks may be reduced.

The pricing of government guarantees varies considerably, but in many cases these prices do not fully reflect risks taken by borrowers. In such cases, a government guarantee amounts to a subsidy for the borrower. Because they are protected from default, investors are willing to lend funds to guaranteed borrowers at lower interest rates than they would otherwise require. In short, the financial safety net distorts financial markets by directing funding away from unprotected sectors and toward those with guarantees. In addition, safety net protection tends to encourage borrower risk-taking.

While the magnitude of the distortions created by the

safety net is hard to determine, the safety net itself is quite large. My colleague John Walter and I have counted up the debts and other private liabilities that have explicit federal guarantees and found that over 16 percent of all private liabilities in the U.S. economy had such protection at the end of 1999. Insured deposits in banks and other financial institutions account for a large part of this number, but the explicit safety net also includes many other items, such as guarantees for student and small business loans. Occasionally, Congress also grants ad hoc guarantees, as in the bailout of Chrysler in 1980, although no such special programs were included in our estimate.

Perhaps even more worrisome than the explicit safety net

is the prospect that some private debt might enjoy implicit protection. Many financial market observers believe that some market participants are so big or so important that they would not be allowed to fail. If investors believe that a particular borrower would be bailed out in a situation of financial distress, then that borrower will be able to obtain funding at terms similar to those available to explicitly guaranteed borrowers. In recent years, such government-sponsored enterprises as Fannie Mae and Freddie Mac have been the subject of a growing debate concerning the extent to which they benefit from implicit safety net protection.

While explicit guarantees often bring with them regulatory oversight to control the risk-taking by protected borrowers, such oversight is often much weaker for implicitly guaranteed borrowers. In addition, implicit guarantees, by their very nature, are not priced — increasing the potential for market distortions. Through our research, Walter and I estimate that implicit guarantees could account for as much as another 10 percent of all private liabilities. Taking the implicit and explicit safety nets together, then, perhaps a quarter of all private debts are shielded by the government from the risk of default. A safety net of this size suggests the potential for sizable distortions in private financial arrangements and assessments of risk.

The financial safety net arrived at its current state in a piecemeal fashion: individual guarantees have been extended in response to the perceived needs of an individual sector or class of borrowers. Maybe what is needed now is a comprehensive review of the government’s role as a guarantor of private debts.

RF

The financial safety net distorts markets by directing funding away from unprotected sectors and toward those with guarantees. In addition, safety net protection tends to encourage borrower risk-taking.

The Shaky Manufacturing Sector

Manufacturing sales and employment tend to be on the rebound in most areas of the country. But the manufacturing sector is still reeling in the Fifth District. What accounts for this regional difference, and can anything be done to close the gap?

Water Trading Programs

The idea of using markets to promote clean water has been around for decades, but it hasn't gained momentum until now. In January 2003, the Environmental Protection Agency published water trading guidelines in an effort to spur policymakers to develop market-based programs. The states surrounding the Chesapeake Bay may be prime candidates for such reform.

The Economics of Mass Marketing

Junk mail, blast faxes, and spam e-mail allow businesses to reach millions of consumers cheaply. But are these mounting solicitations giving people a bad case of information overload that can result in lowered productivity?

The Richmond Fed's Board of Directors

The businesspeople who sit on the Board of Directors of the Federal Reserve Bank of Richmond provide unique insights into the regional economy that can influence monetary-policy decisions. The Board also appoints the President and First Vice President of the Bank, and reviews its budget and expenditures.

African-American Business Districts

Following the Civil War, several African-American business districts prospered in the Mid-Atlantic and Southeast, giving rise to a black middle class. Join us for a look at some of these communities, including the U Street corridor in Washington, D.C., Jackson Ward in Richmond, Va., and Parrish Street in Durham, N.C.

Interview

A conversation with Randy Kroszner, a former member of the President's Council of Economic Advisers and an economist at the University of Chicago.

Jargon Alert

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