

» The Baiting Game » Plans for Spam » New Day for Tobacco  
» An Interview with James Buchanan » Is the Market Moral?

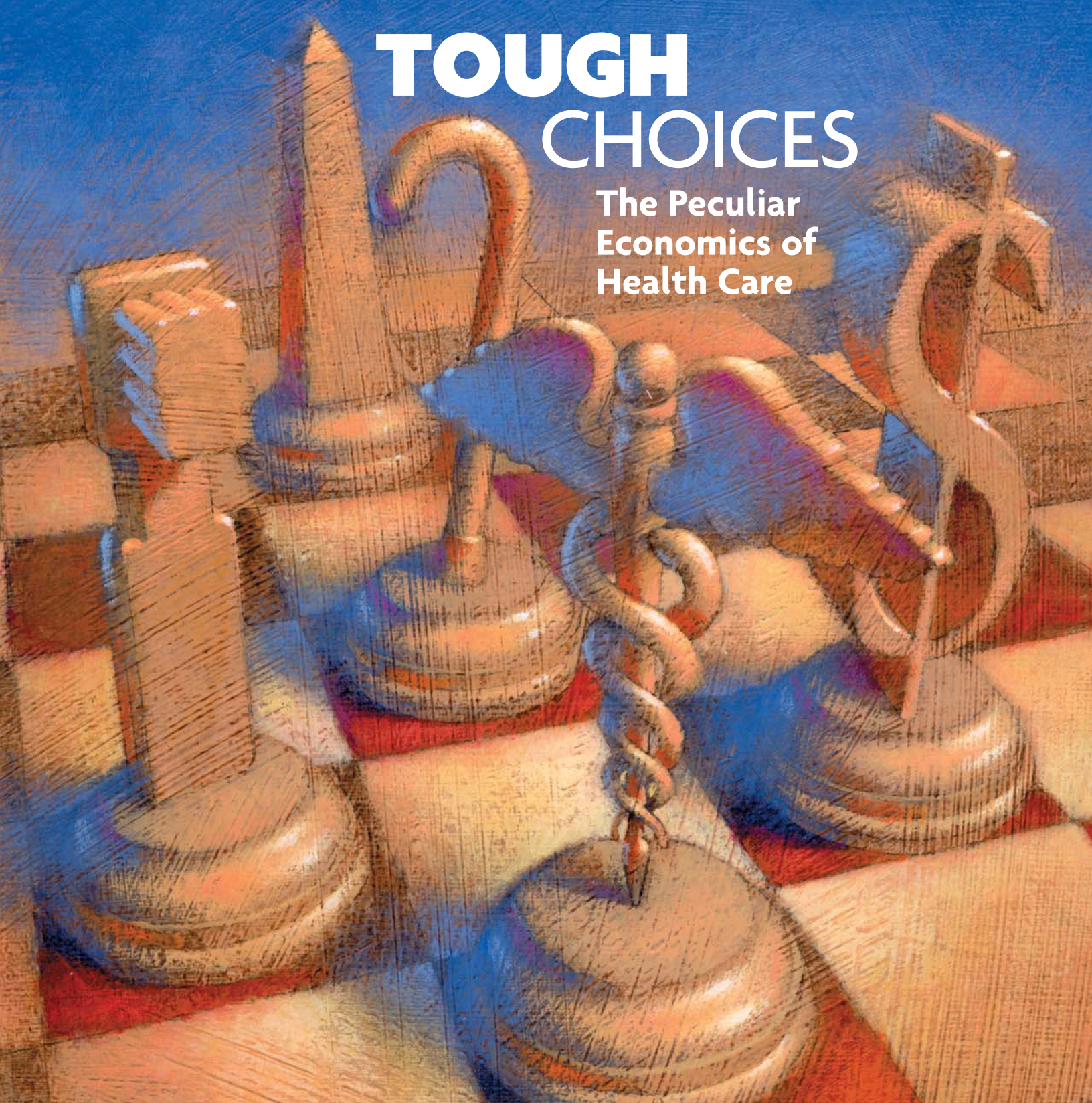
# REGION FOCUS

SPRING 2004

THE FEDERAL RESERVE BANK OF RICHMOND

## TOUGH CHOICES

The Peculiar  
Economics of  
Health Care



# REGION FOCUS

VOLUME 8  
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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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## Beyond Money and Banking: How Federal Reserve Banks Can Inform Broader Economic Policies



**“The story of how a Reserve Bank, through its regional publication, put itself at the center of a national debate on interstate economic rivalry is instructive.”**

This magazine has dedicated considerable attention over the last couple of years to the strategies employed by local and state governments or public-private partnerships to promote economic development. This issue of *Region Focus* contains a story about one of the more controversial of these strategies — the tax incentives and subsidies offered to firms to influence plant and other business location decisions. While some see such measures as a useful tool for attracting new investment into an area, others see the bidding wars that sometimes result as mutually destructive contests that weaken state and local governments fiscally without significantly affecting ultimate outcomes.

As always, our reporter sought out economists with expertise on the subject at hand, and, as is often the case, he found good sources within the Federal Reserve System. The thoughts of Ray Owens, one of our own Richmond Fed economists, are prominently featured in the article, as are those of Art Rolnick, director of research at the Minneapolis Fed. In fact, the development of the Federal Reserve Banks’ interest in and expertise on this subject is an interesting story in its own right.

The Minneapolis Fed’s 1994 Annual Report issue of its magazine *The Region* included an essay titled, “Congress Should End the Economic War Among the States.” Like our own Bank, Minneapolis uses its Annual

Report to put forward discussions of important economic policy issues. While I am quite proud of the essays that have appeared in our own Annual Report, I will readily acknowledge that this particular essay from our sister Bank had an especially substantial — and I think constructive — impact on public discussion of this subject. The essay contributed to its consideration in Congress, as noted in our article in this issue, and also led to a National Public Radio symposium on the topic in 1996. In addition, the essay motivated further thinking and research on the topic by other economists, including several here at the Richmond Fed.

This story has not yet reached a conclusion. A broad consensus on the issue of special incentives for business location has yet to emerge. Most people recognize the destructive potential of bidding wars. But some would argue that there are enough special cases in which incentives are beneficial that a blanket prohibition, such as the one suggested by the Minneapolis Fed, is unwarranted. Still, while the Minneapolis position has not won the day, debate about how states and regions should promote their economic growth is certainly further advanced than it was before the Minneapolis Bank got into the fray.

The story of how a Reserve Bank, through its regional publication, put itself at the center of a national debate on interstate economic rivalry is

instructive. It illustrates how the Reserve Banks, through their research and publications functions, are able to promote public awareness and greater appreciation of a wide array of economic policy problems, from monetary policy to international finance and trade to regional economic development. Indeed, our unique position as regional Reserve Banks gives us the opportunity to serve as a link between the local and the national aspects of policy issues.

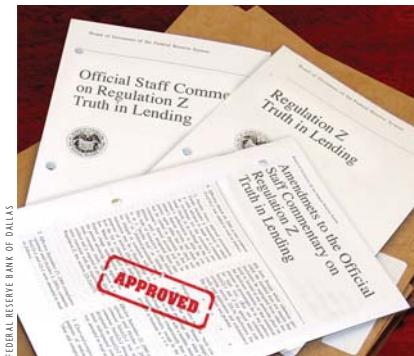
So I tip my hat to the Minneapolis Fed for a job well done. And I look forward to future opportunities for our Richmond Fed to contribute to the building of well-informed public opinion on matters of economic policy.

AL BROADDUS  
PRESIDENT  
FEDERAL RESERVE BANK OF RICHMOND

# Information, Please?

Through its disclosure regulations, the Federal Reserve strives to improve transparency in consumer finance markets

BY CHARLES GERENA



*The Fed's Regulation Z keeps evolving and expanding to keep pace with changes in the financial services industry.*

When Jack Weiss joined the Federal Reserve Bank of Richmond as a bank examiner in the mid-1970s, it had been only a few years since the Federal Reserve System ventured into the realm of consumer protection. In addition to auditing a bank's safety and soundness, he had to verify compliance with a series of federal laws that were passed in the late 1960s and early 1970s because of wide disparities in how the consumer finance industry operated and how it was regulated by states.

Congress charged the Federal Reserve and a varied group of federal agencies — from the Office of Thrift Supervision to the Department of Housing and Urban Development — with enforcing these laws. It also gave the Fed unique authority to write the regulations for the various disclosure and anti-discrimination provisions. Lawmakers recognized the Fed's credibility as an apolitical organization and its expertise in banking regulation.

At first, banks only had to answer a question on the exam form to prove they were following the Fed's disclosure requirements. "It didn't say whether the disclosures were correct or not, it just said whether they were provided," recalls Weiss. But as consumer credit regulations grew in detail and scope, the Richmond Fed and other Reserve Banks created specialized teams of examiners to conduct separate compliance audits.

Today, Weiss and other consumer compliance examiners help the Federal Reserve enforce a book of regulations several inches thick. Many of the regulations focus on mandatory disclosures outlined by Congress and crafted by the Fed. By making creditors describe the

price and terms of their product in a consistent manner, buyers can comparison shop. By making firms account for how they approve or deny credit, the Fed and other regulators can look for patterns of discrimination.

Here is a taste of how the Fed's disclosure requirements pull back the curtain on the consumer finance industry and the value of what it reveals.

## Knowledge is Power, But at What Price?

Consumer protection groups want borrowers to know what they're getting into; ignorance breeds fraud in their eyes. But why should the Federal Reserve care if John Doe knows the over-the-limit fee on his credit card?

Besides the fact that the Consumer Credit Protection Act of 1968 and subsequent legislation make it the Fed's business, market transparency has economic benefits. "If consumers are better informed about practically anything, they will make better decisions and the markets will function better," notes Thomas Durkin, an economist at the Federal Reserve Board of Governors and an expert on consumer credit regulation.

Generally, consumers gain from a transparent market because they should be better matched to their needs and prices should be more competitive. Lewis Mandell, professor of finance and managerial economics at the State University of New York at Buffalo, says that consumer finance companies benefit as well. Informed borrowers are expected to make fewer missteps, creating surplus capacity in credit markets because there is less unrecoverable debt to write off.

If transparency benefits both sides of the market, why doesn't it occur on

its own without government regulation? “Sometimes, if you have a monopoly position [as a result of] consumer ignorance, you may not want to give up some of those profits,” surmises Mandell, but the answer is not that simple and is still under debate among economists.

Regulation Z is the Federal Reserve’s primary means of encouraging transparency in consumer finance. Implementing provisions in the “Truth in Lending” portion of the Consumer Credit Protection Act, it mandates that creditors standardize how they describe the cost of their services and requires disclosure of prices and credit terms, both before and after customers sign on the dotted line.

For example, a credit card solicitation must include key information such as the minimum finance charge that customers have to pay and the grace period for repaying credit without incurring finance charges. The most important disclosure is the annual percentage rate (APR), which is supposed to express the total cost to customers of credit purchases, cash advances, and balance transfers on an annualized basis.

Regulation M imposes similar disclosure requirements on companies that offer consumer leases. These companies must provide information on the cost and terms of leases so consumers can compare one lease with another or weigh leasing against purchasing a product outright.

Not surprisingly, banks and other consumer finance companies grouse about the dozens of detailed disclosures they make in the name of creating an informed public. Richard Insley, a banking consultant who used to be a compliance officer at Signet Banking Corp. and an examiner at the Richmond Fed, says it hasn’t been easy or cheap for banks to keep up with disclosure requirements. “The early nickname given to the Truth in Lending law was the ‘Lawyers and Printers Relief Act.’ Truth in Lending has been an enormous regulation that covers just about every imaginable credit product that consumers use,” says Insley, president of Richmond, Va.-based APR Systems Inc.

Economists have found that the monetary burden of consumer credit regulations is proportionately larger for small firms, according to Richmond Fed economist John Walter. For example, a bank needs a compliance officer to make sure that it follows all of the regulations, whether it has branches nationwide or a single office in a rural town.

Computer technology has dramatically reduced compliance costs and improved the reliability of disclosures for everyone, notes Insley, but the chances of violating Regulation Z are significant. According to the Federal Reserve’s 2002 Annual Report to Congress, 77 percent of banks examined by the Fed and other federal agencies were fully compliant with the regulation. However, that is the lowest compliance rate among the consumer protection regulations tracked by the Fed.

“In a bank of any size with any kind of sophisticated product line, if you look long enough you’ll find something wrong,” Insley adds.

The Fed’s Thomas Durkin believes that the price of keeping up with regulation changes is the real issue. “Banks can comply with anything. They just don’t want the regulations changing all of the time.”

Of course, the consumer finance industry is always evolving and the Federal Reserve has to keep pace. There are new services like refund anticipation loans and overdraft protection that aren’t subject to the same disclosure requirements as standard consumer loans. Debit cards function like credit cards, yet they aren’t subject to the same requirements either. In addition, Congress amends Truth in Lending and other consumer credit laws in response to industry changes, and that usually requires the Fed to tweak its regulations.

Balancing the potential benefits of market transparency against the potential costs to industry is the job of James Michaels and his colleagues at the Federal Reserve Board’s Division of Consumer and Community Affairs. The division’s goal is to tailor disclosure requirements “so that you have the

intended impact without creating unnecessary burdens or risks,” says Michaels, assistant director for financial services regulations. But there are always tradeoffs, so the division reports both sides to the members of the Board of Governors and they decide which way to go.

Michaels believes that public comment periods and hearings are useful for determining the benefits and costs of the Fed’s regulations. However, it is a major challenge to do a benefit-cost analysis of market transparency.

There is a consensus that credit markets are more competitive and consumers have greater awareness of the terms of their credit since the 1960s. But how much of these benefits came from mandated disclosures or what its impact has been in dollars and cents is hard to pin down, says Durkin.

Also, disclosures only give consumers the means to make wiser credit decisions. People still take on more debt than they can afford. “If he has to pay a doctor bill ... and doesn’t have any money or made a Super Bowl bet and the bookie is coming after him with a ball-peen hammer, the rational consumer may take out a loan at a high rate of interest,” explain SUNY’s Lewis Mandell. “We can also assume that there are a lot of folks who cannot calculate interest or totally ignore it because they don’t understand the concept.”

Mandell insists that the current multitude of disclosures “may be more harmful than beneficial.” Based on 35 years of research, he has concluded that consumers aren’t capable of focusing on more than one piece of information when evaluating credit. “I would like to see a lot of stuff disclosed, but ... there has to be one point that is ‘super-disclosed’ in order to reach as many people as possible.”

### **A Watchful Eye**

While disclosures under Regulations Z and M provide a means for people to help themselves, other mandated disclosures help the Fed ensure equal access to credit.

Regulation B implements the Equal

Credit Opportunity Act of 1974, which prohibits creditors from treating borrowers differently on the basis of their race, ethnicity, religion, gender, marital status, or age. Among its many rules, Regulation B prohibits firms from doing anything to selectively attract or discourage certain borrowers from applying for credit. It also establishes boundaries on what creditors can ask borrowers during the pre-screening and evaluation of applications, and requires firms to provide a detailed notification when they deny an application or make a decision that adversely affects an existing customer.

On top of disclosing the reasons behind their actions, creditors are required by Regulation B to retain any records concerning those actions for 25 months. In addition, they must collect information on the race, gender, marital status, and age of people who borrow money to buy a house.

Regulation C, which fulfills the provisions of the Home Mortgage Disclosure Act of 1975, also requires financial institutions to collect data. They must provide information on the geographic distribution of their mortgage and home improvement loans, organized by gender, race, and other applicant characteristics.

Using computer models, consumer compliance examiners use the information obtained under Regulations B and C to detect potential problems in a bank's lending practices. Jack Weiss describes the steps taken by the examiners that he manages at the Richmond Fed. "A regression analysis takes loans of a similar category like purchase money mortgages," then compares approved and denied applications "to see whether the bank's loan policy is being applied uniformly to ensure discrimination does not take place."

The regression analysis doesn't always raise a red flag if a bank's lending is biased. "It is only an indicator," says Weiss, and not every bank makes enough loans to produce sufficient data for this analysis. As a result, examiners also conduct interviews to see if discrimination is taking place and pull samples from the bank's

files to perform various types of analysis.

For example, an examiner might do a pricing analysis to see if every customer with a Hispanic last name paid more interest than the average customer was charged. At that point, a more thorough examination would be conducted.

Even with all the information at the examiner's fingertips, Weiss says that verifying compliance with Truth in Lending disclosures is more straightforward than checking for violations of fair lending regulations. In fact, examiners will often reach conclusions that are very different from what consumer groups come to when they look at the loan information provided to the public.

Henry Franzyszen, a supervisory examiner at the Richmond Fed, says that his colleagues must rule out all appropriate factors before they charge discrimination. "While the Regulation C data may show minorities are being denied at a higher rate, the data only includes a limited number of borrower and loan characteristics such as income, race, sex, location, and loan rate spreads. But information from credit bureaus and other sources might point to valid reasons for any lending disparities, based on sound financial practice."

### On the Front Burner

While disclosure requirements will always need adjustment, Weiss doesn't see the amount of requirements decreasing in the future. "Congress and consumer advocates think this information needs to be put forth. They just won't touch it."

Actually, the Federal Reserve's regulatory responsibilities keep on growing. In 1999, the Financial Modernization Act gave the Fed and other regulators the task of implementing restrictions on how banks use their customers' personal information. Two years later, Regulation P required financial institutions under the Federal Reserve's supervision to disclose their privacy policy. They also must ask customers if they want their information shared with nonaffiliated third parties.

More recently, the passage of the Fair and Accurate Credit Transactions Act last December will require the Federal Reserve, the Federal Trade Commission,

and other federal banking agencies to jointly write at least 10 new rules concerning consumer privacy, according to staffers at the Board of Governors. The rules will include model forms for creditors to use for obtaining information on applicants and regulation of creditors' use of medical information.

In addition to privacy issues, the Federal Reserve will soon have to deal with the growing amount of consumer credit sold through the Internet. "The information flow to people is coming faster and through more types of devices," adds consultant Richard Insley. As a result, a person waiting at an airport can shop for a loan using his web-enabled telephone.

As more people use the Internet to shop for credit, Insley thinks more needs to be done to ensure compliance with disclosure requirements. "I suspect there are a lot of people out there who are shopping [for credit] and missing information they are supposed to have." **RF**

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Visit [www.rich.frb.org/pubs/region](http://www.rich.frb.org/pubs/region) focus for links to relevant Web sites.

# The Mixed Bag of Medicare Drug Coverage

BY CHARLES GERENA

The Medicare reform bill signed by President Bush last December will help thousands of Medicare recipients by providing drug coverage for the first time. But it comes at a high price in terms of its potential macroeconomic consequences and unintended effects on access to drugs.

Starting in 2006, seniors can choose a stand-alone prescription drug plan (PDP) under Medicare Part D or drug coverage through a Medicare Advantage comprehensive plan (formerly Medicare+Choice or Part C). The standard drug benefit will cover 75 percent of medication costs between \$250 and \$2,250, then no further assistance will be provided until expenses reach a “catastrophic” level of \$5,100. Those with low incomes may qualify for a special drug benefit with no gap in coverage.

Drug coverage will add approximately \$534 billion to the cost of Medicare over 10 years. Such a large expansion in an entitlement program carries the risk of pushing the federal budget into structural imbalance, whereby planned government expenses exceed average tax revenues generated by an expected level of economic activity. Entitlements, which already consume more than half of the budget, are much harder to cut than discretionary programs.

What will stop mounting drug prices from ballooning the overall cost of Medicare? Congress hopes the drug benefit will save money by encouraging more seniors to use medications that prevent conditions before they worsen and require expensive treatment. Generally, seniors with insurance are less price sensitive in their demand for drugs. “They don’t think very much about the cost,” says Roland McDevitt, a senior consultant for Watson Wyatt Worldwide. “They take whatever [the doctor] prescribes and get the latest generation of drugs designed for their condition.”

To keep the fiscal burden of the Medicare drug benefit from growing out of control, lawmakers put cost-containment mechanisms into place. For example, as Medicare Part D spending rises, the deductible and the level at which catastrophic coverage starts will rise as well. This will shift more costs onto Medicare beneficiaries.

Will cost shifting help contain overall drug prices as well? Lynn Taylor, senior policy analyst at the Institute for Health Policy Solutions, says the coverage gap will result in the most financial assistance going to occasional users of drugs and frequent users, leaving the average Medicare recipient to pay for their medications out of pocket. “Any time you make people absorb more of the

costs, the theory is that it will make them more conservative about what they purchase,” explains Taylor. “But to put [a gap] in the middle as opposed to having a high up-front deductible or higher cost sharing, I don’t know what the rationale is for that.” Most observers believe the coverage gap kept the price tag of Medicare drug coverage at a politically acceptable level.

Another way that lawmakers hope to rein in costs is to bring private-sector competition into the delivery of drug coverage. The federal Centers for Medicare and Medicaid Services will contract with health insurers to provide PDPs and Medicare Advantage plans with drug benefits. The country will be divided

into at least 10 regions, and a minimum of two drug plans from different firms will have to be available in each region.

These insurers are expected to negotiate lower prices for drugs, but policy analysts like Edwin Park of the Center on Budget and Policy Priorities have their doubts. Park says the best way for them to secure a discount is to guarantee a certain market share for a drug manufacturer, usually by adding its product to their preferred drug list. But he questions whether this would be achievable. “How much market share are you delivering when you are breaking up [the market] into multiple regions?” Furthermore, Park thinks it’s unlikely that firms could get better drug bargains than large government purchasers like

the Veterans Administration could.

Private insurers also are expected to use cost-containment tools more aggressively than government agencies could. They won’t be subject to political pressures, plus they will be able to use preferred drug lists.

The downside of using such tactics is that some drugs may not be covered or may require a higher co-payment. This won’t be an issue if seniors can shop around for drug coverage that includes their medications. Additional payments will be given to health insurers to offer PHPs and Medicare Advantage plans, but Families USA, a healthcare advocacy group, notes that some regions may not get any takers.

All told, seniors will have fewer alternatives if no Medicare-sponsored plan works for them. Medicaid won’t be allowed to fill in coverage gaps in the Medicare drug program, while states would be hard-pressed to fill the gaps on their own. Furthermore, employers could eliminate drug coverage for retirees when the Medicare benefit becomes available, despite the availability of federal subsidies.

RF

## Basic Medicare Drug Benefit

Plan Component	Beneficiaries Pay
Premium	\$35/month (\$420/year)
Deductible	\$250
Initial coverage	25 percent of expenses between \$250 and \$2,250
Coverage gap	All expenses between \$2,250 and \$5,100
Catastrophic coverage	5 percent of expenses above \$5,100, or \$2/generic drug and \$5/brand-name drug (whichever is greater)

SOURCE: *The New Medicare Drug Benefit: How Much Will You Pay?*, Families USA, Spring 2004

## Externality

BY AARON STEELMAN

Imagine you have high blood pressure and seek a doctor's advice. There are different things that he might prescribe: He might put you on medication, or he might say that the problem can be handled through exercise and diet. Both solutions could have side effects, some negative and some positive. The medication, for example, could cause you to feel light-headed. The changed diet and exercise regime, on the other hand, could help you lose weight and increase your energy level.

Many types of economic activity also have side effects. In some ways, these side effects are like those of the medical patient mentioned above: They can be either negative or positive. But in other ways, they are different: They are felt not just by the patient but by a larger group of people. Economists refer to these side effects as "externalities."

Consider the case of a factory that pollutes the air of neighboring property owners. Those people are not engaged in the manufacturing process but they feel its effects. They, not the owner of the factory or the consumer of its goods, bear the cost. This is an example of a negative externality.

Now consider the case of a positive externality. Let's say that you enjoy gardening and plant a variety of flowers in your yard. You benefit from the beauty of those plants, but so do your neighbors who can view them at no charge.

In both cases, government action may seem desirable. One of the most common approaches is regulation. In the case of the factory, the government might put a cap on the amount of pollutants it can discharge. In the case of the homeowner, the government might require all citizens to meet minimum requirements regarding the upkeep of their property.

The government might decide to forego regulation, however, and impose taxes instead. It could tax the factory according to the amount of pollution it produces. That may induce the factory to cut emissions on its own, but if not, the government could use the tax proceeds to compensate those affected by the smoke. In the case of the homeowner, the government could subsidize improvements people make to their houses and lawns.

Both of these solutions—regulation and taxation—can be blunt instruments, though, and can produce side effects

of their own. It may be more desirable for the market to work out these problems on its own. But how? In a 1960 article in the *Journal of Law & Economics*, Ronald Coase argued that such externalities can be "internalized" as long as property rights are fully allocated and transferable, and transaction costs are low.

Consider the case of the factory. Assume that the factory's emissions cause damages of \$100 per year, that a smoke-preventing device could be installed for \$90 per year, and that the government taxes the factory to cover the damages. In this scenario, the smoke-preventing device would be installed and the factory owner would be better off by \$10 annually than if he had paid the tax. "Yet the position achieved may not be optimal," Coase writes. "Suppose that those who suffer the damage could avoid it by moving to other locations or by taking various precautions which would cost them, or be equivalent to a loss in income of, \$40 per annum. Then there would be a gain in the value of production of \$50 if the factory continued to emit its smoke and those now in the district moved elsewhere or made other adjustments to avoid the damage."

Under a robust system of property rights, the parties would have a strong incentive to negotiate and arrive at this more efficient solution. For instance, the factory owner might simply buy the homeowners' right to clean air—at a cost between \$40 and \$90 annually—and continue operating his plant as he had before.

Naturally, some economists were skeptical of Coase's theorem and pointed to cases where they thought it would not apply. Yet in many of those cases, voluntary, mutually beneficial arrangements had long been the norm. The most famous example involves bees.

Bees require nectar from plants, and plants require pollination. So when plants were producing nectar and did not need pollination, beekeepers paid farmers for the right to put their hives on farmers' fields. And when plants were producing little nectar but needed pollination, farmers paid beekeepers. There was no regulation, tax, or subsidy involved.

This does not mean that the market can handle all externalities. But Coase's theorem should give us pause about the extent to which state intervention may be necessary. **RF**



ILLUSTRATION BY TIMOTHY COOK



## Are Criminals Rational?

BY AARON STEELMAN

Economists use models to explain a wide variety of phenomena. Most of the models assume that people are rational—that they act purposively and respond to incentives. This assumption applies to people in all walks of life, from investors to politicians to criminals.

David Friedman, an economist at Santa Clara University and author of *Hidden Order: The Economics of Everyday Life*, nicely summarizes the way economists look at crime: “A burglar burgles for the same reason I teach economics—because he finds it a more attractive profession than any other. The obvious conclusion is that the way to reduce burglary—whether as a legislator or a homeowner—is by raising the costs of the burglar’s profession or reducing its benefits.”

One might say, “That’s ridiculous. I don’t break into people’s homes because it’s morally wrong, not because I have decided that it isn’t worth the risk.” This is probably true for most people—and it may be the most significant reason why we don’t have more crime than we do. But that doesn’t necessarily mean that such law-abiding citizens haven’t done a benefit-cost analysis of their own.

“Crime also has associated with it psychic costs. Many people do not commit crimes because they believe doing so is ethically wrong. And the feelings we have about what is right and wrong are important,” writes University of Chicago economist Gary Becker. In other words, guilt is a real cost. You may not have to answer to the law for committing burglary, but you will have to answer to your conscience.

Still, we need legal sanctions to protect us from those less scrupulous: criminals and would-be criminals. What those sanctions should be and how they should be enforced are matters of opinion. But, generally, economists would say that if you want less crime, you should stiffen penalties and expend more resources on enforcement—though the exact mix is a matter of debate, since empirical studies differ over the relative effectiveness of these two forms of deterrence. You should also keep in mind that the optimal amount of crime is not zero. Eradicating all crime would be extremely costly and probably would require draconian measures that most people would reject as unworthy of a free society.

If criminals are indeed rational, where is the evidence? Economists Jac C. Heckelman of Wake Forest University and Andrew J. Yates of the University of Richmond use a novel data set to test this hypothesis: penalty statistics from the National Hockey League (NHL).

During the 1999-2000 season, the NHL experimented with a new system: Some games had two referees, others just one. There were more penalties called during two-referee games, meaning that players were less likely to get away with breaking the rules than they were in a one-referee game. But what about deterrence? Did the additional referee prevent players from committing penalties that they otherwise would because they knew their chance of being caught was greater? It doesn’t seem so. “The number of referees is not statistically significant in any of the regressions, suggesting that players do not commit fewer infractions in response to the increased number of referees.”

Does this give us reason to doubt the rational criminal hypothesis? Perhaps. But there are at least three reasons why it might not.

First, the statistical techniques used to measure deterrence, or the lack thereof, are imperfect and may not capture the full effects of an additional referee. Second, it’s not clear that all teams would respond to an additional referee in the same way. For instance, teams that play relatively well in “shorthanded” situations—penalty periods in which they have fewer players on the ice—might not be as concerned about being called for penalties because the costs to them are not as high. (Conversely, the additional referee should have a greater deterrent effect for teams that play relatively poorly shorthanded.) Third, and most important, hockey is a game of reaction. Decisions have to be made on the fly, with little time for serious contemplation. So the conditions are very different than when one is planning a burglary.

“Because many sports infractions take place during the heat of competition and may be accidental or retaliatory in nature rather than planned in advance, the act of committing a sports infraction may be more analogous to a crime of passion than a calculated benefit-cost analysis performed by a rational criminal,” Heckelman and Yates conclude. **RF**

“And a Hockey Game Broke Out:  
Crime and Punishment in the NHL” by  
Jac C. Heckelman and Andrew J. Yates.  
*Economic Inquiry*, October 2003, vol. 41,  
no. 4, pp. 705-712.

## RALLYING FOR REFORM

### Lawmakers Pressed on Malpractice

A year after West Virginia “fixed” its tort system to make malpractice insurance more affordable and available, medical professionals elsewhere in the Fifth District are having insurance problems, especially certain specialties like obstetrics and trauma care. While the American Medical Association says the situation has reached a crisis level only in North Carolina and West Virginia, lawmakers throughout the region are being lobbied hard to follow the Mountain State’s lead.



CHARLES GERENA/PHOTO OF RICHMOND

*Physicians lobbied outside of the Virginia State Capitol in February for changes to the state’s medical malpractice rules.*

In March 2003, the West Virginia Medical Professional Liability Reform Act changed several aspects of the state’s tort law. The bill’s provisions included a \$250,000 limit on “pain and suffering” damages and a \$500,000 overall cap on damages paid by trauma centers.

Since then, the West Virginia Hospital Association has noted an improvement in recruitment efforts at the state’s hospitals. Still, the state has only one major private provider of malpractice insurance —

Medical Assurance of West Virginia — and its parent company stopped providing it reinsurance last December. Another firm, NCRIC Inc., announced in January that it wouldn’t renew its malpractice policies in West Virginia as they expire.

Other parts of the Fifth District don’t have such a limited market for malpractice insurance. But some have experienced significant increases in premiums, and that has doctors worried about the future. In the last 12 months, physicians converged on statehouses in Virginia, Maryland, North Carolina, and South Carolina to rally for changes in tort law.

Two proposed reforms could help reduce the number of frivolous lawsuits, which doctors and insurers say have pushed up malpractice costs. One proposal would require plaintiffs to pay for defendants’ legal bills if they lose. Roy Cordato, vice president for research at the John Locke Foundation in Raleigh, N.C., believes this would bring balance to a system where the potential payoff from a suit is much higher than the expense of filing a case. “The lawyer doesn’t look at the legitimacy of the complaint,” explains Cordato. “What he looks at is the probability of getting a settlement.” And the odds are in the plaintiffs’ favor because defendants often settle out of court to avoid a big jury award.

Another reform proposal would subject malpractice lawsuits to arbitration or a review panel of medical experts before trial. G. Robert Thompson, an economist at Clem-

son University, believes the latter would help discourage frivolous lawsuits.

But other tort reforms are more problematic. For instance, caps on jury awards haven’t been proven to affect the price of malpractice insurance, and Thompson suspects that caps may encourage incompetent doctors to migrate to a state because they know their liability is limited.

Another imperfect solution, which is being considered in West Virginia, is to start a patient injury compensation fund. South Carolina created such a fund in 1977 that pays for any part of a malpractice judgment or settlement over \$200,000. Virginia created a more specialized fund in 1987 that pays for lifelong medical care for infants that suffer brain injuries at birth. But both programs are underfunded and they have no upper limit on payouts. They also don’t charge deductibles, co-payments, or any other form of cost sharing that would shift some of the risk burden onto doctors. Consequently, physicians have no incentive to avoid lawsuits, creating a moral hazard problem according to Thompson.

Cutting back on the number of lawsuits and the size of jury awards alone does not make malpractice insurance more available or affordable, since certain market forces are also driving the current premium increases. Still, there is relatively broad support for tort reform among economists, who see it as a good first step toward fixing a very difficult problem.

—CHARLES GERENA

## BAD CONNECTION

### Southwest Virginia Loses Call Center

Internet travel agency Travelocity.com has announced plans to close its call center in Clintwood, Va., by the end of 2004, putting roughly 250 people out of work. Clintwood is in Dickenson County, in the state's southwest corner, an area that has suffered economic hardship in recent decades. Dickenson's population has fallen from a peak of 23,000 in 1950 to 17,600 in 2000. As of December 2003, the county's unemployment rate stood at 11 percent.

Some of the work done in Clintwood will be sent to a facility in India. Similar outsourcing recently has occurred at call centers operated by other companies in the Fifth District. (See Charles Gereña's article, "On Hold: Fifth District Call Centers Are Shedding Workers Due to Technological Improvements and Globalization," from the Winter 2004 issue of *Region Focus*.)

Travelocity originally planned to employ up to 500 people at the Clintwood facility, which opened its doors in mid-2001. But sluggish business for the travel industry following the terrorist attacks of Sept. 11, 2001, reduced the demand for workers.

The Virginia Coalfield Economic Development Authority and the Dickenson County Industrial Development Authority courted Travelocity, with the county taking out a \$250,000 loan to improve the company's call-center facility. (For more on economic development incentives see Karl

Rhodes' article, "The Baiting Game," on pp. 20-23 of this issue.) —AARON STEELMAN

## ELECTRIC DEBATE

### Is Deregulation Working?

It seemed like a great idea. And it may turn out to be a great idea yet. But, so far, efforts to deregulate the electric industry have fallen short of their original promise.

"I've been somewhat disappointed at the way deregulation has unfolded," says Jack Reasor, president and chief executive officer of Old Dominion Electric Cooperative, headquartered in Glen Allen, Va. Before joining Old Dominion, Reasor was chairman of the Senate Subcommittee on Electric Utility Restructuring in the Virginia General Assembly. "I question whether it [deregulation] can work in the electric utility industry," he says candidly.

A lot of people share Reasor's doubts these days, particularly in California, where the restructuring of electric markets began in earnest in the late 1990s. A firm belief that competition would lower the state's high electric rates led to fundamental changes in state laws and regulations affecting the ownership of generating plants and the way wholesale electricity markets functioned. California's efforts to deregulate its industry were among the earliest and most comprehensive in the nation.

Unfortunately, California's deregulation plan failed miserably. By June 2000, the

state was experiencing soaring wholesale prices for electricity, and by 2001 there were rolling blackouts and a big-time crisis. While other factors, such as a time-consuming process for licensing new generating plants and unusually hot, dry weather, contributed to the problems, the California restructuring plan was clearly flawed.

California's experience with deregulation was sobering for those developing restructuring plans in other states. The Enron scandal and issues with manipulation of wholesale markets raised further questions about the feasibility of deregulation.

Even in states that managed to avoid California's calamities, there was growing suspicion that deregulation helped only a select group of consumers. "Whether deregulation has been a success or not depends on whom you talk to," says Robert Burns, a senior research specialist with the National Regulatory Research Institute in Columbus, Ohio. "Large commercial and industrial customers have benefited, but there hasn't been much benefit at all for residential customers."

Legislators in several Fifth District states have acted in recent months to either slow down electric deregulation or better protect consumers from potentially higher electric rates in a more deregulated environment. Legislation passed in the 2004 session of the Virginia General Assembly calls for an extension of electric rate caps until Dec. 31, 2010, unless ended sooner by a finding that a

competitive market for generation exists. (Rate caps are a common feature of deregulation plans and offer consumers some protection against volatile price swings during the transition to more competitive markets.)

Among the legislative proposals in Maryland to protect customers from rate shock is Senate Bill 739, which restricts residential rate increases to no more than 10 percent in any one year.

Despite the setbacks in California and elsewhere, the debate over restructuring will continue. Competitive markets have great allure, and economists certainly prefer them where possible.

And amid the setbacks, there have been some overlooked success stories in deregulation, which hold promise for future restructuring efforts. William Hecht, chairman of PPL Corporation, an electric utility headquartered in Allentown, Pa., says Pennsylvania "got it right." The state's restructuring effort gives each electric customer the option of choosing an electricity supplier. He credits a system that allows new electric-generating capacity to be built "in response to economic price signals, not through the old central planning approach," as a key to Pennsylvania's success. Restructuring efforts in Texas and Ohio have also garnered praise.

There is even talk about giving deregulation another shot in California. New governor Arnold Schwarzenegger is an advocate but, not surprisingly, strong opposition exists. —ROBERT LACY

# WORKING FOR Health Care

*Employer-sponsored health insurance is commonplace, but it may be one of many factors distorting the market for medical services*

BY BETTY JOYCE NASH

The Northern Neck Free Health Clinic in Kilmarnock, Va., serves up medical care to the working poor. “I have right here a 28-year-old with breast cancer,” says Jean Nelson, executive director. The patient lacks health insurance because she works part-time, ironically, at a hospital. The free clinic itself can barely afford to insure its employees. “Our premiums are incredible, but you don’t bring in employees to a free health clinic and not give them health insurance.”

Health coverage in the United States is built around employer-sponsored insurance plans. Employees receive access to group health plans at a cheaper rate than they could buy individually. Of course, workers get the benefit of insurance at the expense of higher wages, but they’re not taxed on the insurance as they would be on the added pay. This “third-party” payment system has complicated the economics of health care enormously, economists say.

“When consumers are out there, they’re using someone else’s dollars to order very expensive services,” says Chris Conover, who researches health care at Duke University’s Terry Sanford Institute of Public Policy. “[There’s] not the price and cost discipline you see in most other markets.”



## Markets and Health Care

The United States spends more on health care for each person than any other industrialized nation, all of which offer some form of guaranteed health coverage. In 2002, the United States spent \$1.6 trillion, or \$5,440 per person, 9.3 percent more than in 2001. Health spending grew 5.7 percent faster in 2002 than the overall economy, according to the Centers for Medicare & Medicaid Services (CMS). Health care’s share of the gross domestic product jumped to 14.9 percent in 2002

after nearly a decade in the 13 percent range.

Of that \$1.6 trillion, more than half came from private payers. Employer-sponsored insurance, with its tax subsidy, has become the cornerstone of the U.S. health insurance market. Today, about 175 million people are covered through an employer plan, down from nearly 178 million in 2000, with about 242 million covered by a private plan of some sort and 74 million covered by a government plan. Workplace insurance dramatically shaped the system, says David Cutler, an economist at Harvard University and author of *Your Money or Your Life: Strong Medicine for America’s Healthcare System*.

“It led to insurance being tied to work, for good (more risk pooling) and ill (people locked into their jobs),” says Cutler. The downside of workplace insurance is that low wage and part-time workers often aren’t offered health insurance. An upside, though, as Keith Crocker and John Moran point out in an article in the *RAND Journal of Economics*, is that workers are less mobile when insurance is bundled with employment. That creates more commitment to insurance pools, providing “more complete insurance of health risks than would be

available in a competitive market.”

But overall, the economic consequence of employer-paid insurance is troubling: Consumers never see the true costs of medical care because they don't pay with their own dime.

That's thrown the market out of whack. Markets work when buyer and seller let the invisible hand determine price, right? But in the health-care market, consumers buy medical care while employers and insurance firms pay for it and still other participants provide goods and services.

The third-party payment system has contributed to several commonly identified economic problems. The first is moral hazard. Since people aren't paying the full cost of health care, they aren't as sensitive to price. They tend perhaps to buy more than they need and don't shop for the best buy, inasmuch as that's possible in health care.

Third-party payment for medical care, subsidized by tax policy, is illogical, observes economist Milton Friedman in an essay on “How to Cure Health Care” published in *The Public Interest*.

“Why single out medical care? Food is more essential to life than medical care,” he writes. “Why not exempt the cost of food from taxes if provided by the employer?” Friedman argues that the tax exemption of employer-provided care has fueled the inflation in health care spending. He says employees would be better off buying their own insurance policies or paying for medical care with the higher pay they'd get if they didn't get tax breaks on medical benefits.

The second problem is the issue of adverse selection. If healthy people forgo insurance as costs rise, employers may drop plans altogether as only the least healthy people remain in the pool. Adverse selection ultimately will drive insurers out of unprofitable markets, further depressing competition. Regulations enacted to guarantee access can work in reverse. They can make insurance unaffordable, says Tom Miller, formerly a health-care analyst at the Cato Institute and now senior economist with the Joint Economic Committee of the U.S. Congress.

“That's a factor in the cost of care

and people being priced out of the market. [You do] all these things in the hope you'll make insurance affordable for most people. But it generally drives the cost higher in that market.” For example, the 48-hour maternity mandated hospital stay seems sensible, but not everyone needs it and it pushes costs higher for everyone.

“You load the cost into the system and... you are in effect shifting the cost to those other purchasers,” Miller says. “If you look at the cross-sectional dynamics of the uninsured, they tend to be younger, healthier and not have as much money to buy a deluxe policy. [They're] less likely to pick up on a more expensive policy.”

Another complicating factor is asymmetric information. It's difficult for people to observe the quality of goods and services they purchase in the health-care market. How would a person know, for example, whether a heart condition warranted angioplasty or surgery? How good are the drugs, doctors, and procedures at solving medical problems?

“There's that physician who has to play the agent for us,” says Mike Morrissey, a health economist at the University of Alabama at Birmingham.

Information flow in health care is also a problem. While medical technologies have flourished, health care lags other industries in using information technology to improve outcomes and efficiency. “It's taking a long time for the industry to get its act together,” Conover notes. Further complicating the system are doctors' individualized practices and unique role within the hospital. Though they usually have no economic stake in health facilities, they nevertheless, have the hospital at their disposal.

### Enter Managed Care

Markets began to work, to some degree, during the managed-care revolution of the mid-1990s. Escalating costs in the late 1980s sent premiums up by 17 or 18 percent. The recession of the early 1990s pushed managed care to the forefront as big purchasers of health benefits hired insurance firms to manage care and benefits aggressively.

## Dates That Shaped the Market

**1789** Congress establishes U.S. Marine Hospital Service funded by contributions from seamen's wages.

**1847** The Massachusetts Health Insurance Co. of Boston began to insure against sickness.

**1939** Revenue Act of 1939 establishes employee tax exclusion for compensation for injuries, sickness under workers' compensation, accident, or health insurance.

**1943** War Labor Board ruled that World War II's wage freeze did not apply to fringe benefits.

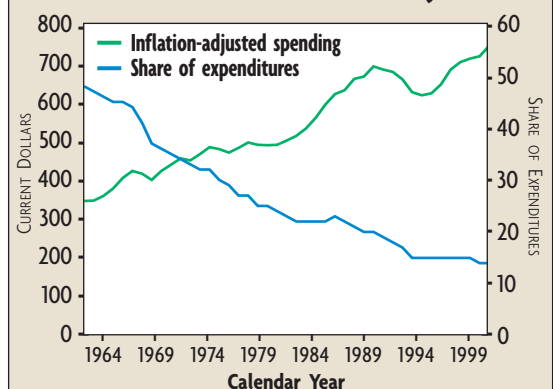
**1965** Congress establishes Medicaid and Medicare to cover poor people and people over 65.

“Historically, health care didn't function anywhere near traditional textbook models,” Morrissey says. For example, competition in hospital markets tended to lead to higher costs rather than lower costs, as hospitals engaged in “medical arms races” to install the latest advances in equipment.

“What we've seen with the advent of managed care beginning in the mid-1980s through the mid-1990s was that managed care really did put health-care markets back on their textbook feet,” he says. Selective contracting allowed volume discounts and accompanying lower prices. The rate of premium increase declined steadily.

“By the mid-'90s they believed if they hadn't slain the cost dragon they had at least curbed it,” notes Robert Hurley, an associate professor of health

## Health Care Spending and Consumers' Out-of-Pocket Payments



SOURCE: Centers for Medicare & Medicaid Services

administration at Virginia Commonwealth University. But from 1996 through today, premiums have gone from no change in 1996 to the 13.9 percent increase in 2003. The ability of health plans to extract discounts dried up as consumers and providers alike demonstrated they didn't like the restrictions of managed care.

Much employer-sponsored coverage was through managed care in the 1990s. Those plans have dwindled, however, and serve only about 24 percent of insured people today. Preferred-provider plans dominate the health insurance market and with a broader panel of providers, prices can't be negotiated.

"Employers haven't been as supportive, consumers have been unhappy and providers have made it clear they're not going to take what they have in the past," Hurley says.

Regulations can also impede market function. "Some providers in any given state, be they hospitals, physicians, or nursing homes, are very good at understanding their market and have been able to go to state legislatures to seek protection," Morrisey notes. Along with mandated benefits, there are "willing provider" laws. Those laws say, "If I'm willing to live by conditions of contract,

you have to accept me," and ultimately weaken selective contracting.

In Greenville, S.C., for example, one hospital sued to be included in the provider networks of two health plans, previously under exclusive contracts with a competing system. The Center for Studying Health System Change reports: "Consumers now have equal access to both hospital systems, but plans' ability to hold down costs may have been weakened."

### Prices Rise, Demand Drops

The number of working-age Americans who receive health insurance through an employer fell from 71 percent in 1987 to 68 percent in 2000, according to research by Harvard University health economist David Cutler, despite the booming economy of the 1990s. Recent Census Bureau estimates put the percentage of working-age people who are covered by employment-based insurance at about 66 percent in 2002. Premium hikes and a changing employment picture share blame as part-time and low-wage jobs replace higher-paying ones, especially in Fifth District states formerly reliant on manufacturing. As lower-wage service industry jobs proliferate, the number of people

covered by employer coverage could continue to slide.

But what Cutler found was that premium costs affect insurance decisions hugely. Twenty percent of uninsured workers who are offered coverage decline it, citing cost as the reason. For every \$10 increase in monthly employee premium, 0.4 percent of employees opt out.

And health premiums are climbing. Premiums rose 13.9 percent between 2002 and 2003, the third straight year of two-digit increases and the biggest jump since 1990, according to the Kaiser Family Foundation and Health Research and Educational Trust.

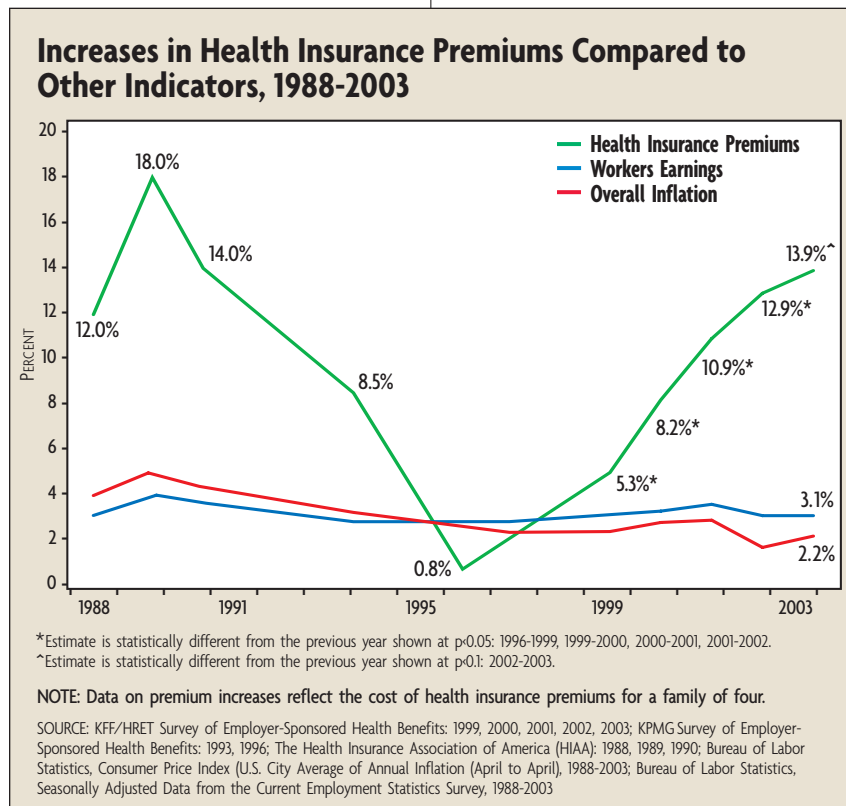
Some employers have either dropped coverage altogether or require workers to pay a bigger share — to save money and to heighten consumer awareness of the true costs of medical care. If people pay more out of pocket, then they're less likely to use medical services and prescription drugs excessively, the thinking goes.

The number of working-age adults with no health insurance increased by 2.4 million in 2002, the biggest jump in more than a decade, says John Holahan, an economist who studies the issue for the Urban Institute. Overall, there are 43.6 million uninsured Americans, or 15.2 percent of the population. Many of those people lost benefits after losing a job, or changed from a large to small firm that doesn't offer insurance or can't pay the higher premium costs. Eight of 10 of the uninsured come from working families, according to a report issued by The Kaiser Commission on Medicaid and the Uninsured.

Workplace-provided insurance is shifting as the job market shifts. "Whether you'll see job gains in industries with employer-sponsored insurance is a big unknown," Holahan says.

### Fifth District: Challenges for Coverage

Some Fifth District states face difficulties in health spending and access, partly because of below-average household income, minority populations, and shifts in employment. For example, while North Carolina boasts many high-technology jobs, the state is reeling from massive layoffs in the textile industry



## A Subscription Prescription

A patient wrenches his back just before heading to the airport for a trip. He calls his doctor, who prescribes a muscle relaxant, and the patient stops to fill it en route. An hour later, he's checking in when his cell phone rings. It's the doctor, giving him the lowdown on the medicine and instructions to minimize discomfort during his trip. After he hung up, a fellow passenger turns and asks incredulously, "Was that your doctor you were talking to?"

These days, quick, personal medical service is astounding. But for \$68 a month (for a person over 36), if you live in Norfolk, Va., you, too, could have it. Dr. David Grulke and his two partners run a subscription medical practice that he says has freed him from the hassles of paperwork and impersonal, hurried patient care. Sound expensive?

"But in reality this is a modest expense for something we think is a great value," Grulke says. "We want people who are committed to their health and who ask questions and [want] to be educated. They're easy to take care of. Patients who don't take their medications and don't show up for appointments—they're a liability." Grulke handles no insurance, but patients need to carry it for lab work, hospitalization, and procedures referred by Grulke.

In 2002, Grulke quit his previous practice, which had been bought by a corporation along with 13 others. After the purchase, Grulke says he spent half his time doing paperwork after hours, much of it associated with information required by the company. He spent less time absorbing medical details crucial for good care. And he saw between 36 and 42 patients each day.

Now, Grulke and his two partners limit the practice to 600 patients apiece, about 20 to 25 a day, and set aside 15-minute slots for a typical visit, rather than 10. He has gone back to allotting an hour for an annual physical for new patients, 45 minutes for an established patient, rather than the 20 minutes prescribed by the corporate owner. He also sets aside a 15-minute slot every hour for those who need a same-day appointment.

Grulke has practiced internal medicine for 26 years and neither he nor his partners have been threatened by legal action. But he's grateful that he cut his daily patient load when he did. "It's only a matter of time if you see 40 people a day because you're gonna miss the x-ray that showed up lung cancer. We have time to think. If the patient's not getting better, they have easy access back into the practice."

It may seem like an ideal way to practice medicine, but it sounds like a recipe for adverse selection, and eventually, losing money as the sickest people dominate the practice. But Grulke says he's happier and making more money than before, and when a doctor knows intricate details of a patient's condition, it saves money for everyone in the long run. Those patients don't show up in the emergency room or take inappropriate medication and develop even more problems. Half of Grulke's patients are over 65 and some of the ones who are under 65 have health issues. But he also has healthy patients and nearly all his patients want to learn about any medical condition they might have, he says. "They want to find out what to do about it."

But what about the people who can't afford this boutique care? Grulke replies that even the state would save money if it paid him his monthly fee to care for Medicaid patients because they wouldn't wind up in the emergency room.

So far, though, the fee-for-service medical practice is rare. A spokesman for the American Medical Association, Toni Xenos, says the AMA has no estimates of how many doctors do business this way.

—BETTY JOYCE NASH

alone, 8,315 in 2003. "We're very much in this transition because we used to be a manufacturing state," Conover says. "That's changing—[there's a] shift toward services, lower-paid jobs." Manufacturing jobs have higher rates of coverage than service jobs, he notes. Firm size and industry type influence insurance decisions. Large firms are more likely to offer coverage than small. Firms with highly paid workers typically will offer coverage while those with low-wage workers and high turnover probably won't. Regional differences account for still more insurance variability. Employers in the Northeast are more likely to offer health coverage than those in the South and West, according to Linda Blumberg of the Urban Institute.

Other coverage issues lie in simple demographics. All Fifth District states except West Virginia have a higher pro-

portion of African Americans than the national average. And African Americans are uninsured at a relatively high rate—20.2 percent in 2002 compared to 10.7 percent for white people.

Three Fifth District states, Maryland, North Carolina, and Virginia, saw uninsured rates rise between 2001 and 2002, by 1.5 percent, 1.6 percent, and 0.9 percent respectively, according to the Census Bureau.

And people make less money in three Fifth District states and Washington D.C. than the U.S. median of \$42,409. The three-year average median household income in the Carolinas is about \$38,400; in West Virginia, about \$30,000; and in D.C., about \$41,313, according to the Census Bureau. Also, more people were out of work in 2003 in three Fifth District states than in the nation as a whole. Nationally, the jobless rate was 6

percent in 2003, while in North Carolina the rate of unemployment was 6.3 percent; South Carolina, 6.4 percent; and Washington, D.C., 6.6 percent.

These factors translate into fewer people insured by employer-sponsored plans. And even those insured may pay more for health care in some Fifth District states. Employers in the Greenville, S.C., area, for example, back away from subsidizing rich benefit packages, according to Hurley. He studies health-care markets for the Center for Health System Change, a project of the non-profit Robert Wood Johnson Foundation. One of the project's study areas is the Greenville metropolitan area.

Half of privately insured people in families in the Greenville area faced out-of-pocket costs of \$500 or more in 2001, compared to 36 percent of similarly insured people in metropolitan areas of 200,000 or more.

"It reflects the benefit designs, [they're] more meager for people there," Hurley notes. "We attribute that to low levels of unionization." He adds that the burden on workers has been even greater in the soft economy, with some employers dropping coverage altogether.

Going without health insurance can be expensive, as uninsured people tend to forgo preventive health care. Taxpayers foot the bill, of course, for charity care and for lost economic potential. Even relatively healthy young adults from 19 to 29, who represented 30 percent of the uninsured in 2002, use acute care services and are at higher risk of pregnancy, injuries, and some chronic diseases such as HIV.

And people without insurance are more likely to die prematurely, among other factors. A 2003 Institute of Medicine study found that uninsured people received health-care services

valued at about \$99 billion in 2001, taking into account money paid from their own pockets, insurance paid, and any workers' compensation payments or charity care received. Charity care totaled \$35 billion in 2001, mostly funded by taxpayers. The study further estimates the potential economic value at between \$65 and \$130 billion annually, including higher expected lifetime earnings, because of improved productivity and better educational outcomes.

### Placing a Premium on Health Care

Health-care spending has grown since the 1960s as people have become more insulated from costs. But over the same period, the field of medicine has made substantial advances in lengthening peoples lives through managing chronic illnesses like cancer and cardiovascular disease. For example, many medical specialties such as oncology and critical care

medicine weren't developed until the 1970s and 1980s. Today, life expectancy is close to 80 years, compared to 45 in 1900, having declined pretty much steadily since the mid-1950s.

"On average, given the extraordinary costs of illness and premature death, society is better off exchanging more money for better health," writes Sherry Glied, an economist at Columbia University's Mailman School of Public Health, in the *Journal of Economic Perspectives*. She also points out that there has been little variation in the annual rate of growth in per capita real health expenditures, increasing only slightly faster in the five years following the introduction of Medicare and Medicaid in 1965. Glied suggests that the introduction of new and expensive technology most likely explains the growth of health-care costs, largely because of increased demand. "...although the measured price of medical services has

## Better Data, Better Care

While medical innovations help us live longer, healthier lives, the health-care industry is behind the curve in using information technology to improve efficiency and patient outcomes, analysts say.

Indianapolis-based insurer Anthem Blue Cross and Blue Shield is working to change that with the help of Dr. Richardson Grinnan, a former physician. Grinnan uses "Informatics" to study claims data. The idea is to better understand variations in medical practices and costs in hospitals and among physicians. An insurance company has a bottom-line interest in good care, Grinnan notes.

"Anytime you deliver quality care, it's going to be the most affordable care," he explains.

Change in hospital and physician cultures comes slowly. Tradition is likely to hold sway. Grinnan tells the story of a doctor in a hospital who had mentioned to an administrator that good outpatient congestive heart failure management would prevent many hospital admissions. The administrator replied, "Why would you do that?"

To encourage participation in the informatics program, Anthem puts up money. The company adjusts the future year's contract by 1 percent, which can amount to

\$500,000 to \$1 million for a large hospital, Grinnan says. "That money helps underwrite infrastructure and activities to make sure that the care process is being reinforced," he says.

One of the motivations for Anthem's quality emphasis is the significant press coming out of the Institute of Medicine and other respected organizations saying there's too much variation in practice. "There are slightly less than 50 percent of the people receiving the best practices as promulgated by the evidence," Grinnan notes. Measuring outcomes and processes is the way of the future, he says.

"If we start managing resources correctly, we will be able to improve health outcomes, we'll reduce medical errors, [have] fewer malpractice suits, and [insurance] rates will go down," he says.

In Anthem's year-old program, hospitals need to computerize orders, for example. Most medication errors occur because of problems in transcribing, Grinnan says. Orders can be misinterpreted, just plain illegible or even have a decimal point in the wrong place. Order-entry programs have reduced medication errors by half. Another step toward reducing errors is by matching medication bar codes with codes on patient

identification bracelets.

Grinnan has been in medicine his entire life; his father was a doctor. "[I was] always impressed with how hard my dad worked," he remembers. He finished medical training in 1975, almost 10 years after government reimbursement, Medicare and Medicaid, came on line. He witnessed waste and even back then was intrigued about how to use resources in a logical way.

"The spirit [then] was just to use everything that's available...without a whole lot of rigor placed on what we should be focused on," he says. "I just had a sense that couldn't last forever."

Anthem's program, called the Quality-In-Sights Hospital Incentive Program, is the first of its kind in the nation. However, Grinnan has been applying informatics to measure quality of care since the mid-1990s. His medical management group analyzes practice patterns and compares data to established best practices. For example, the team studied variations in hospital admissions for asthma patients. Through education about asthma control and proper use of peak flow meters, emergency room visits and hospital admissions for asthma patients fell by 30 percent.

—BETTY JOYCE NASH



been rising, the quality adjusted cost of medical treatment for many widespread conditions ... has declined," she writes.

It's worth noting that in 1962, 46 percent of health spending was paid by people out of their own pockets. By 2002, people paid only 14 percent of health spending out of pocket, according to the CMS. Between 1965, the year Medicare and Medicaid legislation passed to guarantee medical care for elderly and poor people, and 1970, the government's share of total health spending grew from nearly 12 percent to 24 percent. During that same time, out-of-pocket payments fell from 45 percent to 34 percent.

Today, health care swims in a fast current of expensive prescription drugs, an aging population and increased utilization, a nursing shortage, cost shifting from Medicaid, and the constant development of expensive, gee-whiz medical technology. No wonder we're drowning in costs. And, of course, medical malpractice insurance and claims, rising dramatically, don't help. Doctors often order unnecessary and expensive tests. "To know that all your clinical decisions can be Monday morning quarterbacked? That's not going to contribute to a very efficient system," notes Conover.

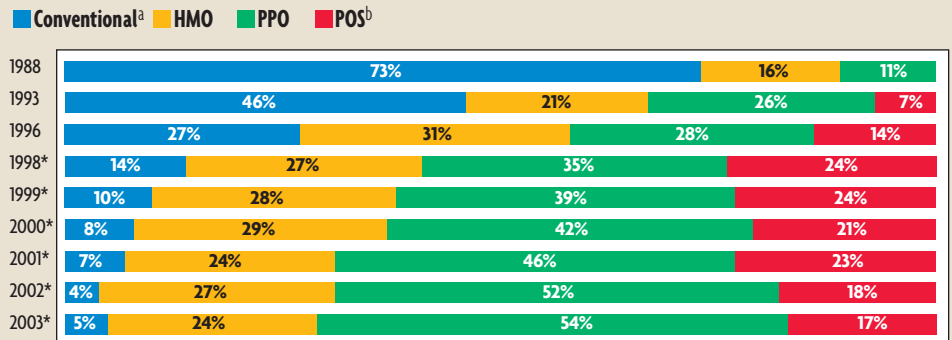
Blockbuster drugs also exacerbate costs, but as some popular drugs, such as Prilosec, go off patent, premium costs will level off, says Gary Claxton, a health analyst at the Kaiser Family Foundation. Health-care spending growth in 2003 is predicted at 7.8 percent, down from the previous year's 9.3-percent level, according to CMS.

The spending cycle and premium increases depend also on the insurance business cycle, says Claxton of KFF. "In the late '90s, it was not very profitable," he notes. "In the last few years, they've been raising premiums faster than the costs are going up to help raise profitability."

Health economist Morrissey says premium prices also depend on the job market. When jobs are plentiful and employers are looking for workers, they worry about the quality of the health plan and make sure people have lots of choice. Then premiums rise because choice is expensive.

The rate of increase will moderate

## Health Plan Enrollment For Covered Workers, by Plan Type, 1988-2003



\*Distribution is statistically different from the previous year shown: 1996-1998, 1998-1999, 1999-2000, 2000-2001, 2001-2002, 2002-2003.

<sup>a</sup>Conventional health insurance provides for hospital, surgical, medical, major medical, comprehensive, catastrophic, and dental plans. Rates depend on which plan you buy into, the level of coverage you and your employer choose, and whether you purchase individual or family protection.

<sup>b</sup>A point-of-service (POS) plan offers managed-care benefits within a network of medical providers but also allows you to receive care outside of the network whenever you wish. When you receive out-of-network care, you pay more.

SOURCE: Kaiser/HRET Survey of Employer-Sponsored Health Benefits: 1999, 2000, 2001, 2002, 2003; KPMG Survey of Employer-Sponsored Health Benefits: 1988, 1993, 1996

in the next two years, he says, but as jobs increase, premiums will start to swing to the other end of the cycle.

### Policy Options Proliferate

Still, the problem of access to affordable health care vexes nearly all stakeholders in the health business. Solutions saturate the airwaves as politicians promote variations on policies that include tax credits, tax free savings, and universal health coverage. While it's unlikely that the United States will sever its ties to employer-sponsored health insurance anytime soon, economic theory suggests that moving away from third-party payments could lead to a more efficient health-care system.

A policy including tax credits to buy higher-deductible insurance, more money and better access for high-risk pools, flexible regulations, and proper incentives could guide people in a new direction, Miller says.

For example, the Medicare bill passed late last year contained a health savings account provision. People under 65 can contribute to an account if they have a qualified health plan—one with a high deductible—and the investment is tax-free as long as it's used to pay for medical expenses.

This plan replaced the Medical Savings Account (MSA), a pilot program created in 1996 to promote the idea of tax-free savings for health care and expired at the end of 2003. The U.S. General Ac-

counting Office found that four of every 10 people who established MSAs in 1997 had previously been uninsured. Premiums for the higher-deductible policies are generally lower. The accounts are owned by the employee and fully transferable. Savings accounts also increase choices. Health-care shoppers could spend money on alternative therapies that may not be covered by traditional insurance.

The idea is to encourage consumers to spend their own money on care. By shopping around and researching options, they make personal choices. "The general indications are that people will spend less and spend better," Miller notes.

**RF**

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# Putting on the **BRAKES**

*Certificate of need regulations try to steer health-care supplies, but it's hard to keep them from fishtailing*

BY CHARLES GERENA

Every month, members of the board of directors for the Central Virginia Health Planning Agency Inc. gather in a blue-gray meeting room. The conservative color scheme is everywhere, even in the speckled fabric of the chairs where the board members sit. Only one thing sticks out: the honey-colored wooden podium where health-care providers pitch their proposals for new facilities and equipment.

In Virginia and throughout the rest of the Fifth District, providers must obtain a certificate of need (CON) before making major capital investments. They have to demonstrate that the expenditure is necessary to fulfill the needs of the community, which are determined by state health officials and detailed in a formal plan.

At the January meeting of Central Virginia's health planning board, three groups explained why the region needs additional diagnostic imaging equipment. Their proposals faced the scrutiny of the board, which makes its recommendations to the state health commissioner. After an hour of presentations, reports, and intense questioning, two of the three CON applicants were rebuffed. A fourth applicant withdrew from consideration before the meeting.

Many economists question the necessity of regulating the health-care supply

so closely. Their view is that companies introduce goods and services only when they expect to be rewarded with higher revenue and profits. Meanwhile, consumers usually benefit from the increased competition in the form of broader choices and better prices. In short, markets tend to work pretty well by themselves.

But state health planners and other CON supporters counter that health care isn't a typical market. They believe that government must intervene to minimize unnecessary development and improve the accessibility and quality of care.

"We are coping with an imperfect system," notes Pamela Barclay, deputy director of health resources for the Maryland Health Care Commission, which reviews CON applications. Instead of consumers buying health care directly, government- and employer-provided insurance pays for it. But some medical services are reimbursed at higher rates than others and not everyone has the same level of coverage, creating distortions in the market.

The CON process is also imperfect, but states have used it to address problems in an industry that affects everyone's well being.

## **CON to the Rescue**

Health-care planning dates back to the 1940s. During the Great Depression

and World War II, few hospitals were being built or updated, and the supply of medical facilities was inadequately distributed among and within states. Communities responded to this crisis by financing and planning hospital development themselves, sometimes with the help of government agencies. In 1946, their efforts were aided by federal subsidies.

States began regulating the supply of health care through certificate of need reviews in the 1960s and '70s, partly in response to lobbying from hospital operators who favored centralized health planning. By 1974, Congress required states to have a CON program in order to receive federal dollars for psychiatric, substance abuse, and other health services. It also approved direct funding of CON programs.

"States weren't seen as micromanaging health-care markets. It was routine for communities to be involved in planning," says John Steen, a New Jersey-based medical consultant who serves on the board of directors for the American Health Planning Association (AHPA).

Also, "states and federal officials were really concerned about rising costs," notes Frank Sloan, director of Duke University's Center for Health Policy, Law, and Management. "CON was the first major cost containment program implemented."

The idea was that by controlling the expansion of health-care supplies, fewer development costs would be placed on the shoulders of consumers. At the time, cost-based reimbursement systems — especially the massive Medicaid and Medicare programs created in the 1960s — enabled health-care providers to pass along most of the expense of new equipment and services to third parties. Since capital improvements could translate into increased revenue with little downside risk, providers were perceived as having an incentive to over-invest.

Lastly, state and federal lawmakers were concerned about health care quality and access. By using CON reviews to steer new development, they aimed to prevent providers from expanding only in affluent areas that were already well served. According to Lee Hoffman, chief of the CON program at the North Carolina Division of Facility Services, if there is no designated need for additional services in a metropolitan area, “providers prefer to take their chances in a rural area [rather than have] nothing at all. It gets their foot in the door.”

CON programs proliferated until the early 1980s when the federal government changed how it paid health-care providers. Under a new per-case prospective payment system, providers received a predetermined amount of money for each patient treated, regardless of the cost of the services required. The amount paid depended primarily on the diagnosis-related group into which the patient was classified.

Private health insurers adopted this payment system as well, which removed the incentive to over-invest that many policymakers had been concerned with. Meanwhile, market-based approaches such as managed care emerged as alternatives for containing medical costs, which were still rising despite the widespread usage of CON reviews.

In 1986, the federal government stopped funding CON programs and 14 states eventually abandoned their programs. Today, 36 states and the District of Columbia regulate health-care supplies to varying degrees. Virginia lawmakers backed off from eliminating the state’s CON regulations in 2001,

while West Virginia, Maryland, and the Carolinas have reviewed or revised their regulations over the last five years instead of eliminating them.

Why does more than two-thirds of the nation still conduct CON reviews? Part of the reason is political pressure, particularly from health-care providers with an established market presence.

State lawmakers also believe that CON reviews give communities a voice in health-care development. Public hearings are usually held before a CON application is considered and whenever a state’s health plan is being updated. “It’s a process in which providers and consumers of services can get together, examine problems, and exercise their best judgement,” says Dean Montgomery, current AHPA president and executive director of the Health Systems Agency of Northern Virginia.

States have another motive for trying to maneuver health-care supplies: They have a big stake in containing medical costs. In communities with a low concentration of businesses, a big chunk of medical services are reimbursed through Medicaid and insurance provided to state employees.

And there is reason to be worried about health-care providers gaining more pricing power and increasing their capital investments. Despite the changes in medical reimbursement, insurers have less power to negotiate lower rates with providers. “In the late ’80s and early ’90s, they were able to [reduce costs] the easy way because there was fat in the system,” says medical consultant John Steen. But managed care has reached its limits in cost reduction and people have been demanding more services.

### The Verdict

Has this faith in the certificate of need process been justified? It depends on what criteria you use.

Constraining the health-care supply via CON review may have tempered growth in hospital beds and nursing home development. But it hasn’t been conclusively shown to slow growth in overall per-capita medical spending.

“While CON laws can be effective in slowing the expansion of some serv-

ices, many other factors affect health-care costs (e.g., labor, physicians services) that CON laws have not attempted to control,” noted a January 1999 study by the University of Washington. Furthermore, a 1998 study by Duke University’s Frank Sloan and Christopher Conover didn’t find a marked increase in health-care expenditures in states that dropped CON reviews.

Meanwhile, CON regulations may sometimes constrain supplies too well, making it difficult for health-care providers to respond to market changes. Let’s say an imaging center wants to buy another MRI machine because its existing equipment is operating 18 hours a day and on weekends to keep up with demand. The center may fail to get a CON because there is underutilized capacity elsewhere, even though that capacity may be in a less-populated area, inconvenient to patients, or outdated.

Additionally, hospitals can be prevented from moving capacity to high-growth areas or redesigning it for services that are in greater demand. Charlotte Lynch, manager of business planning at Gaston Memorial Hospital near Charlotte, N.C., recalls how she struggled to obtain a CON to redistribute its unused bed capacity to the hospital’s Women Center. Initially, the state wanted to de-license 40-plus acute care beds in the hospital’s inventory before it would approve the CON. Rather than relinquish capacity that was needed to accommodate future growth, the hospital eventually gave up some of its psychiatric beds.

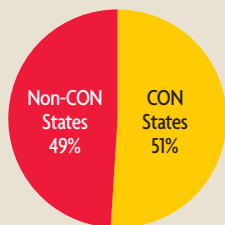
*Hospitals often must obtain a certificate of need to purchase new equipment, such as MRI machines.*



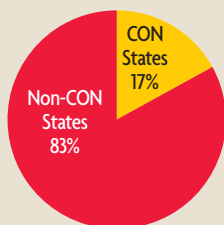
## Path of Least Resistance

Specialty hospitals tend to stay away from states where medical facilities have to obtain a certificate of need to add capacity, as shown below. Is that good or bad? Specialty hospitals outperform general hospitals in terms of costs, but they are less likely to have an emergency room and they treat a smaller percentage of Medicaid patients.

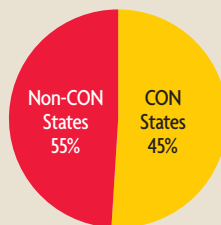
Distribution of U.S. Population



Distribution of Specialty Hospitals



Distribution of General Hospitals



NOTE: Twenty-six states and the District of Columbia were counted as “CON States” because they require a certificate of need to develop acute care beds. The total number of states with a certificate of need process of any type is much higher (36).

SOURCE: *Specialty Hospitals: Geographic Location, Services Provided, and Financial Performance*, General Accounting Office, October 2003

“As soon as you want to expand... and you’re not at the target occupancy, their thinking is ‘Let’s take some of this excess capacity away from them because they don’t need it,’” complains Lynch.

Health-care providers can make adjustments to the CON process or the state health plan via the public review process. But some states take at least a year to update their plan, while other states have much longer planning horizons. And there’s no guarantee that providers will get the changes they want. Lynch says it took years before North Carolina recognized a need for acute care beds.

State officials would be hard-pressed to admit these shortcomings in CON programs. Instead, they have moved cost containment down their list of policy goals and emphasized CON’s role in meeting an equally important goal: to intervene in health-care markets when accessibility and quality take a backseat to profits.

How much state governments intervene in markets depends on how many medical services they regulate and how large a capital investment must be before it is subject to CON review. Maryland and West Virginia regulate a wide range of medical services under CON and have relatively low capital cost thresholds, plus they review hospital rates. The Carolinas, Virginia, and the District of Columbia have com-

prehensive programs as well, while the latter two still have regional health planning agencies that evaluate CON applications.

An agency under the state’s department of health typically evaluates applications to determine how proposed projects meet the state’s health plan. The plan identifies the quantity and type of services needed in certain regions based on population growth, utilization rates, and other data. Then anyone can apply for a CON to meet these needs.

Other criteria are also used to determine if a proposed project is in the public interest. They include the project’s economic impact on existing facilities, the applicant’s history of providing charity care, and the geographic accessibility of the project.

With the latter, one would think that the development of health-care infrastructure should follow population growth. “In some respects that’s true,” says Ken Cook, president of Roanoke, Va.-based Vantage Healthcare Consulting Group Inc. and former executive director of southwest Virginia’s health planning agency. “But we also want to force [development] to move out into surrounding areas.” For example, Lynchburg has more nursing home beds per thousand seniors compared to the four rural counties surrounding the city.

Have these market interventions worked? A recent General Accounting Office report found that states with CON programs appear to have better access to health care because they have fewer specialty hospitals than states without CON. Such facilities are less likely to have an emergency room and to accept Medicaid patients. On the other hand, states without CON have slightly more general hospitals than non-CON states, and these facilities have to serve everyone. (See pie charts.)

On the whole, “it is very difficult to steer” the development of medical services, notes Frank Sloan. There have been some attempts to prevent hospitals from moving from the inner city to the suburbs, but they have failed to prevent health care providers from chasing population growth.

### It’s Good at Playing Monopoly

Most health-care economists, consultants, and regulators would agree that certificate of need regulations have been good at one thing—producing markets with varying levels of protection. Such markets affect access and quality of medical care, both positively and negatively.

“Health care is a service where a significant portion of the population cannot afford to pay for it because they are underinsured or uninsured,” explains Lynn Bailey, a consulting economist in Columbia, S.C. By awarding a limited number of CONs for particular services in a geographic area, states essentially create franchised territories for general hospitals in exchange for them serving the entire population. “It is a social contract.”

In general, protected markets have a high cost of entry. The CON application process can take several years, especially if there are appeals, and require tens of thousands of dollars to pay for consultants, lawyers, and processing fees. But once a health-care provider gets its “franchise” for offering a certain service, it’s in a better position to charge higher prices and generate a reliable revenue stream because others can’t readily follow. “If you have a monopoly in a town, an insurer has to negotiate with

that monopolist. It's not going to get the same price as an insurer who has the ability to take its business elsewhere," explains Sloan. This probably doesn't help contain costs, but it does make it easier for providers to acquire credit and invest in new technology and staff training.

Another benefit of market protection is that it supposedly prevents a specialty facility from entering a community and cherry picking profitable outpatient services like ambulatory surgery and cardiac catheterization. While cherry picking is a savvy business move, it could hurt long-established general hospitals that use moneymaking outpatient services to pay for money-losing inpatient services like the emergency room. Hospitals must compete to hold on to their best customers while caring for the indigent and uninsured whom they are legally required to serve regardless of their ability to pay.

On the other hand, companies usually have less incentive to be innovative and efficient if they don't have to face the constant challenges of competition. So health planners perform a delicate balancing act. "If you design your CON program right so that you allow enough competitors to get in, you won't make an inefficient system. ... Providers will have to compete on quality," says Cook.

Finally, limiting the growth of new medical capacity may help build up the volume of procedures at existing facilities. This would enable providers to spread out the cost of equipment over more patients. It also would enable medical professionals to gain experience that helps them improve patient outcomes, which is why malpractice insurers often refuse to provide coverage unless providers reach a certain threshold of patient utilization.

However, CON programs have had a mixed record when it comes to increasing patient volume at facilities and their impact on outcomes hasn't been proven. Furthermore, such benefits of limiting medical capacity would have to be balanced against making services available to the greatest number of people, notes Sloan.

### Watch Where You Swing That Thing!

In the final analysis, the certificate of need has been a blunt instrument of public policy. So why not let health-care markets figure out the best combination of supply and demand? Then state governments could deal with quality and access problems by establishing standards for care and expanding public medical facilities.

CON advocates argue that health-care markets can't fix themselves because they are dysfunctional. For one thing, patients usually depend on health-care providers to tell them what services they need, so providers are in the position of redirecting patient care to utilize any new capacity. "It's not like buying a car where you can determine the best quality you can get for the lowest price. We really depend on doctors to advise us what facility to go to and what services we need," says Joel Grice, director of the South Carolina Bureau of Health Facilities and Services Development, which manages the Palmetto State's CON program.

Health-care markets malfunction for a less sinister reason as well: They have little price competition, which tends to encourage overproduction. Normally, suppliers produce more as prices increase until their services become too expensive for buyers. But prices for certain medical services can continue to rise without patients demanding less.

Why? The demand for many medical services is very price inelastic. Patients care more about getting the best care available than about how much they'll pay, especially in an emergency situation or when treatment options are limited. Also, patients don't know the actual costs of their care. Market information is not readily available, plus insurers act as a third party that separates patients from providers in transactions.

Even if these market malfunctions could be fixed, broad regulation of health-care markets is more politically desirable than deregulation. If a nursing home closed down as a result of market competition, the cost of relocating former residents would make the front

page of local newspapers. In contrast, the shortcomings of CON programs impact everyone, so it's not as obvious to individuals.

Still, government regulation is considered a necessary evil to protect patients from the ups and downs of unfettered market competition. In fact, some lawmakers and health care experts believe that health care shouldn't be a profit-making business.

Notes economist Lynn Bailey, "We haven't resolved the issue of whether health care is a private good regulated by market forces—those who pay for it get it and those who can't pay for it don't—or a public good that benefits the entire community." European countries have long considered health care a public good, but following the same path in the United States—via universal health insurance or a government-run hospital system—wouldn't be cheap.

Until our society decides how health-care markets should function, CON programs will continue trying to steer supplies in the Fifth District and throughout the nation. **RF**

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# The Baiting Game

*Using economic incentives to attract new businesses  
isn't as simple as it may seem*



BY KARL RHODES

Critics of economic development incentives ranted and raved in 1992 when South Carolina put together a \$130 million package to persuade BMW to build a plant in Spartanburg County.

In the decade that followed, BMW silenced those critics by building a world-class facility and expanding it several times. The company's initial employment estimate was 1,900. But by 2001, the plant was providing jobs to more than 4,300 people and an annual economic impact estimated at \$4.1 billion, according to a study by the Moore School of Business at the University of South Carolina.

The BMW incentives "turned out to be chicken feed given the economic impact of the plant," says Ray Owens, a vice president and senior economist at the Federal Reserve Bank of Richmond. Unfortunately, "for every BMW, there are plenty of broken promises."

Even when economic development incentives are highly profitable for one state, offering them is bad public policy for the country as a whole, says Art Rolnick, director of research for the Federal Reserve Bank of Minneapolis. "You are misallocating resources. You are interfering with interstate commerce. It is economically inefficient," he says. "And sometimes you induce a company to take a second-best location."

Rolnick views incentives as a "negative-sum" baiting game that should be outlawed by Congress because it pits states against each other at the expense of the national economy. For every winner there is a loser, he contends, and corporate subsidies reduce state governments' ability to fund public goods, such as education and transportation.

But without those extra incentives, firms with "market power" tend to raise prices to pay for the inefficiencies of their existing locations, say some observers. Rolnick responds that antitrust laws — not incentives — should be used to prevent the inefficiencies of "market power," which he equates to "monopolistic situations." States should not subsidize monopolies, but they often do, he says. "The monopolies are the ones who are the most successful in using these subsidies."

Big-league sports franchises are a prime example, Rolnick says. "These guys have a monopoly in a unique way because they are a very special form of entertainment, and they have played the bidding wars to the hilt. Billions of public dollars have gone to these private companies because ... they can provide a very credible threat that 'if we go, you don't get anybody.'"

Some economic development officials agree with Rolnick's suggestion that Congress should outlaw incentives. "I would testify for that bill the minute they write it," says Aris Melissaratos, Maryland's secretary of Business and Economic Development. "I really don't like this continuing bidding war," he explains. "Even though ... in most cases it's a rational quantitative analysis of payback, some jurisdictions at times act irrationally and create a bidding war that just gets out of hand."

## Which Bait Works Best?

In North Carolina, the debate over tax credits for job creation intensified when Michael Luger, a University of North Carolina economist, published a study questioning the effectiveness of an economic incentive program called the Lee Act. Luger estimated that "only around 4 percent of the jobs claimed to be created with Lee Act incentives actually were induced."

North Carolina granted \$208 million of tax credits under the program in the years 1996 through 2001. Since then, North Carolina has scaled back some aspects of the Lee Act to free up funds to use in more targeted incentive programs, says Don Hobart, general counsel for the state's Department of Commerce. Hobart says tax credits under the Lee Act have been more effective than Luger's 4 percent figure would indicate, but he concedes that "tax

## Swapping Fish Stories

Virginia hooked a semiconductor manufacturer in February 2002. Cerxon Microtechnologies LLC was just a startup operation, but it seemed like a pretty big fish in the small pond of Henry County, where plant closings had pushed the unemployment rate up to 13 percent.

Cerxon garnered several hundred thousand dollars in state and local incentives because it promised to invest \$6.6 million and employ 250 people. Gov. Mark Warner hailed the Cerxon deal as "a tremendous win for Henry County and all of Southside Virginia."

The company relocated to the county from Camden, S.C., a city that apparently made no attempt to retain Cerxon. In sharp contrast, Virginia gave the company a \$200,000 grant from its Governor's Opportunity Fund, a \$100,000 grant from its Tobacco Commission, plus nearly \$1 million in loans and other incentives from Henry County.

"Oh my God!" exclaimed Daniel Young, director of grants and incentives for the South Carolina Department of Commerce, when he learned about the incentives Virginia paid to attract the company. "Camden was not real upset when that project left," he said. "To my knowledge, we did not counteroffer because I don't think [Cerxon] was really big enough. ... I believe it was a one- or two-person operation."

In Virginia, Cerxon employed a few people, but it never came close to generating 250 jobs or investing \$6.6 million. It went out of business in December 2003.

While Virginia was luring Cerxon away from South Carolina, the Palmetto State was wooing CropTech away from the Old Dominion. CropTech was a highly touted biotech company that planned to use genetically altered tobacco to manufacture pharmaceuticals. It grew up in Virginia Tech's Corporate Research Center, but it shopped around for a new location as it geared up for mass production.

Virginia made an effort to retain the company, but its incentives paled in comparison to the multimillion-dollar package that South Carolina put together to attract CropTech to Berkeley County. At a press conference in May 2002, the chairman of the Charleston Regional Development Alliance raved about CropTech's potential. "The company's unique processes and creative approaches will provide top-quality jobs for area residents," he said, "and its research will help improve the lives of people around the world."

Things didn't pan out that way. Nearly one year later — on April Fools' Day — the headline in *The Post and Courier* told Chapter 11 of the CropTech story. "Berkeley may lose CropTech," it said. "Virginia firm files for bankruptcy." —KR

## The Big One That Got Away

Virginia officials put together a huge incentive package in the mid-1990s, when Motorola executives were looking to build a \$3 billion semiconductor plant west of Richmond. In addition to offering \$60 million for achieving production milestones, Virginia officials accelerated plans to extend Route 288 through rural Goochland and Powhatan counties. They also expedited \$12 million to jumpstart a new School of Engineering at Virginia Commonwealth University. Until Motorola came around, neither of those projects were high priorities for state funding.

Microelectronic engineering became a major focus of the new school, and Motorola engineers helped design the school's electrical engineering curriculum. Also, two community colleges in the Richmond area established specialized microelectronics technology programs to prepare thousands of employees to work at Motorola. The plant was delayed, but another semiconductor manufacturer, Infineon Technologies, built a plant on the east side of the city.

VCU graduated its first class of engineering students in 2000. By then, the \$323 million extension of Route 288 was under construction, but the Motorola site was sitting idle, and the community colleges were scaling back their microelectronics programs.

In 2002, Motorola abandoned plans to build its proposed plant.

Virginia never paid any production-milestone incentives to Motorola, but the phantom plant did have a big impact on the Richmond economy. Some residents complain that the project caused a misallocation of transportation



*Virginia's big semiconductor catch turned out to be Infineon Technologies. The company built this clean room and fabrication plant east of Richmond.*

and education resources, while others say things worked out for the best.

"I've always viewed Route 288 as a big benefit of Motorola," says Ray Owens, a senior economist at the Federal Reserve Bank of Richmond. "It was the missing link of Richmond's circumferential beltway."

Also, VCU's School of Engineering helped attract Infineon, which currently employs about 1,750 people, says Mark Kilduff, executive director of the Virginia Economic Development Partnership. The engineering school, he notes, "still is a great benefit to Infineon," and it has helped attract other high-tech companies to the Richmond region. —KR

incentives represent a blunt instrument for economic development from a state's perspective, whereas other programs are a lot more surgical."

The Tar Heel State has beefed up its One North Carolina Fund, which makes performance-based cash grants for industrial recruitment. The fund used to receive just \$1 million or \$2 million per year, but in 2001, the General Assembly made a one-time contribution of \$15 million. And now the Department of Commerce is seeking another \$20 million for the fund from the 2004 General Assembly.

Last year, North Carolina also established its Site Infrastructure Development Fund, which makes cash

grants for site improvements to companies that are relocating to or expanding within the state. The fund has received a one-time appropriation of \$24 million.

"Companies want money upfront now," says Daniel Young, director of grants and incentives for South Carolina's Department of Commerce. "They're all doing their 15-year models, and the more you put in upfront, the greater the impact. If you start spreading it out on taxes and soft money, and spreading that over years, you don't get the bang for the buck."

Most of South Carolina's hard-dollar incentives are grants to localities for infrastructure improvements. Young

refers to this deal-closing fund as the "checking account." Annual appropriations to that account have been about \$18 million for the "past six or eight years at least," he says.

Virginia is trying to increase its Governor's Opportunity Fund from \$17.5 million in the current two-year budget to \$23 million for the coming two years, says Mark Kilduff, executive director of Virginia's Economic Development Partnership. That pot of money attracts lots of attention, he says, but the vast majority of the state's economic development deals do not qualify for those funds.

A more common form of upfront assistance in Virginia is work-force training. "That program is meaningful to 99 percent of the companies we work with," Kilduff says, because it helps defray the costs of pre-employment training.

Maryland's secretary of Business and Economic Development also puts work-force training at the top of his list. "That is an incentive that I am very much in favor of because it enhances productivity of the worker and the enterprise," Melissaratos says. "It makes that enterprise more competitive, and the skill set is retained for the worker in case something at that company doesn't pan out."

Whether a state offers work-force training or tax credits or performance grants, it's important to keep incentives simple, says David Satterfield, executive director of West Virginia's Economic Development Office. In recent years, West Virginia has boiled its incentive programs down from 21 to four, and Satterfield is determined to make them "predictable, meaningful and based on common sense." Prospects should not need an army of tax lawyers to determine an incentive's true value, he says. "If they don't understand it, they won't appreciate it."

During most of the 1990s, Washington, D.C., refused to play the baiting game, and schools of companies swam across the Potomac River to Northern Virginia. "Five or six years ago, the city was really an economic desert," says Chris Bender, a spokesman for the Office of the Deputy Mayor for Plan-



ning and Economic Development. “The businesses that were here were categorically fleeing for more fertile ground. There just was no support.”

The District became more business friendly in the late 1990s, Bender says, following the election of Mayor Anthony Williams and the designation of enterprise zones covering two-thirds of the city. Since then, the District has experienced an “economic renaissance,” Bender says. “We were rated No. 1 in foreign real estate investment in the world in 2002. Our office vacancy rates are the lowest in the country despite the highest rents.”

Many law firms, associations, and multinational corporations want a presence in Washington, D.C., but the city still struggles to attract and retain an adequate retail tax base. Bender says a new shopping center in the low-income Brentwood area is one of the District’s top incentive success stories. With significant assistance from the city, Rhode Island Place has attracted the District’s first Home Depot and a Giant Food, the only grocery store in the Brentwood area.

Washington, D.C., is saddled with a high percentage of federal property that doesn’t generate any tax revenue, Bender explains. So city officials have to find creative ways to capitalize on the remaining real estate. “We do that by getting businesses here, and that takes incentives,” he says. “We do need incentives. There’s no question about that.” (For more on Washington, D.C.’s commercial real estate market, see the cover story from the Fall 2003 issue of *Region Focus* titled “Building in Uncle Sam’s Backyard.”)

West Virginia’s economic development officials take a similar view. The Mountain State has upped its ante on incentives since Gov. Bob Wise took office in 2001. Most notably, West Virginia has raised \$225 million for a new economic development grant program.

“I look at [incentives] like my retirement plan,” Satterfield says. “I’m putting money away and investing it hoping that there’s going to be a gain.” People investing in West Virginia are hoping to increase the value of their companies in much the same way.

“They expect the state to bring something to the dance.”

### No Fishing Allowed?

Rolnick, the economist at the Federal Reserve Bank of Minneapolis, admits that government officials have little choice but to offer incentives. “Here in the Twin Cities ... if somebody comes after 3M or General Mills or the Minnesota Twins ... you, as a mayor or a governor, have to respond.” But Congress should end this baiting game by taxing the value that private companies receive from any preferential treatment, he says. “The federal government would tax that income at a confiscatory rate.”

In 1999, Minnesota Congressman David Minge introduced the Distorting Subsidies Limitation Act, which would have placed a steep federal excise tax on incentives — not the 100 percent tax that Rolnick advocated, but a substantial tax nonetheless. The legislation never received a full hearing, Rolnick says. “The economics of it are pretty clear,” he says. But “there are huge conflicts of interest here. In the current system, politicians are allowed to give away goodies, and if you end the bidding wars, they can’t give away goodies.”

At the Federal Reserve Bank of Richmond, Owens is not quite that cynical. “If the world were a perfectly competitive place, incentive programs would be silly,” he agrees. “But these programs are designed by people existing in the real world — not the perfect world of principles [of economics] textbooks.”

It would be impossible to equalize what every state has to offer, adds Kilduff at the Virginia Economic Development Partnership. “Would every state and every locality have to have the same tax rates?” he asks. “Would every community have to have an interstate? Would every community have to have a university?”

To evaluate a particular proposal to eliminate incentives, you would have to look at how incentives are defined, says Hobart at the North Carolina Department of Commerce. “Is it truly preferential treatment? Or is just smart public policy?”

Hobart suggests that most wealthy states would gladly quit the baiting game while they are ahead. “Any state that already has a great quality of life and a solid, well-developed infrastructure for transportation and education would have no problem eliminating pure economic development incentive dollars from all states,” he predicts.

Not necessarily, says Kilduff. He asks: How would the United States stop foreign governments from baiting their hooks with incentives?

Rolnick says international trade agreements should include subsidy restrictions. “It is the federal government’s responsibility to negotiate good trade agreements,” he says. “Just as we don’t want trade barriers, we don’t want subsidy wars.” And besides, “most of the subsidy wars are internal,” he contends. “Minneapolis and St. Paul go after each other’s companies, and from the state’s point of view, that’s crazy.”

That logic also applies to neighboring states, says Maryland’s Melissaratos. “This is a pretty small planet, and I hate to see us fighting for jobs with Virginia. We need to face the global competition together.” **RF**

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# No, Thank You

*How economics may  
help slow the onslaught  
of spam e-mail*

BY AARON STEELMAN

If you have an e-mail account, chances are your inbox has been inundated with unsolicited messages — otherwise known as “spam.” According to Brightmail Inc., which develops spam-filtering software, roughly 60 percent of all Internet e-mail is spam. Spammers advertise many different types of products, but among the most common are financial services, adult entertainment, and medical treatments.

Most people quickly identify such messages as spam and delete them, much as they throw away junk mail they receive through the postal service. So why do spammers keep at it, if such a small percentage of their messages actually make it through to their recipients? Because spam is cheap. It costs very little to send an unwanted solicitation, and the marginal expense of adding extra recipients — perhaps thousands of them, in some cases — is negligible. Spam may still “pay,” then, even if only a tiny fraction of people respond.

Given the economics of the spam business, what can be done to stop — or at least slow — its growth? Consider four proposals that have been discussed: one that relies on legislation, one that depends on technological innovation, and two that use economics to stop spammers at their own game.

#### “CAN-SPAM” Law

In the late 1980s, the fax machine was the hot new technology. It helped people send documents much more quickly and cheaply than ever before. It also led to a phenomenon similar to spam: “blast faxing.” Direct-mail companies compiled huge databases of fax numbers and sent out unsolicited advertisements that clogged fax trays like spam clogs inboxes today. By 1991 there was enough opposition to blast faxing that Congress passed a law designed to virtually ban the practice. Some blast faxes still get through, of course, but the number has dwindled. Given the perceived success of this measure, many have urged Congress to take a more active role in stopping spam.

On Jan. 1, 2004, the “CAN-SPAM” law took effect. The law has three major provisions: unsolicited e-mail has to be marked as such, spammers have to include a valid return address, and recipients must be allowed to opt out of receiving similar messages in the future. In March, four of the country’s biggest e-mail and Internet service providers — America Online, EarthLink Inc., Microsoft Corp., and Yahoo Inc. — filed lawsuits against spammers in federal courts in California, Georgia, Virginia, and Washington state.

Anti-spam activists were heartened to see the government take action to help stop the onslaught of spam, but many wanted a tougher law. For instance, some argued that consumers should be able to sign up for a “Do Not E-mail” list, similar to the national “Do Not Call” list recently aimed at telemarketers. Others were skeptical that any sort of legislation would put a serious dent in spam volume because the federal government can police only those spammers operating in the United States. If U.S. laws start to put a pinch on their business, they would have little problem moving overseas.

#### Better Filters

If some of the world’s best information technology minds can design e-mail pro-

grams that even technophobes feel comfortable using, shouldn’t they be able to design ways to stop spam from getting through? That has long been the hope of people who are opposed to both spam and government efforts to curtail its growth.

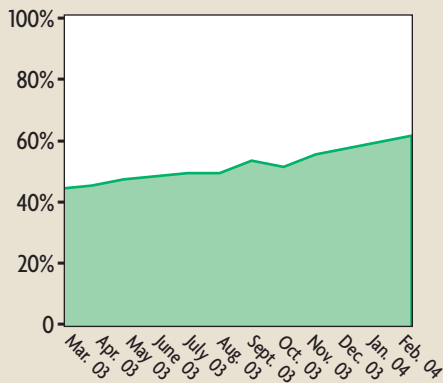
To some extent, e-mail filters have improved. For instance, many users of Hotmail, the free Internet e-mail service offered by Microsoft Corp., have noticed fewer junk e-mail messages making it to their inboxes recently. But the quest for the technological “silver bullet” to stop spam outright has proved elusive. This had led some to search for other methods to stop spam — methods that may involve some government intervention but are less blunt than much of the anti-spam legislation being proposed.

### Spam Categories

Percentage	Category	Description
24%	Products	E-mail offering or advertising general goods and services. <i>Examples: Devices, Investigation Services, Clothing, Makeup.</i>
18%	Financial	E-mail that contains references or offers related to money, the stock market, or other financial “opportunities.” <i>Examples: Investments, Credit Reports, Real Estate, Loans.</i>
14%	Adult	E-mail containing or referring to products or services intended for persons above age 18. <i>Examples: Pornography, Personal Ads, Relationship Advice.</i>
11%	Scams	E-mail recognized as fraudulent, intentionally misleading, or known to result in fraudulent activity on the part of the sender. <i>Examples: Investment Proposals, Pyramid Schemes, Chain Letters.</i>
7%	Health	E-mail offering or advertising health-related products and services. <i>Examples: Pharmaceuticals, Medical Treatments, Herbal Remedies.</i>
6%	Internet	E-mail specifically offering or advertising Internet or computer related goods and services. <i>Examples: Web Hosting, Web Design, Spamware.</i>
6%	Leisure	E-mail offering or advertising prizes, awards, or discounted leisure activities. <i>Examples: Vacation Offers, Online Casinos, Games.</i>
4%	Fraud	E-mail appearing to be from a well-known company, but are not. Also known as “brand spoofing” or “phishing,” these messages are often used to trick users into revealing personal information such as e-mail addresses, financial information, and passwords. <i>Examples: Account Notification, Credit Card Verification, Billing Updates.</i>
2%	Political	E-mail advertising a political candidate’s campaign; offers to donate money to a political party or political cause; offers for products related to a political figure/campaign, etc. <i>Examples: Elections, Donations, Political Parties.</i>
1%	Spiritual	E-mail with information pertaining to religious or spiritual evangelization and/or services. <i>Examples: Psychics, Astrology, Organized Religion, Outreach.</i>
7%	Other	E-mail not pertaining to any other category

SOURCE: Brightmail Logistics and Operations Center

## Percentage of Total Internet E-mail Identified as Spam



SOURCE: Brightmail Logistics and Operations Center

### Make Spammers Pay

If spam is profitable because it is cheap to send, then why not increase the costs, many economists have asked. The most common proposal along these lines is simply to tax all e-mail a small amount, say a penny per message. For most e-mail users this wouldn't amount to much, because they may send only a few dozen messages a week. But for spammers, who send out thousands upon thousands of messages, the costs could quickly become prohibitive. If the idea of taxing non-spammers at even a nominal rate for the offenses of spammers sounds unfair, there is a twist on this idea: Everyone with an e-mail account would get to send, say, 500 or 1,000 messages per year for free and after that the sender is taxed on a per-message rate. This would exempt most individuals from taxation, but still ensnare spammers.

A similar proposal offered by Shyam Sunder, an economist at Yale University, would have spammers pay customers to receive their e-mail messages. "Just as postage on a letter provides a useful disincentive for junk mailers and signals recipients as to the material's importance, so the adoption of a voluntary 'postage' scheme for e-mail — with the recipient receiving the postage — would help the recipients screen out spam," Sunder argues. The system would work as follows. Senders would affix any amount of postage they liked to their message. If the price were

right, the recipient would open it and the value of the postage would be transferred to an account managed by their Internet Service Provider. If not, the recipient would simply delete the message and no postage would be deposited. E-mail from friends and business acquaintances would not require any postage, because presumably these are messages that the recipients usually wish to receive anyway. "This voluntary e-mail postage is a market-based solution for efficiently serving the legitimate interests of both the sender and the recipient," Sunder concludes.

### The "Idiot Tax"

In discussions of spam, senders are always made out to be the bad guys. That's understandable. They are the ones causing the problem, it would seem. Presumably, however, they would stop spamming if nobody responded to their — often ridiculous — solicitations. But enough people do respond to make it profitable; the number is probably small, perhaps only one out of 1,000. Why not tax that person who in effect is creating a negative externality for everyone else? (See this issue's "Jargon Alert" column for a discussion of externalities.) Some have called this proposal an "Idiot Tax." This may seem a bit harsh. But, conceptually, the proposal makes a lot of sense. The problem with this scheme, as with others involving taxation, is enforcement. It's not at all clear how one could put this plan into practice.

### What's the Big Deal, Anyway?

These proposals might sound interesting but one might ask: What's the big deal about spam, anyway? If most people can identify unsolicited e-mail and delete it in a matter of seconds, what's the problem? These are reasonable questions. It may be that efforts to stop spam amount to going after a fly with a hammer. For some people, however, spam is more than a pest — it keeps them from using the Internet and e-mail as much as they otherwise would.

In a recent survey conducted by the Pew Internet & American Life Project, 77 percent of e-mail users said spam was making their online experiences

unpleasant and annoying. Even more telling, 29 percent said they had cut their use of e-mail because of spam. Ferris Research Inc., based in San Francisco, estimates that spam costs businesses \$10 billion annually due to lowered productivity and the additional equipment and labor needed to filter spam. Whether the costs of spam are indeed that high is a matter of debate. But the point is they are not trivial, and this means that efforts to stop spam cannot simply be dismissed as meritless.

Whether those efforts are futile is another matter. It may be that we have no good solution to the problem of spam — that is, a solution that imposes fewer costs than spam itself. If so, we may have to simply wait and allow spam to die a natural death. This, arguably, is what happened with blast faxes. Sure, Congress passed a tough law to stop their proliferation, which, no doubt, helped to slow the practice. But what probably helped their demise even more was the advent of e-mail, which made the fax somewhat antiquated. In short, as technology changed, many would-be blast-faxers may have become spammers instead. The work didn't change, but the medium did.

What will replace e-mail? Who knows. But it may be that, in 10 years, we will look back nostalgically at how we conquered the problem of spam when, in fact, what really happened is that spammers found newer and cheaper ways to reach consumers. **RF**

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# UNWELCOME

## guests

*A global economy grapples with the economic and ecological effects of invasive species*

BY CHARLES GERENA

Every year, peregrine falcons join thousands of other migratory birds that fill the autumn skies over the Eastern Shore of Virginia National Wildlife Refuge. This isolated spot on the southern tip of the Delmarva Peninsula is merely a pit stop on a much longer journey that eventually brings these birds back to their native habitats.

Generally a plant or animal is tied to a single place that has what it needs to live and grow. Sometimes organisms cross natural boundaries like a mountain range or a river to find a new home, but such natural dispersal is usually rare and gradual. This enables ecosystems to adjust to changes.

As trade has crossed the boundaries of land and water, however, people have carried large numbers of plants and animals into new habitats accidentally and intentionally. This has greatly accelerated the rate of dispersal beyond nature's grasp.

Nonnative species are generally benign, and often beneficial, from an economic and ecological standpoint. But a few become invasive and overpower native plants and animals, causing greater harm than good. Beaver-like nutrias from South America destroy productive wetlands in Maryland. An

Asian beetle discovered in Northern Virginia this year led to the removal of 200 ash trees to prevent its spread. Stilt grass, which may have come to America as packing material for Japanese porcelain, overtakes riverbanks and forestland in West Virginia.

Humans are starting to recognize the unintended consequences of their globetrotting: The estimated price tag for the damage caused by invasive species and for controlling their spread is well over \$100 billion annually. However, researchers are only beginning to understand what triggers an invasion. As a result, policymakers still can't assess the risks of invasion in order to make the best investments in prevention and control.

Until researchers can reliably predict invasions and that knowledge is translated into tangible actions, global commerce won't bear the monetary costs that nonnative organisms may impose. According to several economists, invasive species may be the only negative externality of world trade.

"Anti-globalization people tend to point their finger at trade as causing all kinds of problems, but usually those problems can be mitigated in other ways besides reducing trade," says economist Christopher Costello at the University

of California, Santa Barbara. "The damaging [aspect of invasive species] is inherently bundled with trade."

### The Great Migration

Plants and animals have been imported since colonial times. In fact, the first major product of Chesapeake colonists was tobacco grown with imported seed. Currently, nonnative crops like corn and wheat, and nonnative livestock account for nearly all food production.

Organisms have been introduced for non-food uses, too. Insects have been recruited for biological pest control, birds from around the world have served as pets, exotic plants have beautified backyards, and fish have been stocked in lakes for anglers.

Such intentional introductions of nonnative species have been beneficial. Others have been failures. Nutrias were brought to Maryland in the 1940s and 1950s to help the fur industry, but they either escaped or were accidentally released into the wild and started chewing up marshes along the Eastern Shore.

Introductions aren't always obviously good or bad notes David Lodge, a biology professor at the University of Notre Dame. The rewards of introducing a nonnative species can be immediate, while potential damages

ARCHIVE PHOTOGRAPHY



*The potential threat that the northern snakehead posed to native fish prompted Maryland officials to eradicate it in 2002.*

from a species becoming invasive can take years to emerge and are spread among millions of people.

Damage may also be less visible if it occurs underwater or in the wilderness. It's even harder to detect when a plant or animal is introduced accidentally. John Randall, acting director of the Invasive Species Initiative at The Nature Conservancy, says researchers have a better sense of what has been deliberately introduced.

Ballast water is a major pathway for accidental introductions. Ships take on water at a port to compensate for the weight of offloaded cargo, then discharge water at the next port when it loads a new shipment. Floating in the water and inhabiting the sediment on the bottom of ballast tanks are countless microbes and small sea creatures that move from port to port. Some of these nonnative organisms become invasive, such as the infamous zebra mussel that migrated from the Caspian Sea in ballast water and eventually clogged water intake pipes throughout the Great Lakes region.

Global shipping provides other means for nonnative species to hitch a ride. Insects and fungi can stowaway on wood pallets or packaging material, as well as on horticultural and food imports. Even places like West Virginia with no international port can have unwelcome guests because highways and railroad tracks also facilitate interstate and international commerce.

Using these and other pathways, numerous invasive plants and animals have relocated to the Fifth District. One of the biggest invaders is kudzu, an Asian import initially used by Southern farmers in the 1930s to prevent soil erosion. Today, the vine covers an estimated 7 million acres in

the Southeast, smothering native plants and damaging man-made structures like power lines. Two insects also originated in Asia but probably got here accidentally: the hemlock woolly adelgid that affects forests in Maryland, Virginia, North Carolina, and South Carolina; and the emerald ash borer found in landscape trees shipped to Maryland from Michigan.

Other nonnative plants and animals are on the radar screen. They include the lionfish, a venomous tropical fish sighted off the coast of North Carolina, and the Rapa whelk, a Japanese snail that could prey on native oysters in the Chesapeake Bay.

### When Animals Attack

Is the lionfish or the Rapa whelk considered invasive? Generally, scientists differ on where they draw the line between a migration and an invasion.

They agree that a nonnative species is considered invasive when it escapes the bounds of cultivation or captivity and out-competes species that are more desirable, imposing ecological and economic damages that exceed their benefits. This doesn't happen often — about 10 percent of plants and animals live outside of their usual habitat and roughly 10 percent of those survivors are troublemakers. Still, given the many thousands of species that inhabit the earth, that is a significant number.

Researchers have been trying to figure out how invasive species beat the odds, and they have found some clues. It typically takes a large contingent of a nonnative organism to survive in a new environment. Also, the organism needs a new home that is comparable to its original habitat, doesn't have too much competition for food and space, and doesn't experience adverse weather for several years.

It helps if an organism is "weedy," meaning it can tolerate wide variations in its environment. Furthermore, natural forces or human activity can alter an environment in such a way that creates an opening for nonnative species. For instance, stilt grass readily grows in West Virginia along roads cut into forests for logging and coal mining.

Even when a nonnative organism

persists, it usually settles into a niche and doesn't overwhelm other plants and animals. The problems start when predators, pathogens, or other natural barriers fail to limit the expansion of the organism's population.

When these variables trigger an invasion is the \$64,000 question. "Nobody can tell you what the effect of introducing an organism into a novel habitat is yet," says A. Whitman Miller, assistant director of the Marine Invasions Research Program at the Smithsonian Environmental Research Center. "You can introduce the same organism 100 times and it won't take, then on the 101st time it will."

The ecological damage of invasive species also is an open question, but researchers know enough to be concerned about the planet's future biodiversity. Henry Lee II, a research ecologist with the U.S. Environmental Protection Agency, says that invasive species threaten to homogenize ecosystems. "It's like all of the restaurants turning into McDonalds."

One would think that the arrival of a new species broadens biodiversity. That's true in the short run, but in the long run invasive plants and animals can push native species into the margins of an ecosystem. In fact, invasive organisms are thought to be a leading cause of species endangerment and extinction.

In contrast, some researchers have asserted that the spread and dominance of invasive species is part of the process of natural selection, where only the strongest survive. Lee concurs that many invaders are organisms that have managed to survive polluted environments and are colonizers.

However, the outcome of this process may be unacceptable. "We'll get harder species [as a result of the spread of invasive plants and animals], but they're not also ones that we want," explains Lee. He cites the Norway rat, a scourge of city dwellers across Asia, Europe, and North America.

The widening presence of invasive species could have other long-term consequences. Less redundancy of natural resources could weaken ecosystems to outside shocks. In addition,

there could be less fodder for the discovery of new products. The Pacific yew, a tree native to the northwestern United States, supplies the active ingredient in a chemotherapy drug.

Invasive species also have economic consequences in the short term. They damage billions of dollars in crops, timber, and other natural resources. They can also depress property values. There are examples of ranches in the West and Midwest that have lost value because of leafy spurge, which overtakes grazing land used by livestock, while the loud calls of coqui frogs in Hawaii have been blamed for declining property values and tourism.

### **Eradicating Nutrias without Killing the Golden Goose**

The economic and ecological consequences of invasive species can be significant. Yet globalization has made it nearly impossible to prevent every plant and animal from escaping its habitat. The challenge is to manage the impact of invasive species without choking off trade.

Do we know enough to do this? Ann Bartuska, an ecologist and deputy chief of research and development at the USDA Forest Service, thinks there is sufficient information to act. "We won't be 100 percent certain about the outcome, but we can monitor the effects of regulations and adjust them when necessary."

Policymakers can do two things — prevent future invasions of destructive organisms and control existing pests. Since there is uncertainty about which nonnative species pose the greatest threat, they have favored control measures says Jason Shogren, an economist specializing in natural resource conservation and management at the University of Wyoming. Risk-averse officials prefer "to control the things they already see than prevent things that might not be there."

Such caution avoids investing in preventive measures whose cost effectiveness would be unclear. But it can backfire, says Shogren. By only combating existing invasive species, "you end up with greater probabilities of invasions" in the future. Additionally, the money spent on control efforts represents resources that

would have been used for something else, plus future invasions will require additional trade-offs.

Ecologists strongly believe that preventing an invasion is better than managing the aftermath. Once a population of invasive species starts expanding, its exponential growth makes eradication exponentially difficult.

A variety of prevention tools are currently employed, including regulation of plant and animal imports and fumigation of wood packaging material entering the country. The U.S. Coast Guard is considering mandating ships to use some form of ballast water management. Also, federal legislation is pending that would require treatment of ballast water, establish a screening program, and require the creation of a monitoring and early detection plan.

Federal officials could choose to follow Australia, New Zealand, and South Africa in creating a "white list" of plants and animals evaluated and approved for importation. Organisms that haven't been screened would be an assumed threat and kept out of the country. While the horticulture and pet trades have objected to this approach, the opposite approach of assuming that an organism is innocent until proven guilty has one big disadvantage. You have to wait until an invasion has occurred before reacting.

Anti-globalization advocates and others believe that the threat of invasive species justifies banning or restricting trade with other countries. Economist Chris Costello counters that freer trade may actually mitigate some of the damaging effects of invasions.

"... Although reduced protectionism raises the volume of trade and hence the platform for biological invasions, it also changes the production mix of participating countries..." he noted in a August 2001 paper co-authored with Carol McAusland. This could make these countries less susceptible to invasive species. "... For countries that initially import agricultural products, reduced tariffs will lead to a decrease in the volume of agricultural output. This reduces both the quantity of crops available for damage by exotic pests and the amount of land that is dis-

turbed and thereby aiding the propagation of exotic species."

Tariffs could be selectively applied to countries with species that are the most likely to cause harm in the United States. However, such a system would have to be based on sound science and not used as a form of disguised protectionism, notes Shogren.

Costello suggests imposing liability rules on global transactions. A contract could hold a seller responsible for any invasive species that is found in the buyer's country that could only have resulted from the transaction. The seller could post a bond to cover that liability and get it back after 10 years of no invasions.

The result is that sellers would have an incentive to reduce the risk of invasions. In addition, the costs of invasive species management would eventually be reflected in the price of goods from exporting countries.

Tariffs or liability rules would impose costs on global trade. Such costs might disproportionately affect developing countries that want to export, but they also stand to benefit the most since they are less equipped than rich countries to deal with the damage wrought by inadvertently imported plants and animals. **RF**

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# No Big More Four?

*Small cigarette manufacturers  
grab market share*

BY ROBERT W. KIDD

Philip Morris USA Inc., R.J. Reynolds Tobacco Co., Brown & Williamson Tobacco Corp., and Lorillard Tobacco Co., popularly called “The Big Four,” have held a commanding position among domestic cigarette manufacturers throughout the United States for the last 40 years. By 1997, the Big Four’s combined market share hit a historical peak of 97.7 percent, according to industry analyst John C. Maxwell, Jr. in his quarterly publication *The Maxwell Report*. The United States Department of Agriculture (USDA) described the industry then as “hourglass shaped.” Thousands of tobacco farmers supplied only 13 cigarette manufacturing establishments, which then shipped the manufactured product to hundreds of thousands of wholesale and retail establishments.

In the last five years, however, the tobacco industry has lost its hourglass figure as start-up competitors — includ-

ing a few in the Fifth District — have entered the cigarette manufacturing market. And as the Big Four lose market share, state budgets aren’t getting as much money as was originally estimated through tobacco settlements.

Susan Craven, president of the Council of Independent Tobacco Manufacturers of America (CITMA), observes that “there is a flurry of start-up activity” in the cigarette manufacturing industry. Some reports, for instance, estimate that there might currently be more than 100 startups, including those in the Fifth District such as Poison Inc. in Castle Hayne, N.C.; S&M Brands in Keysville, Va.; and Star Scientific in Chester, Va. Small manufacturers, which were relegated to only 2.3 percent of the domestic market in 1997, now account for more than 15 percent, according to *The Maxwell Report*.

Why the sudden emergence of these small manufacturers? The Big Four all point to the Master Settlement Agreement (MSA) to help explain their accelerating loss of market share. The MSA was a record-setting settlement between nearly all the states and the Big Four in November 1998. The agreement “absolutely and unconditionally” releases the participating companies from all current and future suits by participating jurisdictions in tobacco-related health-care claims. In return, the Big Four agreed to make payments to the participating states, projected at the time of settlement to be worth about \$204.5 billion through year 2025.

Although the Big Four freely bargained for the terms of the MSA, they blame the payment obligations for higher prices. The major cigarette companies have increased their prices more than \$1.10 per pack since 1998, effectively



doubling the average price of cigarettes in five years, according to a 2001 Presidential Commission Report, *Tobacco at a Crossroad: A Call for Action*.

The steep increase in cigarette prices opened the door for smaller manufacturers with lower cost structures to grab market share. In 2001, Maxwell observed that “with ease of entry into the market being very reasonable many new companies are being formed. For only a few hundred thousand dollars, a secondhand maker can be purchased” and quickly become profitable. In an effort to explain their sharp drop in market share to stockholders, Lorillard estimated in its 2002 annual report that smaller competitors were pricing their brands as much as 60 percent below the major cigarette manufacturers.

However, skeptical industry observers believe the Big Four’s price hikes were much greater than required to meet their payment obligations under the MSA. For instance, the Presidential Commission Report states that only “roughly half” of the increase is to cover the costs associated with the MSA.

### A Shrinking Market

According to *The Maxwell Report*, domestic cigarette shipments totaled about 403 billion in 2003, down 35 percent from 1981, when domestic shipments reached a historic high of 636.5 billion.

In the past year, the Big Four took significant steps to regain U.S. market share. On October 27, 2003, R.J. Reynolds announced its agreement to acquire Brown & Williamson (the U.S. cigarette and tobacco operations of British American Tobacco Company) and create a new holding company, Reynolds American Inc. The two companies have a combined 32 percent of the domestic market share. If U.S. and European regulators approve the acquisition, the new Reynolds American would become the second largest manufacturer behind Philip Morris, which has about 50 percent market. (Lorillard has about 10 percent of market share.) According to R.J. Reynolds, the deal is expected to improve efficiency and generate more than \$500 million in annualized savings.

Rather than actively pursuing a business merger, Lorillard attempted to strengthen demand through promotional initiatives and by altering its pricing schemes. The company halted its wholesale price increases in March 2002, and in May 2003, lowered the list price of its discount brand, Maverick, by \$1.10 per pack of 20 cigarettes. However, because of higher promotional expenses and lower sales volume, Lorillard’s revenues and net income decreased in 2003.

### Tough Times for Local Farmers, State Governments

Since MSA payments to states can be adjusted for changes in the Big Four’s domestic sales and market share, state governments aren’t receiving the money they had anticipated. For example, RJR’s payments went from \$2.5 billion in 2002 to \$1.8 billion, a drop of 28 percent. (Each state’s allocation of the MSA was initially based on its smoking-related health-care costs. About 9 percent of total disbursements are allocated for Fifth District states, while populous states like New York and California each receive more than 10 percent of disbursements.)

With smaller MSA payments, states are being forced to revise their budgets. For instance, Virginia’s Department of Planning and Budget recommended lowering the appropriation for the Tobacco Indemnification and Community Revitalization Fund and the Virginia Tobacco Settlement Fund. Recommendations included reductions of \$3.8 million and \$2.9 million for 2005 and 2006 respectively.

Not only will state governments be affected, so will local economies throughout the Fifth District. Philip Morris and Lorillard both have their headquarters, manufacturing, and storage facilities in North Carolina and Virginia. Although Brown & Williamson is currently headquartered in Kentucky, the facility will close and the new company will be in Winston-Salem, N.C., home of R.J. Reynolds. The proposed acquisition will result in tobacco processing and cigarette manufacturing redundancies that will be eliminated to achieve the expected cost synergies. For instance, a tobacco-pro-

## Less Demand Means Less Production

Fifth District State	2000 Tobacco Production (1,000 POUNDS)	2002 Tobacco Production (1,000 POUNDS)
MD	8,265	2,380
NC	406,500	357,350
SC	81,260	59,475
VA	56,613	66,180
WV	1,560	1,950
Fifth District Total	554,198	487,335
U.S. Total	1,052,999	889,632

cessing plant in Chester, Va., which employs 132 people, is expected to be closed.

Because demand for cigarettes is dropping, so is U.S. tobacco production. According to the USDA, total U.S. tobacco production fell from 1.1 billion pounds in 2000 to 890 million pounds in 2002. During this same time, production in the Fifth District fell from 554 million pounds to 487 million pounds. However, the Fifth District’s share of U.S. production slightly increased from 52 percent to 55 percent, indicating that production is decreasing at a slower rate in the Fifth District than in other regions.

According to a 2000 USDA report, the “loss of tobacco-related income and jobs will have little noticeable long-term effect on the U.S. economy as a whole, but there will be difficult transitions for many farmers, workers, businesses, and communities.” Since tobacco farming and manufacturing is concentrated in the Fifth District, and the Big Four seems likely to become the Big Three, the region is particularly vulnerable to competitive dynamics and will continue to face challenges resulting from these anticipated transitions. **RF**

### READINGS

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Visit [www.rich.frb.org/pubs/region focus](http://www.rich.frb.org/pubs/region%20focus) for links to relevant Web sites.

# James Buchanan

*Editor's Note: This is an abbreviated version of RF's conversation with James Buchanan. For the full interview, go to our Web site: [www.rich.frb.org/pubs/regionfocus](http://www.rich.frb.org/pubs/regionfocus).*

Economists have long treated people in the marketplace as rational actors pursuing their own self-interest. But until the mid-20th century it was common to view people in government in a very different light — as selfless public servants. Such a distinction, argued James Buchanan, was unnecessary and incorrect. People in the public sector are self-interested just like everybody else. Using this basic assumption, Buchanan and others were able to apply the tools of economics to politics. This line of inquiry soon become known as “public choice” and spread rapidly throughout the United States, Europe, and Asia.

Most of Buchanan's academic career has been spent in Virginia: first at the University of Virginia in Charlottesville, then at the Virginia Polytechnic Institute in Blacksburg, and later at George Mason University in Fairfax. As a result, he and his colleagues are often referred to as members of the “Virginia School.” In the early 1960s, Buchanan was one of the founders of the Public Choice Society (PCS). The PCS holds annual meetings where papers are presented and discussed. It is also loosely affiliated with the academic journal *Public Choice*, which was long edited by Gordon Tullock, one of Buchanan's most frequent collaborators.

Buchanan was awarded the Nobel Prize in Economics in 1986. Although he is now in his mid-80s, he still pursues an active research agenda and continues to lecture regularly. Aaron Steelman interviewed Buchanan at George Mason University on Feb. 2, 2004.

**RF: Public choice is often described as “politics without romance.” Could you please describe what this phrase means?**

**Buchanan:** I actually used that as the title of a lecture I gave at the Institute for Advanced Studies in Vienna in 1978. I think that if you had to boil public choice down to three words, that's a pretty good description, but on the other hand it's not complete either. The phrase captures the idea that public choice does not look at politics through rose-colored glasses — it is skeptical that the actions of people in politics are necessarily focused on promoting the public interest. Instead, it takes a more hard-nosed, realistic view of government. But what it leaves out is that we must have a legitimizing argument that politics is worthwhile — that politics is an exchange in the sense that we give up something but we also get back something.

**RF: Public choice is now a recognized sub-discipline within economics. But when you first started doing work in public choice, how was that research greeted by the profession?**

**Buchanan:** It was certainly outside the mainstream. I think many of my colleagues at the University of Virginia didn't particularly like using economics to analyze politics. But I have to say that when Gordon Tullock and I published *The Calculus of Consent* in 1962, the book received quite warm reviews by both economists and political scientists. And, between the two groups, I think the book's impact was greater among political scientists in the following respect: They had further to go. Economists were familiar with the tools we were using and the basic assumptions about rationality that we were making, but to many political scientists, these ideas were rather novel. Also, I think you can't leave personalities out of this either. Bill Riker was very active in introducing public choice and positive political economy to other political scientists and to his students at the University of Rochester. The fact that he came onboard very early was extremely important.

**RF: People working in the public choice tradition are often referred to as members of the “Virginia School.” Could you please explain how and when that term came into being?**

**Buchanan:** Mancur Olson came up with that term. He was the one who first characterized us as the Virginia School—I don't know exactly when but it was probably in the mid-1970s, after we had already moved from Charlottesville to Blacksburg. It was fine by us. So we went with it, as did other people. But we didn't coin the term ourselves.

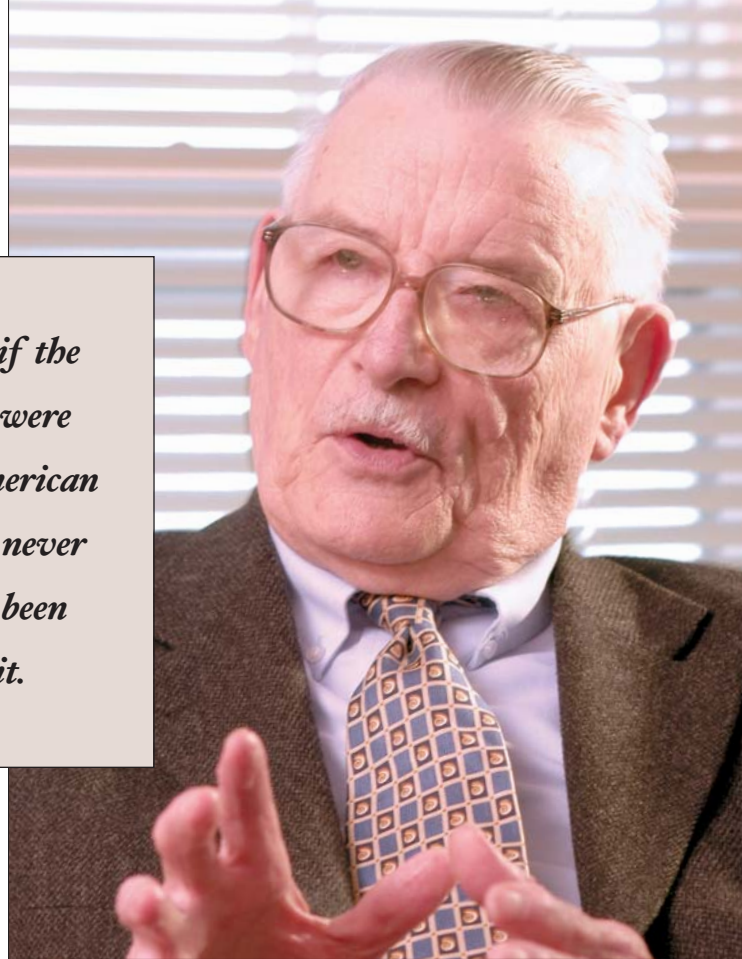
**RF:** Richard Wagner, who was one of your students at the University of Virginia and has been your colleague at both the Virginia Polytechnic Institute (VPI) and George Mason University, has written that VPI was the most fertile place for public choice scholarship. Do you agree?

**Buchanan:** I think you have to look at this on different dimensions. The public choice program originated at the University of Virginia from 1956 to 1968. Warren Nutter and I set up the Thomas Jefferson Center for Studies in Political Economy. The research program at the Center was broader in scope—it wasn't confined to public choice per se. That was a very productive and exciting time. We had a great group of people there: Ronald Coase, Leland Yeager, Tullock, and Nutter were all on the faculty. And, without question, we had the best graduate students I have ever worked with—really top-notch kids.

We were never that productive in terms of producing good graduate students at VPI. But the public choice program became more developed there. We enjoyed tremendous support from the university administration, which in some ways had been lacking at Virginia. And Tullock, who had left Virginia a few years before I did, came to VPI. He and I started collaborating on a lot of projects, and we set up the Center for the Study of Public Choice along with Charlie Goetz.

One of the things that I think was really important about VPI was the unique atmosphere and geography: We were all located close to each other and had constant interaction. Plus, at VPI there was a young man named Winston Bush whose enthusiasm and intellect really inspired a lot of interesting projects, such as our work on the political economy of anarchy. Winston was a great mathematical economist, who unfortunately died

*I think that if the Nobel Prize were decided by American economists, I never would have been awarded it.*



quite young in a car accident, but for a few years was a real live wire who really kept things going. We also had a great visiting fellow program. It wasn't unusual for us to have eight or nine visitors at one time. So, in the sense of sheer output, I think Wagner is right: VPI was the most productive place.

**RF:** At last year's meetings of the Public Choice Society in Nashville, I was struck by the large percentage of participants from continental Europe. Did public choice take off internationally during the period you were at VPI?

**Buchanan:** Yes. Many of the visiting fellows who came to Blacksburg were from Europe or Asia. It was also around this time that they set up their own organizations: the European Public Choice Society and the Japanese Public Choice Society. In some ways, the Europeans were more eager to work on constitutional political economy issues than were the Americans. In fact, I think that if the Nobel Prize were decided by American economists, I never would have been awarded it. My work has been much more warmly received in Europe than in the United States.

**RF:** Could you describe how Frank Knight and Knut Wicksell have affected your thinking and career?

**Buchanan:** They were certainly the two most important influences on my work. Knight's influence was more as a role model than as someone whose work I tried to build on, although he certainly made very important contributions of his own. Knight and I had very similar backgrounds: He was a farm boy from central Illinois who spent some time in school in Tennessee and who ultimately rejected the religious milieu in which he had been raised. I really liked his attitude toward the world and his willingness to question anything and anybody. He had a real passion for ideas.

Wicksell, on the other hand, was more of an accidental discovery. I was going through the stacks of the old University of Chicago library after I had finished my dissertation and I ran across his dissertation, which had never been translated from the very difficult German. In that

book, he was saying things that I felt inside me but I never dared to say. He really reinforced a lot of things that were sort of inchoate in my thinking. The central idea I got from Wicksell is that we can't improve politics by simply expecting politicians to do good. There are no interests other than those of individuals,

and politicians will pursue their own interests just like anyone else, by trying to get re-elected, advance their careers, and so on. This means that economists ought to stop acting as if they were advising benevolent despots. If you want to improve government, you must try to improve the rules of the game rather than the individual players.

**RF:** Looking back over the past 40 years, what do you think are some of the most important contributions that public choice theorists have made?

**Buchanan:** I think that the most important contribution, by far, is to simply change the way that people look at politics. I often have been asked if public choice had a causal influence in the decline of confidence in politics and politicians compared to, say, 40 years ago. My answer is: yes and no. Once governments began, in the 1960s and 1970s,

to overstep their bounds and take on projects that ultimately proved to be great failures—and this is true not only in the socialist states but also in the democratic states of the West—public choice came along and gave people a systematic way to analyze and explain these failures. So public choice wasn't the cause of distrust in government but it did help us understand the deficiencies of the political process. It changed the way that we look at collective action.

**RF:** Many commentators frequently decry voter turnout rates of, say, 50 percent as “too low.” But, actually, it's surprising that this many people go to the polls because the chance of being instrumental is virtually zero. Does public choice have a good explanation for why people vote?

**Buchanan:** That is one of the central puzzles we have faced since Anthony Downs and Gordon Tullock raised the question in the 1950s. From a purely rational standpoint, people don't have much of an incentive to vote but, as you said, about half of them do. Why? I think this gets us into social psychology. People may vote simply as a means of expression rather than as a way of influencing the outcome of an election. They also may feel some sort of duty is involved. But, given the framework that economists would traditionally look at this sort of question, it's hard to come up with a satisfactory answer.

**RF:** Many people who have done important academic work in the public choice tradition have subsequently gone on to hold high-level appointed offices in the federal government. Is there something ironic about this, in your view? Or is this training useful?

**Buchanan:** I'm not sure that it helps much. If you're on the inside, maybe you don't want to be trained in public choice. For instance, if you are going into the bureaucracy, perhaps you wouldn't want to have read the public choice literature on bureaucracy. I certainly wouldn't get excited about more public choice people filling government positions. Absorbing and doing are quite different things in this context. I think that there is little doubt that public choice has been enriched by people who have used government experience to inform their academic work. But I don't know that public choice has done much to influence the way that government officials actually behave.

**RF:** It is widely believed that public choice theorists are more suspicious of government

*If you want to improve government, you must try to improve the rules of the game rather than the individual players.*

**action and more friendly toward market solutions than economists generally. Do you think this is accurate?**

**Buchanan:** Yes, to some degree. But a continuing critique of public choice is that the whole research program is ideologically driven. I think that is completely wrong. It all goes back to the first question you asked about public choice being described as “politics without romance.” If you look at politics in a realistic way, no matter your underlying ideological preferences, you are going to come out more negative than you started. There are many public choice people whose normative views are not at all market-oriented. But, as scientists, they reach conclusions that may not particularly support those normative preferences.

**RF: What do you think of the various “heterodox” schools of economics that are challenging the basic assumptions of neoclassical economics?**

**Buchanan:** For more than 20 years, I have predicted that you would see more collaboration between psychologists and economists. That prediction is finally becoming realized with the widespread emergence of “behavioral economics,” as characterized by the work of Dick Thaler, Bob Frank, and others. They pick out particular anomalies and use them to try to chip away at the neoclassical edifice. Many of those anomalies are interesting, but they are just that— anomalies and thus not very generalizable. I don’t think that behavioral economics is a spent force yet, but I don’t know how much further they can go with it, because what they have to offer are critiques rather than an alternative program of inquiry. Still, I’m sympathetic to the idea that economists have pushed this homo-economicus model too much.

**RF: In a series of articles on what he calls “rational irrationality,” Bryan Caplan has tried to reorient public choice to focus more on voter-driven political failure and less on the perverse influence of special interests. What do you think of this line of inquiry?**

**Buchanan:** I don’t know Caplan’s work very well. But I think there is something to what he is trying to argue. For instance, I think there is the following bifurcation in the choice process: We may want to do things collectively that we are not willing to sustain privately. It may be true that the welfare state represents what people actually want. They may want the government to take care of everybody, and so they vote for can-

didates who run on such a platform, including the higher tax rates needed to pay for it. At the same time, given those high levels of taxation, they may decide to quit working, like the Swedes, and spend time at their summer home. So even though they voted for the whole program— on both the spending and taxation sides— they are not willing to support it through their private actions.

**RF: What, in your view, is the proper role of government?**

**Buchanan:** Well, I think the state should fund the classic public goods and you could probably do that with government spending at a level of roughly 15 percent of gross domestic product (GDP). But I’m not willing to say that that is all government should do. As long as government grows within a proper set or rules, then I would rather not put limits on its size. I am reluctant to say, for instance, that having public spending at 40 percent of GDP— which is about what we have now— is necessarily wrong.

**RF: Why do so many voters hold views that are at odds with mainstream economic theory?**

**Buchanan:** Part of the blame falls on economists. As scientists, we are incredibly attracted to grapple with interesting puzzles that may have little immediate practical application. And, indeed, we are rewarded for doing that through academic promotions and greater prestige within the profession. So that type of work has a lot of private value to economists. Contrast that with making basic economic truths— such as the benefits of free trade— accessible to a wider audience. Economists gain very little from doing that— for instance, it probably won’t get you tenure. But there is an enormous public value associated with having an economically literate society. We need more Bastiats who are willing to talk to the public. As it stands, economists are losing the battle.

## James Buchanan

### ► Present Position

Distinguished Professor Emeritus of Economics, George Mason University, and Distinguished Professor Emeritus of Economics and Philosophy, Virginia Polytechnic Institute and State University

### ► Previous Faculty Appointments

Virginia Polytechnic Institute and State University (1969-1983); University of California at Los Angeles (1968-1969); University of Virginia (1956-1968); Florida State University (1951-1956); University of Tennessee (1948-1951)

### ► Education

B.S., Middle Tennessee State College (1940); M.A., University of Tennessee (1941); Ph.D., University of Chicago (1948)

### ► Selected Publications

Author or co-author of more than 20 books, including *The Calculus of Consent: Logical Foundations of Constitutional Democracy* (1962); *Cost and Choice: An Inquiry in Economic Theory* (1969); *The Limits of Liberty: Between Anarchy and Leviathan* (1975); and *Better than Plowing: And Other Personal Essays* (1992)

### ► Awards and Offices

Winner, 1986 Nobel Memorial Prize in Economic Sciences; Fellow, American Academy of Arts and Sciences; Former President of the Southern Economic Association, Western Economic Association, Mont Pelerin Society, and Public Choice Society



RF

# “Sold, American!”

**How auction markets improved the tobacco trade and why they are becoming obsolete**

BY CHARLES GERENA

During the 1920s, the above phrase would frequently end the rhythmic, almost hypnotic chant of auctioneer L.A. “Speed” Riggs, indicating that American Tobacco Co. had won its bid for a farmer’s tobacco. Riggs helped growers get a good price for their crops in piles at the Liberty Warehouse in Durham, N.C. They needed all the help they could get.

In general, the tobacco plant is a tough agricultural good to appraise. Environmental conditions and cultivation techniques influence the color, texture, and size of the plant’s leaves; then the curing of leaves after they are harvested creates additional variations. Leaves picked from different positions of a stalk have unique characteristics as well. Even though grading systems attempt to capture these variables, determining the sale price of tobacco is still more art than science.

or quantity of the good cannot be substituted for another equal part or quantity. “Each lot of tobacco stands on its own,” says Prince. In contrast, “a bushel of wheat is a bushel of wheat.” This is why tobacco hasn’t been traded along with wheat and other agricultural products on a commodity exchange like the Chicago Board of Trade.

Instead, buyers and sellers have struggled for hundreds of years to create transparent, centralized markets where both sides have enough information to reach a mutually agreeable price. Until four years ago, tobacco auctions in Maryland, Virginia, and the Carolinas provided those markets. Large warehouses would be filled with the smell of the golden leaf and the singsong cries of auctioneers like Speed Riggs. They created a dynamic environment that benefited both buyers and sellers.

But in these uncertain times, a growing number of tobacco farmers and manufacturers like Philip Morris are trading the advantages of auction markets for the greater certainty of contracts. In a sense, tobacco marketing has come full circle — buyers are dealing directly with sellers as they once did hundreds of years ago.

## The Golden Leaf Rush

Tobacco marketing in America started in the 1600s with frustrated colonists trying to survive in the Tidewater region of Virginia and southern Maryland. Colonists had access to Atlantic trade routes by using navigable rivers like the James to get to the Chesapeake Bay, but it didn’t help them economically because they had a hard time producing anything to trade.



*A typical tobacco auction at the turn of the century brought buyers and sellers together in Richmond, Va.*

“The buyers look at every lot of tobacco,” says Eldred Prince Jr., a history professor at Coastal Carolina University who has studied tobacco farming in South Carolina. “Some of them will smell it as well as look at it.”

Because many variables influence its value, tobacco isn’t fungible — one part

Then John Rolfe, the infamous husband of Pocahontas, hit pay dirt in Jamestown. The tobacco seeds that he brought from the Caribbean thrived in Virginia soil, producing leaves with a fragrant aroma when snuffed and a sweet taste when chewed. The British loved Rolfe's product and, by 1617, colonists harvested enough tobacco to export.

In the coming years, demand for America's first commercial export grew, becoming so strong that farmers devoted most of their land to tobacco rather than food. Exports from the colonies to England expanded from 20,000 pounds in 1617 to more than 40 million pounds in 1727. Production eventually expanded geographically as well, venturing westward in Virginia and southward into North Carolina and South Carolina as tobacco became more valuable than cotton or other crops and Tidewater land became depleted of nutrients.

While some growers sold their tobacco to traveling merchants, most brought their crops to market. Water was the primary means of transportation. Plantations near rivers and their tributaries had their own docks so that growers could ship tobacco leaves in heavy barrels called hogsheads, while farmers without water access rolled hogsheads over land to the nearest port or navigable body of water. In time, port towns throughout the Fifth District profited from the tobacco trade, including Alexandria, Va. and Port Tobacco, Md. on the Potomac River; Richmond and Petersburg on the James River; and Port Roanoke (Edenton), N.C. and Charleston, S.C. near the coast.

Once the farmer got his tobacco to market, a merchant would weigh and examine each hogshead, then compensate the farmer for his goods. The payment would be in the form of bartered goods or tobacco receipts, which could be used to pay wages, settle debts, and make purchases. In this way, tobacco became a form of currency.

Tobacco was so lucrative that it was hard to prevent overproduction. Periodic gluts in the tobacco market occurred, causing prices to fall and incidents of fraud to rise.

## Keeping Auctions Alive

Only two warehouses in Maryland continue holding auctions for air-cured tobacco as hundreds of farmers choose to sign contracts with buyers or take advantage of a state-sponsored buyout program. Other states in the tobacco belt have more warehouses in operation than Maryland, but even their ranks are dwindling. This has prompted two farmers' cooperatives and a nonprofit organization to create alternatives to the warehouse-based auction system.

A farmer can get five cents or more per pound for selling his tobacco crop under contract, but what happens if a leaf dealer closes its receiving station before the harvest is over or rejects a farmer's crop? "If you disagree with [a buyer's decision] what opportunity do you have?" says Arnold Hamm, assistant general manager of the Flue-Cured Tobacco Cooperative Stabilization Corp. "Farmers are fearful that they will have nowhere to market their tobacco."

Only a few growers sell a portion of their tobacco directly to buyers and some through the auction system in order to keep their options open and maintain some bargaining power. But most use contracts to secure a commitment for 100 percent of their crops.

That's why the Flue-Cured Tobacco Cooperative created its own auction system in 2002 after testing the concept in 2001. The system consists of 14 marketing centers located in leased space at warehouses in Georgia, North Carolina, South Carolina, and Virginia. The Burley Tobacco Growers Cooperative

Association, which has members in West Virginia and four other states, opened its own marketing center in a former tobacco warehouse in Cynthiana, Ky. in 2002.

In western North Carolina, the state's Rural Economic Development Center has maintained an auction market for burley tobacco in the region since 2001. The center uses tobacco settlement funds to lease two warehouses in Asheville.

In each case, auctions are conducted as they were traditionally done in tobacco warehouses, with one important difference. Since the center's owners receive outside funding, they don't have to levy warehouse charges, auction fees or sales commissions.

Some warehouse owners have complained that this arrangement has given marketing centers an unfair advantage that has accelerated the demise of the auction system. In fact, several warehouse owners sued the Flue-Cured Tobacco Cooperative several years ago for violating antitrust laws. According to Hamm, business courts ruled in the co-op's favor twice and an appeal also went its way. "As a cooperative, we can use a tobacco farmer's [membership fees] to assist them in the marketing of their product."

The jury is still out on whether marketing centers will save the tobacco auction system. The Flue-Cured Tobacco Cooperative's centers have handled 5 million to 6 million pounds of tobacco each year, but that is a fraction of the total volume sold through auctions and contracts.

—CHARLES GERENA

Merchants usually loaded their purchases onto ships sight unseen. And when they did inspect a hogshead, it wasn't easy. "They would open it and try to feel down [but] there were always problems with farmers packing bad stuff at the bottom," describes James Crawford, an adjunct geography professor at Virginia Tech who has studied the Old Dominion's tobacco culture. Some planters even loaded hogsheads with bricks and rocks to increase their weight.

In 1619, Virginia lawmakers responded to these problems by passing the first laws to inspect tobacco before it was sold. If a warehouse manager found anything

awry with a hogshead, the entire contents of the barrel could be confiscated and burned. Additional laws were passed throughout the 17th century to deal with the quality issue, as well as to control the burgeoning tobacco supply. Grading standards were created, as well as inspection stations, to enforce those standards.

Still, fraud persisted and the English continued to complain about their tobacco imports from the colonies. This forced merchants to discount the price they paid to reflect their uncertainty about quality.

In 1730, Virginia established an inspection system where hogsheads of



*Inspectors appraise a bale of tobacco in a warehouse in the Danville, Va., area.*

tobacco had to be examined and graded by bonded inspectors at legally established warehouses before they were shipped to England. Once it was clear that the system provided a quality advantage for Virginia tobacco, Maryland followed suit in 1747 and the Carolinas in 1754.

In addition to providing locations where tobacco could be objectively evaluated, warehouses also became the centralized markets for trading the crop. Merchants and growers continued to directly trade with each other, making private deals while tobacco was being inspected. They also interacted in markets outside of the warehouse and at plantations.

### **Markets Discover the Auctioneer's Cry**

In the early 1800s, the auction system used by the French became a popular way to trade tobacco in the Southeast.

"Some planters brought their crops to market and independently sought ... the most appealing price," wrote Billy Yeargin, a Raleigh, N.C. tobacco historian, in his master's thesis for Duke University. "Some cried the bids for their own tobacco or employed someone else, perhaps the inspector, to do the job. The intent was to establish competition among purchasers." By the 1820s, private auctioneers stepped forward to help growers get the best price for their tobacco while guaranteeing the quality of tobacco.

Just before the Civil War, businessmen in Danville, Va., opened a full-time

auction market whereby tobacco leaves were stacked into loose piles on the warehouse floor rather than sold in hogsheads. This method, which had been experimented with in Richmond and elsewhere, allowed buyers to walk along the piles and closely inspect the leaves before making a bid.

This "loose-leaf" auction system spread throughout Virginia and the Carolinas. It took longer to take hold in Maryland, according to historian Eldred Prince Jr. "Marketing was different in different tobacco regions. In the tobacco counties of southern Maryland, buyers would often go from farm to farm buying leaf."

Overall, auction markets lowered transaction costs and increased transparency. Buyers could view crops from a variety of growers in one place, and they could use the grades assigned by inspectors and their own judgment to make appropriate bids based on their quality. Farmers also benefited because they had access to a broader range of offers.

But problems with the auction system grew as tobacco manufacturers began producing cigars, pipe tobacco, and cigarettes in addition to snuff and chewing tobacco. Each product required tobacco with specific qualities, yet there was no uniform method of describing these specifications.

The grading process used by manufacturers to determine prices varied from company to company and it wasn't public knowledge. Thus, farmers still couldn't judge whether they were getting a fair deal out of the auction process. In fact, they suspected warehouse operators and tobacco buyers of stuffing their wallets with profits while leaving them struggling to make ends meet.

To gain more control over pricing, farmers tried to collectively deal with buyers outside of the auction system several times during the early 20th century. One such effort was an organization formed by farmers called the Tri-State Tobacco Growers' Cooperative.

By 1922, the cooperative managed to control half of the tobacco produced in North Carolina, South Carolina, and Virginia. According to Prince, R.J.

Reynolds bought tobacco from the cooperative, but the two largest buyers — American Tobacco and Imperial Tobacco of Great Britain — refused to deal with it.

These buyers and some warehouse owners chose to encourage defections from the cooperative, using accusations of communism, racist propaganda, and other tactics. "They dipped their arrows in venom," says Prince. The organization collapsed after five years.

Other efforts failed as well, as Pete Daniel describes in his book, *Breaking the Land: The Transformation of Cotton, Tobacco, and Rice Cultures Since 1880*. "In these reform efforts growers found traditional approaches to their problems, but attempts to implement them failed, due in part to their lack of organization and dedication but also due to concerted attacks from the interests that profited most... There was, in addition, a strong tradition of rural independence."

In recognition of the need for standards in tobacco auction markets, Congress enacted the Tobacco Inspection Act in 1935, which established the framework for development of official grading standards. The legislation also authorized the Secretary of Agriculture to designate auction markets where growers would receive mandatory inspection of their crops to determine their grade and type.

### **Auctions Circumvented in the Name of Certainty**

Today, warehouse floors no longer have row upon row of tobacco leaves waiting for inspection. Many facilities have closed due to lack of volume.

Richard Harris, vice president of sales and operations for DIMON Inc., a Danville, Va.-based leaf dealer, gives his tally. In Virginia, North Carolina, South Carolina and two other states where flue-cured tobacco is produced, the number of warehouses shrank from 150 to 38 over the last four years. (Maryland farmers market a special type of air-cured tobacco.)

Some blame the reduced demand for American-grown tobacco among



domestic and overseas tobacco manufacturers, who are increasingly buying from cheaper foreign producers. This has been reflected in reductions in federal tobacco quotas during the last few years.

More importantly, people have been turning away from the auction system since 2000 because contractual arrangements can provide more certainty and security. About 80 percent of tobacco is sold on contract, with a farmer committing his crop to a single buyer.

By bypassing auctions, farmers know ahead of time what they will receive for each grade of tobacco when they bring their crop to a buyer's receiving station. In addition, they are immediately paid for their entire crop in one transaction and they don't have to shell out warehouse charges.

Tobacco buyers — primarily leaf dealers that make purchases for manufacturers like Philip Morris — also favor direct contracts. They collect their purchases at receiving stations instead of at warehouses where they are charged fees, and they don't have to pay an army of agents to purchase tobacco from multiple warehouses. (Of course, some of these cost savings are offset by the added expense of operating stations.) In addition, buyers get their tobacco more quickly, decreasing the amount of waste due to spoilage.

Above all, contracts can give tobacco buyers more control over their supply. According to Arnold Hamm, assistant general manager of the Flue-Cured Tobacco Cooperative Stabilization Corp., buyers are starting to sign production contracts with growers that dictate the quantity and quality of tobacco they want.

This improved communication benefits farmers as well. They are better able to match their product to the demands of the marketplace, within the limits of Mother Nature, of course.

In contrast, auction markets don't always give buyers what they want. According to a January 2001 report by agricultural economists at North Carolina State University, farmers harvest leaves from fewer parts of the stalk

than they used to. Some even harvest all the leaves with one pass through the field with no differentiation among stalk position. This is because the price they get for leaves from more desirable stalk positions aren't sufficiently high to justify the additional labor costs of selective harvesting.

In economic lingo, auction markets have been unsuccessful at transmitting incentives for quality. "The fact that cigarette manufacturers do not translate their apparent wishes for separation by stalk position into financial incentives in the marketplace seems to bear little economic logic, and has not been adequately explained by either cigarette manufacturers, leaf merchants, or auction operators," noted the N.C. State report.

Auction markets also haven't been able to give buyers enough tobacco to compete for. Some blame reductions in quotas that have shrunk the supply of tobacco too sharply. These reductions "have brought the size of the U.S. crops down by more than half in the last five years," says DIMON's Richard Harris. In response, Philip Morris, the largest purchaser of U.S. leaf, began contracting for its burley tobacco in 2000. A year later, R.J. Reynolds, Brown & Williamson, and Lorillard also started dealing directly with farmers. "When you had the largest buyer in the market doing that, others had to follow suit to protect their supply."

Buyers could have paid more for tobacco to ensure an adequate supply, since higher prices would have motivated growers to produce more. (The quota system limits this market response, although farmers can produce 3 percent above the quota and lease the right to increase production further.) Instead, they avoided the perils of price competition and locked in their supplies with individual farmers.

There are suspicions that buyers are offering higher contract prices now to lure farmers out of the auction system and its price supports. Under the federal tobacco program, a grower's crop is inspected and assigned a grade. If it fails to get an offer of at least a

penny above the price support established for that grade, the farmer can sell it to an authorized cooperative or stabilization corporation. He is paid using money borrowed from the USDA's Commodity Credit Corp., then the crop is reinspected, processed, and sold to repay the loans. In this manner, tobacco farmers are assured a minimum price for their crops.

Some farmers not only want to retain price supports, but they also want the bargaining power that warehouse-based auctions provide them. Rather than depend on supplying one buyer at one price, they want the ability to solicit multiple buyers to get a better price, especially during shortages.

Farmers also worry that direct contracting favors big agribusiness over the little guy. Large buyers of tobacco will likely sign contracts with only large-scale farms since smaller ones don't have the capacity to provide the quantities they are looking for or the technology to meet their quality standards.

Regardless of the reasons, contract buying is likely here to stay, just as it is for other agricultural goods like produce and poultry. Whether auction markets will be around is another question. The number of buyers and sellers bargaining on the warehouse floor may eventually be too small to sustain this historic means of marketing tobacco. **RF**

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# District Economic

BY ROBERT LACY

**Output of goods and services in the Fifth District appeared to expand at a relatively brisk pace, and unemployment rates edged down in the final quarter of 2003. Payroll employment, however, was slightly lower than a year ago, suggesting that many employers remained cautious about hiring.**

## Did You Know . . .

**Hickory. High Point. Drexel. Thomasville. If you shop for furniture, you may associate these names with some of the best-known furniture brands around. What you may not know is that they are all small towns in North Carolina, where quality furniture has been manufactured for more than 100 years. According to 2001 Census data, more people are employed in furniture manufacturing in North Carolina than in any other state in the country.**

A rebound in manufacturing output capped a fourth quarter of solid economic performance in the Fifth District, but anemic payroll employment data continued to raise doubts about the vigor of this economic recovery. Outside of the hard-hit textile sector, most District manufacturers reported higher shipments throughout the quarter. Additionally, District retailers said that sales during the holiday season were good and generally met their expectations.

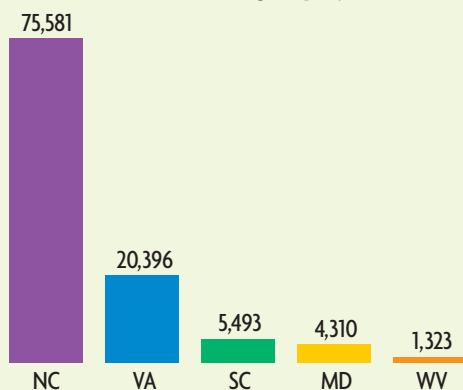
## Manufacturing Turns Up

The District's manufacturing sector rebounded in the fourth quarter — our monthly survey of manufacturers indicated that shipments and new orders rose in each of the final three months of the year. According to our survey indexes, fourth-quarter performance was the strongest since spring 2002.

Despite the pickup, however, there remained a sense that the manufacturing recovery was fragile. Many District manufacturing firms continued to struggle, even outside the long-suffering textiles and apparel sectors. A District plastics manufacturer, for example, told us, "I thought the manufacturing economy was getting better. Unfortunately, after a small spurt, things have gone south again."

In short, although District manufacturing appears to be on the mend, the sector has not completely recovered.

**Furniture Manufacturing Employment, 2001\***



\*The estimate for Washington, D.C., ranges from 100 to 249.

## Retail Sales Solid

The District's retail sector also expanded at a solid pace in the fourth quarter of 2003. District retailers posted fairly strong holiday sales, especially during the last few weeks of December.

Two upscale regional malls opened in the Richmond, Va., metropolitan area, expanding the retail sector there and boosting fourth-quarter employment. Retail employment in the District overall, however, grew only 0.2 percent in the fourth quarter compared to a year ago.

## Labor Markets Mixed

In contrast to the generally upbeat business readings, the news from the District's labor markets was mixed. The U.S. Department of Labor's monthly survey of establishments indicated that Fifth District employment dropped slightly from a year ago. But, on a brighter note, the District's unemployment rate edged lower in the fourth quarter, to 5.1 percent.

The latest unemployment rates suggest substantial differences in economic conditions across the District. In the Carolinas, the unemployment rate remained above 6 percent in December, a little higher than the U.S. average. By contrast, Virginia's 3.6 percent unemployment rate for the month was the third lowest in the nation. The unemployment rate in the Washington, D.C., metropolitan area was a remarkable 3.0 percent in December — the lowest rate for a large metropolitan area in the United States.

## Housing Leveling Off

The housing sector has continued to be a star over the last few years, holding up remarkably well during and after the 2001 recession. Boosted in part by exceptionally low mortgage rates, housing starts and home sales surged through 2002 and much of 2003.

But housing activity began to show signs of leveling off in late 2003. District building permits were flat in the fourth quarter of 2003 compared to a year ago. For the year as a whole, building permits in Fifth District states dropped by a slight 0.5 percent.

# Developments

## Nonfarm Employment Fourth Quarter 2003

	Employment (Thousands)	% Change (Year Ago)
DC	669	0.9
MD	2,467	-0.2
NC	3,835	0.1
SC	1,778	-2.3
VA	3,523	0.7
WV	725	-0.6
5th District	12,997	-0.1
US	130,109	-0.2

## Unemployment Rate Percent

	4th Qtr. 2003	4th Qtr. 2002
DC	6.7	6.5
MD	4.2	4.2
NC	6.1	6.6
SC	6.7	6.2
VA	3.6	3.9
WV	5.6	6.2
5th District	5.1	5.3
US	5.9	5.9

## Personal Income Third Quarter 2003

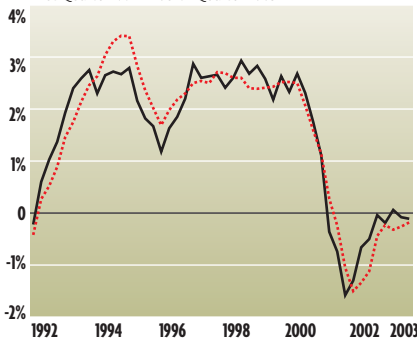
	Income (\$ billions)	% Change (Year Ago)
DC	25.4	2.7
MD	205.0	3.5
NC	236.4	2.8
SC	108.2	3.3
VA	247.9	3.4
WV	44.0	3.2
5th District	867.1	3.2
US	9,248.0	3.6

— Fifth District

- - - - - United States

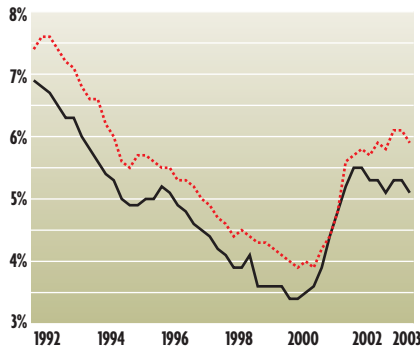
### Nonfarm Employment Change From Prior Year

First Quarter 1992 - Fourth Quarter 2003



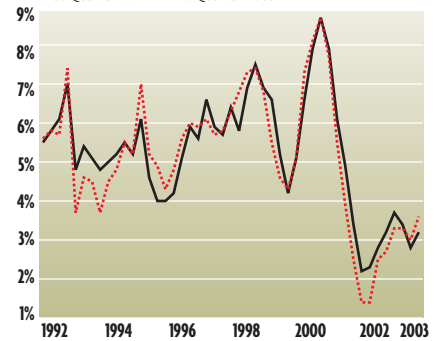
### Unemployment Rate

First Quarter 1992 - Fourth Quarter 2003



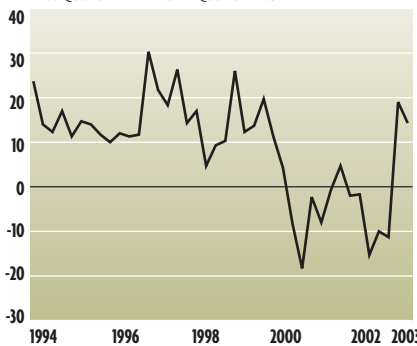
### Personal Income Change From Prior Year

First Quarter 1992 - Third Quarter 2003



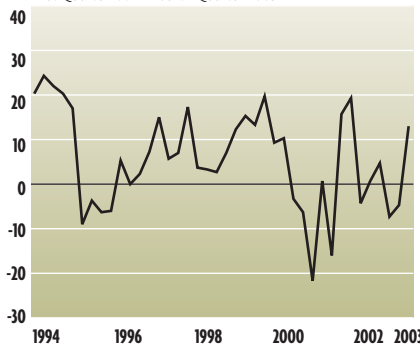
### FRB—Richmond Services Revenues Index

First Quarter 1994 - Fourth Quarter 2003



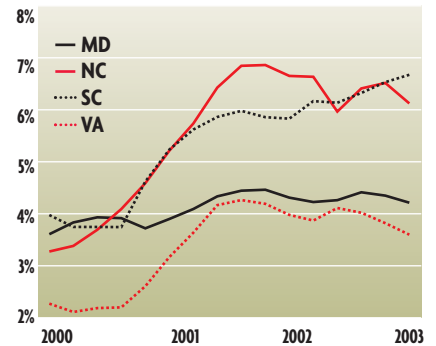
### FRB—Richmond Manufacturing Shipments Index

First Quarter 1994 - Fourth Quarter 2003



### Unemployment Rate

First Quarter 2000 - Fourth 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](mailto:Robert.Lacy@rich.frb.org).



BY ANDREA HOLLAND

With weak labor market conditions in the District of Columbia since the onset of the recession in 2001, initial unemployment claims have received much attention from business analysts. Movements in the level of initial claims for unemployment insurance (UI)—insurance against loss of income due to unemployment—are considered a leading economic indicator because, over time, they are helpful in gauging future labor market activity. Decreases in initial claims typically foretell a strengthening labor market, while rising initial claims indicate weakening labor market conditions.

In the District of Columbia, following a pickup in initial claims in late 2001, payroll employment growth slowed. In 2003, however, initial claims eased in each quarter, and for the year, were 10.8 percent below the 2002 level. Following this decline, the pace of job growth picked up. Employers increased payrolls by 4.4 percent in the fourth quarter of 2003, marking the largest quarterly payroll gain since 1999.

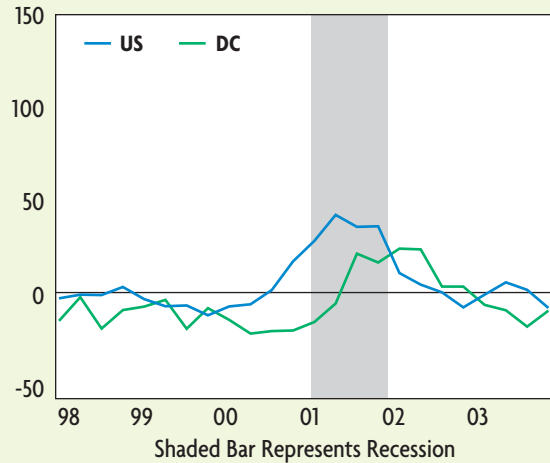
Despite the importance of using initial claims as a forecasting tool, many applicants do not reap UI benefits. Nationwide, for example, program participation reached only 41 percent in 2003, in part because large segments of the unemployed don't meet set requirements for wages earned or time worked prior to becoming unemployed. In the District of Columbia, only 38 percent of the jobless participated in the program in 2003.

For those who meet program requirements, UI benefits can extend for up to 26 weeks. In 2003, on average, UI benefits were collected for 16 weeks nationwide while in the District of Columbia, for 20 weeks. The duration of a job search typically lengthens in economic downturns, prompting more participants to receive the full 26-week allotment. In the District of Columbia, for instance, the percentage of participants receiving full-term UI benefits jumped from 50 to 80 percent from 2000 to 2003, respectively.

Many participants choose a job over fully exhausting their UI benefits because the program replaces only a portion of their wages. Weekly UI benefits in the District of Columbia were typically \$255 in 2003, or 25 percent of the District of Columbia's average weekly wage of \$1,039. By comparison, participants nationwide collected \$259 a week, or 37 percent of the average weekly wage of \$701.

## Unemployment Insurance: Initial Claims Applications

Percent Change From Prior Year



SOURCE: U.S. Department of Labor

	Percent Change at Annual Rate From		
	4th Qtr 2003	3rd Qtr 2003	4th Qtr 2002
Nonfarm Employment	668.6	4.4	0.9
Manufacturing, NSA	2.8	0.0	-3.4
Professional/Business Services	142.5	3.3	2.5
Government	230.5	3.9	0.3
Civilian Labor Force	311.9	2.0	3.2
	4th Qtr 2003	3rd Qtr 2003	4th Qtr 2002
Unemployment Rate	6.7	6.6	6.5
Building Permits, NSA	87	182	394
Home Sales	17.3	16.3	15.2

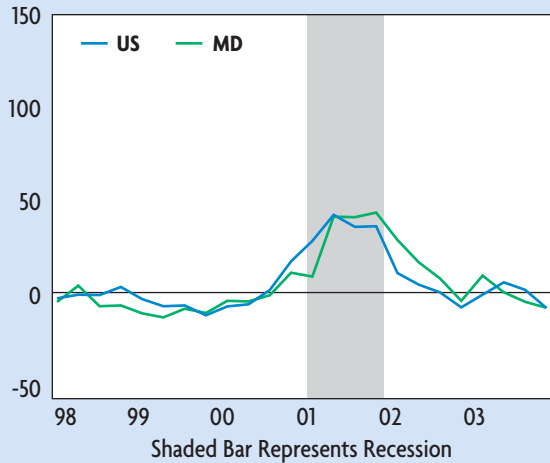
NOTES:  
Nonfarm Employment, thousands of jobs, seasonally adjusted (SA); Bureau of Labor Statistics (BLS)/Haver Analytics  
Manufacturing, thousands of jobs, not seasonally adjusted (NSA); BLS/Haver Analytics  
Professional/Business Services, thousands of jobs, SA; BLS/Haver Analytics  
Government, thousands of jobs, SA; BLS/Haver Analytics  
Civilian Labor Force, thousands of persons, SA; BLS/Haver Analytics  
Unemployment Rate, percent, SA; BLS/Haver Analytics  
Building Permits, number of permits, NSA; U.S. Census Bureau/Haver Analytics  
Home Sales, thousands of units, SA; National Association of Realtors®



BY ANDREA HOLLAND

## Unemployment Insurance: Initial Claims Applications

Percent Change From Prior Year



SOURCE: U.S. Department of Labor

In Maryland, business analysts have closely watched initial unemployment claims because job growth has remained sluggish while other indicators of economic performance have advanced. Initial claims measure first-time applicants for unemployment insurance (UI)—which replaces a portion of income if an applicant has been terminated through no fault of his own. Initial claims are one of 11 leading indicators used by the Department of Commerce to measure economic trends in the near future, particularly payroll activity. When initial claims rise, unemployment is also usually rising, suggesting weaker labor market conditions.

Illustrating this relationship, initial claims in Maryland headed higher in two quarters prior to the onset of the most recent recession. Three quarters later, in the first quarter of 2001, payroll employment began to weaken. Of late, initial claims have moderated. After peaking in early 2002, initial claims contracted on a year-over-year basis in the third and fourth quarters. The drop-off is encouraging, as Maryland's labor market continued to struggle in 2003. Payroll growth was negative in the fourth quarter of 2003, and the state lost 23,700 jobs, reducing employment to its lowest level since late 2002.

Regardless of the role of initial claims as a key gauge of future payroll activity, a large number of applicants do not receive UI benefits. For instance, of those unemployed in Maryland in 2003, only 39 percent participated in the state's UI program. Typically, a large share of the jobless don't meet state requirements for wages earned or time worked prior to being separated from their jobs.

During recessionary periods, Maryland residents meeting program requirements, on average, will draw UI benefits for a longer period of time. For example, in 2000, participants typically collected UI benefits for 13 weeks. By 2003, the average collection period had climbed to 16 weeks. The share of persons receiving UI benefits for the full 26 weeks allotted generally rises during business cycle downturns. From 2000 to 2003, full-term collectors increased from 28 to 35 percent.

Full-term collectors are somewhat limited due to the program replacing only a share of lost wages, making employment more attractive. Typically, Maryland's insured received 35 percent of the state's average weekly wage in 2003. Maryland's replacement rate is on target when viewed against programs nationwide: Participants collected 37 percent of the average weekly wage.

	Percent Change at Annual Rate From		
	4th Qtr 2003	3rd Qtr 2003	4th Qtr 2002
Nonfarm Employment	2,467.5	-3.8	-0.2
Manufacturing	151.7	-1.7	-1.7
Professional/Business Services	360.1	-3.7	-1.4
Government	463.3	0.4	0.0
Civilian Labor Force	2,924.7	0.0	0.8
	4th Qtr 2003	3rd Qtr 2003	4th Qtr 2002
Unemployment Rate	4.2	4.3	4.2
Building Permits, NSA	6,878	6,602	6,488
Home Sales	142.1	140.0	122.3

NOTES:  
 Nonfarm Employment, thousands of jobs, seasonally adjusted (SA); Bureau of Labor Statistics (BLS)/Haver Analytics  
 Manufacturing, thousands of jobs, SA; BLS/Haver Analytics  
 Professional/Business Services, thousands of jobs, SA; BLS/Haver Analytics  
 Government, thousands of jobs, SA; BLS/Haver Analytics  
 Civilian Labor Force, thousands of persons, SA; BLS/Haver Analytics  
 Unemployment Rate, percent, SA; BLS/Haver Analytics  
 Building Permits, number of permits, not seasonally adjusted (NSA); U.S. Census Bureau/Haver Analytics  
 Home Sales, thousands of units, SA; National Association of Realtors®



# NORTH CAROLINA

BY ANDREA HOLLAND

Although the North Carolina economy has expanded in recent quarters, the pace of job creation in the state remains weak, pushing initial claims for unemployment insurance (UI)—government-sponsored protection that replaces a portion of lost wages—into the spotlight. Economists watch closely for changes in the number of initial claims filed because, typically, a rise in initial claims has often preceded a drop in nonfarm employment and vice versa.

This association was intact during the most recent business cycle in North Carolina: Two quarters after initial claims spiked up, job numbers in the state began to erode. The latest statistics show that initial claims have trended down in the last three consecutive quarters, but the labor market has yet to pick up. But some good news is in evidence. The pace of job losses has slowed on a year-over-year basis, and payrolls contracted a modest 0.1 percent in 2003, following declines of 1.0 and 1.5 percent in 2000 and 2001, respectively.

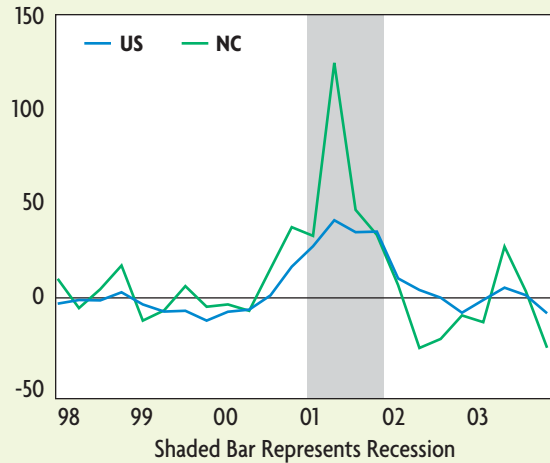
Notwithstanding the value of initial claims as a forward-looking estimate of labor market conditions, some claimants do not collect UI. Typically, the participation rate is fairly low because a large number of unemployed don't meet set requirements for wages earned or time worked prior to becoming unemployed. Illustrating this, the portion of jobless North Carolinians receiving UI benefits was only 41 percent in 2003, matching the national rate.

For eligible North Carolinians, UI benefits extend for up to 26 weeks. North Carolina residents received UI for a shorter period of time than any other District state in 2003, drawing UI benefits for 13 weeks, on average. Economic downturns typically increase the proportion of claimants who collect UI benefits for the 26-week maximum. For example, from 2000 to 2003, the share soared from 20 to 39 percent, the second most extreme rise districtwide.

But many jobless opt for employment over collecting the full UI benefit allowed because UI replaces only a portion of wages. In 2003, North Carolina's typical weekly UI benefit amount matched the national rate. The UI benefits in North Carolina were typically \$259 a week in 2003, 41 percent of the state's average weekly wage of \$628. By comparison, participants nationwide also received \$259 a week, but the UI benefits replaced only 37 percent of the national average weekly wage of \$701.

## Unemployment Insurance: Initial Claims Applications

Percent Change From Prior Year



SOURCE: U.S. Department of Labor

	Percent Change at Annual Rate From		
	4th Qtr 2003	3rd Qtr 2003	4th Qtr 2002
Nonfarm Employment	3,835.4	0.4	0.1
Manufacturing	597.2	-4.8	-4.8
Professional/Business Services	426.6	-0.6	3.0
Government	658.7	5.8	0.3
Civilian Labor Force	4,187.5	1.1	0.8
	4th Qtr 2003	3rd Qtr 2003	4th Qtr 2002
Unemployment Rate	6.1	6.5	6.6
Building Permits, NSA	19,448	20,761	20,963
Home Sales	305.3	314.0	250.4

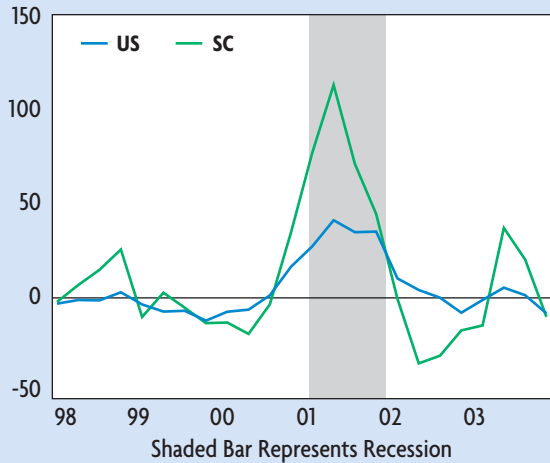
NOTES:  
 Nonfarm Employment, thousands of jobs, seasonally adjusted (SA); Bureau of Labor Statistics (BLS)/Haver Analytics  
 Manufacturing, thousands of jobs, SA; BLS/Haver Analytics  
 Professional/Business Services, thousands of jobs, SA; BLS/Haver Analytics  
 Government, thousands of jobs, SA; BLS/Haver Analytics  
 Civilian Labor Force, thousands of persons, SA; BLS/Haver Analytics  
 Unemployment Rate, percent, SA; BLS/Haver Analytics  
 Building Permits, number of permits, not seasonally adjusted (NSA); U.S. Census Bureau/Haver Analytics  
 Home Sales, thousands of units, SA; National Association of Realtors®

# SOUTH CAROLINA

BY ANDREA HOLLAND

## Unemployment Insurance: Initial Claims Applications

Percent Change From Prior Year



SOURCE: U.S. Department of Labor

Despite robust growth, the post-recession economy in South Carolina has failed to create many jobs. As a result, initial claims for unemployment insurance (UI)—social insurance benefit funded by business payroll taxes that protects workers against loss of income due to involuntary job loss—have increasingly made headlines. Initial claims are one of 10 measures that make up the Conference Board’s composite index of leading indicators, which is designed to signal peaks and troughs in the business cycle. Usually, an increase in initial claims is triggered by rising unemployment, suggesting weaker labor market conditions.

In most Fifth District states, rises and falls in initial claims lead payroll activity by roughly a year. The relationship is not as strong in South Carolina though. Initial claims and payroll employment growth weakened concurrently in 2000 and have continued to track one another in recent periods. For the year just ended, initial claims and employment activity remained sluggish in South Carolina. But looking only at the fourth quarter, statistics were more encouraging: Over the year, initial claims contracted by 10 percent.

Even though initial claims data are believed to be a reliable predictor of future shifts in employment, many residents who submit an initial claim do not collect UI. In 2003, for example, only 39 percent of the jobless in South Carolina were enrolled in the UI program. The participation rate is typically low because large segments of the jobless don’t meet state requirements for wages earned or time worked prior to being separated from their jobs.

As in most states, jobless South Carolinians who qualify for the program may receive UI benefits for up to 26 weeks. In 2003, the average South Carolinian collected UI benefits for 13 weeks, about three weeks less than the typical job hunt lasted nationwide. Not all unemployed find jobs in the 26-week period, however, especially during slumps in the business cycle. For instance, 41 percent of South Carolina program participants collected UI benefits for the full term in 2003, up from 25 percent in 2000.

For many participants, employment is more attractive than collecting UI benefits because UI only replaces a share of lost wages. In 2003, South Carolina’s wage replacement rate matched the national rate.

	Percent Change at Annual Rate From		
	4th Qtr 2003	3rd Qtr 2003	4th Qtr 2002
Nonfarm Employment	1,777.9	0.5	-2.3
Manufacturing, NSA	271.0	-4.5	-6.4
Professional/Business Services, NSA	179.2	1.3	-2.5
Government	329.7	6.0	-1.8
Civilian Labor Force	2,029.4	0.2	2.4
	4th Qtr 2003	3rd Qtr 2003	4th Qtr 2002
Unemployment Rate	6.7	6.5	6.2
Building Permits, NSA	8,212	9,703	6,711
Home Sales	150.3	155.3	125.5

NOTES:  
 Nonfarm Employment, thousands of jobs, seasonally adjusted (SA); Bureau of Labor Statistics (BLS)/Haver Analytics  
 Manufacturing, thousands of jobs, not seasonally adjusted (NSA); BLS/Haver Analytics  
 Professional/Business Services, thousands of jobs, NSA; BLS/Haver Analytics  
 Government, thousands of jobs, SA; BLS/Haver Analytics  
 Civilian Labor Force, thousands of persons, SA; BLS/Haver Analytics  
 Unemployment Rate, percent, SA; BLS/Haver Analytics  
 Building Permits, number of permits, NSA; U.S. Census Bureau/Haver Analytics  
 Home Sales, thousands of units, SA; National Association of Realtors®

BY ANDREA HOLLAND

Rapid growth of Virginia's economy in mid-2003 has so far translated into weak job creation, boosting business analysts' interest in initial unemployment claims. The Department of Labor tracks changes in the number of first-time applicants for unemployment insurance (UI), which replaces a share of income while the unemployed search for a new job. Decreases in initial claims typically point to a strengthening labor market, while rising initial claims foretell weakening labor market conditions.

For example, going into the recession of 2001, Virginia businesses began to shed workers two quarters after initial claims began to rise. Coming out of the recession, payroll employment in Virginia began to pick up in early 2003, roughly a year after initial claims began to head lower. Since then, job numbers in Virginia have steadily trended upward, and businesses added 19,700 workers in the fourth quarter of 2003, pushing total employment growth for the year into positive territory.

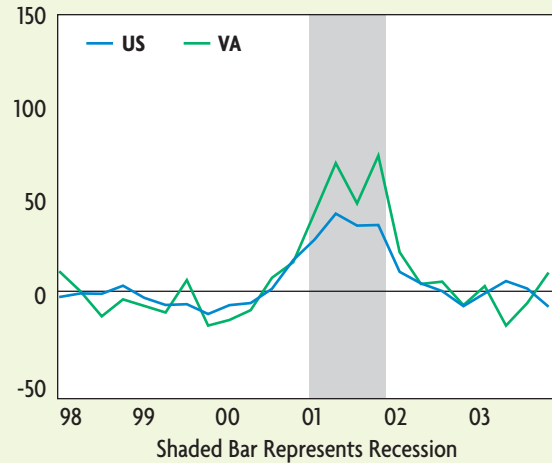
Despite the importance of initial claims data as a reliable forecasting tool, many first-time applicants are not accepted to the program. For instance, Virginia had the smallest percentage of insured unemployed in the Fifth District in 2003—only 36 percent. During the same period, the nationwide participation rate stood at only 41 percent, largely because many unemployed don't meet set requirements for wages earned or time worked prior to becoming unemployed.

For the unemployed meeting program requirements, UI benefits can be collected for up to 26 weeks, though many find jobs before the term expires. Prior to the recession in 2001, participants in Virginia received UI benefits for 10 weeks on average. In 2003, however, the collection period reached 14 weeks—marking the largest jump districtwide. The proportion of claimants who collect all 26 weeks of their UI entitlement (also known as the exhaustion rate) typically rises during economic downturns. For example, Virginia's exhaustion rate reached 41 percent in 2003, up from 25 percent in 2000.

Many participants choose a job over exhausting their UI benefits because the program replaces only a portion of their wages. The typical UI benefit in Virginia equaled roughly 38 percent of the state's average weekly wage in 2003. When viewed against the national average, Virginia's replacement rate is on point. Nationwide, participants collected 37 percent of the average weekly wage.

## Unemployment Insurance: Initial Claims Applications

Percent Change From Prior Year



SOURCE: U.S. Department of Labor

	Percent Change at Annual Rate From		
	4th Qtr 2003	3rd Qtr 2003	4th Qtr 2002
Nonfarm Employment	3,523.0	2.3	0.7
Manufacturing	304.4	-2.5	-4.7
Professional/Business Services	548.4	-1.9	0.8
Government	646.1	3.5	1.4
Civilian Labor Force	3,796.7	0.1	1.6
	4th Qtr 2003	3rd Qtr 2003	4th Qtr 2002
Unemployment Rate	3.6	3.8	3.9
Building Permits, NSA	14,069	14,230	14,262
Home Sales	186.8	180.1	161.8

NOTES:

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

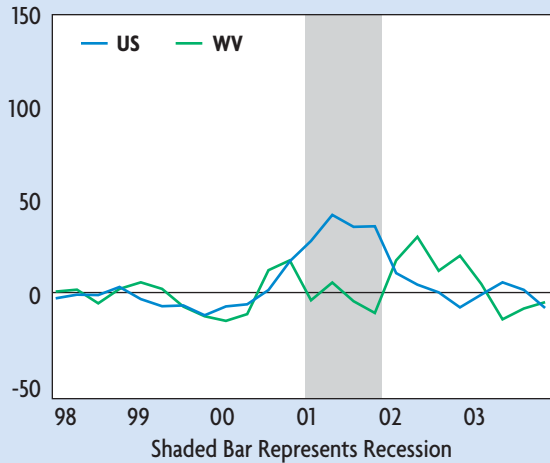




BY ANDREA HOLLAND

## Unemployment Insurance: Initial Claims Applications

Percent Change From Prior Year



SOURCE: U.S. Department of Labor

West Virginia's labor market remains lukewarm despite steady growth in other sectors of the economy, prompting economists to keep a close eye on initial unemployment claims, which measure newly laid-off workers and are used to forecast trends in the labor market. Initial claimants are first-time applicants for unemployment insurance (UI)—a compensation plan by which the federal and state government provides money to workers who've lost their jobs through no fault of their own. Typically, when initial claims rise, unemployment is usually rising, suggesting weaker labor market conditions.

On average, initial claims data lead payroll employment growth by just under a year in the Fifth District. But in West Virginia, initial claims have a longer lead time. Illustrating this, initial claims in the state rose in the fourth quarter of 1999, but payroll employment didn't weaken until five quarters later. The latest data show that initial claims peaked in the first quarter of 2003, and have since trended down. The turnaround is encouraging, as West Virginia's labor market has yet to show much improvement. The state shed 5,100 jobs in the fourth quarter, marking the third straight quarter of eroding payrolls.

Notwithstanding the significance of initial claims as a reliable approximation of future payroll activity, large segments of initial claims applicants do not meet the program's enrollment criteria. Nationwide, for instance, participation rates are only 41 percent because a large portion of the jobless don't meet set requirements for wages earned or time worked prior to being separated from their jobs. Of the unemployed in West Virginia in 2003, only 39 percent were program participants.

During recessionary periods, the insured unemployed in West Virginia typically draw UI benefits for longer periods of time. For example, the average collection period reached 15 weeks in 2003, up from 13 weeks in 2000.

West Virginians can collect UI benefits for up to 26 weeks, but for many participants securing new employment is more attractive than collecting UI benefits because UI replaces only a share of lost wages. Typically, West Virginians received \$222 a week in 2003, or 41 percent of the state's average weekly wage of \$540. By comparison, participants nationwide collected \$259 a week, only 37 percent of the average weekly wage of \$701.

	Percent Change at Annual Rate From		
	4th Qtr 2003	3rd Qtr 2003	4th Qtr 2002
Nonfarm Employment	724.7	-2.8	-0.6
Manufacturing	64.6	-5.6	-4.4
Professional/Business Services	58.3	-4.7	1.7
Government	141.0	3.0	-0.8
Civilian Labor Force	798.1	-3.5	0.5
	4th Qtr 2003	3rd Qtr 2003	4th Qtr 2002
Unemployment Rate	5.6	6.4	6.2
Building Permits, NSA	1,126	1,291	992
Home Sales	35.2	33.6	29.5

NOTES:  
 Nonfarm Employment, thousands of jobs, seasonally adjusted (SA); Bureau of Labor Statistics (BLS)/Haver Analytics  
 Manufacturing, thousands of jobs, SA; BLS/Haver Analytics  
 Professional/Business Services, thousands of jobs, SA; BLS/Haver Analytics  
 Government, thousands of jobs, SA; BLS/Haver Analytics  
 Civilian Labor Force, thousands of persons, SA; BLS/Haver Analytics  
 Unemployment Rate, percent, SA; BLS/Haver Analytics  
 Building Permits, number of permits, not seasonally adjusted (NSA); U.S. Census Bureau/Haver Analytics  
 Home Sales, thousands of units, SA; National Association of Realtors®

For more information regarding state summaries, call 804-697-8273 or e-mail [Andrea.Holland@rich.frb.org](mailto:Andrea.Holland@rich.frb.org).

# Is the Market Moral?

BY AARON STEELMAN

Economists are often asked to advise government officials on policy issues, including many that are imbued with moral content. Consider, for instance, the subject of this issue's cover story—health care. Some people argue that health care is a human right and that the government should provide a minimum level of medical coverage to everyone. Or consider the issue of taxation. Some believe that the United States should adopt a more progressive income tax structure so that the rich would pay a higher percentage of total taxes, while others believe just the opposite, that the only “fair” tax is a flat tax.

Economics, however, is a positive science. As such it can't provide answers to these kinds of moral questions. The role of the economist is to *describe* the consequences of public policies, not to *prescribe* them. For instance, economists can advise policymakers about the most efficient way to achieve universal health care coverage, but not whether the goal itself is wise or worthy. To answer that question, we must turn to the realm of ethics.

There are, of course, many competing ethical theories. But three deserve special mention: utilitarianism, egalitarianism, and libertarianism. All three traditions are rich and have many distinguished proponents. But for simplicity we will associate each with a specific writer: John Stuart Mill, John Rawls, and Robert Nozick, respectively.

## Mill's Utilitarianism

Utilitarianism posits that public policies should be judged by their consequences. In the early 1860s, for instance, Mill argued that actions “are right in proportion as they tend to promote happiness; wrong as they tend to produce the reverse of happiness.”

Utilitarianism faces a number of criticisms. The most basic perhaps is: How do you measure happiness? Mill and his mentor, Jeremy Bentham, recognized this problem and suggested that pleasure be measured in units called “utils,” but they were less clear about how this could be done in practice. Utilitarianism has also been criticized because it supposedly ignores problems of “justice.” Certain actions, critics maintain, are wrong by their very nature and a just society would prohibit them. Mill agreed that some things, such as theft, should generally be prohibited—not because they are inherently wrong, but rather because they tend to lower overall well-being.

## Rawls' Egalitarianism

John Rawls reignited interest in social contract theory with his 1971 book *A Theory of Justice*. According to Rawls, people should act as if they are standing behind a “veil of ignorance” when choosing rules to govern society. In other words, they should pretend that they are in the “original position” and know nothing about the social class they will be born into or the abilities they will possess. In such a situation, Rawls argued, people will follow the “maximin” rule: They will pick a society that puts its least fortunate individuals in the least unfortunate situation—in short, a society that takes extreme caution to protect people from economic hardship. Rawls' theory was enormously influential, but it begged the following question: Are people really so risk-averse? If not, they may opt for a system that would still protect them from misfortune but would not involve the level of government intervention that is probably required to maintain the maximin rule.

Are people really so risk-averse? If not, they may opt for a system that would still protect them from misfortune but would not involve the level of government intervention that is probably required to maintain the maximin rule.

## Nozick's Libertarianism

Rawls' Harvard colleague Robert Nozick penned his 1974 book *Anarchy, State, and Utopia* largely in response to Rawls' work. Nozick argued that individuals “have rights, and there are things no person or

group may do to them.” This led him to conclude that “a minimal state, limited to the narrow functions of protection against force, theft, fraud, enforcement of contracts, and so on, is justified; that any more extensive state will violate persons' rights not to be forced to do certain things.” Nozick's book was tightly argued. But it required readers to accept its central premise—that people do, indeed, have natural rights—as a given. He did little to show how this assumption could be derived rationally.

## Whom to Believe?

When pressed, followers of each of these theories will admit their limitations. (For instance, few egalitarians would choose a desperately poor society in which everyone earned the same small amount of money over the present-day United States, which is less equal but much richer.) Still, each theory presents an intriguing way of looking at the world that can help us choose what we wish to accomplish with public policy. And once that has been decided, economics can help us determine the most efficient means to achieve these ends. It is important, though, not to conflate the two: Ethics has its role, as does economics, but the two should remain clearly distinct.

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*“The role of the economist is to describe the consequences of public policies, not to prescribe them.”*

## Back to School

Layoffs in the manufacturing and information technology sectors have put thousands of workers in the Fifth District back on the job market. Many have returned to school to acquire new skills that they hope will make it easier to land, and keep, their next jobs. What sort of retraining programs are available in the region — and which have proven to be the most effective?

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## Secondhand Pollution

North Carolina has petitioned the Environmental Protection Agency to crack down on air pollution coming from coal-fired power plants in 13 other states. Policymakers in the Tar Heel State say action is necessary to keep the skies clean, but others worry that such measures could chill economic development and cost jobs at a time when employment figures are already weak.

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## Drug Reimportation

Prescription drugs are often cheaper to buy in Canada than in the United States, where many are originally developed and produced. But their reimportation back to the United States is currently prohibited. Would lifting this ban help senior citizens and other prescription drug users throughout the Fifth District, as some claim? Or would the benefits be illusory?

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## Historically Black Colleges

The Fifth District has a large number of historically black colleges and universities (HBCUs). Those schools have educated generations of students, but some institutions are coming under severe financial pressure, as black students enroll in ever-larger numbers at schools that once prohibited or discouraged their attendance. What does the future hold for HBCUs?

## Interview

An interview with Kenneth Elzinga, an antitrust expert at the University of Virginia and co-author of the “Marshall Jevons” mystery novels, whose central character uses economic logic to solve crimes.

## Jargon Alert

You may think elasticity applies only to rubber bands and spandex, but the term is used by economists in a variety of contexts.

## Research Spotlight

Does school choice increase school quality? New data from North Carolina.

The Summer 2004 REGIONFOCUS will be published in July.

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