Reforming the CREDIT RATERS
Reforming the Raters: Can regulatory reforms adequately realign the incentives of credit rating agencies?
Amid the financial turmoil, many have criticized the bond rating agencies. How do these agencies operate? And what do economists have to say about the role they play in a healthy capital market?

FEATURES

Honeybees: Market for pollination services grows
Some beekeepers in the Fifth District sell pollination services to farmers as far away as California’s almond fields. This market has expanded as wild bee populations have declined and honeybee hives have suffered from a variety of pests and problems.

Silver Screen Subsidies: Is hoping to land the next Hollywood hit a sound economic development strategy?
State legislators often try to lure movie and television productions to their states. But the effectiveness of these policies as an economic development tool is in question.

Clear Skies? The fight for dominance in the airline industry
The recession and oil price shocks have made for a turbulent few years for the airline industry. Today, strong competition and shifts in market realities are changing how airlines operate and will have real implications for future air travel.

Veto Politics: Can a line-item veto reduce spending?
The line-item veto power held by a state governor is often thought to keep the spending of the legislature in check. However, economists who have studied the issue have come to realize that the conventional wisdom may not be entirely correct.

DEPARTMENTS

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The cover story of this issue of Region Focus seeks to frame the policy debate about the future of the credit rating agencies. It's certainly a timely discussion. When financial institutions began to post significant losses, some observers suggested that many financial institutions had invested in new, complex securities — some of which have been downgraded to junk status today — mainly because those assets were at that time given a seal of approval by one of the “Big Three” rating agencies. Some of the reform proposals being discussed in Washington are geared toward eliminating what many argue were conflicts of interest that arose in the course of awarding those ratings.

It's important to acknowledge the concerns that many have about the agencies and how those agencies might have influenced the quality of investor information. After all, clear and reliable information is an important component of a properly functioning market. If an investor doesn't understand how a securitized asset is constructed — maybe because it is too opaque or simply too confusing to understand — market discipline may be weakened. Either a lack of transparency or a lack of comprehension by the buyer of an asset can lead to little or no check on the originators and underwriters of those securities.

Yet it may not be entirely appropriate to blame the apparent shortcomings of the securitization markets simply on the complexity of the products. If indeed that complexity raised sufficient concern among investors, it should have been reflected in the prices of those assets. And if those risk premia were not as high as we think they should have been after the fact, an undeserved credit rating may not have been the only contributing factor. It could be that investors simply had an incorrect view of the future of the economy or of particular institutions.

Nor is it appropriate to place all the blame with the credit rating agencies. Yes, an investor’s false sense of security may have been reinforced by the inflated grade given to a securitized asset by the rating agencies. But intelligent institutional investors also probably had some understanding that the ratings awarded by the Big Three agencies were flawed in certain respects. That could have just as easily been factored into the price too. And indeed it was, to some extent, as structured securities routinely traded at spreads greater than similarly rated, but less complex, corporate bonds. This leads one to question the extent to which investors had a competing incentive to ignore countervailing information about the potential riskiness of the securitized assets they were buying.

One plausible reason investors bought these securities involves the incentives built into the capital requirements that financial institutions must observe. Credit ratings issued by the agencies were used to assign “risk weights” to the securities banks held. If the grade was high, banks could hold less capital as a buffer against losses. That gave banks an incentive to hold the highest-yielding (that is, riskiest) securities with any given rating — in short, potentially overrated securities.

Such a strategy might seem especially desirable to certain financial institutions if market participants believed the federal government would treat those institutions as “too big to fail” and would take action to keep them alive in the face of impending insolvency. This implicit promise to bail out institutions considered important to the stability of capital markets could have dampened market discipline no matter how good the information produced by rating agencies and others might have been.

When the government is in the business of protecting a certain class of investors and institutions against downside risk, it should be no surprise that those investors and institutions are more likely to take on risk. It should also be no surprise that information which might have spurred caution might be given less attention in such cases.

Better information — whether through a reformed rating process or through increased disclosure — could contribute to better functioning markets. But better information alone will not be sufficient to bring effective market discipline to bear on institutions that are widely viewed as too big to fail. What will be necessary is a widespread belief among investors that the government will not necessarily protect large institutions which make imprudent investments. So far, investors have little reason to believe that is the case. Indeed, quite the opposite. Establishing tighter boundaries on the financial safety net — and making those boundaries well known and credible — is a key task facing policymakers.

Jeffrey M. Lacker
President
Federal Reserve Bank of Richmond
Backyard Burn
Coastal Wildfire Risk Swells with Population

The worst wildfire in more than 30 years burned nearly 20,000 acres and sent smoke billowing over the Grand Strand near Myrtle Beach, S.C., in April after a backyard debris burn spread to an adjacent property.

No one was injured, but the fire destroyed 75 homes and damaged 101 more. Four thousand people were evacuated.

South Carolina’s coastal development has mushroomed since the biggest fire on record, the Clear Pond Fire. In 1976, that fire burned 30,000 acres. The residential boom raises questions about what’s become a problem, not just in South Carolina, but across the nation as people settle in retirement or vacation communities near the woods. This fire, for example, threatened thousands of homes. The fire came close to major developments like Carolina Forest and Barefoot Landing.

Most fires are caused by people. South Carolina Forest Protection Chief Darryl Jones says that his agency responds to between 5,000 and 6,000 fires a year, many started by people trying to burn leaves or yard trimmings. Some 88 percent of the 12.9 million acres of forest in South Carolina are privately owned.

As destructive as wildfires can be, especially near residential areas, fires serve to manage forest floor litter and that prevents worse fires. “Wildfires in forests are a part of the natural disturbance regime,” says economist Roger Sedjo, who directs the forest economics and policy program at Resources for the Future, a Washington, D.C., think tank. But suppression becomes a priority when human life and development are threatened.

Living near forests presents risks. Sedjo notes that the “insurance market has begun to adapt to these differential risks” especially in the West. It makes more sense for the people whose assets are at risk to bear the cost of fire suppression, so society doesn’t pick up the whole tab, Jones says that his agency is working with insurance companies to consider factoring the risk of fires into insurance rates.

To fight the South Carolina fire, the commission got help from local fire departments as well as the United States National Guard. The Guard sent Black Hawk helicopters outfitted with 750-gallon buckets to scoop water from ponds to drop on the blaze. The Federal Emergency Management Agency will help South Carolina pay the Guard. Damage estimates from the fire fighting alone reached $1.5 million. Damage to timber is estimated at between $15 million to $20 million, with about $25 million in damage to homes.

There’s ongoing debate about how budgets, for example in the United States Forest Service, are allocated between suppression of wildfire and prevention. Sedjo says that most of the money today goes to fire fighting when “there are obvious things people might do to decrease the probability that their house might burn down.”

The South Carolina Forestry Commission is responsible for forest fires in rural areas of the state, and fights them with its fleet of fire tractor-bulldozers that plow firebreaks. Each machine costs about $250,000. Without a buffer zone of about 30 feet to 40 feet between the house and the woods, it’s not safe for firefighters. Some materials to avoid include vinyl siding, wood stacked near the home, and certain types of flammable shrubs and mulch.

The fire still smoldered underground well into May, requiring the commission to monitor the area with heat sensors, amid an unusual coastal feature known as the “Carolina Bays.” Those are elliptical depressions dotting the Southeast containing peat bogs and flammable material.

—BETTY JOYCE NASH
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A wildfire near Myrtle Beach, S.C., burned more than 20,000 acres last spring.

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The South Carolina General Assembly overrode a gubernatorial veto of a bill that requires the creation of a database to track whether borrowers have outstanding loans elsewhere.

The state will now contract with a third party to provide the database, and that company will be allowed to charge payday lenders a fee to determine consumer eligibility. Companies can pass half of the fee — which cannot exceed $1 per completed transaction — onto their customers, says Jamie Fulmer, director of public affairs for Advance America, the nation’s largest payday lender, which is based in Spartanburg, S.C.

The new rules specify that borrowers will be allowed to take only one loan at a time, face a one-day break between each of the first seven consecutive loans and a two-day break between loans after that. The maximum allowable individual loan will increase from $500 to $500.

Both the South Carolina House of Representatives and Senate override the veto by a wide margin. Governor Mark Sanford worried the lending database would violate consumers’ privacy, according to newspaper reports. He also argued the bill could make people’s financial situation worse or drive them to illegal loan sharks and unregulated Internet lenders.

Payday loans are small, short-term consumer loans designed to be repaid in a single lump sum. Borrowers only need to provide a pay stub, bank statement, and driver’s license. Lenders typically won’t conduct a credit check of prospective borrowers but may investigate whether the applicant has a checking account. If approved, the borrower typically writes a postdated check for the loan amount plus a finance charge, and receives the loan amount in exchange. The lender will hold the check until a future date, in most cases, two weeks. In some states, borrowers can renew loans before their postdated check is deposited, and incur additional fees.

In the Fifth District, South Carolina now joins Virginia in tracking borrowers’ activity and the imposition of a cooling-off period between loans for repeat borrowers. No storefront payday lenders operate in Maryland, the District of Columbia, North Carolina, or West Virginia.

Most states cap interest rates on consumer loans, usually in the double digits. Payday lenders often can’t profitably operate in states with such laws because their customers are often relatively risky borrowers. Maryland, West Virginia, and the District of Columbia each cap interest rates.

More than 22,000 outlets make payday loans to consumers nationwide. Typical payday borrowers earn between $12,000 and $50,000 a year. Nearly 70 percent of customers are under 45 years old, most are married, and 42 percent own homes. Payday borrowers are typically “early life-cycle, moderate income, credit constrained consumers,” write Gregory Ellienhausen and Edward C. Lawrence in a 2008 Contemporary Economic Policy article.

Lenders in South Carolina currently charge $15 for every $100 borrowed, for an annual percentage rate of more than 400 percent. However, annual percentage rates for overdraft protection, offered by banks, and for cash advances on credit cards can be even higher. Rates for $100 bounced checks including merchant fees, credit card balances with late fees, and utility bills with reconnect fees may add up to finance charges of 1,000 percent.

Consumer advocacy groups condemn payday lenders. They argue payday loans are debt traps that pose hardships for borrowers. However, in a Federal Reserve Bank of New York staff report, Bank economist Donald Morgan and Cornell University doctoral student Michael Strain studied the effects of legislation against payday loans in Georgia and North Carolina. They found residents of both states bounced more checks than residents of states where payday loan laws did not change. The researchers also found more Georgians and North Carolinians complained to the Federal Trade Commission about debt collectors.

Since he started studying payday lending in 2005, Morgan says more states have banned or regulated the practice. The next big research question, Morgan says, is why some states regulate the loans more strictly. “It’s not the borrowers themselves who are pushing to have these laws changed,” he says.

— DAVID VAN DEN BERG

The AAMVA study estimated that almost 4 percent of all registered motor vehicles in the United States are “vanitized,” equaling about 9 million total plates. But in Virginia, about 16 percent of all vehicles have vanity plates. New Hampshire came in second at 14 percent, and Texas was dead last at 0.58 percent.

“People seem to just really love personalized plates,” according to Melanie Stokes of the Virginia Department of Motor Vehicles (DMV). “It’s a fun way to put your personality on your car. Virginians really have fun with it and the DMV really enjoys administering it.”

Why are Virginians so eager to express themselves? According to economist Erik Craft at the University of Richmond, there are several reasons. In 2002, he used data collected from each state, with the help of the Virginia DMV, to figure out which factors affect the number of vanity plates you see on the road.

According to Craft’s study one of the biggest determinants of vanity plate demand is the age range of the population. States with more voters that have reached the age range of the population have more vanity plates.

“Younger people want to stand out,” Craft hypothesizes. “Single, young people may tend to be at the point where they want to make a statement with their style and attract attention.” Or if a state requires license plates mounted front and back, as in Virginia, then the proportion of cars with vanity plates rises even more, according to Craft’s study, because the impact of personalizing your car is even greater.

Craft’s study also found that vanity plates and “specialized license plates” are complementary goods. States that offer these specialty-background plates that endorse some university, civic group, or nonprofit organization sell more vanity plates too. By the time a driver has gone to the trouble to order a special background image for his plate, choosing a number and letter combination requires little extra effort.

Virginia offers more than 220 specialty plate styles. Each costs an extra $25, and yet more specialty plates are issued than vanity plates. Stokes reports that specialty plates generate almost $3 million for special groups and universities, including more than $434,000 for the Department of Game and Inland Fisheries through proceeds from the Wildlife Conservationist plate, which is the most popular.

But perhaps the biggest reason that Virginia’s drivers are so expressive is that it costs so little. In Virginia, a vanity plate costs only $10 at the time of purchase in addition to the usual vehicle registration fee, with a $10 annual renewal fee. Compare this with Minnesota, which charges $100 initially. The Virginia DMV also estimates that it takes about four minutes to buy your plate online. At prices like these, Virginians have shown more interest in being whimsical on their plates.

Though a state-by-state comparison of vanity plate demand hasn’t been repeated since 2007, Virginia residents need only to look around to know whether their counterparts continue to express themselves in abundance. A recent stroll through the Richmond Fed’s parking garage one morning revealed a wide range of vanity plates, touring everything from a sweetheart’s name to a favorite NASCAR contender. None were Fed related.

— RENEE COURTOIS
The South Carolina General Assembly overrode a gubernatorial veto of a bill that requires the creation of a database to track whether borrowers have outstanding loans elsewhere.

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— David Van den Berg

Virginia’s Department of Motor Vehicles (DMV) issued 751,492 driver plates and 674,022 license plates in 2007, Virginia’s drivers are so expressive that it costs so little. In Virginia, a vanity plate costs only $10 at the time of purchase in addition to the usual vehicle registration fee, with a $10 annual renewal fee. This is in line with Minnesota, which charges $100 initially. The Virginia DMV also estimates that it takes about four minutes to buy your plate online. At prices like these, Virginians have shown more interest in being whimsical on their plates. Though a state-by-state comparison of vanity plate demand hasn’t been repeated since 2007, Virginia residents need only to look around to know whether their counterparts continue to express themselves in abundance. A recent stroll through the Richmond Fed’s parking garage one morning revealed a wide range of vanity plates, touring everything from a sweethearts’ name to a favorite NASCAR contender. None were Fed related.

Who’s so vain? Virginia is, according to the American Association of Motor Vehicle Administrators (AAMVA). The organization found in a 2007 survey that Virginia ranks No. 1 in the percentage of all registered vehicles with vanity license plates. They feature a personally chosen number, letter, or symbol combination.

The AAMVA study estimated that almost 4 percent of all registered motor vehicles in the United States are “vanitized,” equating about 9 million total plates. But in Virginia, about 16 percent of all vehicles have vanity plates. New Hampshire came in second at 14 percent, and Texas was dead last at 0.56 percent.

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According to Craft’s study, one of the biggest determinants of vanity plate demand is the age range of the population. States with more 25- to 34-year-olds tend to have more vanity plates.

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Virginia offers more than 200 specialty plate styles. Each costs an extra $25, and yet more specialty plates are issued than vanity plates. Stokes reports that specialty plates generate almost $3 million for special groups and universities, including more than $404,000 for the Department of Game and Inland Fisheries through proceeds from the Wildlife Conservator plate, which is the most popular. But perhaps the biggest reason that Virginia’s drivers are so expressive is that it costs so little. In Virginia, a vanity plate costs only $10 at the time of purchase in addition to the usual vehicle registration fee, with a $10 annual renewal fee. This is in line with Minnesota, which charges $100 initially. The Virginia DMV also estimates that it takes about four minutes to buy your plate online. At prices like these, Virginians have shown more interest in being whimsical on their plates. Though a state-by-state comparison of vanity plate demand hasn’t been repeated since 2007, Virginia residents need only to look around to know whether their counterparts continue to express themselves in abundance. A recent stroll through the Richmond Fed’s parking garage one morning revealed a wide range of vanity plates, touring everything from a sweethearts’ name to a favorite NASCAR contender. None were Fed related.

— Renee Courtois
The Federal Reserve — Capital Cushions

BY STEPHEN SLIVINSKI

The Basel Accords and bank risk

The recent “stress test” the federal government conducted on the nation’s biggest banks was an attempt to ascertain whether those depositor institutions could withstand a market downturn. This new form of bank examination was meant to quell some of the uncertainty among investors about the value of the assets the banks were holding on their balance sheets as well as whether these banks had enough capital on hand to keep them standing in the wake of an extended economic storm.

Banks can finance their operations through the interest payments made by borrowers.) When a bank borrows money to fund its operations, this creates a liability that can cause the bank to fail if it cannot meet its repayment obligations. On the other hand, the revenue generated by a stock sale is considered “capital” since it can be used to pay off depositors or bondholders if necessary. Thus, the larger the portion of the bank’s operations that are financed by capital funds, the more losses the bank can absorb.

Measuring how much capital a bank has on hand relative to its assets has become an important function of the bank regulatory system. The main regulators of the U.S. banking system are the Federal Deposit Insurance Corporation, the Federal Reserve, and the Office of the Comptroller of the Currency — have routinely examined banks for their ability to measure the adequacy of their capital cushions, among other things.

One of the metrics by which this adequacy is measured is a capital-to-assets ratio. While this might sound like a simple concept to operationalize, the proper role for the ratio in regulatory policy is far from settled. In addition, current events have raised questions regarding the old assumptions about how best to define a bank’s capital cushion.

A Brief History

The numerus standards that the current capital adequacy requirements are based on are relatively new. Before the 1980s, bank supervisors did not impose a specific capital requirement on a bank. Instead, through most of the country’s history, an institution’s solvency was based largely on an examiner’s judgment. Supervisors had the freedom to take a look at each bank individually and use formal and informal measures and their knowledge of each bank’s circumstances to form their views.

Rigorous adherence to something as simple as a capital ratio was still widely perceived to discourage a more comprehensive and thoughtful analysis of a bank’s potential solvency in the face of an economic shock. For instance, the American Bankers Associations 1993 “Statement of Principles” explicitly rejected the use of ratios as a centerpiece of bank supervision. Even as late as 1978, the FDIC Manual of Examination Policies — the rulebook for that agency’s bank auditors — instructed their examiners to use capital ratios only as a “first line of defense” for measuring a bank’s ability to withstand adversity. A low capital ratio by itself is no more conclusive of a bank’s weakness than a high ratio is of its invulnerability.

This was a sustainable strategy for bank examiners from the 1940s through the early 1970s. Bank failures were few in number and in scope during that time. The dollar-weighted average capital to assets — the capital-to-assets ratio — of the banking industry remained healthy also, ranging from 6 percent to 8 percent between 1950 and 1970.

The high-inflation environment of the mid- to late-1970s led to high interest rates that severely weakened large banks and the savings and loan (S&L) industry. In 1981, the federal regulators introduced an explicit capital ratio requirement for the first time. It consisted of a “leverage ratio” of primary capital (mainly the amount of stockholder equity) to average total assets (an average of aggregate assets over a set time period, usually two years). Congress furthered the push by passing the Federal Deposit Insurance Act of 1989 (FDICIA). The legislation ushered in a common definition of uniform capital requirements for all bank regulatory agencies to use.

In 1985, under the auspices of ISLA, the standard mandated capital ratio for banks converged on 5 percent of stockholders’ equity. A ratio of 4 percent was declared unsound and was required to comply with federal enforcement actions. By 1986, however, regulators began to realize that the ratio failed to differentiate between different sorts of risks on the bank’s balance sheets. The simple ratio, by definition, ranked all assets as being equally likely to maintain their value. But during the 1980s, financial markets were becoming vastly more international in scope and innovations in financial products were introducing a new element of risk into bank holdings. Besides, many banks were beginning to move away from lower-yielding liquid assets while also experimenting with “off-balance-sheet” activities that would allow them to make certain higher-yield (but riskier) investments. Under the old rules, they didn’t have to increase the size of their capital cushion as a result.

The Basel Accord and U.S. Policy

In the summer of 1988, central bank governors from the 10 biggest economies (also called the Group of Ten, or G-10) met in the town of Basel, Switzerland, to approve an agreement known as the Basel Accords — that would set the approach that bank regulators would take for the next 18 years. The first big result of the accord was to redefine the way regulators in each participating country measure capital requirements for banks and set a minimum capital level that supervisors had the freedom to take.

A “core” capital cushion — Tier 1 (primary capital) — was basically equity owned by shareholders. A “supplementary” capital (Tier 2) was any other form of capital, such as a “hybrid” equity instrument like preferred stock that resembles equity in some form but also maintains a liability claim on the bank in the event of bankruptcy.

The next step was to break away from a simplistic, uniform approach to capital ratios and instead create a series of risk categories into which the assets of a bank can be subdivided. This was achieved by assigning to each class of asset the purposes of taking into account the potential for a loss in value or probability of default: The higher the risk, the more capital a bank needs to have on hand to compensate for the potential loss. Those ranked from a “10 percent” risk weight for bonds issued by the governments of most developed countries to a “100 percent” risk weight for corporate debt. Merger/failures fell in the middle (40 percent weight). Off-balance-sheet assets were also included in these “risk buckets” and weighted by a similar risk factor.

To calculate the risk-weighted capital ratio, regulators would sum the new weighted values of the assets before they calculated the capital-to-asset result. The standard would require banks to hold capital (Tier 1 plus Tier 2) that consist of 8 percent of their newly defined risk-weighted assets. 

Coincidentally the year after the original Basel Accord was agreed upon and the standards began to be adopted by a number of countries — over 100 by the year 2002 — the United States witnessed the largest number of bank failures since the Great Depression. More than 550 FDIC-insured banks failed in 1989. The concern among policy-makers at the time was about “regulatory forbearance” — in other words, the act of looking the other way when a regulator discovered that a bank might be in jeopardy of collapsing.

Analysts of the period often point out that bank regulators were aware of many of the warning signs and the losses from the S&L crisis of the 1980s were made worse than they might have been. “The consequent increased pressure to forebear from managers and owners in the industry, unchecked by an offsetting increased pressure to facilitate early closure, may have led to changes in favor of such policies in the 1980s,” write economists Randall Kroszner of the University of Chicago and Philip Strahan of Boston College in a 1999 paper. (Kroszner subsequently served as a Governor at the Federal Reserve Board.)

Partly in response to this concern, Congress passed the Federal Deposit Insurance Corporation Improvement Act (FDICIA) in 1991. It created a set of categories to classify the capitalization of a bank. A bank was “well capitalized” if it had a risk-weighted capital ratio of 10 percent or more. It was “adequately capitalized” at 8 percent or more. Below 8 percent was considered “undercapitalized.” The law mandated “prompt corrective action” by regulators to shut down banks that were considered undercapitalized and failed to meet other criteria. The purpose was to minimize the potential cost to taxpayers of the government’s deposit insurance guarantees by heading off a potential bank collapse while a bank still had a positive, but low, capital ratio.

The Rise of Basel II

Soon, a variety of inherent flaws in Basel I’s treatment of capital became apparent. First, the relationship between assets’ actual revealed default risk and their risk weights proved to be less reliable than had been thought. For instance, all bonds issued by countries that were members of the Organization for Economic Cooperation and Development (OECD) were given the same weight even though doing so might have downplayed the real risk differences in the risk of defaults among these countries or, conversely, possibly overstated the difference in default risks between OECD and non-OECD countries.

Second, the Basel methodology was too crude. It simply summed the risk weights to construct a measure of overall capital risk, but that is a poor proxy for actual risk. Doing so does not take into account the overall portfolio risk of the bank and the formula made no room for management.
The recent “stress test” the federal government conducted on the nation’s biggest banks was an attempt to ascertain whether those depositor institutions could withstand a market downturn. This new form of bank examination was meant to quell some of the uncertainty among investors about the value of the assets the bank was holding on their balance sheets as well as whether these banks had enough capital on hand to keep them standing in the wake of an extended economic storm.

Banks can finance their operations through the interest payments made by borrowers. When a bank borrows money to fund its operations, this creates a liability that can cause the bank to fail if it cannot meet its repayment obligations. On the other hand, the revenue generated by a stock sale is considered “capital” since it can be used to pay off depositors or bondholders if necessary. Thus, the larger the portion of the bank’s operations that are financed by capital funds, the more losses the bank can absorb.

Measuring how much capital a bank has on hand relative to its assets has become an important function of the bank regulatory system. The main regulators of the U.S. banking system, the Federal Reserve, the Federal Deposit Insurance Corporation, the Comptroller of the Currency – have routinely examined banks for their ability to maintain the adequacy of their capital cushion. The measure of this adequacy is a capital-to-assets ratio in two ways. They can borrow money – or accept more deposits from their customers, by which definition is a form of borrowing since the bank is required to return the full deposit balance if demanded by the customer – or they can sell stock. Banks can then turn around and lend this money to others. (The loans the banks extend to others are considered assets since they generate income for the bank.

### Bank Capital Ratios Have Risen Since the 1980s

<table>
<thead>
<tr>
<th>Year</th>
<th>Capital-to-Assets Ratio</th>
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<tr>
<td>1980</td>
<td>8.0%</td>
</tr>
<tr>
<td>1990</td>
<td>10.0%</td>
</tr>
<tr>
<td>2000</td>
<td>12.0%</td>
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Source: FDIC Historical Statistics on Banking

Bank Capital Ratios Have Risen Since the 1980s

### The Basel Accords and bank risk

The numeric standards that the current capital adequacy requirements are based on are relatively new. Before the 1980s, bank supervisors did not impose a specific capital requirement on a bank. Instead, through most of the country’s history, an institution’s solvency was based largely on an examiner’s judgment. Supervisors had the freedom to take a look at each bank individually and use formal and informal measures and their knowledge of each bank’s circumstances to form their views.

Rigid adherence to something as quantitative as a capital ratio was still widely perceived to discourage a more comprehensive and thoughtful analysis of a bank’s potential solvency in the face of an economic shock. For instance, the American Bankers Associations 1913 “Statement of Principles” explicitly rejected the use of ratios as a centerpiece of bank supervision. Even as late as 1978, the FDIC Manual of Examination Policies – the rulebook for that agency’s bank auditors – instructed their examiners to use capital ratios as only “a first approximation” of a bank’s capital and Tier 2 (supplementary) capital. Tier 1 is basically equity owned by common stockholders while Tier 2 consists of a variety of other forms of capital, such as a “hybrid” equity instrument like preferred stock that resembles equity in some form but also maintains a liability claim on the bank in the event of bankruptcy.

The new step was to break away from a simplistic, uniform approach to capital ratios and instead create a series of risk categories into which the assets of a bank can be subdivided. When a bank borrows money to finance its operations, it is required to hold capital (Tier 1 plus Tier 2) that consists of a bank’s capital ratio. A Brief History

The demise of the current capital adequacy requirements are calculated the capital-to-asset result. The standard would require banks to hold capital (Tier 1 plus Tier 2) that consist of a “leverage ratio” of primary capital (mainly the amount of stockholder equity) to average total assets (an aggregate of aggregate assets over a set time period, usually two years). Congress furthered the push by passing the International Supervision Act of 1983 (ILSA). The legislation ushered in a common definition of uniform capital requirements for all bank regulatory agencies to use.

In 1985, under the auspices of ILSA, the standard mandated capital ratio for banks converged on 8 percent of capital. A number of banks were being battered at a leverage ratio of 3 percent was declared unsound and was required to comply with federal enforcement actions.

By 1986, however, regulators began to realize that the ratio failed to differentiate between different sorts of risks on the bank’s balance sheets. The simple ratio, by definition, ranked all assets as being equally likely to maintain their value. But during the 1980s, financial markets were becoming vastly more international in scope and innovations in financial products were introducing a new element of risk into bank holdings. Besides, many banks were beginning to move away from lower-yielding liquid assets while also experimenting with “off-balance-sheet” activities that would allow them to make certain higher-yield (but riskier) investments. Under the old rules, they didn’t have to increase the size of their capital cushion as a result.

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In the summer of 1988, central bank governors from the 10 biggest economies (also called the Group of Ten, or G-10) met in the town of Basel, Switzerland, to approve an agreement – called Basel I – that would set the approach that bank regulators would take for the next 18 years. The first big result of the accord was to redefine the way regulators in each participating country measured capital. One approach was to minimize the potential cost to taxpayers of the government’s deposit insurance guarantees by heading off a potential bank collapse while a bank still had a positive, but low, capital ratio.

### The Rise of Basel II

Soon, a variety of inherent flaws in Basel I’s treatment of capital risk, but that is a poor proxy for actual risk. Doing so would have increased the size of the capital cushion as a result.

Related research by the Organization for Economic Cooperation and Development (OECD) were given the same weight even though doing so might have downplayed the very real differences in the risk of defaults among these countries or, conversely, possibly overstated the difference in default rates between OECD and non-OECD countries.

Second, the Basel methodology was too crude. It simply summed the risk weights to construct a measure of overall capital risk, but that is a poor proxy for actual risk. Doing so does not take into account the overall portfolio risk of the bank and the formula made no room for management.
strategies that could reduce that overall risk. A bank portfolio could indeed be more or less risky than the mere sum of its parts might indicate because of the correlation among assets.

Third, the broad categories were lumped together, and assigned a single weight to a variety of assets that in reality exist along a spectrum of risk profiles. A loan to a startup company, for instance, was treated the same as one to an established Fortune 500 company. As such, banks investing their capital in equities in either sector would have to lowball their capital requirement estimates. One way of achieving the science of risk management. It has become apparent that the “Big Three” ratings agencies are, could be considered a sufficient minimum capital set aside. This creates an incentive for a bank to invest in high-yielding assets in the risky end of the spectrum without having to make a correspondingly large investment in such capital. This sort of activity could over time increase the overall risk of a bank’s portfolio, although it would still meet Basel I standards.

In January of 2000, a second set of Basel standards was called Basel II — attempted to remedy these problems. (The implementation by the Federal Reserve began in the fall of 2006.) The first big change altered the risk weight. By using the ratings issued by credit rating agencies like Standard and Poor’s and Moody’s to determine the potential risk of default, Basel II set up a system by which assets with in each broad “risk bucket” could be further classified.

The second big change was a new method by which risk profiles could be measured. Instead of forcing all banks to abide by the specific numeric standards set forth in Basel II, certain banks' risk profiles could be rated using a mathematical model — allowed some banks to estimate the necessary size of their own capital cushion. Both changes were aimed at answering the critics who stated that Basel standards did not integrate an appropriate market-based mechanisms, and for evaluating risk. Yet these changes seem to have been flawed as well. The grades assigned to assets by the internal rating scale used to determine capital based on the “external ratings base” approach, is a subjective scale of assets that in reality exist along a spectrum of risk profiles. A loan to a startup company, for instance, was treated the same as one to an established Fortune 500 company. As such, banks investing their capital in equities in either sector would have to lowball their capital requirement estimates. One way to control risk more directly is to approach the classification of assets from the other end by limiting the risk weight that a particular asset would receive. The Basel II capital calculation for a particular asset would be a high capital requirement; high capital requirements choke off investment. Yet it’s likely that a proposal to allow a lowering of capital requirements would be met with skepticism today.

As the economic downturn unfolded, the debate about what the bank’s capital position should be became widespread. Some critics question whether the attempts to continually modify capital standards can ever keep up. Nevertheless, capital ratios are quite firmly embedded in U.S. law now. Yet it remains an open question whether the spirit of the Basel II standards will survive intact. The Basel IV standards are likely to be implemented, and the best way to integrate market-based mechanisms will continue. Bank regulation, by its nature, is often backward-looking. That is, it is driven more by the desire to prevent future crises than to predict them.

Critical of the subordinated debt proposal suggests that a secondary market for the asset may not emerge. The amount of debt outstanding, particularly for a small bank, might be too small for the market to be robust. Also, because the proposals relies on the assumption that the bondholders are relatively risk averse, they are frequently insensitive to new information and rush to redeem the debt after hearing isolated pieces of bad economic news. Another criticism of the subordinated debt proposal suggests that it is a less effective tool at controlling risk. In a world of deposit insurance and central government guarantees unable to credibly commit to not bail out failing banks, the upside of private capital is privatized — allowing the bank’s stockholders to keep the profits of successful gambles but not to bear the risk of poor management, the risks of an economic shock, and the risks to reputation in the marketplace. Critics argue that a real market-based mechanism that does not rely alone on credit rating agencies or mathematical models would be better suited to managing not just the capital ratios of a bank but also these other intangible risks factors that are not incorporated into the government ensures that the bank’s debtors don’t suffer. This creates an incentive for banks to make even riskier investments than those that would be deemed to be acceptable by the federal deposit insurance and the debt price would not necessarily yield information about a bank’s level of risk.

A potential risk here is that a stock warrant could allow the bank’s capital position in a long-term subordinated debt. This form of debt would be uninsured — meaning it has no claim to a federal guarantee — and would have a maturity of more than a year. The term “subordinated” means that the holders of these bonds are in line for repayment after mortgage-backed securities, for instance, have been shown to be less reliable than originally hoped. Some argue it’s hard to make a case that a handful of firms which are largely insulated from market fluctuations in the event of default, the FDIC should the bank fail. The bonds could be traded in a secondary market.

Supporters of this proposal suggest that these characteristics would be important for making this form of debt a strong market-based barometer of a bank’s capital position. Because these bonds would be among the last to get paid in the event of failure, they would have an incentive to monitor the bank’s relative riskiness. Subordinated debt holders would be watchful of the bank’s levels of leverage because that leverage not just the probability of the bank’s failure but also the composition of risks on its balance sheet — and, consequently, the bank’s ability to repay subordinated bondholders in the event of default. Finally because the bonds could be traded in secondary markets, the risk yield would go up on the debt in the event of a market perception that the bank is taking on too much risk, thus sending a signal to both regulators and investors.

As Charles Calomiris of Columbia University and Robert Litan of the Kauffman Foundation argue, a subordinated debt requirement could be preferable to the current Basel standard that encourages more equity financing of banks. Stockholders of a bank are likely to be more concerned about the bank’s profitability and, hence, more interested in a bank making high-yield, potentially risky investments. As Calomiris and Litan point out in a 2000 study, “because subordinated bondholders would have to engage in such behavior.

Readings

September 1996, vol. 52, no. 4, pp. 159-179.
strategies that could reduce that overall risk. A bank portfolio can indeed be more or less risky than the mere sum of its parts might indicate because of the correlation among assets.

Third, the broad categories were lumped together, and assigned a single weight to a variety of assets that in reality exist along a spectrum of risk profiles. A loan to a startup company, for instance, was treated the same as one to an established Fortune 500 company. As such, banks investing their capital through their own risk-based capital frameworks would have been relatively less exposed to the potential default of a market perception that the bank is taking on too much risk. Because banks must meet both ends of the spectrum without having to make a correspondingly expanded capital cushion on each side, this sort of activity could over time increase the overall risk of a bank’s portfolio although it would still meet Basel I standards.

In January of 2001, a second set of Basel standards—called Basel II—attempted to remedy these problems. (The implementation by the Federal Reserve began in the fall of 2001.) The first big change altered the risk weight. By using the ratings issued by credit rating agencies like Standard and Poor’s and Moody’s to determine the potential risk of default, Basel II set up a system by which assets within each broad “risk bucket” could be further classified.

The second big change was a new method by which risk profiles could be measured. Instead of forcing all banks to abide by the specific numeric standards set forth in Basel II, criteria for a bank’s capital requirements are based on the top-down approach, the “internal ratings based” approach—available only to sophisticated banks with the resources and knowledge to develop an internal rating with a mathematical model—allowed some banks to estimate the necessary size of their own capital cushion.

Both changes were aimed at answering the critics who stated that the original Basel standards did not integrate any of their own capital cushion. The only way a bank could ever hold a certain portion of their assets in long-term subordinated debt was if the capital of a bank’s capital position. Critics argue that a real market-based mechanism that does not rely almost solely on credit rating agencies or mathematical models would be better suited to managing not just the capital ratios of a bank but also these intangible risk factors that are not captured in the model. Instead of forcing all banks to use the ratings issued by credit rating agencies like Standard and Poor’s, the “private market” would be allowed to develop an internal rating with a mathematical model that would allow banks to estimate the necessary size of their own capital cushion.

There has been some discussion within the Federal Reserve about how to overcome the incentive a bank would have to lowball their capital requirement estimates. One way to create an incentive for banks to be as honest as possible is to require them to precommit to a maximum loss exposure and corresponding capital buffer. If a bank’s losses exceed the declared maximum, the bank supervisor would levy a fine on the bank.

A criticism of the precommitment approach centers on the ability and willingness of a regulator to assess fines. For the fines to be a credible threat, they must be large enough to spur action by the bank. But it’s not clear that a bank would be able to reduce a bank’s soundness, a regulator might feel compelled, if he believed the shock to be temporary, to avoid assessing the fine if doing so would require a portion of the bonds will mature regularly; a subordinated debt requirement on banks would force those banks to prove themselves in the credit markets on a regular basis. Yet the “Big Three” ratings agencies, could be considered a sufficient market-based barometer of a bank’s capital position. Critics argue that a real market-based mechanism that does not rely almost solely on credit rating agencies or mathematical models would be better suited to managing not just the capital ratios of a bank but also these intangible risk factors that are not captured in the model. Instead of forcing all banks to use the ratings issued by credit rating agencies like Standard and Poor’s, the “private market” would be allowed to develop an internal rating with a mathematical model that would allow banks to estimate the necessary size of their own capital cushion.

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The monthly unemployment rate most people are familiar with tracks people who are out of work and seeking employment. However, it’s only one of six measures of unemployment published by the Bureau of Labor Statistics (BLS). The BLS also produces a broader measurement, sometimes referred to as the “underemployment rate” or the “U-6 rate” after the dataset on which it is based. The U-6 rate, according to the BLS, includes the officially unemployed plus all marginally attached workers and people employed part-time for economic reasons as a share of the civilian labor force plus all marginally attached workers. Through June 2009, the unemployment rate reached 15 percent, the highest since the BLS redesigned its unemployment figures and created the U-6 in 1994. In 1995 the BLS stopped the U-7 data set, which was previously its broadest measure of unemployment.

Workers classified as “marginally attached” and “discouraged workers” are included in the underemployment calculation. They are typically a small portion of the people outside the labor force as measured by the BLS, which defines the labor force as the sum of all employed and unemployed people. Employed people performed any work for pay or profit during the survey week, did at least 15 hours of work, were not looking for work, were not available for work, had jobs but were not working, and were out of work for a week. The unemployed people performed any work for pay or profit during the survey week, did at least 15 hours of work, were not looking for work, were not available for work, had jobs but were not working, and were out of work for a week.

“Typically most people not in the labor force do not seek employment because they have retired, attending to family responsibilities, going to school, or are physically unable to work. The marginally attached are neither employed nor looking for work. The other discouraged workers are available immediately. Family responsibilities or transportation concerns can keep marginally attached workers out of the labor force. Discouraged workers are not employed and not seeking work because they believe there is nothing available for them.”

Six unemployment measures the Bureau of Labor Statistics publishes follow a similar pattern: Both the underemployed and not seeking work because they believe no other work is available immediately. Family responsibilities or transportation concerns also counted as unemployed.

Because they move in the same direction, both numbers tell the same general story over time, Faberman says.

Unemployment measures and other labor market indicators are derived from data generated by the Current Population Survey (CPS), sent to 60,000 households a month. Before the 1994 changes to the survey, the BLS sent the old and new versions of the questionnaires simultaneously between July 1992 and December 1993. The new questionnaire produced an unemployment rate half a percentage point higher for 1993.

Survey participants faced more extensive questioning under the new questionnaire, which generally registered more labor force activity, especially for workers who traditionally have more part-time or irregular work force participation. That’s why the new survey yields a higher labor force participation rate. It also revealed longer durations of unemployment, a higher proportion of unemployed people re-entering the work force, and a lower proportion of new entrants.

Because the U-6 was first published in 1996, it is not possible to compare recent underemployment rates to those in earlier severe downturns such as the 1982 recession. For instance, marginally attached workers were not included in unemployment measures prior to the 1994 redesign. The BLS also tightened the definition of discouraged workers, which reduced their numbers considerably after the CPS redesign.

One exception to the redefinition is the part-time worker. The part-time worker is a part-time worker. The figure, which can be traced back to 1993, is higher today than at any point since then.

Over time, the gap between unemployment and underemployment rates has remained fairly constant in percentage terms, according to BLS data. However, the severity of the current recession could produce some significant short-term structural changes in the labor market. Monitoring the unemployment and underemployment rates will be important both during the current downturn and the recovery following it.

It’s merely a coincidence that living standards rose sharply and absolute poverty declined while the world trend as alternative unemployment figures makes things easier, says Faberman. “For a lay person, what this tells you is that looking at the unemployment number is going to give you the same story in relative terms as looking at the underemployment number.” Because they move in the same direction, both numbers tell the same general story over time, Faberman says.

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In this spirit include capital market deregulation, the inelastic supply of labor associated with job loss, and a lack of institutional barriers to arbitrary political power which have some positive effect. As Shleifer points out, they corresponded to substantial increases in the rate of growth in per-capita GDP worldwide and it’s quite likely that they were the main drivers of the growth. The countries for which market liberalization policies provided the best relative return were those that were once the most heavily regulated, such as the countries of East and South Asia. Aggregate growth trends mask a few key differences between regions. Rapid growth in Asia towers above slow growth in Latin America and stagnation in Africa.

The triumph over runaway inflation and high punitive tax rates was evident during the Age of Friedman. The world median inflation rate declined from 14.3 percent in 1980 to 4.1 percent in 2005. Marginal income tax rates dropped from the population-weighted average of 16 percent in 1980 to 36 percent in 2007.

Markets became more international in scope due to a weakening of trade barriers too. Tariff rates fell from the population-weighted average of 43 percent in 1980 to 11.3 percent in 1997. One clear impact of the end of protectionism is that export markets have become more free, market activity declined. The benefits of abandoning dirigistic policies have become clear to many in the developed world and thus, in turn, has raised people’s hopes and expectations. Shleifer recounts a trip he took to Chile a decade ago. At that time, the ambition of policymakers was to restore Argentina. In 2007, policymakers wanted to march the growth of Australia and New Zealand.

Yet some scholars, most notably Columbia University economist and Nobel Prize winner Joseph Stiglitz, remain skeptical that free market policies are, in fact, good for the countries adopting them. For instance, these economists do not necessarily look askance at capital controls or see profitability as an important precondition to economic growth.

A recent book co-authored by Stiglitz, surveyed by Shleifer in this essay, seeks to make the case for significant state intervention in developing economies. Stiglitz argues, the evidence offered is not persuasive. On inflation, for instance, their argument often amounts to a straw man, Shleifer maintains. Stiglitz and his co-authors see advocates of zero inflation as their main opposition when that point of view isn’t held by most market-oriented economists, who argue that a certain level of inflation might need to be tolerated, at least in the short run. Meanwhile, Stiglitz and his co-authors are incisive when they “express little concern for” the huge costs that high inflation has brought to countries that lost control of their fiscal policy, including many Latin American and transition economies. Stiglitz and his co-authors favor capital controls as a way to stem swings in speculative capital investment. As Shleifer notes, they lean heavily on the example of Malaysia as a country that imposed such controls and was able to escape the Asian financial crisis of the 1990s. Yet Shleifer observes that a number of studies have failed to find that these controls had macro-economic benefits. Stiglitz, Shleifer suggests that such controls encouraged unproductive uses of capital and political corruption.

Shleifer reminds us that we must be careful to learn the right lessons from the experiences of developing economies. The transition to a more free market system “has taught us that economic and political disorganization, combined with obsolete human capital of both economic agents and politicians, can sharply slow down the economic process.” The other obvious lesson is that developing world now, he writes, is the lack of new business investment — a phenomenon that must be tied to the lack of institutional barriers to arbitrage in natural power which spawns predatory regulatory and fiscal policies.

“On strategy, economics got the right answer: free market policies, supported but not encumbered by the government, deliver growth and prosperity.” Shleifer concludes. “And while a lot has been accomplished in the last quarter century, a lot remains to be done.” In short, the principle to which Milton Friedman devoted his career can continue to provide a suitable policy guide in the future.
The monthly unemployment rate most people are familiar with tracks people who are out of work and actively seeking work. However, it’s only one of six measures of unemployment published by the Bureau of Labor Statistics (BLS). The BLS also produces a broader measurement, sometimes referred to as the “underemployment rate” or the “U-6 rate” after the dataset on which it is based. The U-6 rate, according to the BLS, includes officially unemployed plus all marginally attached workers and people employed part-time for economic reasons as a share of the civilian labor force plus all marginally attached workers. Through June 2009, the underemployment rate reached 16.5 percent, the highest since the BLS redesigned its unemployment figures and created the U-6 in 1994. In 1995 the BLS stopped the U-7 data set, which was previously its broadest measure of unemployment.

Workers classified as “marginally attached” and “discouraged workers” are included in the underemployment calculation. They are typically a small portion of the people outside the labor force as measured by the BLS, which defines the labor force as the sum of all employed and unemployed people. Employed people performed any work for pay or profit during the survey week, did at least 15 hours of unpaid work in the previous 12 months, and are still working. People who are marginally attached, on the other hand, have actively searched for one in the last four weeks and are immediately available for work and are counted as unemployed.

Typically most people not in the labor force do not seek employment, because they’ve retired, attending to family responsibilities, going to school, or are physically unable work. The marginally attached are neither employed nor looking for work. The other discouraged workers are marginally attached workers who are not seeking work. Discouraged workers are not employed and not seeking work because they believe there is nothing else available for them.

All six unemployment measures the Bureau of Labor Statistics publishes follow a similar pattern. Both the underemployment and unemployment rates move in the same direction. What is perhaps most relevant to economic researchers is how these measures move relative to each other, says Jason Faberman, an economist at the Federal Reserve Bank of Philadelphia. For general audiences, the fact that the official unemployment rate follows the same trend as alternative unemployment figures makes things easy, says Faberman. “For a lay person, what this tells you is that looking at the unemployment number is giving you the same story in relative terms as looking at the unemployment number.” Because they move in the same direction, both numbers will tell the same general story over time, Faberman says.

Unemployment measures and other labor market indicators are derived from data generated by the Current Population Survey (CPS), which generally registered marginally attached workers as an additional 7-8 million people than would be identified using surveys completed by the Labor Department’s Bureau of Labor Statistics. Faberman says the CPS design allows for a comparison of employment levels. “Comparing employment levels is a good way to get an idea of how many people are not part of the labor market.” The BLS also uses a new CPS to track the U-6 rate. The BLS redesigned its questionnaire, which generally registered a higher proportion of unemployed people re-entering the work force, and a lower proportion of new entrants.

The triumph over runaway inflation and high punitive tax rates was evident during the Age of Friedman. The world median income tax rate declined from 44.3 percent in 1980 to 41 percent in 2005. Marginal income tax rates dropped from the population-weighted average of 85 percent in 1980 to 56.7 percent in 2005. Markets became more international in scope due to a weakening of trade barriers too. Tariff rates fell from the population-weighted average of 43 percent in 1980 to 11 percent in 1995. One element of the new globalization is that distances matter less, market participants can think of developing economies as one large market.

The benefits of abandoning dirigistic policies have become clear to many in the developed world and thus, in turn, has raised people’s hopes and expectations. Shleifer recounts a trip he took to Chile a decade ago. At that time, the ambition of policymakers was to overtake Argentina. In 2005 policymakers wanted to match the growth of Australia and New Zealand.

Yet some scholars, most notably Columbia University economist and Nobel Prize winner Joseph Stiglitz, remain skeptical that free market policies are, in fact, good for the countries adopting them. For instance, these economists do not necessarily look askance at capital controls or see political instability as an important precondition to economic growth.

A recent book co-authored by Stiglitz, surveyed by Shleifer in this essay, seeks to make the case for significant state intervention in developing economies. Shleifer argues, the evidence offered is not persuasive. On inflation, for instance, their argument often amounts to a straw man, Shleifer maintains. Stiglitz and his co-authors see advocates of zero inflation as their main opposition when that point of view isn’t held by most market-oriented economists, who argue that a certain level of inflation might need to be tolerated, at least in the short run. Meanwhile, Stiglitz and his co-authors are incensed when they “express little concern for the huge costs that high inflation has brought to countries that lost control of their fiscal policy, including many Latin American and transition economies.”

Stiglitz and his co-authors favor capital controls as a way to temper swings in speculative capital investment. As Shleifer notes, they lean heavily on the example of Malaysia as a country that imposed such controls and was able to escape the Asian financial crisis of the 1990s. Yet evidence has failed to find that these controls had market-economic benefits. Instead, Shleifer suggests that such controls encouraged unproductive accumulation of capital and speculation.

Shleifer reminds us that we must be careful to learn the right lessons from the experiences of developing economies. The transition to a more free market system “has taught us that economic and political disorganization, combined with obsolete capital of both economic agents and politicians, can sharply slow down the economic growth of a country.” The other obvious lesson developing world now, he writes, is the lack of new business investment — a phenomenon that must be tied to the lack of institutional barriers to arbitrage in natural power which spawns predatory regulatory and fiscal policies.

On strategy, economics got the right answer: free market policies, supported but not encumbered by the government, deliver growth and prosperity.” Shleifer concludes. “And while a lot has been accomplished in the last quarter century, a lot remains to be done.” In short, the principle to which Milton Friedman devoted his career can continue to provide a suitable policy guide in the future.
Are CEOs Paid Too Much?

BY DAVID VAN DEN BERG

In June, President Obama announced the appointment of a Washington attorney as the administration’s new “special master” for executive compensation. Kenneth Feinberg, the appointee, will oversee pay packages of company executives whose firms are receiving government assistance.

Feinberg will review and approve any compensation for the senior executives and the next 20 highest-paid employees at seven firms who received money through the Federal Government’s TARP program. Those companies include Bank of America, Citigroup, AIG, General Motors, GMAC, Chrysler, and Chrysler Financial, according to the Treasury Department. Feinberg’s duties also include advising 30 more financial companies that received government aid about executive pay.

Part of the debate in Washington about executive pay has centered on the question of whether CEOs are overpaid relative to their contribution to firm value. Another question has revolved around whether their compensation packages create incentives for them to take excessive risks.

Across the corporate sector, the size of executive compensation packages has soared. The gap between the salaries of the workers and the CEO of a corporation has widened considerably. In 1994, the ratio of median CEO pay to median production worker pay was 90 to 1, according to a Congressional Research Service report. In 2005, that ratio had increased to 179 to 1.

Even as compensation packages often contain multiple elements, CEOs can receive company stock, stock options, deferred compensation, long-term bonuses, and nonmonetary perks. Not all of these new stock options have been an important element of CEO pay since the 1950s, although executives receive those more frequently now.

In a 2009 paper, New York University economists Xavier Gabaix and Augustin Landier wrote: “The sixfold increase in U.S. CEO pay between 1930 and 2003 may be fully attributable to the sixfold increase in market capitalization of large companies.”

In a 2009 paper, Gabaix and three co-authors proposed one possible solution for improving incentive structures. They suggest awarding executive pay through “dynamically incentive accounts.” Under the plan, CEOs would see their pay escrowed each year and would have no immediate access to the money. A constant percentage of the executive’s pay would be invested in company stock and the remainder in cash. The portfolio would be continuously rebalanced so that the portion of company stock is sufficient to induce effort at minimum risk to the executive. The executive would receive small portions of the account gradually, and that gradual vesting would continue even after an executive’s departure. This could discourage an executive from behaving badly, such as using accounting tricks to inflate the company’s short-run stock price before cashing out and leaving the firm in shambles.

In the end, structuring executive compensation in a way that aligns the incentives of the CEO with those of the company and its shareholders can be a tricky task — but one crucial to well-functioning markets.

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While most economists would argue that the main cause of the Great Depression was unwieldy monetary policies, such policies alone cannot adequately explain the severity and duration of the crisis. In this paper Ellen McGrattan of the Minneapolis Fed seeks to prove that some fiscal policies during the period had more than a small impact. One key insight of the paper is that prior studies on this topic have assumed that the only sort of capital taxed during this period was profit. Yet the big change in policy was actually a substantial increase in the taxation of dividends in the Revenue Act of 1932.

As McGrattan suggests, even the anticipation of dividend taxation — a proposal publicly suggested by President Herbert Hoover as early as 1930 — could have had an effect on investment in that period. In addition, the studies that suggest tax increases had little or no effect note that few people actually paid income taxes during this period. McGrattan notes that while this is true, the taxpayers who did pay those taxes earned almost all of their income through dividends.

Adding dividend taxation to the standard growth model on which the majority of research on this topic is based, McGrattan discovers that a large fraction of the observed decline in output from 1930 to 1933 is explained by her tax-inclusive model. Additionally, the decline in production hours per capita during this period also can be explained by her model.


The right to host a mega-event such as the Olympics is a valuable asset. A city that wins the Olympic bid can use it to promote itself on the international stage. However, economists are skeptical about the economic benefits. In practice, these events usually end up imposing large costs on their hosts that are not often fully recovered through revenue during the event or from the structures that are left over afterward.

While it is commonly asserted that hosting the Olympics will promote a nation’s exports, economists Andrew Rose of the University of California at Berkeley and Mark Spiegel of the San Francisco Fed examine the empirical evidence. They find a large positive effect of the Summer Olympics on both exports and overall trade. (The Winter Olympics are not studied due to the fact that fewer countries are able to host that event.) The authors also found a strong positive effect on trade from other mega-events, such as the Winter Olympics.

The research shows that Olympic host countries have seen up to a 30 percent increase in exports. Yet the authors also find an almost equal increase in trade in the nations that vied for the right to host the event but were not chosen. This implies that the effect on trade comes not from actually hosting the games but from bidding for them in the first place.

The authors speculate that this increase results from the signal that bidding to host the event sends to the world. This “signaling strategy” conveys the country’s interest in trade liberalization. This idea is illustrated by the fact that just two months after being awarded the right to host the 2008 Summer Games in July 2001, China successfully concluded negotiations with the WTO, thus formalizing its commitment to trade liberalization.

“Subprime Mortgage Pricing: The Impact of Race, Ethnicity, and Gender on the Cost of Borrowing.” Andrew Haughwout, Christopher Mayer, and Joseph Tracy, Federal Reserve Bank of New York Staff Report 385, April 2009.

Some have argued that during the peak period for subprime lending (2004 to 2006) minority borrowers were saddled with higher interest rates than nonminority borrowers. The authors of this study test that claim using a new sample that merges data on more than 75,000 adjustable rate mortgages with information on the race, ethnicity, and gender of the borrowers. They also have them to examine the differences in mortgage lending while controlling for both the risk profile of the mortgage and the characteristics of the neighborhood in which the property was located.

In contrast to some previous findings, their results show that there is no evidence of adverse pricing for most minority borrowers or the World Cup is seen as an honor to the nation to induce effort at minimum risk to the executive. The executive would receive small portions of the account gradually, and that gradual vesting would continue even after an executive’s departure. This could discourage an executive from behaving badly, such as using accounting tricks to inflate the company’s short-run stock price before cashing out and leaving the firm in shambles.

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Part of the debate in Washington about executive pay has centered on the question of whether CEOs are overpaid relative to their contribution to firm value. Another question has revolved around whether their compensation packages create incentives for them to take excessive risks. Across the corporate sector, the size of executive compensation packages has soared. The gap between the salaries of the workers and the CEO of a corporation has widened considerably. In 1994, the ratio of median CEO pay to median production worker pay was 9/1; according to a Congressional Research Service report. In 2005, that ratio had increased to 15/1. Executive compensation packages often contain multiple elements. CEOs can receive company stock, stock options, deferred compensation, long-term bonuses, and nonmoney perks. Not all of these new stock options have been an important element of CEO pay since the 1950s, although executives receive those more frequently now.

In a 2005 paper, New York University economists Xavier Gabaix and Augustin Landier write: “The sixfold increase in the ratio of median CEO pay to median production worker pay in 2005, relative to the 15/1 ratio of 1994, suggests that the market for CEOs works well and there are only a few egregious examples of executives getting paid more than they would expect based on their contributions to a company’s success. CEOs may operate in a kind of superstar market, which the late University of Chicago labor economist Sherwin Rosen describes as one in which ‘relatively small numbers of people earn enormous amounts of money and dominate the activities in which they engage.’ The differences in talent levels among top executives is quite small, Gabaix and Landier argue. However, those small differences can lead to big gaps in compensation and are magnified by firm size. In their paper, they note that the first CEO on the list earns over 100 percent more than the 80th ranked executive. The more-talented CEOs seem to add more value to their companies than the less-talented ones. Marko Tervio of the University of California at Berkeley tried to determine what would happen if the managers of the 1,000 largest U.S. companies in 2004 had been replaced by less-skilled executives, such as the CEO of the company at the bottom of the list. The combined market value of the top firms would have been perhaps $2 billion lower. Tervio’s calculations imply talented CEOs contributed $7 million to $12 million, or 15 percent of the total market value, of the largest 1,000 firms. Ananta Zaique in a 2008 paper for the Richmond Fed’s Economic Quarterly. Economists differ on how closely the executive’s pay should be linked to the company’s performance. For instance, stock options may prove problematic in CEO compensation packages, Gabaix says, by encouraging excessive risk taking that only temporarily bolsters a firm’s share price. In addition, a large decline in share price can render the stock options worthless and granting new options or re-pricing existing ones may seem to reward an executive for failure. Part of the CEO’s compensation should not be subject to risk, providing some insurance against bad performance due to factors outside of his control, Jarque writes. Failure to provide that assurance would make it difficult to recruit executives.

In a May 2009 paper, Gabaix and three co-authors, who propose one possible solution for improving incentive structures. They suggest awarding executive pay through ‘dynamic incentive accounts.’ Under the plan, CEOs would see their pay escrowed each year and would have no immediate access to most of it. A constant percentage of the executive’s pay would be invested in company stock and the remainder in cash. The portfolio would be continuously rebalanced to make sure the stock is sufficient to induce effort at minimum risk to the executive. The executive would receive small portions of the account gradually, and that gradual vesting would continue even after an executive’s departure. This could discourage an executive from behaving badly, such as using accounting tricks to inflate the company’s short-run stock price before cashing out and leaving the firm in shambles.

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The right to host a mega-event such as the Olympics is not something that can be bought or sold. The host city is chosen, but economists are skeptical about the economic benefits. In practice, these events usually end up imposing large costs on their hosts that are not often fully recovered through revenue during the event or from the structures that are left over afterward.

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The authors speculate that this increase results from the signal that bidding to host the event sends to the world. This “signaling strategy” conveys the country’s interest in trade liberalization. This idea is illustrated by the fact that just two months after being awarded the right to host the 2008 Summer Games in July 2001, China successfully concluded negotiations with the WTO, thus formalizing its commitment to trade liberalization.

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Some have argued that during the peak period for subprime lending (2004 to 2006) minority borrowers were saddled with higher interest rates than nonminority borrowers. The authors of this study test that claim using a new sample that merges data on more than 75,000 adjustable rate mortgages with information on the race, ethnicity, and gender of the borrowers. The authors find that event.) The authors also found a strong positive effect on trade from other mega events, such as the World Cup. The research shows that Olympic host countries have seen up to a 30 percent increase in exports. Yet the authors also find an almost equal increase in trade in the nations that vied for the right to host the event but were not chosen. This implies that the effect on trade comes not from actually hosting the games but from bidding for them in the first place.

The authors speculate that this increase results from the signal that bidding to host the event sends to the world. This “signaling strategy” conveys the country’s interest in trade liberalization. This idea is illustrated by the fact that just two months after being awarded the right to host the 2008 Summer Games in July 2001, China successfully concluded negotiations with the WTO, thus formalizing its commitment to trade liberalization.

“Subprime Mortgage Pricing: The Impact of Race, Ethnicity, and Gender on the Cost of Borrowing.” Andrew Hwang, Christopher Mayer, and Joseph Tracey, Federal Reserve Bank of New York Staff Report 368, April 2009.
BY RENEE COURTOIS

Just as consumer credit companies like Experian and Equifax issue credit scores for individuals, in bond markets credit rating agencies evaluate the risk level of securities that are issued by corporations, local governments, and other entities to raise money. The processes have substantial differences, but their purpose is largely the same: to reduce asymmetric information in financial markets that can otherwise raise the cost of connecting borrowers and lenders. This is a valuable market function.

In the last decade, rating agencies have been an essential part of the process of mortgage securitization, or turning home mortgages into bonds that were sold throughout the global financial market. Ratings opened up securities backed by mortgages, including many subprime mortgages, to a larger pool of investors than ever before, especially ones constrained by regulations to hold only assets of a certain safety level. This allowed profits from the booming housing market to be shared throughout the financial system.

Like lenders and investors, rating agencies shared in that profit. The “Big Three” rating agencies of Standard & Poor’s (S&P), Moody’s Investors Service, and Fitch Ratings, which together represent more than 95 percent of the market share in the rating industry, made record profits rating mortgage-backed securities: The Big Three’s revenue from ratings doubled from $3 billion to $6 billion during the 2002 to 2007 heyday of subprime lending and securitization.

In hindsight, many of these ratings did not do a good job of predicting the performance of the securities. The financial market turmoil — related to the declining housing market — that started in the summer of 2007 led the rating agencies to revise ratings downward in record numbers. In 2007 Moody’s downgraded 31 percent of its asset-backed collateralized debt obligations (CDOs), most of which were based on mortgages. By just over six months into the crisis, S&P had downgraded 44 percent of the residential mortgage-backed securities (RMBS) based on subprime mortgages that it had rated from 2005 through the third quarter of 2007. In 2008 Fitch downgraded 57 percent of its ratings on residential mortgage-backed securities.

In each of these cases, a large proportion (by historical standards) of the downgrades was for securities rated AAA — the highest possible rating, typically associated with virtually zero default risk. The difficulty of pricing risks in what had become a worldwide mortgage-backed security market is ultimately what amplified the housing downturn and made it a global problem.

Rating agencies were by no means the only parties that underestimated the riskiness of these securities. Nonetheless, the role that rating agencies played in the securitization process has led to an intense discussion about reform within the rating industry, which will depend critically on understanding the incentives these agencies face to produce accurate ratings.

The Rating Process

The grade (called a rating) that a rating agency issues represents the probability the security issuer will default on the bond it is issuing. For the most part, issuers of the securities pay for the ratings to be developed, and then the majority of ratings are published on the rating agency’s Web site for

Can regulatory reforms adequately realign the incentives of credit rating agencies?
As insurance companies, banks, pension funds, and money industry. Since the 1930s, certain financial institutions, such as the Big Three, only Moody’s is a publicly traded company.

The industry has been increasingly woven into financial markets since its birth in 1909, when John Moody began issuing public ratings of railroad bonds. Rating agencies were virtually unregulated by the federal government until 2007, when the 2006 Credit Rating Agency Reform Act was implemented. The act gave the Securities and Exchange Commission (SEC), a government regulatory body that acts as an advocate for investors, the authority to force the agencies to create certain procedures and investigate whether the agencies adhered to those procedures. But the SEC drew a very careful line prohibiting it from auditing the ratings themselves, or forcing agencies to modify the sophisticated methodologies used to produce them.

Rating agencies have historically centered their business on grading bonds issued by a single entity, such as a corporation or a local government, to raise money. However, in the last decade the agencies have gained an increasing amount of their revenue, between one-third and one-half depending on the agency, from rating a relatively new financial device called “structured finance” bonds — so named because they are “structured” out of other assets like mortgages. These are much more complex and harder to rate because they entail assessing the risk of many underlying assets.

A large class of structured finance products is RMBS. To grade an RMBS, a rating agency works closely with the security issuer, often an investment bank, to obtain background information on the security, including the characteristics — like the borrowers’ FICO score, geographic location, loan-to-value ratio, and whether income documentation was provided — of each of the up to several thousand mortgages in the RMBS. Based on the risk characteristics of the mortgages in the RMBS, the rating agency uses sophisticated mathematical models and some subjective judgment to determine the probability that the issuer will default. Based on that probability, the rating agency assigns a grade to the security.

The grade is then provided to the issuer and, in the case of the Big Three, published on their Web sites. The agency continues to monitor the likelihood that the security issuer will default, updating its rating as necessary. Some rating agencies make these updates frequently to keep their ratings current, while others, especially the Big Three, intentionally do so only periodically to avoid erroneously adjusting ratings in response to temporary blips in financial markets.

A Structural Problem
No other industry is structured quite like the credit rating industry. Since the 1930s, certain financial institutions, such as insurance companies, banks, pension funds, and money market mutual funds, have been required to hold only securities that have been deemed “investment grade” by a rating agency. Since then, rating agencies have been a part of the regulatory apparatus. In 1975 regulations also began setting minimum capital requirements for certain financial institutions based on the grades of the assets in their portfolio — if a regulated financial institution held risky assets, regulators would require it to keep a little extra cash on hand as protection.

But the SEC began to worry that bogus rating firms would emerge and issue beneficial ratings for anyone willing to pay. This compelled it to spell out exactly whose “grades” counted. For that, in 1975 the SEC created the nationally recognized statistical rating organization (NRSRO) designation for rating agencies. The Big Three were granted the NRSRO title by the SEC, and NRSROs were formally written into SEC and other regulations. It followed that many investors, even those whose portfolios weren’t regulated in this way, would choose to also base their investments in part on ratings, further cementing demand for rating agencies’ services.

In these early days, rating agencies were paid by the investors who were bound by regulation to use ratings in creating their portfolios. However, this changed around the time the SEC created the NRSRO category. With simple photocopying, those who did not pay could have access to the thick manuals of ratings published by the Big Three, introducing the “free rider” problem to the rating industry.

Around the same time, the large bankruptcy of Penn Central Railroad — one of the largest issuers of commercial paper at the time — left issuers of securities desperate to prove to investors that their paper was sound.

The Big Three realized that issuers of securities, as opposed to investors, were ready and willing to pay for ratings, and they each moved to an “issuer-pays” structure. Currently more than 98 percent of all credit ratings issued by NRSROs are paid for by the issuer. The remaining ratings are paid for by subscribers, usually investors, which are kept private.

The issuer-pays model has not been easy for everyone to swallow. Critics say the rating agency being paid directly by the party that it is evaluating presents a conflict of interest because both sides have incentive for ratings to be as optimistic as possible. There is nothing preventing issuers from shopping around among rating agencies, or at least threatening to if they think they can get a higher rating elsewhere.

Rating agencies — which are paid according to the quantity of securities they rate — in turn have incentive to attract the business of issuers by providing ratings that are inflated, according to critics.

This structure doesn’t guarantee that rating agencies will inflate ratings, but it certainly presents incentive for them to do so. The surprising volume of rating downgrades taken place since the housing downturn, coupled with anecdotal reports like a 2008 SEC investigation that found rating analysts participated in fee negotiations with issuers,
highlight the possibility that conflicts of interest might have affected the rating process in recent years.

For all its potential conflicts of interest, the issuer-pays structure apparently posed no large problem until the recent boom in subprime lending. There are two probable reasons for this. The first is that securities grew increasingly complex during this time period (see sidebar), which encouraged market participants to skim on their own due diligence in favor of over-relying on the straightforward simplicity of ratings. Further, rating agency analysts’ models may not have kept pace with the mounting complexity of RMBS and CDOs, causing them to underestimate some of the risk. In an open April 2009 SEC meeting on rating agencies, Daniel Curry, head of Canadian rating agency DBRS’s U.S. operations, referred to increasing complexity as a “smokescreen” that obscured any inaccuracies of the ratings.

Second, growth in securitization from the mortgage market was exceptional — CDO issuance grew from about $158 billion in 2004 to more than $720 billion in 2006. The result was that large portions of rating agencies’ revenue became increasingly concentrated in just a handful of clients since the lucrative and exceedingly complex securities were issued predominantly by a few firms. According to an SEC review of 368 CDOs rated by the Big Three in 2006 and 2007, just 11 issuers accounted for 92 percent of them. These issuers would have the power to wield more influence on rating agencies to produce favorable ratings since, if they were unhappy with ratings, they could threaten to take a very large chunk of their business to a competing rating agency. The rating agencies merely being conscious of this predicament could be enough to encourage them to inflate ratings to keep business.

Supporters of the issuer-pays model, including the Big Three, say that the question of who pays shouldn’t matter since the market would weed out any agency that didn’t have an established reputation for producing accurate ratings. The issuer-pays rating agencies execute this “reputation building” by publishing all of their ratings, covering virtually every industry and every bond issuer, on their Web sites for public consumption, providing the opportunity for anyone, including competitors, to check on their ratings. This ratings transparency was described as a “substantial public good” by Raymond McDaniel, CEO of Moody’s, in the April 2009 SEC roundtable. This public good would

### Understanding Mortgage Securitization

In 2000 a J.P. Morgan analyst named David Li was intrigued by the frequency with which someone dies after a spouse passes away, commonly called the “broken heart” phenomenon. Li knew that insurance companies use mathematical techniques to estimate that probability for the pricing of insurance policies. He realized that a similar technique could be applied to financial markets and published a highly technical paper on the topic. He probably had no idea that his revelation would arguably contribute to the worldwide financial market downturn and the role that mortgage securitization had in it.

To understand how, you first need to know what mortgage securitization is. When mortgage lenders sell mortgages on the secondary market they are often grouped into a pool called a residential mortgage-backed security (RMBS). Then they are resold in pieces to institutional investors on Wall Street.

Creating an RMBS requires some financial alchemy. The issuer often divides the RMBS into groups called “tranches.” Investors in the highest tranche get paid first as mortgage payments come in; then the middle tranches are paid. The lowest tranches are paid only if all the higher tranches have been paid first. In other words, they bear losses first so they’re a riskier investment. For the top tranches to be affected, however, literally hundreds or thousands of homeowners in a pool would have to default on their mortgages at once. That’s not very likely to happen.

The lower RMBS tranches, on the other hand, were obviously quite risky. But just as some mortgages could be pooled to create a virtually risk-free asset, what if a new, safer security could be created out of the risky low tranches of RMBS too?

Issuers already had a name for such a security: A collateralized debt obligation (CDO), which is a bond that is itself backed by another pool of bonds and sold in tranches like RMBS. The key to creating a mortgage CDO is pooling together the low-tranche RMBS bonds in such a way that the probability they would default at the same time is sufficiently low. This would mean the high tranches are likely never to see losses. In fact, if the default probabilities are sufficiently uncorrelated, the higher tranches could even earn an AAA rating — even if they are comprised entirely of risky assets — and sold to investors looking for safe assets.

Estimating the correlation of a pool of bonds for a CDO is relatively easy when they are based on corporate bonds, which are relatively simple. But what if underlying assets are based on mortgages, each with different homeowner FICO scores, geographic locations, loan-to-value ratios, and dozens of other characteristics? It is hard enough to use those characteristics to estimate the probability of default for even one mortgage. Estimating the probably that the hundreds or thousands of mortgages would default together — their default correlation — would seem nearly impossible.

The trouble with assessing the default correlation of a pool of mortgages is that we haven’t observed each mix of mortgage characteristics very many times in history to know how they affect the likelihood of default. Further, some of the characteristics, such as geographic location, are related across
go away if all rating agencies were required to switch to the “subscriber-pays” model that some of the smaller agencies use.

It may even be that it doesn’t truly matter which party pays for ratings, since conflicts of interest can exist no matter who pays. For example, certain investors such as hedge fund managers could just as easily persuade a subscriber-based rating agency to downgrade a security, allowing them to short-sell it. “[A]s long as rating agencies are paid by any party with a financial stake in the outcome of our opinions … there are going to be pressures,” said Moody’s McDaniel in October 2008 testimony before Congress. “And so the question is not are there conflicts of interest. There are. It’s managing them properly.”

Supply Does Not Meet Demand
Questions surrounding the incentive structure created by the issuer-pays model are not the only ones on the table. The rest comes down to supply and demand — both of which are set artificially by the SEC. By establishing the NRSRO label and parsimoniously choosing which rating agencies get that label, the SEC has created barriers to entry into the rating industry. These barriers were lowered somewhat after the 2006 act; there are now 10 approved NRSROs in the United States.

In addition to restricting the supply of rating agencies, the SEC has established guaranteed demand for NRSROs by writing them into regulations. Issuers must get their securities rated in order for institutional investors — the largest investors in the market — to hold them, ensuring that they will always be in need of rating agencies’ services. The presence of ratings in public regulations — and now in many private contracts and investment guidelines — could mean that the focus of a large proportion of the market’s investors has shifted from holding sound investments to holding investments that are simply highly rated. These should be equivalent but may not be if there are active conflicts of interest.

Economist Lawrence J. White of New York University is one of the most vocal critics of the protection of NRSROs in regulations. He believes that regulators have essentially outsourced their responsibility to conflict-ridden credit rating agencies. “These third-party opinions had been given the force of law,” he says. “Federal regulations make it clear that...

mortgages, but we don’t always know how much. If a mortgage in Oakland County, Mich., defaults, how does that impact the probability that another mortgage there will, too, given the dozens of other differences between them? It’s hard to say.

This is where David Li’s paper comes in. Insurance companies had used a “Gaussian copula” function to estimate the probability of death — which he realized could also be used to estimate the “death” of a security, or default. The copula function predicts the likelihood of two events occurring when they are somewhat affected by each other.

The breakthrough of the copula model was that rather than gathering data from actual mortgage defaults, which are rare, the copula looked at prices in bond markets, which are abundant, to assess correlation. Through the lens of the copula function, movements in certain asset prices revealed their risk level, and produced the default correlation between them. CDO issuers no longer had to scratch their heads over the multitude of characteristics of each individual mortgage in the loan. The copula provided a much simpler way to evaluate default correlation. Thus, the mortgage CDO boom was born.

The appetite for these structured finance securities was substantial — in 2005, 81 percent of CDOs contained mortgages, the vast majority of which were highly rated by rating agencies. Institutions also had begun issuing insurance policies for these RMBS, called credit default swaps (CDS). The seller of the swap didn’t even have to own the RMBS pool, and that allowed an unlimited number of securities to be created out of a limited number of mortgages. From 2001 to 2007, the CDS market multiplied more than 67 times to $62 trillion, larger than the entire world’s gross domestic product at that time.

CDO issuers became by far the largest purchasers of subprime mortgages in the secondary market, for the purpose of issuing more securities. Subprime mortgage lenders saw such a strong demand for their subprime loans that many were encouraged to provide more of them, sometimes lowering their lending standards to do so.

Securitization allowed the proliferation of mortgage-related securities to expand far beyond the number of actual mortgages extended during the boom. This explains how the global economic impact of the housing market decline has been many times larger than the total losses in subprime loans. Securitization is not the enemy — it remains an important way for financial markets to hedge risk. The copula’s flaw was that the correlation estimates it provided were extremely sensitive: As soon as market conditions changed a tiny bit, the correlations became highly inaccurate. As mortgage holders defaulted in increasing numbers, so did the trillions of dollars of securities on which they were based. The logic of mortgage securitization was based on pooling assets that were not likely to default together. But issuers and rating agencies never accounted for the possibility that house prices would turn negative simultaneously in so many regions.

But don’t blame Li for the mess others may have made of his model. “The most dangerous part,” he warned in the Wall Street Journal in 2005, “is when people believe everything coming out of it.”

— RENEE COURTOIS

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'investment grade' is something entirely the creation of the rating agencies.” Meanwhile, he notes, all ratings are alongside disclaimers that the ratings are purely opinions and shouldn't be construed as investment advice.

In fact, the rating agencies cannot be held liable for the quality of their grades. Several court cases have ruled that ratings are opinions, legally equal to those of journalists and therefore protected as “freedom of speech” under the First Amendment. “We are giving the force of law to a bunch of judgments where the judgment providers are caveating and taking absolutely no responsibility for the force of law they were granted,” White says.

Just how rating agencies could be held responsible is tricky, however. The procedure of the Big Three is to adjust ratings only after fundamental changes in order to avoid mistakenly responding to short-run market fluctuations as opposed to a security's fundamental health. So what constitutes getting a rating “wrong” as opposed to simply declining to adjust a rating in response to what the rater believes is a temporary market turn?

Rating agencies argue that if you saddle them with liability for the imprecise art of rating securities, the industry would no longer be profitable and wither away. “Ultimately, we are not guaranteeing all the securities,” said Sean Egan of Egan-Jones, a subscriber-based agency, in an October 2008 testimony before Congress. “There is too much out there. The industry would go away ... if you did away with the freedom of speech defense.” Barron Putnam of LACE Financial, a smaller subscriber-pays agency, adds, “The industry needs changes, but you have to be sure that you don’t kill it.”

White agrees, sort of. “It can’t be a healthy situation to sue them anytime they make a modest mistake,” he says, “but for big mistakes they ought to be held liable. There is a difference between the kind of things they do and the kind of things the New York Times and Wall Street Journal do.”

The agencies argue that they are indeed held liable — again referring to the possibility that their reputations for producing reliable ratings will be tarnished when their ratings have to be downgraded. Heads of the Big Three have conceded that their reputations have suffered as a result of the subprime and securitization mess.

However, White is skeptical that concerns over reputation provide sufficient incentive for rating agencies to stay in line. “The problem is, that’s what Arthur Andersen told us up until the end of 2001, and we know where they ended up,” he says, referring to the history-making collapse of the accounting firm scandalized by Enron. “Of course there’s always the long-run incentive to maintain one’s reputation, but it can get overpowered, clouded, by short-run conflicts and short-run temptations.” He says this is what appeared to happen during the mortgage lending and securitization boom.

So far, the rating agencies have not withered away like Arthur Andersen, and no one seems to expect that outcome. For example, one of the Federal Reserve’s recent programs to assist financial markets, the Term Asset-Backed Securities Loan Facility (TALF), makes loans to investors only if backed by highly rated collateral, as deemed by the rating agencies. The Fed explained its reliance on the rating agencies by pointing out that their grades on asset-backed securities unrelated to mortgages have been more stable, and that ratings are not the only criterion used for TALF collateral.

The Call for Bolder Reform

White is among a growing group of academics who advocate taking NRSROs out of the regulatory process completely by removing all references to them in SEC rules. Certain investors would still be required to hold assets of a given safety level, but the burden of proof of the safety of that portfolio would be placed on the regulated financial institutions. They could deal with this either by conducting their own analysis on their portfolios, or by consulting an advisor, which could very well be a rating agency. However, rather than blindly using the ratings as justification for the assets they hold, they would need to justify to regulators why they believe the rating agencies’ opinions on their portfolios are sound. Indeed, a key reason to write NRSROs out of regulations would be to encourage investors to rely on alternative measures of risk that are market based, such as spreads on asset yields.

In June 2008 the SEC did propose writing NRSROs out of regulations, although the proposal has been absent from all subsequent iterations of regulation changes. A new set of SEC rules that have been proposed but not yet adopted are geared toward improving competition by requiring background information on securities to be shared among rating agencies. This would allow competing agencies to formulate and publish second opinions based on the very same information that the initial rating agency used. The issuer-pays rating agencies do currently publish these unsolicited second opinions, but they are based only on information that is publicly available, which is of significantly less detail.

These proposed regulations carefully traverse what is actually a fine line between promoting competition and destroying it. The concern of some of the agencies is over the potential infringement on proprietary information such as the agencies’ rating models. If forced to share them, the smaller subscriber-pays agencies, which don’t make their rating methodologies public, could be disproportionately affected, further increasing barriers to entry in the industry. Some of these agencies view their classified ratings models as their most important asset.

Perhaps surprisingly, a recent batch of research has suggested that competition in an industry dominated by the issuer-pays model may not actually improve the quality of ratings. A 2009 paper by New York University economists Vasiliki Skreta and Laura Veldkamp shows that increasing the number of rating agencies in the game could enlarge the pool from which securities issuers can shop for ratings. In a world where the average security has grown more complex, as in the past decade with RMBS and CDOs, the more
likely raters are to evaluate a security differently and thus issue different ratings. The wider the dispersion of possible ratings, the more likely an issuer is to find one that is overly optimistic — an outcome that is possible even in the absence of any fraud or active conflict of interest. Further, a 2009 paper by Bo Becker and Todd Milbourn of the University of Illinois at Urbana-Champaign and Washington University in St. Louis, respectively, suggests that since competition reduces profits in an oligopolistic setting like the rating industry, it may also reduce the relative payoff for rating agencies to “invest” in developing a reputation for publishing consistently high-quality ratings compared to other revenue-generating activities like ratings inflation.

Despite his instincts as an economist, White is also not convinced that increased competition is the answer given the industry’s other significant structural flaws. “I’m a pro-competition guy, but I have to acknowledge the possibility that in this fifth-best world it may well be that increasing competition may have perverse consequences.”

On the other hand, LACE Financial’s Putnam thinks increasing competition is crucial to driving the agencies’ primary incentive back to building a reputation for creating high-quality ratings. “If you control so much market share, you’re not really accountable to anybody,” he says. Besides, he adds, if the current regulations on the table don’t work, increasing competition will be hard to avoid for another reason: “Congress and the SEC can pass reforms to make them do a better job, but in the long run if you can’t straighten out the industry, and something like the current mess happens again, Congress will likely address the problem with antitrust regulation.”

**Incentivize Me**

While regulations may make ratings disproportionately important to issuers and investors, the agencies say that many investors misunderstand their purpose to begin with: The grades assess the probability of default, nothing more. They are not meant to signify whether an investment is adequately priced or aligns with a given investor’s risk appetite. Furthermore, two assets with the same rating may exhibit great differences in price volatility. Investors are particularly prone to over-relying on rating agencies in an environment in which securities are growing excessively complex. A simple letter grade is an enticing way for an institutional investor to meet a regulatory requirement and also take part in an opaque but burgeoning market that many of its competitors are finding profitable.

Ratings are intended to be simply one tool of many for reducing asymmetric information, however. This logic was spelled out in the SEC’s initial regulations requiring institutions to rely on NRSROs. But the profitability and complexity of the securitization market in recent years induced investors to ignore this caution, a fact that issuers and rating agencies may have intentionally or unintentionally exploited.

Even those who argue for taking credit rating agencies out of regulations do not argue that the agencies provide no value to the market. However, without the status as a government-protected oligopoly, the agencies would be profitable only if investors perceive that they produce consistent, high-quality ratings. In other words, it would emphasize the need for the agencies to build a reputation by developing a proven track record. What may also abet that process is better procedural oversight of conflicts of interest — such as oversight rules adopted by the SEC in February 2009 — which should fall short of regulating the ratings or methodologies themselves.

At any rate, the discussion highlights that even if there is no intentional fraud, the current structure of the rating industry can, and did, produce adverse outcomes. Whether any particular agency engaged in intentional wrongdoing will take more than the duration of the present economic downturn to ascertain. Perhaps the most important outcome, however, is that this has called attention to the incentives that rating agencies faced in the past and still face today.

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**Readings**


Market for pollination services grows

BY BETTY JOYCE NASH

Commercial pollination markets have been well established since at least the 1940s. Yet research into the economics of pollination, honeybees and its role in agriculture continues to flourish as hives numbers fall and demand for pollination grows.

Bees and Economic Thought

Honeybees also have appeared in economic theory. Imagine a beekeeper on the eastern seaboard who in March loads his bee hives onto his pickup and drives to Florida, New York, and Washington state, evidence that beekeepers rent hives. When he looked at pollination fees, he found buyers and sellers of these services. He concluded that “observed pricing and contractual arrangements governing nectar and pollination services are consistent with efficient allocation of resources.”

In 1973, economist Steven N.S. Cheung in his paper “The Fable of the Bees,” described a functioning market with obvious transactions between beekeepers and farmers. Pollination services were listed in the “Tobacco Page” of rural newspapers, and farmers paid beekeepers to rent hives. bees pick up pollen as they forage across flowering plants, depositing pollen onto receptive stigmas. However, the effects are often subtle and difficult to measure in money. The authors found the price of pollination services reflect “a complex array of knowledge of entomology, horticulture, environmental science, consumer preference, logistics, and world trade.”

Market for pollination services grows

Only a beekeeper would move to South Carolina for the pollen. But Chuck and Karen Kutik of the University of California at Davis estimate hive requirements at roughly 1.5 million colonies. The authors found the fees paid for a honey crop like vetch are lower than all fees reported for non-honey crops like almonds. Almond pollination prices are higher when honey production and pollination do not occur simultaneously. The authors find the price of pollination services reflect “a complex array of knowledge of entomology, horticulture, environmental science, consumer preference, logistics, and world trade.”

Higher prices are attracting beekeepers from as far away as the East Coast. The Kutiks sent their bees to California for the first time in 2008 and again for the 2009 almond pollination. They contract with another beekeeper in California who unloads and then ships the bees back. “We lease our bees to another beekeeper who deals with the farmer,” Karen Kutik notes. “The bees are expected to make sure they are the proper standard that the farmer expects for the money he pays. It was very lucrative

The Kutiks pack bees off to California almond fields in February, apple orchards in New York in May, and blueberry fields in Maine in late spring with vegetable and fruit stops along the Atlantic seaboard in the summer. Charles Hatley of Concord, N.C., also rents hives. “You want to try to keep your bees busy,” his bees, in mid-April, were foraging for nectar in the raspberry fields of Stanley County, N.C., before heading to blueberry and blackberry fields.

Beekeepers like Hatley and the Kutiks are part of a growing market for pollination services that has expanded over the past century, especially since the 1980s when wild bee populations began to vanish. Farmers can’t rely on or manage other pollinators — birds, other types of bees, butterflies, wind, or water. Honeybees forage across flowering plants, improving quality and yields for farmers, while the bees process the blossom nectar into honey, a boon for nectar and pollination services are consistent with efficient allocation of resources.

Cheung’s work drew on the noneconomic“Tobacco Page” of rural newspapers, and farmers paid beekeepers to rent hives. “The Problem of Social Costs,” Thurman and co-authors Michael Burgett of Oregon State University and Randal Rucker of Montana State University, have written a paper about pollination fees. But Burgett has kept crop-by-crop summaries of an annual pollination survey of about 60 commercial beekeepers in Washington and Oregon since 1986. The survey confirms Rentier’s 1952 estimate of a 10 percent demand for the service and go so against a backdrop of continually evolving scientific views on the efficacy of honeybee pollination,” according to a paper on the subject that Thurman co-authored. “Markets must also coordinate the delivery of pollination services to multiple crops during their blooming seasons, not perfectly forecastable.” That is no small task.

Bees pick up and deposit pollen as they forage across flowering plants, improving quality and yields. Farmers often hire honeybees to pollinate crops because wild bee populations have declined.
Market for pollination services grows

By Betty Joyce Nash

Nectar provision and bee pollination are a “reciprocal externality,” according to those early papers, both drawing on the work of economist C.R. Coase. Coase’s views were in part inspired by the Beekeeping Services Decision in an early paper that defined the concept of negative or positive side effects of a firm’s behavior and termed them “externalities.” His theory conceptualized the costs that aren’t borne by the firm. Certain taxes might compensate for negative side effects, such as pollution and honey-making in the bee case, could be encouraged by a subsidy. Such observations had minimal influence on honey price support policies at the time, but the U.S. honey program of the 1980s and 1990s was in fact designed to encourage bee pollination services, according to research by economist Walter Thurman of North Carolina State University. Today, there are no price supports for honey, but trade rules govern some honey imports.

In 1973, economist Steven N. Cheung in his paper “The Fable of the Bees,” described a functioning market with obvious transactions between beekeepers and farmers. Pollination services were listed in the Tobacco Pages of rural, apple-growing Washington state, evidence that beekeepers rented hives. When he looked at pollination fees, he found buyers and sellers of these services. He concluded that “observed pricing and contractual arrangements governing nectar and pollination services are consistent with efficient allocation of resources.”

Cheung’s work drew on the now-famous paper by Ronald Coase, “The Problem of Social Cost,” published in 1937. Exporters who have written a paper about pollination fees. For one thing, aggregate pollination data are not recorded, including even the fees paid to beekeepers, according to Thurman and co-authors Michael Burgett of Oregon State University and Randal Rucker of Montana State University, who have written a paper about pollination fees. But Burgett has kept crop-by-crop summaries of an annual pollination survey of about 60 commercial beekeepers and has found that pollination fees rise according to costs — for example, accounting for the appearance of the varroa mite in 1991, which increased the price of rentals by about $4.60 per colony. The authors also examined the value of honey produced during the pollination periods. Although some beekeepers like the Kutiks say that they don’t factor honey production into their pollination prices, the authors found fees in Washington and Oregon vary across pollinated crops. Beekeepers pick up and deposit pollen as they forage across flowering plants, improving quality and yields. Farmers often hire honeybees to pollinate crops because wild bee populations have declined.

authors found the fees paid for a honey crop like vetch are lower than all fees reported for non-honey crops like almonds. Almond pollination prices are higher when honey production and pollination do not occur simultaneously. The authors find the price of pollination services reflect “a complex array of knowledge of entomology, horticulture, environmental science, consumer preference, logistics, and world trade.” Bee pests have reduced available supplies, especially in California, and so the demand for almond pollination continues to be reflected in prices, which Thurman cites as about $150 per colony in 2008. He estimates fees paid to all U.S. beekeepers for all crops at about $810 million in 2006 and increasing.

With an estimated 3.5 colonies per acre, and an increase of 21 percent in almond acreage from 2006 to 2010, economist Daniel Sumner and research specialist Hayley Boris of the University of California at Davis estimate hive requirements at roughly 1.4 million in 2012, the almond crop may need about 2 million colonies.

Bee operators who migrate to California to pollinate almond blossoms may rent hives to fruit and vegetable growers along the way. After almonds, many move on to the Northwest for apple, pear, and cherry crops. During the summer, hives remain in the Midwest, home to the mega operations for honeybees. There, bees may frequent sunflower, clover, basswood, and various nectar sources to produce honey.

Higher prices are attracting beekeepers from as far away as the East Coast. The Kutiks sent their bees by truck to California for the first time in 2008 and again for the 2009 almond pollination. They contract with another beekeeper in California who unloads and then ships the bees back. “We lease our bees to another beekeeper who deals with the farmer,” Karen Kutik notes. “The bees are inspected to make sure they are the proper standard that the farmer expects for the money he pays. It was very lucrative
Rainy weather in the past two years have stymied basswood
honey-making isn’t ever a sure thing.” For instance, cool, Maine, they “don’t even talk honey with them,” she says of
gram duty placed on Chinese honey in January. There’s no explicit honey subsidy, there was a new $2.63 per kilo-
duty placed on Chinese honey in January.
Karen Kutik says weather can wreak havoc on pollination and honey produc-
tion alike. When it rains or temperatures drop, the bees don’t forage. For instance, the bees may be out in the almost
groves of California for a month and only fly 10 days, she
explains.
The Kutiks depend on pollination services to round out
their income, which also derives from honey and making
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the blueberry growers. “That’s a perk. It is not a sure thing. However, I don’t even ever a sure thing.” For instance, cool, rainy weather in the past two years have stymied basswood
and locust honey production for the Kutiks. “It’s feast or famine,” she says, of the bee business in general. “Right now
seems to be a good time. For a number of years we were too
small.” She adds that they run between 2,500 and 3,000 hives, while among the Midwest bee operations, 10,000 is
considered small.
Future of the Bee Business
While plentiful bees have vanished from the fields and forests, domestic bees are also struggling with a variety of mites and
viruses. There are pest control options, but keeping hives healthy is tricky. Researchers are even examining the possi-
bility that the migrations may weaken bee colonies, making them more susceptible to mites like varroa. Apiculturists are
worried. Some losses are odd and include reports of bees fall-
ing to return to the hives and rapid colony losses for reasons that remain largely unknown, according to a 2008 report
by the Congressional Research Service.
“The market for pollination services has grown and it has
incorporated with these infestations of exotic pests we’ve had,”
says Don Hopkins, the state apiarist for North Carolina. The pests are one reason most states require inspections,
certifications, and permits for incoming bees.
North Carolina has the most beekeepers of any state in
the nation, but most keep the bees as hobbies or sideline businesses, like Charles Hatley. He has kept bees for 35 of his
45 years. With demand for pollination services rising up, and bee populations in jeopardy, he wants to transform his sideline into a full-time operation. He currently breeds queen bees, good for disease resistance, for eventual sale. He
places bees in a 400-acre forest of sourwood trees for a dis-
tinctive honey that can bring a premium price of up to 200 percent over other varieties. Hatley also rents hives to
vegetable and fruit growers for about $50 per colony for six weeks. He has drafted his own contract, one that specifies
whether they use insecticides because he prefers to rent his hives to organic farmers. He can’t keep up with demand. “I got a call from a farmer who wanted 600 colonies for watermelon and
tomatoes, but I don’t need to rely on a specific location. Just because a film
why it is important for companies to be shot there. Special visual effects can alter certain ele-
ments of a landscape or the look of a street. In these cases,
the industry that can re-create any location also
projects. More moviemaking and television production, furthermore,
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Future of the Bee Business

While bee lady, and bee populations in jeopardy, he wants to transform his businesses, like Charles Hatley. He has kept bees for 33 of his 45 years. With demand for pollination services ramping up, and bee populations in jeopardy, he wants to transform his sideline into a full-time operation. He currently breeds queen bees, good for disease resistance, for eventual sale. He places bees in a 400-acre forest of sourwood trees for a distinctive honey that can bring a price premium of up to 200 percent over other varieties. Hatley also rents hives to vegetable and fruit growers for about $50 per colony for six weeks. He has drafted his own contract, one that specifies whether they use insecticides because he prefers to rent hives to organic farmers.

He can’t keep up with demand. “I got a call from a farmer who wanted 400 colonies for watermelon and cantaloupe,” he said. “I just can’t keep up with demand.” For instance, cool, rainy weather in the past two years have stymied basswood tree growers. “That’s a perk. It is not a sure thing. Maine, they ‘don’t even talk honey with them,” she says of the blueberry growers. “Berries make good honey, when they pollinate that crop in the nation.”

The Kutiks depend on pollination services to round out their income, which also derives from honey and making “mead,” the nectar of a hive. Right now, honey is where the money is, she says. Honey prices have risen, in part because of the demand in major honey-producing countries and a smaller than average crop in 2008, according to the American Honeybee Producers Association. While there’s no explicit honey subsidy there was a new $2.65 per kilogram duty placed on Chinese honey in January.

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Top stars and big-budget movies have come to New Mexico to shoot. The state enacted its incentive program in 2002 and has since expanded it. The program includes a tax rebate on production expenses, employment training for “below the line” costs (mostly production workers), support for film and media programs at colleges and universities, and funds for capital expenses. Filmmakers have responded, as Bill Gerbes explains, “New Mexico is the One T ree Hill” and the action film “Terminator: Salvation” were filmed in the state. A film production support industry has also developed, according to a New Mexico State University study, the industry had 136 businesses employing 2,284 workers in 2007. Both numbers had increased since 2001.

About the same time, however, New Mexico State economist Anthony Popp and a co-author show that in the 2008 fiscal year, for every dollar provided in incentives, New Mexico received 83 cents. Companies have built or announced plans to build studios complex in the state since the incentives took effect. Popp says he hopes the state’s incentives will establish an industry that can survive without them. Though many of these sorts of companies are mobile, “The transaction costs of moving somewhere else are fairly small,” Popp says. NBC, has housed a studio since 1984. Film producer Dino De Laurentis brought the sound stages to town after falling in love with the area while scouting filming locations for his 1983 film “The Big Chill.” Numerous productions, including “Muppets from Space,” the HBO television shows “Eastbound & Down” and “Little Britain USA,” and “One Tree Hill,” have all been shot here. Though De Laurentis built the studio, its former president Frank Capra, Jr. — the deceased son of the legendary director of “Mr. Smith Goes to Washington” — is considered the godfather of the city’s film industry. The studio is one element of the comparative advantage the city has in film and television production, and it was established initially without subsidies from the state. Wilmington is also home to a trained crew and multiple service providers.

The shooting of films and television series is one of the most mobile parts of the production process. States provide incentives for it in the hope that they can lure the less profitable parts. That’s more difficult as the number of states offering production incentives has increased, says Steven Miller, an economist at Michigan State University. “It’s a game of keeping the projects that are already here, because of the presence of EUE/Screen Gems Studios and the city’s pre-existing base of crew members, Hurley says. The station produces educational programs and the most PBS primetime and online productions. States interested in developing a film and television industry should pursue opportunities for specific niches instead of seeking the same productions other states fight for, Christopherson says. Opportunities are out there. “Regions should be trying to identify what’s distinctive in their economy and what they can build on rather than just competing on basis of cost,” she explains.

For states, trying to sell themselves on their comparative advantage alone isn’t easier said than done. If left to their own devices, industries would choose to locate in places best suited to their needs, says Miller. In a world where incentives exist, however, states face a kind of prisoner’s dilemma. “If every state offers a 40 percent rebate and the world is price takers for businesses to locate or stay in their geography, someone else is going to,” he says.

Stand-in Cities
In a world where one city can duplicate as another, incentives can influence decisions where about productions are shot. The “Curious Case of Benjamin Button,” the Oscar-nominated movie based on a F. Scott Fitzgerald short story set in Baltimore. The film’s director had chosen Maryland locations for filming and the Maryland Film Office provided assistance. Miller says that the $27 million or so that was invested in the movie’s New Orleans premiere that the project probably could not have been completed without the tax breaks Louisiana provided. The Louisiana office was estimated to have reduced the $167 million budget by more than $25 million.

There are more examples, including the movie “Annapolis,” a 2006 film starring James Franco about a young boxer struggling at the United States Naval Academy. That film had opened offices in Baltimore and was planning to shoot there and in Annapolis. But after opening the offices, Pennsylvania Legislature passed production incentives and within a couple days producers were on their way north to shoot the movie. Sometimes a state’s comparative advantage is vital. “One Tree Hill” started shooting in Wilmington before North Carolina’s incentives started. It followed in the footsteps of “Dawson’s Creek,” a drama shot in Wilmington for six years. But the setting for this show was Massachusetts. Warner Brothers chose to film in Michigan instead because of the presence of EUE/Screen Gems Studios and the city’s pre-existing base of crew members, Hurley says. The station produces educational programs and the most PBS primetime and online productions. States interested in developing a film and television industry should pursue opportunities for specific niches instead of seeking the same productions other states fight for, Christopherson says. Opportunities are out there. “Regions should be trying to identify what’s distinctive in their economy and what they can build on rather than just competing on basis of cost,” she explains.

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A Shift in Strategy?
When will incentives stop? No one has asked that question, Popp says, but he thinks salespeople stop when states can no longer offer incentives. “In their way of thinking, they’re not holding anything back. If they want something developed, they award tax incentives for it. Politicians often focus on the jobs created but disregard the costs. Any hale to incentives would cause problems, including anger from those who don’t get to move out of the city at one time. "Creatively if you have a certain look in mind there are certainly other places in the country that have incentive programs that can approach this place as a comparison."

Gerbes says state film commissioners like him are essentially salespeople who travel to trade shows, film festivals, and similar events selling their state’s film industries, diversity of locations, and other amenities for filmmakers. Nothing would make him happier than to go back to the 1990s when decisions about whether to film in Maryland were made on those factors. But now it’s all about incentives. “That’s unfortunately the economics of today’s Hollywood,” Gerbes says.

The Guide to United States Production Incentives
More than 800 films and 14 television series have been filmed in North Carolina, many before the state started offering incentives. After the subsidy took effect, the state has continued attracting productions, including feature films like “Nights in Rodanthe” and television shows like HBO’s “Eastbound & Down,” both shot in Wilmington. Even with all the productions that have been shot and the money that has been given out, there is concern that “we’re not a player anymore,” says Aaron Syrett, director of North Carolina’s film office. “We’re seeing an industry that has been thriving here for the last 25 years start to dissipate and go away. We’re losing that competitive edge along with our share of the market.”

EUE/Screen Gems Studios could see more activity if the state expands incentives. The top 100 stage days at the studios this year, that’s largest. The new sound stage will have a 60- by 60-foot water tank and will put the company in contention for productions it wouldn’t have a chance at nabbing otherwise, says Bill Vassar, the studio’s executive vice president. A television production with distribution, money, and major talent behind it is interested in the new stage, Vassar says. However, a Disney film starring Miley Cyrus and written by a North Carolina author, will be shot in Georgia instead of that state’s more generous incentives. “Disney would have been the first client in there, which would have been great,” Vassar says.

Wilmington remains home to several small production companies. Some of them benefit from the presence of large companies. “One Tree Hill” may mean that the approach states take toward incentives. After the subsidy took effect, the state halts to incentives would cause problems, including anger from those who don’t get to move out of the city at one time. “Creatively if you have a certain look in mind there are certainly other places in the country that have incentive programs that can approach this place as a comparison."

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The film industry is a fixture of the economy in both Los Angeles and New York City. Companies are involved in pre- and post-production, operating studios, and renting production equipment. Service providers like accountants and lawyers are all there to assist projects as they go through every stage. Both places initially established leadership in the industry and developed a comparative advantage with out the state. Wilmington is also home to a trained crew and multiple service providers.

The shooting of films and television series is one of the most mobile parts of the production process. States provide incentives for it in the hope that they can lure the less profitable parts. That’s more difficult as the number of states offering production incentives has increased, says Steven Miller, an economist at Michigan State University. “It’s a game of keeping the projects that are already here, because of the presence of EUE/Screen Gems Studios and the city’s pre-existing base of crew members, Hurley says. The station produces educational programs and the most PBS primetime and online productions. States interested in developing a film and television industry should pursue opportunities for specific niches instead of seeking the same productions other states fight for, Christopherson says. Opportunities are out there. “Regions should be trying to identify what’s distinctive in their economy and what they can build on rather than just competing on basis of cost,” she explains.

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production hubs like California and New York — provide incentives in various forms. The entertainment industry is a fixture of the economy in both Los Angeles and New York City. Companies are involved in pre- and post-production, operating studios, and renting production equipment. Service providers like accommodation and catering all have their own projects as a regular occurrence every stage. Both places initially established leadership in the industry and developed a competitive advantage with one another.

Now some states hope to use incentives to build their own comparative advantage. Production incentives generally come in the form of either tax credits or rebates. Some states still have in-state construction of studios and other businesses related to moviemaking and production. Filmmaking incentives are typically applied toward “below the line” expenses such as rentals, equipment, and wardrobe. Some states cap the amount of incentives that can be applied toward “above the line” expenses such as salaries for star actors.

Top stars and big-budget movies have come to New Mexico to shoot. The state enacted its incentive program in 2002 and has since expanded it. The program includes a tax rebate on production expenses, employment training for “below the line” costs (mostly production workers), support for film and media programs at colleges and universities, and funds for capital expenses. Filmmakers have responded, as have many states. “The studios have said, ‘Let’s go to New Mexico’ and the action film ‘Terminator: Salvation’ were filmed in the state. A film production support industry has developed as part of moving to a New Mexico State University study, the industry had 136 businesses employing 2,184 workers in 2007. Both numbers had increased since 2005.

In the same study however, New Mexico State economist Anthony Popp and a co-author show that in the 2008 fiscal year, for every dollar provided in incentives, New Mexico received only 14 cents. Companies have built and announced plans to build studio complexes in the state since the incentives took effect. Popp says he hopes the state’s incentives will establish an industry that can survive without them, but added that many of these sorts of companies are mobile. “The transaction costs of moving said places elsewhere are fairly small,” he says.

Wilmington, N.C., has housed a studio since 1974. Film producer Dino De Laurentiis brought the sound stages to Wilmington because the presence of EUE/Screen Gems Studios and the city’s pre-existing base of crew members, Hartley says. The film shooting of “Dawson’s Creek” was planning to shoot there and in Annapolis. But after production incentives and within a couple days producers were on their way north to shoot the movie.

Sometimes a state’s comparative advantage is vital. “One Tree Hill” started shooting in Wilmington before North Carolina’s incentives started. It followed in the footsteps of “Dawson’s Creek,” a drama shot in Wilmington for six years. But the setting for this show was Massachusetts. Warner Bros. Productions, which Shot “One Tree Hill” in Wilmington because of the presence of EUE/Screen Gems Studios and the city’s pre-existing base of crew members, Hartley says. The company is now considering new locations for keeping the show in Wilmington. If the show was starting today, and no incentives were in place, Hartley says the show would likely not be filming there, and said consideration was even given to moving “Dawson’s Creek” out of the city at one time. “Creatively if you have a certain look in mind there are certainly other places in the country that have incentive programs that can approach this place as a comparison,” Gerbes says. State film commissions like him are essentially salespeople who travel to trade shows, film festivals, and similar events selling their states’ film industries, diversity of locations, and other amenities for filmmakers. Nothing would make him happier than to go back to the 1990s when decisions about where to film in Maryland were made on those factors. But now it’s all about incentives. “That’s unfortunately the economics of today’s Hollywood,” Gerbes says.

A Shift in Strategy?

When will incentives stop? No one has asked that question, Popp says, but he thinks salespeople stop when states can no longer offer tax rebates. “If they’re not bidding for businesses to locate or stay in their states. But the only way a studio can make money is if a production company owns it and shoots a steady number of its own projects there, Christopherson says. Boston has a comparative advantage in one specific area of film and television production because it is home to PBS station WGBH-TV. The station produces educational programs and the most PBS primetime and online productions. States interested in developing a film and television industry should pursue opportunities for specific niches instead of seeking the same productions other states fight for, Christopherson says. Opportunities are out there. “Regions should be trying to identify what’s distinctive in their economy and what they can build on rather than just competing on basis of cost,” she explains.

For states, trying to sell themselves on their comparative advantage alone is easier said than done. If left to their own devices, industries would choose to locate in places best suited to their needs, says Miller. In a world where incentives exist, however, states face a kind of prisoner’s dilemma. “If one state for businesses to locate or stay in their geography, someone else is going to,” he says.

Stand-in Cities

In a world where one city can double as another, incentives can influence decisions about where productions are shot. “The Curious Case of Benjamin Button,” the Oscar-winning film based on a F. Scott Fitzgerald short story set in the film’s pre-existing base of crew members, Miller says. If one state expands incentives. The studio will add a 10th sound stage this year, it’s largest. The new sound stage will have a 106-by 60-foot water tank and will put the company in contention for productions it wouldn’t have a chance at nabbing otherwise, says Bill Vassar, the studio’s executive vice president. A television production with distribution, money, and major talent behind it is interested in the new stage, Vassar says. However, a Disney film starring Miley Cyrus and written by a North Carolina author, will be shot in Georgia instead of that state’s more generous incentives. “Disney would have been the first client in there, which would have been great,” Vassar says.

Wilmington remains home to several small production companies. Some of them benefit from the presence of large companies. “In Wilmington, we do have one company that recently got called in to produce ‘behind the scenes’ features for the DVD release of the show, says Jennifer Mullins, who owns Oriana East Productions with her husband, William. Their company is now developing a television show in the city because they can get the tax rebates for the project that has a lot of development money in place at this point, and fortunately it’s coming from private equity so the company has a lot of creative control, and he wants to bring it to Wilmington.”

The firm is serving as consulting producers on some feature films, which may or may not be shot in North Carolina. William Mullins says that decision — like so many others in the film industry — depends on executive producers, mostly based in Los Angeles. “The incentives offered by Louisiana and Michigan are very often too tough for them to turn down.”

RF


Federal Reserve Bank of Boston, October 2006.
Clear Skies?
The fight for dominance in the airline industry

BY RENÉE COURTOIS

Looking for a flight out of Charlotte, N.C.? You'll have 6.9 percent fewer flight options by June 2009 compared to the same month last year. Excited to spend a summer week in Myrtle Beach, S.C.? You'll have 7.3 percent fewer flights for getting home than you would have had last summer. Even our nation's capital has seen about 6.5 percent fewer flights departing from Washington Dulles International Airport this June compared to June 2008.

The main reason behind the capacity cuts at most of the country's major airports, of course, is the recession. When the economy turns sour, people fly less. Since it doesn't pay to fly empty planes, airlines cut capacity by running fewer flights or swapping big planes for smaller ones. “Right now there are too many seats chasing too few passengers," says Vaughn Cordle of AirlineForecasts, an industry consulting group.

But any seasoned traveler knows the recession is just the latest in a series of shocks to hit the airline industry in this decade. Oil prices—a key determinant of jet fuel prices and, to a lesser extent, would-be travelers’ expendable cash—spiked to a record-breaking $147 per barrel in July 2008. The terrorist attacks of 9/11 led to huge costs for the airline industry in the form of security protocols, and they worried travelers, many of whom opted to just stay home. With the airline industry as a whole have been profitable for only two years during this decade, 2006 and 2007. They booked a loss again in 2008, and industry analysts are split on what’s in the cards for this year. Analysts do agree, however, that a recession of shocks that hit the industry this decade has experienced, and the emergence of a new breed of competitors, we may be at a turning point in the airline business model that could change how airlines operate in the future.

Turbulence On the Books

In order to keep this in perspective, it is important to note that the airline industry has never been consistently profitable. This is mostly a result of its structure. Airlines have large upfront fixed costs for their fleet of jets, but their real product is seats on those planes. They charge a fare for each seat that is well above the marginal cost of flying one additional passenger in order to recoup those fixed costs over time.

With the exception of fuel, airlines’ costs are relatively stable. The real uncertainty that they face is increasingly erratic demand resulting from business cycles, and they are more sensitive to weather patterns and geopolitical turmoil than perhaps any other industry in existence. The airline industry experienced its first-ever decline in worldwide traffic volume in 1991, an outcome of anxiety over traveling during the Gulf War. Other notable extremes since have included airlines’ high-profit years during the dot-com boom, the subsequent decline in global air travel following 9/11 and the current financial crisis. The International Air Transport Association (IATA) predicts global passenger traffic will fall by 3 percent in 2009. Despite the industry's cyclical, this is only the third time in the last 15 years that passenger traffic has fallen. This may be one reason why industry analysts are now speculating on whether the industry’s oldest players will survive in their current form.

In an industry where profits are so volatile, it is no surprise that the competitive landscape for airlines is constantly changing through mergers, bankruptcies, and liquidations. A small handful of airlines have stayed in the game since the industry was deregulated in 1988. These so-called “legacy carriers” include some of the country’s biggest names in air travel: American, Continental, United, US Airways, Delta, and Northwest (the latter two of which merged in October 2008) and are in the process of being fully integrated under Delta’s brand. They have seen their share of financial distress.

When times are tough for airlines, new competitors tend to enter or expand in the market when aircraft, labor, and airport space are cheaper. They also gobble up any routes that have been abandoned by existing airlines. In the last two decades, the most intense competition has come from the so-called “low-cost carriers” or LCCs. The LCCs are the group of airlines—the names Southwest, JetBlue, AirTran, Allegiant, and Frontier, but not the so-called “legacy carriers.” The LCCs might ring a bell—known for offering cheap fares for flights all over the country. The LCCs aren’t always the cheapest flight option, but many times they are. The so-called “legacy carriers” have a disadvantage in terms of “cost advantage of the LCCs may be attributable to its simplified business model, according to consulting firm Booz Allen Hamilton.

But any seasoned traveler knows the recession is just the latest in a series of shocks to hit the airline industry in this decade. Oil prices—a key determinant of jet fuel prices and, to a lesser extent, would-be travelers’ expendable cash—spiked to a record-breaking $147 per barrel in July 2008. The terrorist attacks of 9/11 led to huge costs for the airline industry in the form of security protocols, and they worried travelers, many of whom opted to just stay home. With the airline industry as a whole have been profitable for only two years during this decade, 2006 and 2007. They booked a loss again in 2008, and industry analysts are split on what’s in the cards for this year. Analysts do agree, however, that a recession of shocks that hit the industry this decade has experienced, and the emergence of a new breed of competitors, we may be at a turning point in the airline business model that could change how airlines operate in the future.

Another key difference between legacies and LCCs is the way they operate. These simplifying features streamline flight operations. This lean business model has created a considerable cost advantage in terms of “cost per available seat mile” (CASM) — or the cost of flying one airline seat for one mile. Over time, consulting firm Oliver Wyman estimates the LCCs operate about 15 percent more cheaply than the legacies in terms of CASM. Because of a lower CASM, the LCCs have an easy advantage in terms of “cost per available seat mile” (CASM). As much as 65 percent of the cost advantage of the LCCs may be attributable to its simplified business model, according to consulting firm Booz Allen Hamilton.

Meeting in the Aisle

In some ways the business models of the LCC and legacy airlines are merging. As LCCs grow and the two groups fight
Looking for a flight out of Charlotte, N.C.? You'll have 1.6 percent fewer flight options by June 2009 compared to the same month last year. Excited to spend a week in Myrtle Beach, S.C.? You'll have 7.3 percent fewer flights for getting home than you would have had last summer. Even our nation's capital has seen about 6.6 percent fewer flights departing from Washington Dulles International Airport this June compared to June 2008.

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Turbulence On the Books

In order to keep this in perspective, it is important to note that the airline industry has never been consistently profitable. This is mostly a result of its structure. Airlines have long been the most expensive industry of the major industries in the country. The LCCs aren't always the cheapest flight option, but many times they are. Customers have increased their share of financial distress.

When times are tough for airlines, new competitors tend to enter or expand in the market when aircraft, labor, and airport space are cheaper. They also gobble up any routes that have been abandoned by existing airlines. In the last two decades, the most intense competition has come from the so-called “low-cost carriers,” or LCCs. The LCCs are the group of airlines — the names Southwest, JetBlue, AirTran, Allegiant, and Frontier, but also to a lesser extent, LCCs like Spirit and Allegiant, might ring a bell — known for offering cheap fares for flights all over the country. The LCCs aren't always the cheapest flight option, but many times they are. According to consulting firm Booz Allen Hamilton, these airlines not only offer the biggest expense for airlines, between one-quarter and one-third of total operating expenses. But because the LCCs are able to better manage other costs, this can be seen as a cost advantage in terms of the LCCs' planes are more productive. They're flying 11 to 13 hours a day, compared to 9 to 11 hours a day for the legacies,” says Cordes. This business model turned the costs and benefits of hub-and-spoke airlines on its head: The point-to-point model is less costly in part because it relieves the pressure of having to keep costs down that it completely compensates for the fact that it has the most expensive labor force of the major airlines as a percentage of its CASM. Its labor force is 57.5 percent unionized, and its staff and pilots make among the highest incomes in the industry, with the biggest benefits packages — yet Southwest still has among the lowest CASM in the industry.

Coming to a Hub Near You

Another key difference between legacies and LCCs is the routes they fly. The airline industry was heavily regulated prior to 1978, with the Civil Aeronautics Board determining what routes airlines could fly and what fares they could charge. Thus, in effect the government determined the market share of each airline. Decisions were typically made based on what would best serve the public interest. “(The holdover from this regulatory regime is the painstaking merger approval process that still exists for airlines today)."
It looks as though hubs are here to stay, even though, by some measures, they’re more expensive to run. Hubs may be the only way to serve a country of our size and composition. “A country like ours, with large population centers, generates a lot of travel demand even for relatively small cities, but not always enough traffic to support a direct flight to another medium-sized town. The only way to serve all those points is to hub the traffic,” says Greenslet. “The train system does that in Europe. The hub-and-spoke system does that in this country.

As the LCCs saturate their existing markets, they have two options if they want to keep growing. They can branch into small-city short-haul traffic currently served by the regional airlines — the small, 50- to 70-seat airlines that serve very small cities, often as a subsidiary of a legacy carrier. Or, they can branch into long-haul (generally defined as six or more hours) and international travel like the legacies. The LCCs can’t expect to continually branch into these areas while maintaining only one or two types of jets. However, buying an array of new jets departs rather dramatically from the business model that has kept their costs so low to begin with. “Right now they’re too big to go to Montgomery, Ala. and too small to go to Shanghai,” Boyd says.

What this means is that the long-hauling fruit for the LCCs may be just about gone. They used their novel business model to connect markets in a way that didn’t previously exist — point-to-point service between mid-sized and large population centers, generally would otherwise drive 500 miles to their destination. In other words, the LCCs expanded overall demand instead of taking it away from the legacy carriers. As the legacy carriers, they’ve moved into big-city markets and have been largely successful at undercutting the legacies for many flights. But they won’t be able to keep growing without lighting into aircraft that aren’t traveling to as many places at the same time. This reduces congestion and gets planes back in the air more quickly.

As the LCCs have grown, their traffic has inevitably accumulated in certain cities where demand is strong. As a result, low-cost carriers increasingly operate out of hubs, they just might not call them that. Many of the LCCs instead call these de facto hubs “focus cities” or “gateways.” Therefore it is something of a misnomer to say that the LCCs operate strictly with a point-to-point model, according to Mike Boyd of Boyd Group International, an airline forecasting firm based out of Colorado. Southwest, for example, specifically calls itself a “point-to-point” airline, even though Boyd estimates as much as a third of its flights are connecting traffic. The LCCs don’t make a concerted effort to market themselves as hub carriers, and many are still much less reliant on hubs than the legacies.

Routing to a partial hub system has allowed the LCCs to offer the greater connectivity that the legacy airlines do. This has expanded the number of markets they serve. They have also begun to target “the most lucrative passenger, the business traveler,” by offering more perks and frequent flier programs galore. It’s the broad and bunter of the legacies, according to Cordle. He estimates that business travelers are 8 percent to 12 percent of the passengers for legacy carriers, but they are about 31 percent to 37 percent of their revenue, and in some cases as much as half directly for market share, they’re picking up each other’s habits. Legacy carriers have started to mimic some of the streamlined features of the LCCs. Many legacy carriers increasingly charge for, or eliminate, the “frills” of air travel. They have paid attention to the cost-minimizing innovations pioneered by the LCCs, like the fuel hedges that have previously exist — point-to-point service between mid-sized and large population centers, generally would otherwise drive 500 miles to their destination. In other words, the LCCs expanded overall demand instead of taking it away from the legacy carriers. As the legacy carriers, they’ve moved into big-city markets and have been largely successful at undercutting the legacies for many flights. But they won’t be able to keep growing without lighting into aircraft that aren’t traveling to as many places at the same time. This reduces congestion and gets planes back in the air more quickly.

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Some have also migrated to “rolling hubs.” Traditional hubs schedule many planes to land and depart around the same time during peak hours, which reduces the layovers with which passengers must deal but leads to costly congestion. Rolling hubs, on the other hand, smooth flights over the day rather than coordinating many flights to take off and land around the same time. This reduces congestion and gets planes back in the air more quickly.

As the LCCs have grown, their traffic has inevitably accumulated in certain cities where demand is strong. As a result, low-cost carriers increasingly operate out of hubs, they just might not call them that. Many of the LCCs instead call these de facto hubs “focus cities” or “gateways.” Therefore it is something of a misnomer to say that the LCCs operate strictly with a point-to-point model, according to Mike Boyd of Boyd Group International, an airline forecasting firm based out of Colorado. Southwest, for example, specifically calls itself a “point-to-point” airline, even though Boyd estimates as much as a third of its flights are from or to other cities. As legacy carriers, they’ve moved into big-city markets and have been largely successful at undercutting the legacies for many flights. But they won’t be able to keep growing without fighting tooth and nail. Their planes still don’t have the range of the legacy’s, they can’t branch into long-haul (generally defined as six or more hours) international travel like the legacies do.

FAA regulations ban new airlines from operating out of hubs, the only way to serve a country of our size and composition. In light of the changes that have taken place, economist Berry says. “In Rose, Nancy L. (ed.), Regional Focus • Spring 2009. Berkeley believes there appears to be a single “hybrid” air-line model emerging. “The idea that some airlines have the ‘right’ business model is nonsense. I think we’ll see LCCs more increasingly toward hubbing, and I think we’ll continue to see the legacy carriers move in the opposite direction and streamline,” he says. “We’re definitely seeing the two models merge.”

Landing on Common Ground

The legacy and low-cost carriers will face some issues that both will find hard to ignore. One is the possible adoption of a federal “cap and trade” emissions control program that threatens to dramatically raise their cost of jet fuel. Another is an outdated air traffic control system that forces costly delays. Of course, economic cyclicality will continue to plague the airlines. The industry expands and contracts in line with, and at roughly twice the pace of, the overall economy. When the economy slows, so does travel demand as businesses tighten their travel budgets and individuals opt for fewer recreational trips.

In the future, Cordle expects an airline industry that is smaller overall. “Because of excess spending and consumption in the United States since the early 2000s, with twin bubbles in stocks and housing, expenditures on air travel were inflated above long-run trend,” he says. “Now we’re getting back to the reality of what the consumers can actu- ally manage. When you strip away all the noise, it really means the industry is a lot smaller.”

This can take place through mergers or capacity cuts — both of which can be aided by Chapter 11 bankruptcy, to which the airlines are accustomed. When they file for bankruptcy, four have filed for bankruptcy since the year 2000. These airlines have been a standard way for airlines to deal with labor costs and other capacity issues as the lawyers were essentially walking up the steps of the court to file. This sort of negotiation has been a standard way for airlines to deal with labor costs during hard financial times.

Mergers are the way to go, according to Cordle, in part because airlines share complementary networks, then mergers have the potential to create a broader network overall for consumers. “The government looks out for this and impedes mergers where the potential harm for consumers is greater,” Berry says.

No matter what changes influence the new business models, it’s hard to imagine a world without airlines. For U.S. travelers, there are 15,000 scheduled departures ferrying an average of 2.1 million passengers each day. The Federal Aviation Administration predicts global air traffic will double by 2034. The FAA also estimates that the industry adds more than 5 percent to U.S. gross domestic product through its direct and indirect economic impacts, and is responsible for nearly 10 million jobs in industries (other than transportation) related to the air travel sector. While though U.S. spending on air travel is less than 1 percent of GDP and airlines directly employ just over half a million people. “There is tremendous spill-over that ripples through the entire economy,” Cordle says.

From the passengers’ perspective, ongoing capacity cuts by the airlines will mean “more crowded aircraft, less quality of service, yet better on-time performance because there are fewer capacity bottlenecks,” Cordle sums up.

Boyd also is keen to put the ever-changing airline indus- try into perspective: “Flying will continue to be the most uncomfortable as ever in the same seat space,” Boyd says. “We can count on continuity in that sense.”

Rednings


The Impact of Regulation on Air Traffic Volumes.” Montreal, Quebec: International Air Transport Association, December 2008.

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Can a line-item veto reduce spending?

BY DAVID VAN DEN BERG

S tate legislative sessions often feature intense debates over budgets. Both legislative parties and governors have their own weapons in these battles. One of the most well known is the ability many governors have to veto specific line items in a bill. The line-item veto is often assumed to be an effective way of keeping spending under control. But whether the conventional wisdom is correct on this is still an open question. In fact, the line-item veto is a tool that isn’t always used in the context we might expect — and the results can be surprising.

Forty-four of America’s 50 governors have some form of the line-item veto, according to the National Conference of State Legislatures. Six states do not have any form of the line-item veto, including North Carolina. Governors in those states can only veto entire legislation, not portions of it.

In the states where it exists, the line-item veto functions differently and can shift the balance of power in budget debates. Governors who have the line-item veto can eliminate portions of bills. In some cases, they can adjust spending amounts, and in others, governors can amend legislative language. Governors can use the line-item veto to prevail in budget preferences sometimes, but legislators can combat the use of the line-item veto by banding expenses the governor doesn’t want with those the governor does want. Yet line-item vetoes, if comprehensive enough, can provide a way for governors to possibly thwart those efforts.

To determine whether this sort of veto can be an effective way of imposing spending discipline requires making a few assumptions. First is that politicians, like anyone in any profession, face incentives. Governors aren’t necessarily less prone to them than are legislators. The line-item veto may not be anything more than an additional bargaining chip that a governor can use to go after additional spending he might want, says Samuel Baker, a former economist at the College of William & Mary.

The second assumption is that the political climate affects how the veto power is used. The line-item veto, to some extent, shifts power to the executive branch. But, as will be seen, that may not mean much. If it does, there are some important contexts in which we can expect the veto to be exercised more frequently.

Line-Item Veto and Divided Government

Political contexts usually influence usage of line-item vetoes. They are used more often when opposite parties control the executive and legislative branches and the legislature cannot override the veto, argue Douglas Holtz-Eakin, an economist who formerly taught at Syracuse University before working with Governor James A.Tracey’s Economic Advisors during the George W. Bush administration and then heading up the Congressional Budget Office. Holtz-Eakin is now president of a consulting firm in Washington, D.C.

Highly partisan environments are most conducive to the use of the line-item veto, says Glenn Abney, a former Georgia State University political scientist. “The governors will often use the veto because they disagree over policy,” he notes. Conversely, when one party controls both the executive and legislative branches, the partisan temperature is lower. In those situations, the item veto is less likely to be used. Abney and University of Georgia political scientist Thomas Lauth argue in a 1985 paper.

While the line-item veto shifts some power to the executive branch, governors may have good reasons not to exercise this power. For example, a governor may decline to use the veto to avoid further antagonizing lawmakers, especially if relationships with the legislature have soured, in order to preserve remaining political capital. Those relationships can be crucial. Stable political relationships between elected officials and the state bureaucracy can be crucial and can determine state expenditure levels, economists James Dearden of Lehigh University and Thomas Husted of American University write in a 1993 paper.

The scope of line-item veto powers may determine how useful they are to governors. Only 1 of the 44 governors with line-item vetoes can adjust both dollar amounts and statutory language in legislation. When they can amend dollar amounts and statutory language, governors are most likely to use the veto. In their paper, Dearden and Husted argue that a governor’s ability to obtain a desired budget outcome increases with the comprehensiveness of the line-item veto authority.

Line-item vetoes don’t render legislatures powerless. However, they can write bills in ways that make it difficult for a governor to veto them. Legislators also have a bargaining chip of their own: the override. But research shows that line-item vetoes are rarely overridden. Several explanations for the upholding of vetoes are possible, argue Abney and Lauth. For one, super-majorities are often required for an override, which can be hard to achieve. When overrides are difficult, the veto power is more meaningful.

Fiscal Effects of the Line-Item Veto

The veto is not always used to strike dollar amounts. In a nationwide study published in 2002, Abney and Lauth review appropriations bills from line-item veto states from the years 1993 and 1999. Governors in only 18 states used the veto in 1993, while 22 used it in 1999. In both years, the researchers show that more than 80 percent of vetoes cut language about appropriations that did not contain dollar amounts. More than 20 percent of vetoes were of language totally unrelated to appropriations.

Vetoes of legislative language can still have fiscal effects, although it is difficult to assign them a dollar value. Language and appropriations in bills are not always related. Eliminating language requiring certain state agencies to maintain specific staffing levels could lead to job cuts and reducing cost savings, for example.

Yet leaving the agency free to eliminate jobs may not necessarily lead to job cuts if they find savings elsewhere in their budget, so it’s hard to prove that the line-item veto would have a direct fiscal effect in such a case. In a research project about the line-item veto in Georgia, Lauth and Catherine Reese of Arkansas State University-Jonesboro find that 79 percent of the 203 line-item vetoes used between 1993 and 2002 eliminated language that had a fiscal impact that was hard to measure in dollars.

The threat of the veto can play an important role in legislative debates. Lauth and Holtz-Eakin’s Georgia study covers several decades. They conducted interviews of the state’s seven governors prior to Sonny Perdue, its current executive. The governors told Reese and Lauth that the threat of the line-item veto was an important element of their power.

READINGS


S tate legislative sessions often feature intense debates over appropriations bills. Both legislators and governors have their own weapons in these battles. One of the most well known is the ability many governors have to veto specific line items in a bill. The line-item veto is often assumed to be an effective way of keeping spending under control. But whether the conventional wisdom is correct on this is still an open question. In fact, the line-item veto is a tool that isn’t always used in the context we might expect — and the results can be surprising.

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In the states where it exists, the line-item veto functions differently and can shift the balance of power in budget debates. Governors who have the line-item veto can eliminate items of bills. In some cases, they can adjust spending amounts, and in others, governors can amend legislative language. Governors can use the line-item veto to prevent budget preferences sometimes, but legislators can combat the use of the line-item veto by bundling expenses the governor doesn’t want with those the governor does want. Yet line-item vetoes, if comprehensive enough, can provide a way for governors to possibly thwart those efforts.

To determine whether this sort of veto can be an effective way of imposing spending discipline requires making a few assumptions. First, that politicians — like anyone in any profession, face incentives. Governors aren’t necessarily less prone to them than are legislators. The line-item veto may not be anything more than an additional bargaining chip that a governor can use to go after additional spending he might want, says Samuel Baker, a former economist at the College of William & Mary.

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**SOURCE:**


Allan Meltzer has long been one of the most prominent monetary economists and historians, contributing significantly to our knowledge of how to achieve price stability and economic growth through his academic work, his role as a policy adviser, and his popular writings. In 2004, he published the first volume of his history of the Federal Reserve System, which covered the period from the Fed's founding to its accord with the Treasury Department in 1913. The long-awaited second volume of his history will appear in two parts this autumn.

Since 1957, Meltzer has taught at Carnegie Mellon University (then known as the Carnegie Institute of Technology). He co-founded the Carnegie-Rochester Conference on Political Economy, where scholars from academia, government, and business present papers on important public policy issues, and the Shadow Open Market Committee, which comments upon the policies of the Federal Reserve. He also served as an acting member of the Council of Economic Advisers during the Reagan administration and was chair of the International Financial Institution Advisory Commission, better known as the “Meltzer Commission,” during the 1990s. In addition, Meltzer is a visiting scholar at the American Enterprise Institute for Public Policy Research in Washington, D.C.

Meltzer has been quite critical of the Federal Reserve’s actions immediately preceding and during the financial crisis. In his view, the failure of the Federal Reserve and other agencies to curb the assumption that some institutions were “too big to fail” played a major role in fueling the crisis. In addition, he believes that many of the Fed’s lending programs, initiated since the crisis began, were misguided, threatening the Fed’s independence and risking its ability to control inflation over the long run.

Aaron Steelman interviewed Meltzer at his office at Carnegie Mellon on May 7, 2009.

Allan Meltzer on May 7, 2009.

INTERVIEW

Allan Meltzer

Allan Meltzer

We cannot continue to have a system where profits are privatized and losses are socialized.

RF: What’s the status of the second volume of your history of the Federal Reserve?

Meltzer: I just completed the last pages of the manuscript. The book will appear in October in two parts. I got a number of comments from readers, but the main comment was that the book is 1,400 pages long and we don’t print 1,400-page books. So we ended up dividing it into two volumes: 2.1 and 2.2, which will come out simultaneously.

RF: Chronologically, how far did you go with the second volume?

Meltzer: The second volume goes to 1936. I chose 1936 because it was pretty clear by then that rampant inflation was over and that expected inflation was low. I have some comments about the current episode, but the editor asked me to include those as an epilogue. The most important message of the epilogue is that you won’t get rid of crises until you get rid of “too big to fail.”

RF: What do you think could reasonably be done to reduce the scope of the federal financial safety net?

Meltzer: I would like to get rid of too big to fail! I would like bank reserves rise with the size of the bank. I think it’s in the public interest to say, if you want to be big, you must hold more reserves so that you will be forced to bear a loss if you make a mistake. We cannot continue to have a system where profits are privatized and losses are socialized.

RF: In addition to addressing the too big to fail problem, what other current policy issues do you think are particularly important?

Meltzer: There are quite a few. The one most prominent is the FDICIA which was supposed to do that, but it didn’t. Having Fannie and Freddie do this encourages corruption and encourages excessive zeal to help particular parts of the housing system.

RF: In looking at the Fed’s actions over the past year or so, how well do you think it has done handling the crisis once it was upon us?

Meltzer: In the history of the Federal Reserve System, there are three enormous mistakes that, from my point of view, were the Great Depression, of course. The second one was the Great Inflation of the 1970s. And the third one was the failure of Lehman Brothers in September 2008. As I said, in principle, I’m in favor of permitting institutions to fail when they have acted incautiously and are insolvent as a result. But this was a failure that occurred after 30 years of bailing out not just about every institution of any size, with no prior announcement that the policy had changed. Suddenly the Fed changed what had been the standard practice and allowed a big firm to fail. That was a mistake. It created uncertainty in financial markets. And then, of course, the Fed changed course shortly afterward, back to its long-established policy of bailing out institutions.

RF: So would you have recommended allowing Bear Stearns to fail in March 2008? That possibly could have sent a signal to the market that policy had changed and, as a result, the failure of Lehman later in the year would have been different.

The administration’s proposal to make the Fed a supervisory entity is a mistake for two reasons. The first is that the Fed has a poor record of anticipating crises. The second is it would further remove responsibility from the banks. A regulator of last resort would worsen the too big to fail problem.

I believe there are a few relatively straightforward rules of regulation. First, regulation is written by lawyers and bureaucrats, and over time markets learn to circumvent regulation. The Basel Accord is a great example of that. Banks were supposed to hold more capital, but with lower risk. But, instead, they took those risks off their balance sheets and didn’t hold more capital. In that case, both the regulation and the circumvention failed. Regulation Q of the Glass-Steagall Act, which prevented interest on demand deposits, is another good example. We wouldn’t have money market funds if it weren’t for Regulation Q. There are lots of examples of markets circumventing regulation — and not only in banking and finance.

The second rule is that regulation can be beneficial when private costs and social costs are not aligned. For instance, there is arguably a good case for regulation of banks if you have deposit insurance — otherwise, banks might take excessive risk knowing that they will not bear the full costs associated with a failure. The third is that if regulations are not circumvented, the reason is because they are either beneficial or they are enforced with Draconian measures.

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public interest to say, if you want to be big, you must hold more reserves so that you will be forced to bear a loss if you make a mistake. We cannot continue to have a system where profits are privatized and losses are socialized.

I should point out that much of this is in Walter Bagehot, of course, who was an early rational expectationist. He said that if central banks are going to lend, they should do so at a penalty rate against good collateral and that this policy should be made well-known in advance of a crisis. That system worked for the better part of a century. There were banking problems and failures along the way, but they never spread. The reason was bankers knew they had to hold collateral to protect themselves, and so they did. We have abandoned that system, to our detriment.

**RF:** In addition to addressing the too big to fail problem, what other current policy issues do you think are particularly important?

**Meltzer:** There are quite a few. One of the most important ones is to get rid of Fannie Mae and Freddie Mac. The only thing they do is to subsidize mortgages. We should put that subsidy on the budget. That’s where it belongs. Having Fannie and Freddie do this encourages corruption and encourages excessive zeal to help particular parts of the housing system.

I also would make the Federal Deposit Insurance Corporation Improvement Act (FDICIA) applicable to all financial institutions. The purpose was to have structured early intervention — that is, to close down commercial banks before they used all of their capital. Then, the shareholders could be made to bear the losses and the institution could be sold. FDICIA was supposed to do that, but the regulators hadn’t followed through effectively. They should — and FDICIA should be extended to investment banks as well.

The next one is less of a specific policy proposal and more of a general recommendation. We should pay more attention to the fat tails in the distribution of risk. What are those fat tails? Things like the Russian default, the failure of Long Term Capital Management, the enormous climb in housing prices. Our current models of risk distribution — and how they can affect the economy — don’t take adequate account of them.

**RF:** What do you think of the idea of establishing a systemic risk regulator?

**Meltzer:** The administration’s proposal to make the Fed a super-regulatory body is a mistake for two reasons. The first is the Fed has a poor record of anticipating crises. The second is it would further remove responsibility from the banks. A regulator of last resort would worsen the too big to fail problem.

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**RF:** Looking at the Fed’s actions over the past year or so, how well do you think it has done handling the crisis once it was upon us?

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**RF:** So would you have recommended allowing Bear Stearns to fail in March 2008? That possibly could have sent a signal to the market that policy had changed and, as a result, the failure of Lehman later in the year
Meltzer: We did that at a time when wage and price controls recently had been adopted. Karl and I organized about a dozen economists to sign a statement that we published in the Wall Street Journal saying that the controls were a bad idea and would not work. To get that statement written — this was before fax machines and personal computers — we had to spend hours on the telephone. Any time we had to make a change to accommodate somebody we had to call the others and tell them what the change was. Obviously that was not a very good way to do things. We decided that we needed to have a meeting.

What was our objective? Karl and I were both disturbed by the kind of inflation that we thought was very well understood at that time — because of the way the problem of inflation was being discussed generally. For instance, there was a lot of talk that we either needed to go back to wage and price controls or liberalize them, or that we should not. Also, the loans that are issued should be issued at a sufficient exchange rate. The problem was that this debate was going on, and the economists didn't agree. So we put together a group of both business and academic economists, and we tried to inform people and build a constituency for a quite different policy. That's how we started. We were fortunate in that the New York Times, the Washington Post, and Wall Street Journal all gave that first meeting a lot of attention. So we were well-launched. The committee has continued to meet since then — although I left in 1990 — and I think it has enjoyed some success in pushing the debate about inflation in the correct direction.

RF: What was the Meltzer Commission? What was its purpose? And which conclusions did it arrive at?

Meltzer: The Commission got started mainly because in 1987 some members of Congress were not in favor of continued funding of the International Monetary Fund (IMF). They agreed to vote for funding if the president would agree to have a commission to study the effectiveness of the IMF and similar organizations. So that's how it got started. It's official name was the International Financial Institution Advisory Commission but became known as the Meltzer Commission because I chaired it. I was not, by the way, the first choice to chair it. I was supposed to be a member, but a couple of other people could not do it, so I wound up taking it on.) I requested papers on a number of topics and the people who had worked on them would explain to the commission members what the relevant issues were. For example, I knew very little about the Bank for International Settlements — what it did or whether it was a good thing. We eventually issued a report with a series of recommendations.

The major recommendation that we made regarding the IMF was that it needed to be more discriminating in allocating funds. If countries adopt good policies, the IMF should consider helping them. If they don't, it should not. Also, the loans that are issued should be issued at a penalty rate. That gives countries a strong incentive to pursue policies and avoid the need for IMF assistance in the first place. The banks were a much harder problem because their record of accomplishment is very poor. Many countries that have received significant funding from them have liberalized and adopted more market-oriented policies, whereas relatively little funding — such as China — have seen millions of their citizens lifted out of poverty as they adopted market-oriented policies. It is not generally something that the World Bank does not do a good job of encouraging.

The report didn't say this, but I think the World Bank should do. The report said instead that there should be an independent audit to find out which programs work and which do not. It could either improve the way the IMF works or get rid of programs that don't work or get rid of them. The World Bank is full of people who want to do good things for the poor people of the world. But they don't understand which things will help them and which things won't. They do not generally appreciate that the only system that produces growth and freedom is capitalism. Also, they have no follow-up on their programs. Their whole system is geared to the idea that a program is successful once the final set of funds has been discharged. So if they're building schools in Africa, when the school is built, they declare it a success. But they don't know whether there's a road to connect to the school, or how many kids go to the school, or if they are learning anything.
wouldn't have come as such a surprise.

Meltzer: I don't think you change policy in a crisis. That is likely to make things worse. At the same time, I don't think the Fed should have ended some of the fiscal actions it has taken. I believe that the Fed has sacrificed its independence. It hasn't always been independent, but Volcker came to see an extern, Greenspan built up independence for the institution. That has been squandered in the current crisis. The Fed has become a financing arm of the Treasury Department. Now that the Treasury Department has taken control, I think it has squandered. The squandered in the current crisis. The reason the Treasury Department has taken control, I think it has squandered. The

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RF: Do you think the recent actions of the Fed have reduced its credibility as an inflation fighter so that it will have more difficulty pursuing policies consistent with price stability when the economy rebounds?

Meltzer: Yes. I've had this discussion with members of the Board of Governors and some members of the Fed's staff. They have trouble remembering programs that have been structured in a way that will permit them to remove liquidity from the system when needed. I have no doubt, as I've told them, about their technical ability to do that. It's the political problem. I just don't see them overcoming the political problem. Where will the political problem come from?

Meltzer: Well that's one where I have some scars. I was a visitor at the Fed in 2003. Alan Greenspan was very concerned about inflation. And you're going to tighten policy when in fact it took much less time. They gave him a standing ovation, not because they admired his policy but because they admired his courage. He kept raising rates when everyone thought he would not have the will to do so. For instance, I recall Jim Tobin saying that it would take 10 years to get rid of inflation, when in fact it took much less time.

RF: Do you believe that the Fed was too easy for too long follow- ing the recession of 2001?

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Recently, there has been interest in pushing for better evaluations of the World Bank and the African Development Bank, and that’s a very positive development. So I think we’re having some sort of slow, long-term effect on the banks. But I believe they need to move faster in telling countries that if you want to grow, open up to the world market.

RF: During the late 1970s and early 1980s, you did quite a bit of work on public choice questions. In particular, you and Scott Richard published an influential paper in the *Journal of Political Economy* titled “A Rational Theory of the Size of Government.” What were the principal arguments of that paper?

Meltzer: I think that paper has probably gotten more attention by other academics than any paper I have ever written, including my work on money, which has been the focus of most of my professional life. The paper says that the principal factor determining the size of government is the distribution of income. In a system of majority rule, the voter with median income — not necessarily median ideological views — is decisive. Voters with income above the median favor lower taxes and less redistribution, while those with income below the median favor higher taxes and more redistribution. There are shocks, both political and economic, that can change the position of the median voter and, as a result, public policy. For instance, the expansion of the right to vote in the late 19th and early 20th centuries greatly increased the number of voters with low income, shifting the decisive voter down the income distribution. This, we argue, was one of the big reasons why taxes and government grew during the 20th century.

Scott Richard and I wrote another paper on how redistribution is actually carried out in the United States. Specifically, we wanted to explain why we have never adopted the negative income tax, despite it being a popular idea with economists and arguably the most efficient way to transfer resources to poor people. The answer we gave is that the decisive voter believes the amount that people work can be increased by giving in-kind benefits rather than cash benefits. If you look at the welfare system, for example, the major cash benefits are issued in the form of unemployment compensation and pensions to senior citizens. In short, those benefits go to people who have worked. But for those who do not work or have not worked, we give food stamps, housing subsidies, and a variety of other transfers — but we don’t give cash. And even when we have something that’s a modified version of the negative income tax, such as the earned income tax credit, it goes to people who work.

RF: You have served in the government on a couple of occasions. Do you think that policymakers pay much attention to the advice they solicit?

Meltzer: It very much depends on the politician. For example, Nixon didn’t care much about economics. He really relied on George Shultz to a considerable extent. As budget director, George got to learn what Nixon’s priorities and preferences were and he made a lot of the decisions based on that, without consulting Nixon on specific questions because Nixon simply wasn’t interested. Gerry Ford, who I got to know quite well, was entirely different. First of all, he knew the budget inside and out because he had been in Congress. But he also listened to his advisers. He took what they said into consideration and was willing to do what he thought was right, even if it cost him some political support. Reagan was a slightly different case. He may not have known the details of a piece of legislation as well as, say, Ford. But he had strong convictions and if the goals and likely effects of a bill coincided with what he believed, he would get behind it even if it was unpopular.
Attendance at the Preakness Stakes in Baltimore fell by 30 percent last May compared to the previous year, yet total wagering on race day rose to nearly $87 million, an 18 percent jump over 2008. That was unusual. Industry watchers called it an anomaly because odds favored the winner, Rachel Alexandra, a thoroughbred filly, and 85 years had passed since a filly had crossed the finish line at the Pimlico Race Track. The race is usually Maryland’s biggest one-day sports event.

But Pimlico’s future is in limbo. Owner Magna Entertainment is in bankruptcy, and the state Legislature has authorized the governor to use eminent domain, if necessary, to keep it in Baltimore. The 2009 racing schedule has also been curtailed from 31 to 20 days. Pimlico’s plight illustrates an industry already dogged by sparse attendance and revenues dependent on slot machine gambling. Since the 1970s, horse racing has competed not only with alternative entertainment but also gambling via state lotteries, and, later, casinos, and racetrack casinos. While those “racinos” recently won legislative approval in Maryland, bidding for casinos and construction there are off to a slow start. In neighboring Pennsylvania, Delaware, and West Virginia, however, the racinos are thriving, stealing business from Maryland tracks.

Patrons of the Turf

Horse racing today is thoroughly dependent on wagering. Portions of the gambling money provide funds for owners and trainers, and indirectly for breeders, since the value of a horse can be traced to expectations about its performance.

Of the many milestones in Maryland racing, perhaps the biggest was the introduction of the “French Manuel” machine at Pimlico in 1873. The method paid in proportion to the total amount bet, and it dominates horse racing today. Maryland’s racing legacy also includes early off-track betting parlors as well as 19th century government incentives to build the historic Pimlico track.

Maryland and Virginia were the cradles of racing in the American colonies. Colonial governors, appointed by the King of England, imported the best-bred mares and stallions from the mother country. One mare competed so well she was barred from racing in Virginia in the 1700s, says Joe Kelly, a newspaper man who covered horse racing for the better part of the 20th century. Her name was Selima, and Laurel Racetrack named a race in her honor.

Overland races known as steeple-chases were so named because riders raced from church steeple to steeple, and people wagered in a “my horse can beat your horse” fashion. George Washington’s diary noted wins and losses on his trips to race in Maryland, according to Joseph Challmes in The Preakness: a History.
Total Betting for Maryland Thoroughbred Racing

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<th>Year</th>
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<tr>
<td>1980</td>
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Racing of all kinds, steeplechase and flat track, can be found throughout the District today. Those include country races where people don’t bet — for example in Camden, S.C., at the Colonial and Carolina Cups, well-known and well-attended steeplechases in the fall and spring. There are also on-track and off-track betting locations in Maryland, Virginia, and West Virginia. Colonial Downs in Virginia offers a racing summer season as well as off-track betting and simulcasts. At West Virginia’s Charles Town and Mountainaire Park tracks, there’s slot machine gambling. Portionsof gambling proceeds go to fund purses, and the Mountaineer Park tracks, there’s slot machine gambling.

Maryland boasted many famous horsemen, and from about 1878 through 1882, George Lorillard of the Lorillard Tobacco family dominated Maryland racing. As Lorillard’s health declined and he dispersed his stables, New York was pulling ahead as the hub of racing on the East Coast, offering more tracks and better purses. The Preakness even moved to New York and stayed until 1907, when that state, among others, banned betting in a nationwide reform movement (that ultimately prohibited alcohol as well). Maryland and Kentucky were the only states where you could gamble in that era, says Raymond Sauer, a sports economist at Clemson University.

In 1909, the Preakness returned to Pimlico, and built its reputation through horses like St. Leger. In 1913, he became the first to win the Triple Crown: the Kentucky Derby, the Preakness, and the Belmont Stakes. Yet the Pimlico race still wasn’t widely known outside of Maryland. The Maryland Jockey Club, formed in 1743 and now owned by Magna Entertainment, chose a 70-acre site called Pimlico.

By 1920, one of the most famous race horses in history ran not in the Derby but in the Preakness, in his first start as a 3-year-old. Man o’ War was born at Saratoga. When a wealthy land baron and owner of a famous horse, Preakness, suggested a winner-take-all sweepstakes race at Saratoga. When a wealthy land baron and owner of a famous horse, Preakness, suggested a winner-take-all sweepstakes race at Saratoga.

Economist Richard Thalheimer heads a consulting firm in Washington. “It was about to change,” he says. “The spread of racing industry and its notes, along with Sarat, that the introduction of state lotteries in the 1970s and the proliferation of casinos in the latter two decades of the 20th century have cut into horse racing’s share of the gambling dollar. The result was a decline of 50 percent, largely because of competition, among Thalheimer.

The future of betting on the horses, Thalheimer says, may lie in wagering through telephone and the Internet, where “it’s a great product to sell out where it’s convenient to bet on it,” he says.

Maryland racing enthusiasts hope for a renaissance of sorts now that Vanderbilt’s old place, Sagamore Farms, has been restored into a horse farm once more. Kevin Plank, who founded the Under Armour empire, has entered the breeding business. He wants to win the Triple Crown.


Bredings


Racing also got hurt because it resisted television broadcasts in the early 1970s, says Sauer, under the misconception that TV would cut into live attendance. “The response was simple: people filled the stands out over a decade.” Baseball and football broadcasts expanded, and so did those sport’s attendance. In the long run, television builds interest in the sport, he argues, and racing suffered on a relative basis from the TV exposure that baseball, football, and eventually basket-

ball gained.

Gaming is also harder to broadcast, given its brief spurts of action followed by the lags between races. “I think the lack of regularly scheduled [television] racing and the difficulty of covering it on television hurt in a period where TV broadcasts made the landscape of modern sport.”

The Interstate Horse Racing Act in 1978 changed the industry because it established the property rights of racing tracks over their own races so they could be transmitted. The 1974 Kentucky Derby was pirated by New York State. “The only backer of the bill was New York,” says Sauer. “They didn’t think simulcast would amount to much. ‘Now of course, 80 to 85 percent of wagering at a track is off-track.’

Those simulcasts allowed racing distribution and may have increased its popularity. “We’re still writing about how our interest in the sport almost more by betting handle than by attendance,” says Reed. He adds that graphs of handles increased until 2003. But he agrees that the spread of gambling has hurt racing. “It exploded in the 1990s — state after state started approving riverboat, land based casinos, lotteries,” he says. “The competition caught up to us.” In particular, Maryland isinger by states that made changes. “Charles Town is having a huge negative effect on the horse and customer population because of their change and Maryland doesn’t have that change.”

Thalheimer notes that there is a decline in horse racing parimutuel betting because many people play the slots rather than bet on the horses.

In particular, Maryland racing enthusiasts hope for a renaissance of sorts now that Vanderbilt’s old place, Sagamore Farms, has been restored into a horse farm once more. Kevin Plank, who founded the Under Armour empire, has entered the breeding business. He wants to win the Triple Crown. RF
Racing of all kinds, steeplechase and flat track, can be found throughout the District today. Those include country- 
day races where people don’t bet — for example in Camden, S.C., at the Colonial and Carolina Cups, well-known and well- 
attended steeplechases in the fall and spring. There are also many on-track and off-track betting locations in 
Maryland, Virginia, and West Virginia. Colonial Downs in 
Virginia offers a racing summer season as well as off-track 
betting and simulcasts. At West Virginia’s Charles Town and 
Mountaineer Park tracks, there’s slot machine gambling. Portions of gambling proceeds go to fund purses, and the 
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Virginia offers a racing summer season as well as off-track.
Increased Productivity and Trade Have Reduced Manufacturing Employment

BY SONA RAVINDRANATH WADDELL

The goods-producing sector — which includes the subsectors of construction, natural resources and mining, and manufacturing — has been falling steadily as a share of Fifth District industry for quite some time. The story of the decline, however, is really a story about the changing face of the region’s manufacturing base. Before the turn of the century, most of the manufacturing decline was centered in the textile, apparel, and furniture industries. Today, cutbacks have deepened and spread across subsectors of manufacturing as both the number of establishments engaged in manufacturing and employment in the sector have decreased considerably.

Some of the recent employment losses can be attributed to the globalization of manufacturing and the offshore outsourcing of some manufacturing operations. But much of the reduction can be traced to increased labor productivity.

According to the Bureau of Labor Statistics, the goods-producing sector in 1990 comprised 20 percent of all business establishments in the Fifth District and 30 percent of all employment. By 2008 those shares had fallen to 10 percent and 14 percent, respectively. This corresponds not only with a decline in goods-producing employment, which fell nearly 28 percent in the past two decades, but also with the rise of the service sector — employment in that category has expanded almost 60 percent over the same period.

To speak of broad trends in goods production, however, can be misleading. Employment in the District’s manufacturing sector has fallen by more than a third (37 percent) since 1990, and the number of establishments engaged in manufacturing has dropped almost 3 percent. Meanwhile, employment in the Fifth District natural resources and mining sector has been generally steady over the past 20 years and, although the number of establishments has recently stagnated, it remains above 1990 levels. In contrast, employment and firm levels are 28 percent and 29 percent above their 1990 mark, respectively, despite a recent deterioration in activity.

The Shrinking Manufacturing Firm

Although employment in Fifth District manufacturing has been declining steadily since 1990, the number of factories actually grew by more than 10 percent from 1990 to 2000. Starting in 2000, those levels began to drop, and by the third quarter of 2008, the number of establishments had fallen by more than 12 percent. Not surprisingly, employment declined more dramatically as the number of establishments fell. Manufacturing employment fell by 6.5 percent in the 1990s, but since 2000 has dropped more than 30 percent.

As the number of manufacturing establishments grew and total employment fell through the 1990s, the size of the average establishment clearly fell. Despite the decline in the number of establishments that began in 2000, however, the shrinking in average establishment size has continued — falling from almost 69 workers per firm in 1990 to about 43 workers in 2000 and down to 43 workers in 2008.

There are two possible explanations. First, there could be a general decline in factory size across the District. Second, more large factories could be closing relative to smaller factories, leaving the District with smaller manufacturing establishments on average. The data do not provide an unequivocal answer, although most likely the explanation is some combination of the two.

The Changing Face of Manufacturing

Manufacturing, in the Fifth District is not concentrated heavily in a particular product. In the third quarter of 2008, only two products came close to accounting for 10 percent of all manufacturing activity as measured by employment food and transportation equipment. Transportation equipment has certainly been a growing subsector of Fifth District manufacturing over the past two decades as employment in the industry grew 4.5 percent and the number of factories grew by 45 percent. Fabricated metal products manufacturing, which transforms metal into intermediate or end products (other than machinery, computers, and metal furniture), has also seen considerable growth in the District. Employment in that subsector grew 7.5 percent as the number of establishments increased almost 25 percent since 1990.

The most notable structural change in the District’s manufacturing base, however, occurred in the textile, apparel, and furniture manufacturing. The decline in those subsectors accounted for 72 percent of employment losses and 61 percent of all firm closings from 1990 to 2008. Over time, however, these subsectors’ contributions to total losses diminished. They accounted for basically all employment losses (92 percent) in the 1990s, but only about half of all losses since 2000.

Manufacturing activity in the Fifth District is not distributed evenly across states, and therefore states have been affected differently by the manufacturing decline. North Carolina — which houses 38 percent of District manufacturing firms and 43 percent of manufacturing employment — has been hit the hardest. The Tar Heel State accounted for about 50 percent of the gross decline in employment and establishment numbers since 1990. That year, more than 32 percent of North Carolinians worked in manufacturing, the share has dropped to slightly more than 15 percent today.

All Fifth District states have lost more than 30 percent of their manufacturing jobs over the past two decades, most since 2000. North Carolina has led the Fifth District in net employment losses, shedding over 300,000 manufacturing jobs since 1990. The other states in the District have also seen manufacturing employment decline, but not as severely. Virginia shed 121,670 jobs and South Carolina lost 121,060 jobs since 1990. (In both states more than 80 percent of the job losses occurred since 2000.) Although the South Carolina economy has shed more manufacturing jobs, South Carolina also has added quite a few more. In particular, the Palmetto State has added 13,900 jobs in transportation equipment over the last two decades, and in 2008 was home to about 275 automotive-related companies.

The Manufacturing Sector Since 2000

The manufacturing sector’s job cuts since 2000 were in North Carolina. Forty-seven percent of those cuts were in textiles, textile products, apparel, or apparel manufacturing, with an additional 14 percent in furniture. In fact, these four subsectors in North Carolina accounted for 50 percent of manufacturing cuts in the District. North Carolina also saw sizeable losses in computer and electronic products (7 percent), and electrical equipment and appliances (6 percent).

South Carolina and Virginia have continued to see their manufacturing base move away from textile products, apparel, and furniture. In addition, although many subsectors of manufacturing saw employment losses, certain industries, such as computers and electronic products, contributed more than average to the decline. Thirteen percent of Virginia’s employment loss (and 15 percent of Maryland’s) was in computer and electronic products.

Although manufacturing employment has declined at the aggregate level, there are still some bright spots at the state level. Employment in food manufacturing grew 8 percent in North Carolina and almost 10 percent in South Carolina between 2000 and the third quarter of 2008. South Carolina also saw growth in transportation equipment (6 percent) and petroleum and coal products (7 percent). Virginia saw growth in petroleum and coal products (14 percent), as well as in textile product mills (6 percent). Meanwhile, employment in plastics and rubber products grew more than 6 percent in West Virginia.

Deciphering the “Slump”

There are a few potential explanations for why the District has seen such precipitous declines in manufacturing employment, particularly since 2000.

The first theory is that the demand for manufactured goods — domestic or international — simply might have declined and the lower demand spurred a cut in production. A second theory is that foreign firms have out-competed domestic firms in production. A third theory is that American firms have found it more profitable to manufacture goods sector’s job cuts since 2000 were in North Carolina. Forty-seven percent of those cuts were in textiles, textile products, apparel, or apparel manufacturing, with an additional 14 percent in furniture. In fact, these four subsectors in North Carolina accounted for 50 percent of manufacturing cuts in the District. North Carolina also saw sizeable losses in computer and electronic products (7 percent), and electrical equipment and appliances (6 percent).

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Increased Productivity and Trade Have Reduced Manufacturing Employment

BY SONYA RAVINDRANATH WADDELL

According to the Bureau of Labor Statistics, the goods-producing sector in 2003 comprised 20 percent of all business establishments in the Fifth District and 30 percent of all employment. By 2008, however, these proportions had fallen to 17 percent and 16 percent, respectively. This corresponds not only with a decline in goods-producing employment, which fell nearly 38 percent in the past two decades, but also with the rise of the service sector — employment in that category has expanded almost 50 percent over the same period.

To speak of broad trends in goods production, however, can be misleading. Employment in the District’s manufacturing sector has fallen by more than a third (33 percent) since 1990, and the number of establishments engaged in manufacturing has dropped almost 30 percent. Meanwhile, employment in the Fifth District’s natural resources and mining sector has been generally steady over the past 20 years and, although the number of establishments has recently stagnated, it remains above 1990 levels. In contrast, employment and firm levels are 28 percent below 1990 levels. In addition, employment in that industry has expanded almost 50 percent over the same period.

The most notable structural change in the District’s manufacturing base, however, occurred in the textile, apparel, and furniture manufacturing. The decline in those subsectors accounted for 73 percent of employment losses and 61 percent of all firm closings from 1990 to 2008. Over time, however, these subsectors’ contributions to total losses diminished: They accounted for basically all employment losses (92 percent) in the 1990s, but only about half of all losses since 2000.

Manufacturing activity in the District is not distributed evenly across states, and therefore states have been affected differently by the manufacturing decline. North Carolina — which houses 58 percent of District manufacturing firms and 43 percent of manufacturing employment — has been hit the hardest. The Tar Heel State accounted for about 50 percent of the gross decline in employment and establishment numbers since 1990. That year, more than 32 percent of North Carolinians worked in manufacturing, the share has dropped to slightly more than 15 percent today. All Fifth District states have lost more than 30 percent of their manufacturing jobs over the past two decades, most since 2000. North Carolina has led the Fifth District in net employment losses, shedding over 300,000 manufacturing jobs since 1990. The other states in the District have also seen manufacturing employment decline, but not as severely. Virginia shed 212,670 jobs and South Carolina lost 112,060 jobs and manufacturing firms since 2000. (In both states, more than 80 percent of the job losses occurred since 2000.)

Although the South Carolina economy has shed more manufacturing workers, South Carolina has also added quite a few more. In particular, the Palmetto State has added 13,900 jobs in transportation equipment over the last two decades, and in 2008 was home to about 275 automotive-related companies.

The Manufacturing Sector Since 2000

The data from 1990 to 2008 show the loss of textile, apparel, and furniture manufacturing and the rise in transportation equipment and fabricated metal production. Yet employment has declined in all Fifth District subsectors of manufacturing since 2000. The number of factories in the District has dropped, and employment has fallen even more precipitously. Many manufacturing industries have lost about 30 percent of manufacturing cut in the District. North Carolina also saw sizeable losses in comput- er and electronic products (7 percent), and electrical equipment and appliances (6 percent).

Although manufacturing employment has declined at the aggregate level, there are some bright spots at the state level. Employment in food manufacturing grew 8 percent in North Carolina and almost 10 percent in South Carolina between 2000 and the third quarter of 2008. South Carolina also saw growth in transportation equipment (6 percent) and petroleum and coal products (7 percent). Virginia saw the most growth in petroleum and coal product employment (34 percent), as well as in textile product mills (5 percent). Meanwhile, employment in plastics and rubber products grew more than 6 percent in West Virginia.

Deciphering the “Slump”

There are a few different explanations for why the District has seen such precipitous declines in manufacturing employment, particularly since 2000.

The first theory is that the demand for manufactured goods — domestic and interna- tional — simply may have declined and the lower demand spurred a cut in production. A second theory is that foreign firms have out- competed domestic firms in production. A third theory is that American firms have found it more profitable to manufacture goods, sector’s job cuts since 2000 were in North Carolina. Forty- seven percent of those cuts were in textiles, textiles products, or apparel manufacturing, with an additional 14 percent in furniture. In fact, these four subsectors in North Carolina accounted for 30 percent of manufacturing cuts in the District. North Carolina also saw sizeable losses in comput- er and electronic products (7 percent), and electrical equipment and appliances (6 percent).

South Carolina and Virginia have continued to see their manufacturing base move away from textile products, apparel, and furniture. In addition, although many subsectors of manufacturing saw employment losses, certain industries, such as computer and electronic products, contributed more than average to the decline. Thirteen percent of Virginia’s employment loss (and 15 percent of Maryland’s) was in computer and electronic products.

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The first theory is that the demand for manufactured goods — domestic and interna- tional — simply may have declined and the lower demand spurred a cut in production. A second theory is that foreign firms have out- competed domestic firms in production. A third theory is that American firms have found it more profitable to manufacture goods,
abroad. Finally, the manufacturing sector in the Fifth District simply might have become less productive as firms have found ways to produce the same output with fewer establishments and workers.

The first theory—a general decline in demand—might explain why employment in manufacturing activity. However, a decade of booming American consumer spending and rising pre-tax incomes made the present decline in employment the world does not suggest a reduced demand that could explain a decade-long decline across the Fifth District manufacturing sector.

The second and third theories—that overseas firms are more competitive or that formerly domestic jobs are moving overseas—have been commonly cited reasons for the recent productivity decline in manufacturing. Increased imports and labor outsourcing in the District. Indeed, this final theory is critical to understanding the manufacturing decline. It is virtually undisputed that manufacturing across the United States has become more productive. According to data from the Bureau of Labor Statistics, productivity in the United States, as measured by the real value of output per worker, grew almost 40 percent from 2000 to 2006. This trend held true across Fifth District states, especially in North Carolina and Maryland.

Of all manufacturing subsectors in the Fifth District, the computer and electronic products industry had the highest productivity growth. In that subsector, output per worker grew about three and a half times in South Carolina and fell about 9 percent in North Carolina. The data provide evidence that much of the drop in computer and electronic product industry employment—that accounted for almost 10 percent of Fifth District manufacturing employment losses over the decade—is due to increased productivity.

The productivity data also provide evidence to dim some of the Fifth District

## Share of Total District Manufacturing

<table>
<thead>
<tr>
<th>Manufacturing Subsector</th>
<th>1990</th>
<th>2008</th>
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</thead>
<tbody>
<tr>
<td>Apparel</td>
<td>10.0</td>
<td>7.1</td>
</tr>
<tr>
<td>Nonmetallic &amp; Tobacco Product</td>
<td>2.0</td>
<td>2.2</td>
</tr>
<tr>
<td>Chemicals</td>
<td>2.7</td>
<td>2.4</td>
</tr>
<tr>
<td>Computers &amp; Electronic Product</td>
<td>4.8</td>
<td>7.1</td>
</tr>
<tr>
<td>Electrical Equipment &amp; Appliance</td>
<td>3.4</td>
<td>4.0</td>
</tr>
<tr>
<td>Primary Metal Product</td>
<td>5.2</td>
<td>8.0</td>
</tr>
<tr>
<td>Food</td>
<td>8.1</td>
<td>10.5</td>
</tr>
<tr>
<td>Furniture &amp; Related Product</td>
<td>7.1</td>
<td>5.6</td>
</tr>
<tr>
<td>Transportation &amp; Aid Product</td>
<td>4.0</td>
<td>0.7</td>
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<tr>
<td>Machinery</td>
<td>5.3</td>
<td>7.0</td>
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<tr>
<td>Nonmetallic/Non-Metalular Product</td>
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<td>3.7</td>
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<tr>
<td>Paper</td>
<td>2.2</td>
<td>3.9</td>
</tr>
<tr>
<td>Primary Metal</td>
<td>2.5</td>
<td>2.8</td>
</tr>
<tr>
<td>Printing &amp; Related Product</td>
<td>3.6</td>
<td>3.9</td>
</tr>
<tr>
<td>Textile Mills</td>
<td>3.3</td>
<td>5.2</td>
</tr>
<tr>
<td>Textile Product Mills</td>
<td>2.5</td>
<td>4.6</td>
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<tr>
<td>Transportation Equipment</td>
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<td>Apparel Product</td>
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<td>Miscellaneous</td>
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**SOURCE:** Bureau of Labor Statistics/Quarterly Census Employment and Wages

**Quick Fact**

The Bureau of Labor Statistics’ Quarterly Census of Employment and Wages (QCEW) data comes from quarterly tax reports of more than 8 million employers and some federal agencies. This data includes 99.7 percent of all wages and salary civilian employment.

**Table:** Share of Total District Manufacturing

## Looking Forward

As the marginal productivity gains—particularly in newer manufacturing industries such as computer and electronic products—start to decrease, we might begin to see the decline of manufacturing employment stabilize. New sectors such as biotechnology, nanotechnology, and biopharming. Already, North Carolina is a leading state for biotech with 490 companies involved in some phase of research, development, or manufacturing. Nonetheless, with the increasing globalization of industry and freedom of trade, the urbanization of our region, and the continued productivity improvements, the share of our District devoted to manufacturing may remain on a downward trajectory for some time to come.

**Small Textile Industry Reaches New Markets**

By Betty Joyce Nash

Jeff Ward’s mother kicked him and his business, Innovative Geotextiles Corp., out of the garage in 1985. He was building enough yardage to compete in a $12 to $20 billion worldwide manufacturing plant,” he says. He calls his business category “rejuvenation,” because he finds new purposes for products that had to be put in the polypropylene commonly used as dust covers under sofas and chairs and re-purpose it as landscaping fabric. “I developed a retail product you use for weed block — it lets the water through, but not the sun.”

Rejuvenation also describes the District’s diverse, but much, much smaller textile industry today. Even with all the layoffs and outsourcing, North Carolina remains the No. 1 textile mill employer and yarn producer as well as the No. 4 apparel producer in the nation. Today, however, the textile and apparel sector accounts for less than 2 percent of the state’s employment, and the industry’s labor-intensive production has been replaced by ideas. These technological innovations include carbon fiber that will be used in the “air bus” slated to be built in Kinston, N.C., to fabric that serves as a structure for new skin growth on burn patients. The definition of what qualifies as a “textile” appears unlimited.

Mansour Mohamed founded and serves as the chief scientific officer of JTEX based in Cary, N.C. Formally the head of the department of textile engineering, chemistry, and science at the North Carolina State University College of Textiles, he and his colleagues have put the firm’s patent portfolio to work. Among other products, the firm engineers and manufactures armor systems using its patented fabrics and composite systems. The JTEX technology includes both traditional and nontraditional, nonwoven fabrics known for strength.

“We are also gearing up for a new focus on wind energy — windmill blades,” Mohamed says. “It’s a very inexpensive way of putting materials together,” says Ian Butler, who keeps statistics for INDA, the industry association for nonwoven goods. But it’s also an industry that requires little in the way of machines churn out 1,000 baby diapers per minute.

Textile firms have also specialized in “performance fabrics” that retard flame and bacterial growth and moisture, and even keep socks and shirts from getting smelly. Textile firms have also found military products to be a growing niche, in part thanks to the 1941 Berry Amendment. The amendment was made to maintain assets in the U.S. Code in 2002 and says military products must be manufactured in the United States. Milliken, for instance, has a military division that makes flame-resistant flight suits and boots, among other products, using various trademarked fabrics. In 2008, the U.S. Department of Defense purchased $131 million in North Carolina textile goods.

Medical textiles is also a growing segment. “That is the hot area now,” says Blanton Godfrey, the dean of the North Carolina State University College of Textiles, “where you’re growing peoples’ organs on textile scaffolds, a fiber base.” Other products include artificial arteries and hernia patches. Those products are almost all made in the United States, Some of these new niches supply a still robust part of the market. Until recently, automotive textile suppliers were doing well.

Four years ago, a group of researchers, under a grant from the North Carolina Department of Commerce, documented the textile industry in the state. Researchers from North Carolina State, the University of North Carolina at Chapel Hill, and Duke University merged a variety of databases and federal and the Federal Reserve Bank of San Francisco, overall manufacturing productivity in the United States, as measured by the real value of output per worker, grew almost 40 percent from 2000 to 2006. This trend held true across Fifth District states, especially in North Carolina and Maryland.

Of all manufacturing subsectors in the Fifth District, the computer and electronic products industry had the highest productivity growth. In that subsector, output per worker grew about three and a half times in South Carolina and fell about 9 percent in North Carolina. The data provide evidence that much of the drop in computer and electronic product industry employment—that accounted for almost 10 percent of Fifth District manufacturing employment losses over the decade—is due to increased productivity.

The productivity data also provide evidence to dim some of the Fifth District
The first theory – a general decline in demand – might decline to the same extent in the manufacturing activity. However, a decade of booming American consumer spending and rising pre- capita incomes around the world does not suggest a reduced demand that could explain a decade-long decline across the Fifth District manufacturing sector.

The second and third theories — that overseas firms are more competitive or that formerly domestic jobs are moving overseas — have been commonly cited reasons for the manufacturing decline. Mike Walden says the decline in textiles, apparel, furniture, and computer and electronic products becomes more productive. According to data from the Bureau of Labor Statistics, the same period that South Carolina and North Carolina fell 9 percent in South Carolina from 2000 to 2007, output per worker in the subsector increased 6 percent even as output per worker in motor vehicle production more than doubled. (Productivity in the “other transportation” category in South Carolina also grew.)

The first theory — a general decline in demand across the Fifth District — might account for almost 5 percent of total losses in manufacturing. Employment losses in the chemical and other manufacturing industries such as computer and electronics manufacturing in the District.

The Bureau of Labor Statistics Quarterly Census of Employment and Wages (QCEW) data comes from quarterly tax reports of more than 8 million employers and some federal agencies. This data includes 99.7 percent of all wages and salary civilian employment.

Mike W alden says the decline in textiles, apparel, furniture, and computer and electronic products does not suggest a reduced demand that could explain a decade-long decline across the Fifth District manufacturing sector.

The Bureau of Labor Statistics has devoted to manufacturing since the 1990s and has been a leading state for textile producers than any other state. These include firms that make flame-resistant flight suits and boots, among other products, that makes flame-resistant flight suits and boots, and even keep socks and shirts from getting smelly. Textile firms have also found military products to be a growing niche, in part thanks to the 14th Berry Amendment Amendment. The amendment was made permanent in the U.S. Code in 2002 and says military products must be manufactured in the United States. Miliken, for instance, has a military division that makes flame-resistant flight suits and boots, and even keep socks and shirts from getting smelly. Textile firms have also found military products to be a growing niche, in part thanks to the 14th Berry Amendment Amendment. The amendment was made permanent in the U.S. Code in 2002 and says military products must be manufactured in the United States.

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BY BETTY JOYCE NASH

While giants such as Milliken in South Carolina, and textile firms have also found military products to be a growing niche, in part thanks to the 14th Berry Amendment Amendment. The amendment was made permanent in the U.S. Code in 2002 and says military products must be manufactured in the United States.

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Smaller Textile Industry Reaches New Markets

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State Data, Q4:08

### DC  MD  NC  SC  VA  WV

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<td>2,576.3</td>
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<td>4,080.0</td>
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<td>Y/Y Percent Change</td>
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<td>55.3</td>
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<table>
<thead>
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<tr>
<td>Q/Q Percent Change</td>
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<tr>
<td>Y/Y Percent Change</td>
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<table>
<thead>
<tr>
<th>Professional/ Business Services Employment (000's)</th>
<th>Change from Prior Year</th>
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<tbody>
<tr>
<td>152.7</td>
<td>-0.3</td>
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<tr>
<td>199.5</td>
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<tr>
<td>487.0</td>
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<tr>
<td>219.1</td>
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<tr>
<td>650.5</td>
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<td>60.1</td>
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<table>
<thead>
<tr>
<th>Q/Y Percent Change</th>
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<tr>
<td>Q/Q Percent Change</td>
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<tr>
<td>Y/Y Percent Change</td>
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### Government Employment (000's)

<table>
<thead>
<tr>
<th>Change from Prior Year</th>
</tr>
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<tbody>
<tr>
<td>234.8</td>
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<tr>
<td>488.3</td>
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<tr>
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<td>343.4</td>
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<td>697.6</td>
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<table>
<thead>
<tr>
<th>Q/Y Percent Change</th>
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</thead>
<tbody>
<tr>
<td>Q/Q Percent Change</td>
<td>0.2</td>
</tr>
<tr>
<td>Y/Y Percent Change</td>
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### Civilian Labor Force (000's)

<table>
<thead>
<tr>
<th>Change from Prior Year</th>
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</thead>
<tbody>
<tr>
<td>332.9</td>
</tr>
<tr>
<td>3,007.4</td>
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<tr>
<td>4,578.3</td>
</tr>
<tr>
<td>2,182.1</td>
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<td>4,164.3</td>
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<td>804.7</td>
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<table>
<thead>
<tr>
<th>Q/Y Percent Change</th>
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<tbody>
<tr>
<td>Q/Q Percent Change</td>
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<tr>
<td>Y/Y Percent Change</td>
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### Unemployment Rate (%)

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<tbody>
<tr>
<td>Q4 08</td>
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<tr>
<td>7.2</td>
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<tr>
<td>4.5</td>
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<tr>
<td>6.6</td>
</tr>
<tr>
<td>7.2</td>
</tr>
<tr>
<td>4.1</td>
</tr>
<tr>
<td>4.2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q/Q Percent Change</th>
<th>0.2</th>
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</thead>
<tbody>
<tr>
<td>Q/Q Percent Change</td>
<td>0.2</td>
</tr>
<tr>
<td>Y/Y Percent Change</td>
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### Real Personal Income ($Mil)

<table>
<thead>
<tr>
<th>Change from Prior Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>31,897.6</td>
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<tr>
<td>224,316.3</td>
</tr>
<tr>
<td>262,490.3</td>
</tr>
<tr>
<td>117,934.5</td>
</tr>
<tr>
<td>275,775.9</td>
</tr>
<tr>
<td>45,643.6</td>
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<table>
<thead>
<tr>
<th>Q/Y Percent Change</th>
<th>0.2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q/Q Percent Change</td>
<td>0.2</td>
</tr>
<tr>
<td>Y/Y Percent Change</td>
<td>0.2</td>
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### Building Permits

<table>
<thead>
<tr>
<th>Change from Prior Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>42</td>
</tr>
<tr>
<td>1,889</td>
</tr>
<tr>
<td>8,058</td>
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<td>3,641</td>
</tr>
<tr>
<td>5,033</td>
</tr>
<tr>
<td>403</td>
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</table>

<table>
<thead>
<tr>
<th>Q/Y Percent Change</th>
<th>0.2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q/Q Percent Change</td>
<td>0.2</td>
</tr>
<tr>
<td>Y/Y Percent Change</td>
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</table>

### House Price Index (1980=100)

<table>
<thead>
<tr>
<th>Change from Prior Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>614.2</td>
</tr>
<tr>
<td>493.0</td>
</tr>
<tr>
<td>346.2</td>
</tr>
<tr>
<td>325.0</td>
</tr>
<tr>
<td>446.7</td>
</tr>
<tr>
<td>229.4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q/Y Percent Change</th>
<th>0.2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q/Q Percent Change</td>
<td>0.2</td>
</tr>
<tr>
<td>Y/Y Percent Change</td>
<td>0.2</td>
</tr>
</tbody>
</table>

### Sales of Existing Housing Units (000's)

<table>
<thead>
<tr>
<th>Change from Prior Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.8</td>
</tr>
<tr>
<td>58.4</td>
</tr>
<tr>
<td>121.2</td>
</tr>
<tr>
<td>63.2</td>
</tr>
<tr>
<td>105.2</td>
</tr>
<tr>
<td>22.8</td>
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</table>

<table>
<thead>
<tr>
<th>Q/Y Percent Change</th>
<th>0.2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q/Q Percent Change</td>
<td>0.2</td>
</tr>
<tr>
<td>Y/Y Percent Change</td>
<td>0.2</td>
</tr>
</tbody>
</table>

### Notes:

1) FRB-Richmond survey indexes are diffusion indexes representing the percentage of responding firms reporting increase minus the percentage reporting decrease.

2) Metropolitan area data, building permits, and house prices are not seasonally adjusted (nsa); all other employment indexes.

The manufacturing composite index is a weighted average of the shipments, new orders, and inventories series. A similar index, the composite index, is weighted to reflect the factor proportions of the shipments, new orders, and inventories series.

The manufacturing composite index is a weighted average of the shipments, new orders, and inventories series. A similar index, the composite index, is weighted to reflect the factor proportions of the shipments, new orders, and inventories series.

The real personal income is a data, building permits, and house prices are not seasonally adjusted (nsa); all other series are seasonally adjusted.

REFERENCES:

### State Data, Q4:08

**Nonfarm Employment (000’s)**

<table>
<thead>
<tr>
<th></th>
<th>DC</th>
<th>MD</th>
<th>NC</th>
<th>SC</th>
<th>VA</th>
<th>WV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q/Q</td>
<td>57.0</td>
<td>2,576.3</td>
<td>4,080.0</td>
<td>1,894.9</td>
<td>3,721.5</td>
<td>759.8</td>
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<tr>
<td>Y/Y</td>
<td>-0.4</td>
<td>-0.8</td>
<td>-1.3</td>
<td>-1.5</td>
<td>-1.2</td>
<td>-0.4</td>
</tr>
<tr>
<td>Manufacturing Employment (000’s)</td>
<td>1.4</td>
<td>326.1</td>
<td>497.9</td>
<td>235.8</td>
<td>258.8</td>
<td>15.2</td>
</tr>
<tr>
<td>Q/Q</td>
<td>-12.5</td>
<td>-3.5</td>
<td>-2.8</td>
<td>-2.5</td>
<td>-2.0</td>
<td>-3.5</td>
</tr>
<tr>
<td>Y/Y</td>
<td>-17.6</td>
<td>-4.0</td>
<td>-6.7</td>
<td>-5.1</td>
<td>-5.3</td>
<td>-5.3</td>
</tr>
</tbody>
</table>

**Government Employment (000’s)**

|        | 358.4 | 488.3 | 710.0 | 343.4 | 697.6 | 147.5 |
| Q/Q    | -0.7 | -0.1 | 1.3 | 0.1 | 0.1 | 0.2 |
| Y/Y    | 0.8 | 1.4 | 3.6 | 0.7 | 1.8 | 1.4 |

**Civilian Labor Force (000’s)**

|        | 3,007.4 | 3,007.4 | 3,007.4 | 3,007.4 | 3,007.4 | 3,007.4 |
| Q/Q    | -0.3 | 0.3 | 0.6 | 1.0 | 0.8 | 0.0 |
| Y/Y    | 0.9 | 0.6 | 1.4 | 2.5 | 1.9 | -0.9 |

**Unemployment Rate (%)**

|        | 8.0 | 5.1 | 7.5 | 8.3 | 4.6 | 4.4 |
| Q3:08  | 7.2 | 4.5 | 6.6 | 7.2 | 4.1 | 4.2 |
| Q4:07  | 5.7 | 3.6 | 5.0 | 5.7 | 3.3 | 4.4 |

**Real Personal Income ($Mil)**

|        | 31,897.6 | 224,316.3 | 262,490.3 | 117,934.5 | 275,775.9 | 45,643.6 |
| Q/Q    | 1.5 | 1.3 | 1.1 | 1.3 | 1.3 | 1.7 |
| Y/Y    | 1.6 | 0.8 | 0.8 | 0.8 | 0.9 | 2.9 |

**Building Permits**

|        | 42 | 1,889 | 8,058 | 3,441 | 5,033 | 403 |
| Q/Q    | -72.4 | -50.5 | -44.7 | -48.7 | -20.2 | -53.8 |
| Y/Y    | -76.7 | -45.9 | -49.4 | -53.2 | -31.4 | -43.7 |

**House Price Index (1980=100)**

|        | 614.2 | 493.0 | 346.2 | 325.0 | 446.7 | 229.4 |
| Q/Q    | -1.2 | -1.5 | 0.3 | -0.2 | -0.9 | -0.1 |
| Y/Y    | -6.0 | -2.7 | 1.3 | 0.3 | -4.6 | -0.5 |

**Sales of Existing Housing Units (000s)**

|        | 6.9 | 58.4 | 121.2 | 63.2 | 105.2 | 22.8 |
| Q/Q    | -5.6 | -11.0 | -21.3 | -21.4 | -16.8 | -9.3 |
| Y/Y    | -10.0 | -14.6 | -34.7 | -31.0 | 3.1 | -17.4 |

### Sources

- Metropolitan area data, building permits, and house prices are not seasonally adjusted (nsa); all other employment indexes.
- The manufacturing composite index is a weighted average of the shipments, new orders, and order backlogs indexes.

### Notes

1. FRB—Richmond survey indexes are diffusion indexes representing the percentage of responding firms reporting increase minus the percentage reporting decrease.
2. Metropolitan area data, building permits, and house prices are not seasonally adjusted (nsa); all other employment indexes.
3. First Quarter 1998 - Fourth Quarter 2008
4. Change From Prior Year
6. House prices: Fannie Mae, Freddie Mac, Federal Housing Finance Agency, National Association of Realtors (NAR), and other private sector data sources.
### Metropolitan Area Data, Q4:08

<table>
<thead>
<tr>
<th>Metropolitan Area</th>
<th>Nonfarm Employment (000's)</th>
<th>Q/Q Percent Change</th>
<th>Y/Y Percent Change</th>
<th>Unemployment Rate (%)</th>
<th>Q2:08</th>
<th>Q1:07</th>
<th>Building Permits</th>
<th>Q/Q Percent Change</th>
<th>Y/Y Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Washington, DC</strong></td>
<td>2,442.0</td>
<td>0.1</td>
<td>-0.0</td>
<td>4.4</td>
<td>4.0</td>
<td>2.9</td>
<td>2,928</td>
<td>-15.3</td>
<td>-40.0</td>
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<td><strong>Baltimore, MD</strong></td>
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<td>4.1</td>
<td>3.4</td>
<td>684</td>
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<td>-49.0</td>
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<tr>
<td><strong>Hagerstown-Martinsburg, MD-WV</strong></td>
<td>1011.1</td>
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<td>170</td>
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<td><strong>Greeneville, SC</strong></td>
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<td>-0.2</td>
<td>7.2</td>
<td>5.2</td>
<td>4.8</td>
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<td>-40.6</td>
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<td>648</td>
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</tr>
</tbody>
</table>

**For more information, contact Sonya Ravindranath Waddell at (804) 697-2694 or e-mail sonya.waddell@rich.frb.org**
### Metropolitan Area Data, Q4:08

#### Washington, DC
- **Nonfarm Employment (000's)**: 2,442.0
- **Q/Q Percent Change**: 0.1
- **Y/Y Percent Change**: 0.2
- **Unemployment Rate (%)**: 4.4
- **Q2:08**: 4.0
- **Q1:07**: 2.9
- **Building Permits**: 2,928
- **Q/Q Percent Change**: -15.3
- **Y/Y Percent Change**: -40.0

#### Baltimore, MD
- **Nonfarm Employment (000's)**: 1,303.3
- **Q/Q Percent Change**: -0.3
- **Y/Y Percent Change**: -1.2
- **Unemployment Rate (%)**: 5.4
- **Q2:08**: 4.9
- **Q1:07**: 3.5
- **Building Permits**: 684
- **Q/Q Percent Change**: -57.8
- **Y/Y Percent Change**: -69.0

#### Hagerstown-Martinsburg, MD-WV
- **Nonfarm Employment (000's)**: 101.1
- **Q/Q Percent Change**: -0.1
- **Y/Y Percent Change**: -0.2
- **Unemployment Rate (%)**: 5.9
- **Q2:08**: 4.8
- **Q1:07**: 3.6
- **Building Permits**: 2,018
- **Q/Q Percent Change**: -33.6
- **Y/Y Percent Change**: -40.0

#### Raleigh, NC
- **Nonfarm Employment (000)**: 579.6
- **Q/Q Percent Change**: -0.2
- **Y/Y Percent Change**: -1.3
- **Unemployment Rate (%)**: 5.2
- **Q2:08**: 6.8
- **Q1:07**: 4.8
- **Building Permits**: 1,224
- **Q/Q Percent Change**: -69.0
- **Y/Y Percent Change**: -76.6

#### Virginia Beach-Norfolk, VA
- **Nonfarm Employment (000)**: 783.1
- **Q/Q Percent Change**: -1.1
- **Y/Y Percent Change**: -1.0
- **Unemployment Rate (%)**: 4.9
- **Q2:08**: 4.4
- **Q1:07**: 3.3
- **Building Permits**: 648
- **Q/Q Percent Change**: -92.2
- **Y/Y Percent Change**: -14.7

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

**The Importance of Luck**

BY AARON STEELMAN

If you spend much time talking to proponents of free markets, you will find that many of them don’t have much to say about the role that luck plays in people’s lives. Instead, you will often hear a lot about how people determine their own fates — and that as long as there is a level playing field, then everyone has a good shot at making his dreams a reality.

There is a lot of truth in such statements. Most people do fundamentally determine their own happiness — which, in large measure, is determined by one’s general outlook on life. People can choose to be happy, or at least happier, just as they can choose to be miserable and unpleasant. This is not to deny that some people are prone to bouts of depression or sadness. But, fortunately, with effort people often can handle such predispositions, so that their feelings of melancholia are transitory and manageable rather than permanent and crushing.

At bottom, happiness is an act of volition for most people. Does the same logic apply to people’s material status? This is a more complicated question. Hard work is usually a necessary condition. But it often is not sufficient. Luck plays an enormous role. In fact, the most important factor affecting people’s material status is completely beyond their control. We simply cannot affect the conditions into which we are born.

It is by pure chance that some of us were born in developed countries, while others were born in desperately poor ones. On average, people born in the United States can expect to live about 80 years and have access to luxuries unknown to even aristocrats just a few generations ago. In contrast, on average, people in parts of sub-Saharan Africa can expect to live only into their 40s and get by on less than a dollar a day.

International comparisons provide the starkest example of the role that chance plays in our lives. But intranational comparisons are instructive as well. Income inequality in the United States is significant. What’s more, people who are born rich tend to remain rich and people who are born poor tend to remain poor in the United States is significant. What’s more, people who are born rich tend to remain rich and people who are born poor tend to remain poor and people who are born rich tend to remain rich. It is possible to escape poverty in the United States — and as previously noted, being poor in the United States means living a wholly different life than a poor person in, say, Tanzania. But who can doubt the educational and cultural advantages, just to name a few, that accrue to people born to more affluent families? By definition, the playing field is not level at birth — and this has important consequences for people’s prospects throughout their lives.

Does that mean we should attempt to level conditions through, say, a confiscatory inheritance tax? One has to consider the incentives such a tax would create. Some people, no doubt, would not work as hard as they otherwise would because they would be unable to leave the fruits of their labor to their heirs. In contrast, some people who are now likely to receive significant inheritances might work harder knowing that this cushion would not be forthcoming. Which effect is larger is ultimately an empirical question.

But more important, such a tax would codify into law the belief that things ought to be equal, that we should all start from the same position. This is simply unrealistic. It is also undesirable. Human beings are intrinsically different. Even if you equalize wealth, you cannot equalize talent or ambition. And, for that, we should be grateful. The world is much richer (financially and nonfinancially) because people have varied interests and goals. It is this diversity that makes the division of labor such a powerful force for improving the human condition — and the world such an interesting place.

It is also important to note that there are two kinds of luck. The first is what we normally think of and what is described above — that is, simple chance. The second is quite different. It is best illustrated by an example. When someone receives a promotion at work, we often say that he is lucky. It is true that a fortunate thing has happened to him. But that promotion probably did not just fall into his lap. He probably placed himself in that position by working hard and making wise decisions. In short, we make this second type of luck. Life is a combination of circumstances that we are dealt and those that we choose.

At the beginning of this column, I noted that many free marketeers downplay the role that chance plays in people’s lives. They may believe that acknowledging this weakens the argument for laissez faire and provides ammunition to those who favor redistributionist schemes. As I have argued, I don’t think this is the case. Regardless, the evidence for the importance of luck is all around us. And to deny it is to appear to be oblivious to the facts, perhaps willingly so. That is a very real risk, especially at a time when many in the public are expressing skepticism about the merits of a market system and the wisdom of those who support it.
Federal Reserve
Is the Fed’s “Beige Book” a crystal ball? We’ll take a look at how this publication is used to forecast trends in different sectors of the economy and regions of the country.

Economic History
Did the Fed’s actions to rescue Long Term Capital Management in 1998 affect market expectations about what the public sector would do to protect large nonbank financial institutions?

Research Spotlight
What might Fischer Black, one of the pioneers of modern financial economics, think about the economic crisis?

Jargon Alert
If you buy less of something as your income rises, chances are that item is an “inferior good.”

Measuring the Standard of Living
Per-capita gross domestic product is the most common “standard of living” measure in economics, largely because it is well understood and widely available across countries. But it doesn’t capture all possible aspects of a population’s well-being. Other measures focus on health, environmental quality, income distribution, and happiness. Should policymakers look to these alternative measures when crafting economic policy?

Seasonal Employment
In tourist hotspots like Myrtle Beach, S.C., laid-off workers are now competing for seasonal jobs that students and temporary employees from overseas used to do. What does this mean for the labor market?

Retail Walk-In Health Clinics
Some retailers, like Wal-Mart and CVS, offer walk-in health clinics for their customers. Staffed mainly by nurse practitioners, these one-stop centers provide remedies for routine ailments and might have broader implications for the future of health care.

Antitrust
Antitrust laws were originally created to protect consumers against monopolies by breaking up powerful companies and cartels. Yet there are instances where monopoly power doesn’t hurt consumers in the way some initially thought decades ago. We’ll look at how the economics of antitrust has influenced the regulation of large firms.

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