

# Eighth Note

Thomas C. Melzer  
President



## Is the Fed Out of Touch?

From time to time, the Federal Reserve is criticized for conducting monetary policy in an ivory tower. From high atop that tower, so the argument goes, the Fed enacts its policies, unaware of their effects on the nation's workers, consumers and businesses.

Unfortunately, this criticism reflects a fundamental misunderstanding of the Fed's decentralized structure and the opportunities it affords us to stay in touch with regional concerns. As president of the St. Louis Fed, for example, I spend almost a fourth of my time talking with and listening to various constituencies in the Eighth Federal Reserve District. Other Bank staff spend time in similar endeavors. Our contacts are far-ranging, including:

- Boards of Directors—All four District offices have a board of directors, drawn from a broad cross-section of the public, as well as the banking community, in our seven-state area. Meetings are monthly.

- Economic Advisory Council—We meet twice a year with members of this 10- to 12-member group to discuss the economic concerns of small business and agriculture.

- District Dialogues—Four or five times a year, we host road shows for

bankers, rotating among 18 cities. Two senior officers and I speak before each group, take questions and continue the discussion over dinner. The following morning, we host a similar meeting for community leaders.

- Beige Book contacts—Eight times a year, just prior to Federal Open Market Committee (FOMC) meetings, we check in with dozens of District contacts in a wide range of industries for late-breaking trends in their businesses. A report on this information is distributed to FOMC members before the meeting and is released to the public.

- Economic Forums—Four or five times a year, a senior economist and supervisory officer travel to District cities to speak to representatives of the local business and banking communities.

- Speeches and presentations—Each year, Bank staff make almost 100 presentations to audiences ranging from local Rotary Clubs to national economic and trade associations.

- Industry luncheons—Eight or nine times a year, we invite representatives from specific industries in for lunch and an economic discussion. In 1996, we met with homebuilders, retailers, corporate CEOs and CFOs, investment counselors and health care providers, among others.

Similar programs are going on in other Fed Districts. No doubt, my counterparts find, as I do, that the public is eager for the opportunity to interact directly with a principal in the monetary policymaking process. Not surprisingly, such interaction leads to some frank exchanges about economic prospects

The point here is that the Fed's unusual structure—with policymaking balanced between a central board in Washington and 12 Reserve Banks in the field—ensures that national policies are *never* enacted from an ivory tower. In my view, it should be no other way.



# Shaking the Third Rail

## REFORMING SOCIAL SECURITY

BY Michelle Clark Neely

**U.S.** politicians, policy-makers and ordinary citizens are now talking openly about a topic that has long been taboo: altering the nation's Social Security system. Frequently called "the third rail of American politics"—touch it and you die—social security reform is an issue that prompts heated debates among its supporters and detractors. And although Social Security has been changed a number of times since its inception in 1935, the reforms being discussed today are much more substantial than those previously considered or undertaken.

And for good reason: It has become widely accepted that the long-term financial viability of the Social Security system is in doubt. Although the reasons are numerous, the key factor appears to be the enormous demands the aging of the baby boom population will place on the system early in the next century. To avert the financial crunch that most analysts see looming, a growing number of social security experts and policy-makers are supporting the privatization of all or parts of the system.

### ***Humble Beginnings***

The U.S. Social Security system—formally Old Age, Survivors and Disability Insurance (OASDI)—was launched in response to the Great Depression, when the savings of a large portion of American families were wiped out. Even before the Depression, however, a number of policymakers recognized the need for government social insurance because of sweeping economic and demographic changes like increased urbaniza-

tion and life expectancy, which threatened the traditional family-based support for the elderly. Social Security was introduced as a fully funded program; workers and their employers were each subject to a 1 percent payroll tax on earnings up to \$3,000. The taxes went into a fund to pay future benefits, which were based on an individual's lifetime contribution.

But in 1939, recognizing that Americans nearing retirement age would never be able to contribute enough to finance a socially acceptable retirement income, Congress made a number of changes to the program. First, benefits for dependents—spouses and children—were introduced. Second, benefits became based on average earnings over some minimum period, rather than total lifetime contributions. Finally, and most important, to finance benefits for the newly eligible, as well as higher benefits for workers close to retirement, the program was changed to a "pay-as-you-go" system. Under pay-as-you-go, payroll tax contributions from future retirees and their employers are immediately paid out as benefits to current retirees.

Other modifications have also been made over the years. Disability benefits were added in 1954. Workers not previously covered—farmers, the self-employed, certain government employees—were added to the program. Per capita benefits and payroll taxes have been increased a number of times; the current payroll tax of 12.4 percent (employee and

employer combined) is six times the original rate.<sup>1</sup> Benefits have been indexed for inflation. They are also subject to an earnings test and taxed if income exceeds a given level, which redistributes benefits across income classes. Workers can retire as early as 62, but receive reduced benefits before age 65. The maximum level of earnings subject to the payroll tax has also risen over time, and currently stands at \$62,700.

Under the Social Security Act amendments passed in 1983, benefits will be reduced beginning in the year 2000, and the retirement age will gradually increase, reaching 67 by 2022. A trust fund was also established in 1983 to help finance future benefits. Payroll taxes in excess of what's needed to pay current benefits go into the fund and are invested in U.S. Treasury securities—the only investments permitted under law. The fund currently has a surplus of \$496 billion, which is expected to increase sharply over the next 15 years because of a larger number of workers and higher payroll tax contributions.

### ***The Coming Crunch***

The Social Security trust fund was established because of an increasing concern among policymakers about what demographics would do to the system. The number of workers supporting retirees and the disabled has been declining for decades and is expected to keep dipping well into the next century as the huge cohort of baby boomers begins to retire in 2010. The baby boom generation, defined as those born between

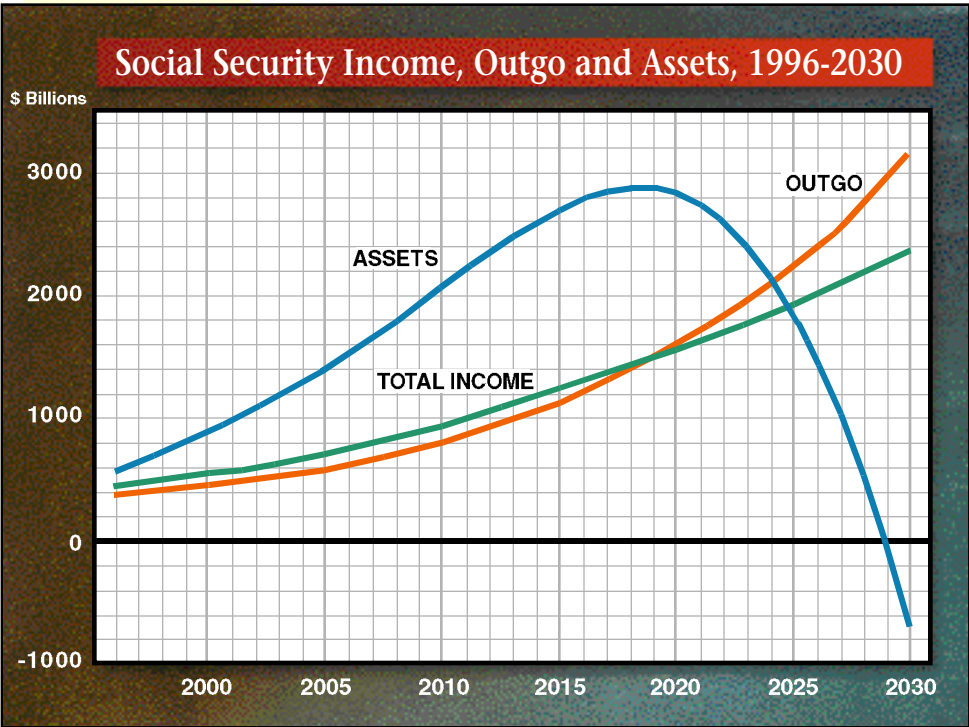
1946 and 1964, numbers 74 million and accounts for about 30 percent of the U.S. population.

Compounding the problem is a continuing drop in the U.S. fertility rate and a continuing increase in life

full benefits—retirement, spousal, dependent and survivor—regardless of either the number of years they paid in to the system or the size of their contributions following the switch from a fully funded to pay-as-you-go

system. Large increases in benefits and the introduction of cost of living adjustments in the 1970s also boosted returns for earlier retirees. There was even a period in the mid-1970s when benefits were over-indexed for inflation because of a flaw in the indexing formula used.

These benefit increases meant that fewer dollars began accumulating in the trust fund when it was set up in 1983. And the dollars that were accumulating were invested in low-yielding Treasury securities.



NOTE: Figures are for combined OASI and DI Trust Funds.

SOURCE: Board of Trustees of the Social Security Administration, June 1996

expectancy. The number of workers per supported retiree is expected to fall from about five today to 3.6 in 2010 and 2.4 in 2030.<sup>2</sup> At that rate, according to the OASDI trust funds' board of trustees, benefits will exceed payroll tax income by 2012 and total income, which is payroll taxes plus interest income, by 2019. By 2029, the trust fund will be exhausted (see figure).<sup>3</sup> Although benefits still will be paid because tax revenue will continue to be collected, most social security analysts believe, barring government borrowing to cover the shortfall, that either taxes will need to be raised, benefits will need to be decreased—or both—to meet system obligations.

### Unhappy Returns

In addition to the solvency concern, reform advocates also bemoan the low financial returns to be received by current and future generations under the current system. To date, each generation of recipients has received a lower rate of return than the previous one—a trend that is expected to continue well into the next century. Early program recipients received far more in benefits than they paid in, enjoying real (after inflation) returns of more than 12 percent by some estimates. In contrast, baby boomers can expect a real return of about 2 percent.<sup>4</sup>

Why the declining returns? First, the program's initial retirees received

### How Radical Reform?

Given the mounting concerns about long-term solvency and the low returns being generated under the current system, momentum is gaining for social security reform. The United States is not alone in this predicament. Most industrialized nations, as well as a number of developing countries, also face aging populations and declining fertility rates and are saddled with pay-as-you-go systems that redistribute income across generations and income levels. Reform efforts of various sorts have been launched in a number of countries, including Australia, Chile and Sweden.<sup>5</sup> What these reform movements have in common is an effort to more closely link benefits with actual contributions. For example, Chile's movement from a pay-as-you-go system to one that's mostly privatized has been closely scrutinized and touted as a model for the United States and other nations (see sidebar).

In the United States, reform proposals that address the solvency issue and the benefits-contribution link are now being seriously contemplated. For example, Senators Bob Kerrey and Alan Simpson have introduced legislation that would increase the normal retirement age to 70 by 2029. More significantly, the senators have also introduced a bill that would direct a portion of payroll taxes to IRA-like personal investment plans—an



approach that could be considered partial privatization of the system.

In its last several annual reports, the OASDI trust funds' board of trustees has forecasted that the system is failing the 75-year test for actuarial balance, which is the difference between annual income and annual costs, summed over the next 75 years. Every four years, an advisory council is appointed to review these forecasts and comment on policy issues related to Social Security. The council appointed in 1994 has tackled the imbalance issue and is expected to issue its policy recommendations by year-end. The council's stated goal was to bring the system into actuarial balance, while preserving its popularity, by minimizing benefit cuts and payroll tax increases.<sup>6</sup>

Although council members could not unanimously agree on one plan, the three drafted share two common features. First, each proposes a way of bridging the gap between benefits and income by raising taxes, trimming benefits, taxing benefits, gradually raising the retirement age or requiring mandatory private saving. Second, to address the low returns generated on workers' contributions, each plan has provisions for directing some portion of these savings into the stock market. The council notes that even after adjusting for risk, the stock market outperforms the bond market over long time horizons, a phenomena economists call "the equity premium."<sup>7</sup> One substantial difference among the plans is the degree to which they move Social Security away from a pay-as-you-go system toward a fully funded one. According to economist Ed Gramlich, a University of Michigan economics professor and head of the council, these plans can be described as follows.

### The Maintain Benefits Proposal

The objective of this proposal is preservation of the current system. To meet this objective, benefits would be subject to tougher tax treatment, and a portion of the OASDI trust funds would be invested in stocks. Currently, above certain income thresholds, 50 percent to 85 percent of benefits are taxable, with tax revenue divided between the OASDI and Medicare trust funds. Under this first proposal, however, *all* benefits in excess of previously taxed contributions (payroll tax payments) would be treated as taxable income, and all of that tax revenue would eventually be diverted to the OASDI funds. One controversial aspect of this tougher tax treatment is that it forces current retirees—who are receiving higher

returns than future generations will receive—to pay for some of the system's actuarial imbalance.

The other provision of this plan would permit the OASDI trust funds to gradually hold up to 40 percent of their assets in stocks, a move that would be expected to raise the overall return on the portfolio by nearly 50 percent. The shift from government securities to stocks is a controversial one. Some analysts have expressed concerns about whether the equity premium will hold up; if it doesn't, the Social Security system would have new financial and credibility problems. Another concern is over government involvement in the stock market. A 40 percent investment in stocks would tally about \$1 trillion, or one-seventh of GDP. Although the plan calls for the OASDI trust funds to hold passive investments, like index funds, there are still fears about political meddling in the management of these sizable accounts.<sup>8</sup>

### The Individual Accounts Proposal

The primary objective of this proposal is to scale back benefits to eradicate the long-term actuarial deficit in the program. To accomplish this, three steps would be taken. First, the normal retirement age would gradually be raised. Second, the ratio of benefits to contributions for high-wage workers would be scaled back. Third, and most important, this plan would create mandatory individual savings accounts equivalent to 1.6 percent of payrolls.<sup>9</sup> Although these accounts would be held in the Social Security system, individuals would direct their contributions to specific investments, choosing from among five to 10 index funds of stocks, bonds or both. The accumulations in these accounts would be packaged as an annuity and added to regular benefits at retirement.

The establishment of individual accounts would represent a radical departure from the current system, which is basically a defined benefit program that also partially redistributes income from high- to low-wage earners.<sup>10</sup> Under this second plan, the system would be part defined benefit and part defined contribution. Because the individual account contributions are a fixed percentage of payroll, high earners would automatically accumulate more income than low earners, assuming the same investment choices.

Proponents of this plan cite several advantages, including decentralized decision-making, an increased sense of "ownership" of retirement funds because of the partial funding, and

EQUITY  
PREMIUM  
PRIVATIZATION  
Fully Funded  
PAY-AS-YOU-GO  
benefits  
Annuity  
BABY  
BOOM  
TRANSITION  
PLAN  
TRUST  
FUNDS

# CHILE'S BLUEPRINT FOR PUBLIC PENSION PRIVATIZATION

Chile boasts two firsts in the world of public pensions. It was one of the first countries in the Western Hemisphere to adopt such a program (in 1924) and the first country anywhere to scrap its pay-as-you-go system in favor of one that's largely privatized (in 1981). Because Chile faced a number of the same long-term demographic and financial problems plaguing the United States and other industrialized countries, and because its transition to the new system has been relatively smooth, privatization proponents extol its plan as a prototype for the rest of the world.

The problems with Chile's old pay-as-you-go system became apparent in the late 1970s when large deficits and low and unequal benefits threatened the program's financial health and popularity. By the late 1970s, expenditures exceeded revenues because of a continued decline in the ratio of contributors to retirees, which fell from eight in 1960 to about two in 1980. Moreover, high inflation during that period had eroded the value of existing benefits, and other program inefficiencies made the funding deficit worse. In addition, the program was highly inequitable by anyone's measure. For example, blue collar workers were required to work until age 65 to receive retirement benefits, while their white collar counterparts could retire after 35 years of work, regardless of age. White collar workers also received higher benefits than blue collar workers.

The system was completely overhauled in 1981. Payroll taxes were eliminated, and workers are now required to contribute 10 percent of their paychecks to one or more of 21 individually funded and privately administered trusts, called AFPs (Administradoras de Fondos de Pensiones). The individual accounts are fully vested and portable. Each employee contributes until retirement (age 65 for men, 60 for women), at which time he may choose between a gradual withdrawal of the balance or an inflation-indexed annuity sold by private insurance companies. Besides the age requirement, each employee is also required to have contributed enough to his account to finance an annual pension that is equal to 70 percent of his average indexed wage during his last 10 years of employment.

Although the system is described as privatized, the government is still involved in the country's pension system. For example, to

provide a floor, government assistance is given to retirees whose pension trusts are less than 85 percent of the prevailing minimum wage. In addition, there is some limit on the proportion of retirement funds that may be invested by AFP administrators in domestic and foreign stocks.

By most accounts, the new system is an unqualified success. Real rates of return have averaged 14 percent per year since the program's inception. Much of the previous inefficiencies have been eliminated,

and workers can now retire any time they please, so long as their pension benefits meet the 70 percent requirement. And, although both programs guarantee the same minimum pension (85 percent of the minimum wage), the likelihood of receiving the minimum has been reduced because of the new program's superior returns. Some analysts have estimated that pensions under the new system are about 70 percent larger than those paid to workers under the old system. And, privatization of the public pension system, combined with other macroeconomic reforms, is credited with raising Chile's national savings rate and broadening and deepening its financial markets.

Given this success, it isn't surprising that policymakers in other countries are eager to copy the Chilean model. But some caveats are in order. First, the transition in Chile was much easier than it would be in countries like the United States because demographic, economic and political conditions were more favorable there. At the time of transition, Chile had nine persons of working age (not necessarily contributors) supporting each retiree, versus five in the United States. Chile was also run-

ning a budget surplus, and was therefore able to fund the transition out of general government revenues. In addition, Chile was under the control of a dictator, Augusto Pinochet, who could single-handedly make economic policy without having to worry, as U.S. reformers do, about answering to special interest groups or the U.S. Congress.

Second, because of the millions of individual accounts created, the program is very costly to administer. Finally, it may be that the high returns enjoyed by Chilean pension recipients thus far are directly related to the massive inflows into the AFPs, and that these returns will not hold up over time. After all, 15 years is a short time to measure long-term returns.

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risk diversification through the combination of defined benefit and defined contribution components. However, this plan shares some of the same disadvantages as the first, such as the risks associated with equities and the political repercussions of having the federal government invest in the stock market. In addition, it raises concerns about poor investment choices by plan participants.

### The Personal Security Accounts Proposal

The third proposal features even larger individual accounts and is closest in spirit to a privatized system like Chile's. Under this plan, 2.4 percentage points of the current 12.4 percent payroll tax would be earmarked for survivors and disability insurance, which would essentially be unchanged. The remaining 10 percentage points of the tax would be split equally and directed to: a flat Social Security benefit equal to two-thirds of the poverty line, which would be financed by employers and administered by the Social Security system; and an individual personal security account or PSA, which would be financed by employees. Unlike the second proposal, however, these PSAs would not be managed by the Social Security system and packaged as annuities. Rather, the accounts would be administered by private registered investment companies. At retirement, a PSA holder would be able to choose among an annuity, a lump sum payout or an addition to his estate. Under this proposal, the retirement age would also gradually rise, to match increases in life expectancy.

The biggest question this plan raises is how to finance the transition from the current system to the new system. The current generation is paying now for their parents' retirement, and, after the transition, this generation's children will be paying for their own retirement. But who would pay for this generation's retirement? The transition plan calls for all workers over 55 to remain in the present system and all workers under 25 to enter the new system (those under 25 may earn some credit for payroll taxes already paid). Workers between the ages of 25 and 55 would receive a two-tiered benefit. Tier 1 would consist of the benefit already accrued in the current system, plus a pro rata share of the flat benefit in the new system; Tier 2 would consist of the funds and returns from the PSA. But because these benefits would be greater than the 7.4 percent being paid into the OASDI trust funds (the 2.4 percent payment for disability and survivor's insurance, plus the 5 percent employer-paid payroll tax), a supple-

mental transition tax would need to be levied to make up for the shortfall.

The main advantages of the PSA plan are twofold: It encourages individual responsibility and ownership because the taxpayer essentially pays a tax to himself; and it guarantees a flat minimum benefit. In addition, its proponents, as well as proponents of other partially privatized plans, believe it would create positive macroeconomic effects by increasing national savings.<sup>11</sup>

But as with the other two plans, the PSA proposal is saddled with several disadvantages and unanswered questions. For starters, retirees would face even more risk in this plan than in the other two because of the larger share of tax payments being invested in the stock and bond markets. Secondly, lump sum withdrawals from PSAs could be problematic if retirees are short-sighted. There would be enormous political pressure to bail out these people, as well as those who did not make wise investment choices. Another concern is whether the administrative costs of managing all of these individual accounts would seriously erode the expected higher returns.

### High Stakes, Tough Choices

Social Security is an enormously popular program among U.S. citizens. And for more than 60 years, it has largely met its goal of providing a socially adequate retirement for the nation's elderly, regardless of income. Unlike most private pension programs, it provides inflation protection. But despite all of these attributes, Social Security is also a program with serious long-term problems. Although pay-as-you-go financing solved the system's early shortcomings, it has proven to be financially unsound. Social security experts are divided, however, on whether the system needs only minor tinkering or more serious overhaul. Privatization proponents point to the prospect of increased returns and national savings—as well as the end of risky intergenerational transfer payments—as the major pluses of their reform thrust. But such sweeping changes would effectively end Social Security as we know it. Given the high stakes, this choice should not be made hastily or lightly.

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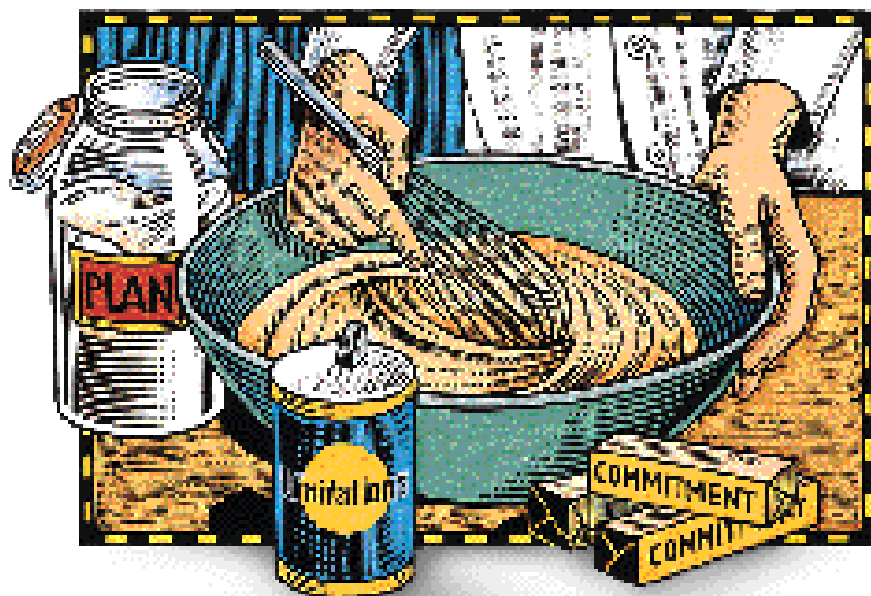
#### ENDNOTES

- <sup>1</sup> This rate includes the payroll tax deduction for disability insurance, but not for Medicare, which is currently 2.9 percent for employers and employees combined.
- <sup>2</sup> These forecasts are based on the projected working age population and the projected retirement age population.
- <sup>3</sup> These estimates are based on an "intermediate" forecast of economic and demographic factors. If fertility declines more than expected, or if people live longer than expected, the trust funds will be depleted earlier. See Board of Trustees (1996).
- <sup>4</sup> See Gokhale and Lansing (1996).
- <sup>5</sup> See Schieber and Shoven (1996).
- <sup>6</sup> See Gramlich (1996).
- <sup>7</sup> Since the 1920s, for example, the inflation-adjusted return on common stocks has averaged more than 7 percent, compared with a return of less than 2 percent on Treasury bonds.
- <sup>8</sup> An index fund is one that is tied to a fixed set of assets, like the stocks of the nation's top 500 companies. By definition, because the components of the fund are predesignated, there is no "stock picking" involved.
- <sup>9</sup> This 1.6 percent levy would be on top of the 12.4 percent payroll tax.
- <sup>10</sup> A defined benefit plan is one in which individuals in similar circumstances pay the same fixed contribution and receive the same fixed benefit; the traditional corporate pension is an example. A defined contribution plan is one in which individuals can choose how much, within limits, to contribute, with the benefit depending on the size of the contribution and the interest income earned on that contribution; 401(k) plans are defined contribution plans.
- <sup>11</sup> Of course, national savings would increase only if additional funds are saved because of these changes. Individuals could opt to reduce other private saving, leaving total savings unchanged.

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# A Recipe for Monetary Policy Credibility

[ by Kevin L. Kliesen ]

Recent economic research suggests that monetary policy will be more effective if it is both transparent and credible. A transparent monetary policy is one in which the central bank clearly states its commitment to some goal—in this case achieving price stability—and how it intends to get there. Credibility is attained when the central bank's actions are consistent with reaching this goal. For the Federal Reserve, the goal is a sustained, low inflation rate.

But a low inflation rate does not necessarily guarantee a credible monetary policy, for straightforward reasons: If financial markets are unsure of the Federal Reserve's commitment to keeping inflation in check, then the Fed's credibility with them will be suspect. Many economists believe that one way the Fed, or any central bank, can enhance its credibility is with a transparent policy rule that is deliberately designed to achieve long-term price stability.

## A Monetary Insurance Policy

Although it is difficult to measure precisely, a credible monetary policy could be summed up in the following phrase: Policymakers must always say what they mean and mean what they say. Three ingredients are crucial in this respect. The first is a stated commitment to achieving a given policy goal. Federal Reserve Chairman Alan Greenspan does this by reiterating that the Fed's ultimate goal should be long-term price stability, of which the benefits are many and varied.<sup>1</sup> The second ingredient is a recognition that there are limits as to what monetary policy can and cannot accomplish. From this, two points follow: First, the only variable the Fed can reliably control over a long time period is the money supply, which is the major factor that determines the inflation rate; and second, because there is no trade-off between inflation and unemployment in the long run, an economy with a low inflation rate is preferable to one with a high inflation rate.<sup>2</sup>

The final ingredient that goes into a credible monetary policy is a well-defined plan—announced beforehand—which stipulates how the Fed intends to achieve and maintain its

stated goal of long-run price stability. This last feature recognizes that the best monetary policy is a transparent one which—because it is well publicized and well understood—creates the least uncertainty in financial markets.

The goal of the Federal Reserve's Federal Open Market Committee (FOMC) is to keep inflationary expectations from worsening. If the committee fails to do so, uncertainty will creep into financial markets. For example, suppose that an acceleration in the current inflation rate occurs, but—because Fed policymakers perceive the movement to be temporary—they take no restraining action. If this decision is viewed positively by financial market participants, they will be less apprehensive about the increase in inflation. If financial markets are not convinced of this, and expect instead a permanent increase in the inflation rate to result from the Fed's inaction, they will react in a manner that increases financial market volatility. Accordingly, the heightened inflationary expectations—which arise from less confidence in the Fed's ability to curtail future inflation—could cause a rise in long-term interest rates, since there will now be more risk associated with holding fixed-income securities (bonds). Thus, a credible monetary policy tends also to yield low and stable nominal interest rates.

## Are Policy Rules Needed?

Given the relatively low inflation rate that has persisted over the past four and a half years, some economists and policymakers maintain that the Federal Reserve has finally achieved its long-sought-after goal of full credibility. This environment stands in stark contrast to the 1960s and 1970s, when monetary policymakers seemed more committed to keeping unemployment from accelerating than to achieving long-term price stability. This stance largely reflected the view, which was commonly held at the time, that there was an inflation-output tradeoff that policymakers could reliably exploit. The result, as shown in the figure, was a substantially higher average inflation rate during the 1970s than during the previous two decades.

Many economists have since argued that the best way to prevent a repeat of the substandard inflation performance of the late 1960s to early 1980s is through an arrangement that consistently strives to achieve the goal of long-run price stability.

One recent tactic that has been taken along these lines is to announce fixed inflation targets, which has been done by the central banks of Canada, England and New Zealand. Some have



proposed that the Fed go a step further by adopting a policy that would more explicitly bind policymakers. Several types of these rules have been advocated.

Probably the best-known rule is the one advanced by Milton Friedman, which calls on the Fed to increase the growth of the money stock at a known, fixed rate. However, changes in the financial structure of the economy since the early 1980s have made the reliability of this rule questionable. Three other popular policy rules that have been proposed in recent years and are, therefore, perhaps more reliable are: the "McCallum rule," the "Taylor rule" and the "Svensson rule."

Essentially, the McCallum Rule, proposed by Carnegie-Mellon professor Bennett McCallum, states that the FOMC should specify a target growth rate for nominal GDP (the current dollar value of final goods and services produced) since it is the product of two components: price and quantity. By targeting nominal GDP, the Fed can, therefore, implicitly target the prevailing inflation rate.

By contrast, the Taylor rule, named after Stanford University professor John Taylor, stipulates that the FOMC should raise or lower the federal funds rate in response to how real GDP and inflation are behaving relative to two benchmark measures. For example, the rule says that the Fed should attempt to push up the federal funds rate through open market operations if the prevailing inflation rate is above a specific target rate set by the Fed. Similar restraint would be needed if real GDP is greater than potential GDP.<sup>3</sup>

The third rule, which is advocated by Swedish economist Lars Svensson, is a variation of targeting inflation. Under this rule, the Fed's short-run (or intermediate) inflation target is the inflation rate that is forecasted to prevail two years hence. By continually setting policy that is tied to a two-year-ahead inflation forecast, the Fed can deliberately bring about its long-run goal of price stability.

## Are Rules Better Than Discretion?

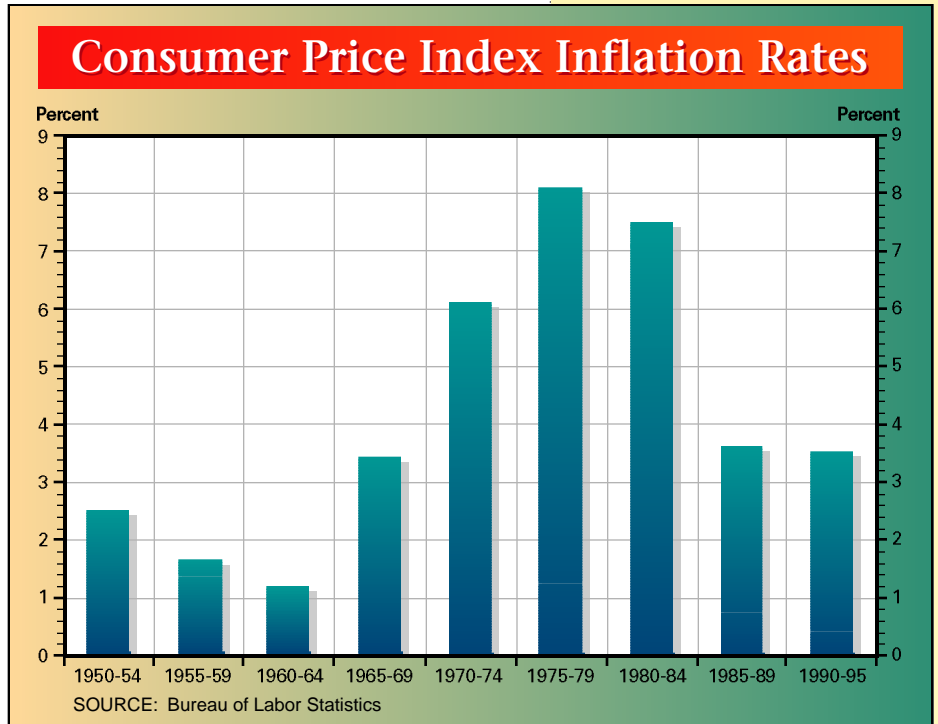
Few economists would quibble with the notion that some discretion is appropriate when setting monetary policy. After all, economic events seldom transpire exactly as predicted. For this reason, some believe that any sort of a fixed rule is inferior to a discretionary framework because it locks

policymakers in a box. But policy rules have several advantages over discretion. First, because financial markets tend to be forward-looking in their behavior, a rule that is also forward-looking would tend to reduce the uncertainty associated with future policy actions. A stated policy rule would also hold the monetary authority more accountable for its

### ENDNOTES

<sup>1</sup> See Federal Reserve Bank of St. Louis (1994).

<sup>2</sup> This means that a higher average inflation rate over a long horizon will not translate into a lower average unemployment rate, and vice versa.



actions, making it easier to evaluate policy outcomes. Finally, a framework that allows policymakers to adjust policy in response to every wiggle in the economic data (discretion) could lead to a more erratic monetary policy. At the same time, because policy rules must be developed on the basis of past historical economic relationships, which do not always hold, they can break down over time.

Whichever side one takes in the rules vs. discretion debate, one thing is clear: To ensure economic stability, monetary policy must be implemented in a forward-looking fashion. In other words, policymakers must consider how their actions will affect both the current and future inflation rates. In this vein, policy rules enhance the credibility of monetary policy by increasing accountability and improving the transparency of policy actions with the public and financial markets. Without some form of a rule, monetary policy could be significantly influenced by personalities or unpredictable economic events.

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<sup>3</sup> The economy's potential growth is usually defined as the rate of growth that is possible given the existing supply of labor, capital, technology and natural resources. It can also be influenced by the existing regulatory and tax structure. In the Taylor model, inflation begins to accelerate if real GDP rises above potential GDP.

### FOR FURTHER READING

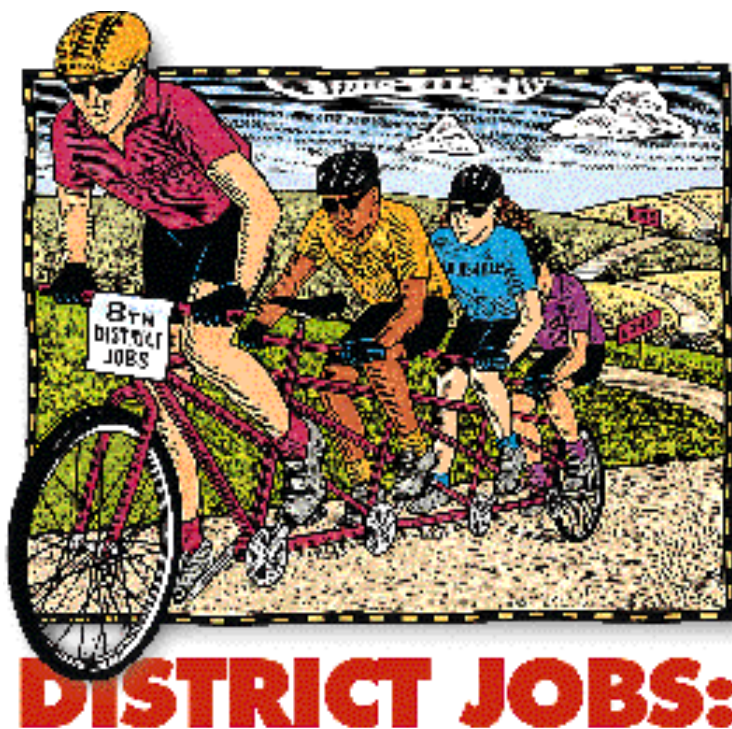
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## DISTRICT JOBS:

### Have They Been Gearing Up?

by Adam M. Zaretsky

Last year's economy did not end on a strong note. Although the year, overall, posted average growth in real output, it was only because of one strong quarter. The picture was still pretty grim at the beginning of 1996, due in part to the federal government shutdown and a fierce winter storm that struck most of the Midwest, Southeast and Eastern Seaboard. Many analysts and policy-makers believed a recession was looming.

Then came the surprise. Payroll employment grew phenomenally in February, and real output rebounded to its average annual growth rate in the first quarter. Output growth accelerated further in the spring, making the first half of this year one of the strongest in the decade. Payroll employment growth did not keep up its pace, however, slowing somewhat during the spring.

How did the Eighth District fare over this period? Although output growth is hard to determine because the data are not timely

enough to be useful, District employment growth slowed somewhat through the spring.<sup>1</sup> However, the effects of the slowdown differed from region to region.

#### St. Louis

Nonagricultural employment growth in the St. Louis MSA slowed in 1995, then saw a mild resurgence in the first quarter of this year. This rebound mirrored that of the region's nonmanufacturing sector, which represents about 84 percent of all area employment. Manufacturing employment growth in the region, on the other hand, has been slowing since the second quarter of 1995, and, at the beginning of this year, turned negative. That is, manufacturing employment levels have actually been declining since the beginning of this year.

Over the past four years, St. Louis' list of leading employment sectors has not changed. In the second quarters of both 1992 and 1996, general services represented the largest employment sector. This sector includes health, legal, educational and entertainment services. Retail and wholesale trade, which includes department and discount stores and supermarkets, was the second largest employment sector in the region in both years. This sector has recently experienced some slowing in its growth rate, however.

Manufacturing is the third most important sector in the MSA, although its employment share has fallen almost two percentage points since 1992. The transportation equipment industry employed more manufacturing workers in the second quarters of 1992 and 1996 than any other such industry. Its share of employment is roughly double that of any other manufacturing industry in the St. Louis MSA.

Food processing and production, and industrial machinery and computer equipment share the second manufacturing spot in the region. Although the latter wasn't even near the top of the list four years ago, it moved up the ranks because of losses in other industries like food processing, which has seen its growth rates decline. And although its rate of decline has ebbed recently, there are no signs yet of a coming resurgence.

#### Little Rock

The growth rate of nonagricultural payroll employment in the Little Rock MSA has declined since the first quarter of last year. By the end of the year, though, the decline had eased, reflecting moderation in the region's non-manufacturing sector, which accounts for about 88 percent of area employment. The region's manufacturing sector, on the other hand, has seen its employment growth rate decline since the last quarter of 1994. By the third quarter of last year, growth became negative and has continued to fall by about 3 percent a year.

Over the past few years, Little Rock's list of leading employment sectors has remained unchanged. General services represented the largest employment sector in the second quarters of 1992 and 1996, and, while there has been some recent slowing in the growth of this sector, it is still experiencing an almost 3 percent annual gain. Retail and wholesale trade was the second largest employment sector in both years, and, for the past three quarters now, has seen an acceleration in its growth rate.

Unlike the St. Louis MSA, manufacturing does not hold the No. 3 spot in the Little Rock region; rather, government employment—federal, state and local—does. In fact, as the accompanying chart shows, government's share of total employment in the Little Rock region is greater than that in any other major metropolitan area in the District. This is understandable, however, since Little Rock is the state's capital.

Manufacturing currently accounts for less than 12 percent of all employment in the region. While fabricated metal production is the largest manufacturing industry, its yearly growth rate, which just recently turned nega-



tive, is down dramatically from its high of more than 25 percent about a year ago. Electrical equipment, and printing and publishing share the No. 2 spot. Although a surge in employment at electrical equipment firms in 1994 helped boost the industry, its employment levels have been declining rapidly in recent quarters.

## Louisville

Nonagricultural employment growth in the Louisville MSA also declined in 1995, but most of the drop occurred in the second quarter. Since then, growth has been relatively stable—around a 2 percent annualized rate. This also mimics the movements of the region’s nonmanufacturing sector, which accounts for about 83 percent of total employment. Manufacturing employment growth has been declining since the second quarter of 1994 and turned negative a year later. It has remained so since. This downward trend reversed in the third quarter of last year, however, and, while still negative, has been moving toward renewed positive growth.

The three leading employment sectors in the Louisville region have remained unchanged since 1992. General services represented the largest sector in the second quarters of 1992 and 1996. Spurred on by the region’s health care industry, growth in general services has been accelerating recently, and employment is more than 5 percent above its level of a year ago. While ranking as the second largest employment sector in the area, retail and wholesale trade has seen a recent decline in its growth rate, which now stands at slightly less than 2 percent per year.

Manufacturing is the third largest employment sector in the region. In fact, the Louisville area employs a larger share of its workers in manufacturing jobs than any other District MSA. And as in the St. Louis area, transportation equipment is the dominant industry in the sector, when only four years ago, it was not even near the top of the list. Transportation equipment gained the pole position by undergoing phenomenal year-over-year employment growth rates—none below 12 percent—during the past few quarters. Much of this growth can be tagged to the additional shift the local Ford plant has added to its production schedule.

## Memphis

The growth rate of nonagricultural employment in the Memphis MSA fell through 1995, followed by a one-quarter rebound at the beginning of this

year. Once again, these movements matched those of the region’s nonmanufacturing sector, which accounts for about 88 percent of all employment. Manufacturing employment growth began to slide in the beginning of 1994, then moderated for two quarters late in 1994, before resuming its downward trend. Currently, manufacturing employment is declining at almost 3 percent a year.

General services is the leading employment sector in the Memphis region. Retail and wholesale trade, which was the leading employment sector in 1992, is now second. Although the area has some major players in this field, growth in retail and wholesale trade has been slowing since the fourth quarter of 1994. Like Little Rock, government employment holds the third spot in Memphis, representing about 15 percent of total employment.

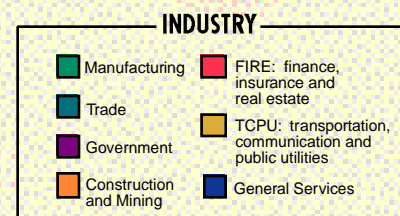
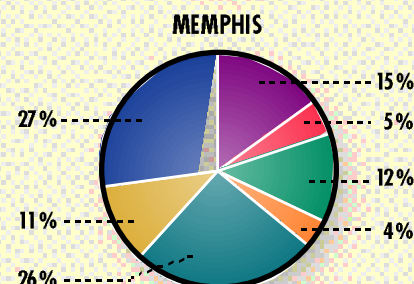
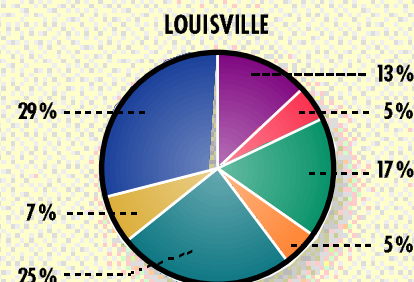
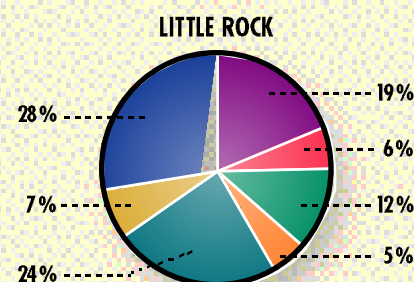
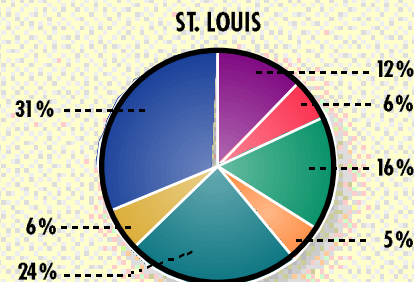
Manufacturing firms employ less than 12 percent of all payroll workers. At its current rate of decline, manufacturing will soon fall behind the transportation, communication and public utilities industry in its share of total employment. Industrial machinery and computer equipment, food processing and production, and chemicals all tie as the leading manufacturing industries.

## Regional Flavors

The District’s major metropolitan areas have not necessarily followed the nation’s employment pattern in recent years. All of the four MSAs discussed saw employment growth decline during 1995—as did the nation—but most saw a mild rebound earlier this year, which the nation did not. Manufacturing industries, which, at best, account for less than one-fifth of total employment, continue to be the crosswinds blowing the trends off-track. Ultimately, the picture that emerges is one of diverse regional strengths and weaknesses, all acting to determine the final outcome.

*Adam M. Zaretsky is an economist at the Federal Reserve Bank of St. Louis. Thomas A. Pollmann and Eran Segev provided research assistance.*

## DISTRICT NONAGRICULTURAL PAYROLL EMPLOYMENT Second Quarter 1996



SOURCE: Bureau of Labor Statistics

### ENDNOTES

- <sup>1</sup> Gross state product, the output measure that is the state equivalent of GDP, is available only with a two-year lag.



# Pieces of Eight

News bulletins from  
the Eighth Federal  
Reserve District

## There's No Business Like Small Business?

Despite a big push by bankers to make more small business loans, the percentage of such loans in bank portfolios declined by about 5 percentage points over the past three years in the Eighth Federal Reserve District.

At the end of second quarter 1996, small business loans—those for \$1 million or less—made up about 56 percent of the District's business loans. "This is a healthy chunk of banks' loan portfolios," says Fed economist Michelle Clark Neely, "but not as healthy a chunk as we might have expected." The ratios declined, Neely explained, because overall business lending grew faster than small business lending. "No one is quite sure yet how to explain the trend," she said, "but one possibility is that small business loans have gotten larger over time, and, thus, are no longer counted in the small business loan category."

The decline is not a statistical fluke. Similar trends are apparent when one looks at small commercial loans collateralized by real estate: District loans under \$1 million made up 62 percent of the total secured and unsecured commercial loans at the end of June, compared with 67 percent at the end of June 1993. The downward trend shows up nationwide as well.



## Economic Development Issues Fresh Off the Farm

About 50 economists, researchers, educators and policymakers from across the country met at the Federal Reserve Bank of St. Louis Oct. 3 to discuss a range of issues affecting America's rural communities. Presenters at the symposium called, "The Rural Economy: Heading into the 21st Century," spoke on the challenges confronting rural communities, as well as the opportunities they need to take advantage of if they are going to survive—and thrive—in the next century.

Among the presenters were:

- Nicholas Filippello of Monsanto Company, who spoke on the changes that biotechnology has brought to the field of agriculture in the last decade;
- David Freshwater of the University of Kentucky, who spoke on the increasingly unskilled nature of the rural labor force;
- James Rubenstein of Miami University of Ohio, who spoke on the trend of auto manufacturers to locate their plants in suburban, rather than rural, areas; and
- Nick Walraven of the Federal Reserve System's Board of Governors, who spoke on the effect that bank mergers have had on lending in rural communities.

To receive a copy of one of these papers or any of the others presented at the symposium, contact Sandra Butler of the St. Louis Fed's Research Department at (314) 444-8591.

To receive a copy of "Economic Forces Shaping the Rural Heartland," a Kansas City Fed report, call their Public Affairs Office at (816) 881-6701.

To receive a copy of "Agriculture, Technology and the Economy," a Dallas Fed publication, contact their Public Affairs Office at (214) 922-5254.

### District Residents Living the American Dream Homeownership Rates, 1995

State	Rate
Kentucky	71.2%
Mississippi	71.1
Indiana	71.0
Missouri	69.4
Arkansas	67.2
Tennessee	67.0
Illinois	66.4
<b>National Average</b>	<b>64.7</b>

SOURCE: U.S. Bureau of the Census

# District Data

Selected economic indicators of banking,  
agricultural and business conditions in  
the Eighth Federal Reserve District

The Regional Economist  
October 1996

## Commercial Bank Performance Ratios

U.S., District and State

	All U.S.	U.S. <\$15B <sup>1</sup>	District	AR	IL	IN	KY	MS	MO	TN
<b>Return on Average Assets (Annualized)</b>										
2nd quarter 1996	1.21%	1.33%	1.29%	1.31%	1.02%	1.30%	1.19%	1.50%	1.34%	1.40%
1st quarter 1996	1.12	1.33	1.24	1.25	0.97	1.31	1.13	1.45	1.27	1.38
2nd quarter 1995	1.14	1.31	1.28	1.24	1.23	1.23	1.22	1.41	1.29	1.41
<b>Return on Average Equity (Annualized)</b>										
2nd quarter 1996	15.00%	14.76%	14.58%	13.78%	10.03%	14.25%	13.58%	15.72%	16.12%	16.89%
1st quarter 1996	13.79	14.70	13.96	13.12	9.43	14.24	13.11	15.22	15.14	16.49
2nd quarter 1995	14.49	15.07	14.74	13.44	12.58	13.21	13.95	15.65	15.92	17.55
<b>Net Interest Margin (Annualized)</b>										
2nd quarter 1996	4.27%	4.77%	4.33%	4.43%	4.22%	4.37%	4.35%	4.93%	4.15%	4.36%
1st quarter 1996	4.18	4.74	4.27	4.33	4.14	4.36	4.34	4.92	4.08	4.29
2nd quarter 1995	4.21	4.80	4.30	4.24	4.50	4.47	4.21	5.03	4.18	4.22
<b>Nonperforming Loans<sup>2</sup> ÷ Total Loans</b>										
2nd quarter 1996	1.12%	1.10%	0.81%	0.80%	1.09%	0.69%	0.87%	0.74%	0.77%	0.72%
1st quarter 1996	1.17	1.12	0.83	0.80	1.01	0.63	0.88	0.78	0.85	0.72
2nd quarter 1995	1.26	1.09	0.70	0.68	1.04	0.53	0.83	0.64	0.57	0.62
<b>Net Loan Losses ÷ Average Total Loans (Annualized)</b>										
2nd quarter 1996	0.57%	0.70%	0.31%	0.19%	0.34%	0.20%	0.41%	0.28%	0.28%	0.36%
1st quarter 1996	0.55	0.64	0.30	0.19	0.30	0.15	0.36	0.25	0.32	0.34
2nd quarter 1995	0.42	0.50	0.18	0.10	0.32	0.13	0.23	0.22	0.14	0.19
<b>Loan Loss Reserve ÷ Total Loans</b>										
2nd quarter 1996	1.99%	1.89%	1.53%	1.34%	1.62%	1.36%	1.53%	1.58%	1.63%	1.49%
1st quarter 1996	2.01	1.92	1.55	1.36	1.65	1.41	1.53	1.62	1.65	1.50
2nd quarter 1995	2.12	1.91	1.57	1.37	1.61	1.43	1.59	1.65	1.67	1.57

NOTE: Data include only that portion of the state within Eighth District boundaries.

<sup>1</sup> U.S. banks with average assets of less than \$15 billion are shown separately to make comparisons with District banks more meaningful, as there are no District banks with average assets greater than \$15 billion.

<sup>2</sup> Includes loans 90 days or more past due and nonaccrual loans

SOURCE: FFIEC Reports of Condition and Income for Insured Commercial Banks

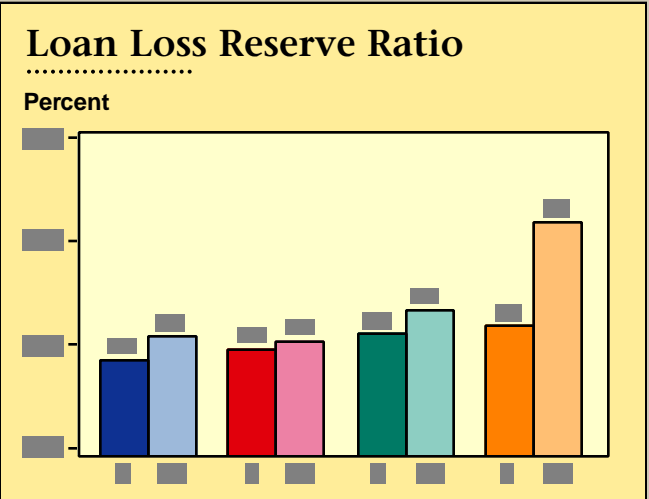
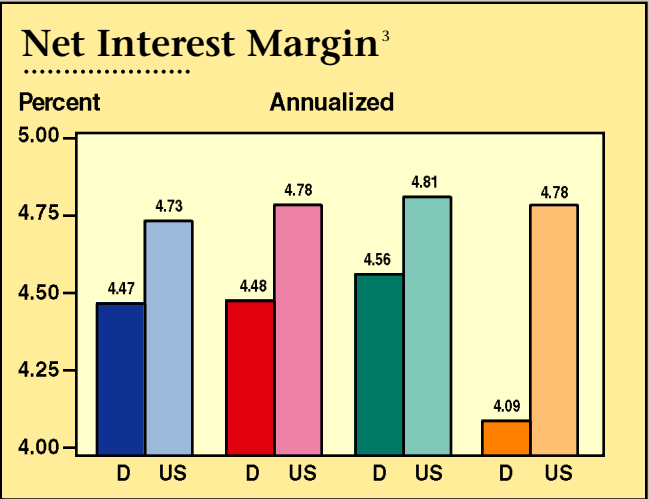
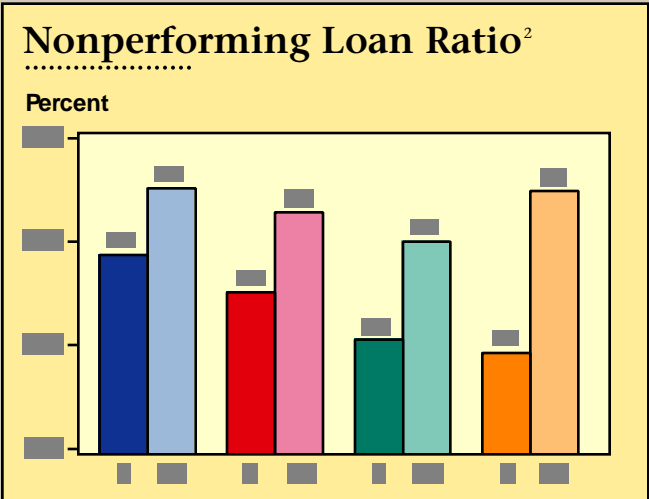
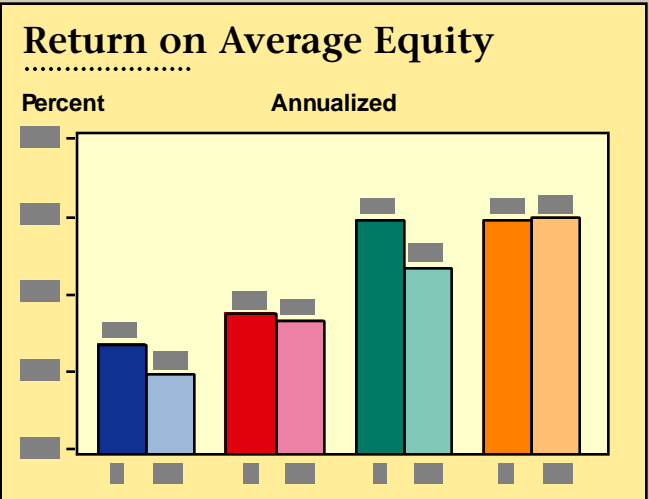
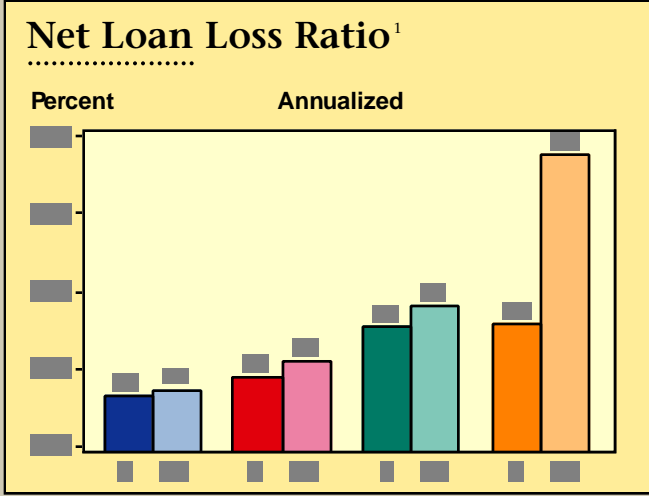
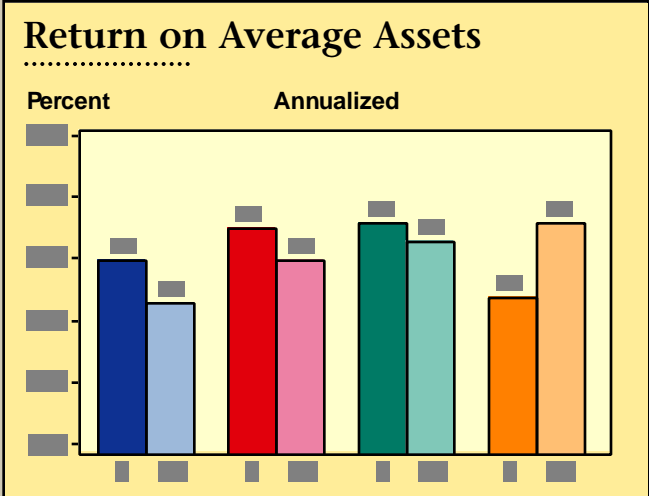
# Commercial Bank Performance Ratios

by Asset Size

2nd Quarter 1996

## Earnings

## Asset Quality



**D = District**  
**US = United States**

	< \$100 Million		\$300 Million – \$1 Billion
	\$100 Million – \$300 Million		\$1 Billion – \$15 Billion

NOTE: Asset quality ratios are calculated as a percent of total loans.

<sup>1</sup> Loan losses are adjusted for recoveries.

<sup>2</sup> Includes loans 90 days or more past due and nonaccrual loans

<sup>3</sup> Interest income less interest expense as a percent of average earning assets

SOURCE: FFIEC Reports of Condition and Income for Insured Commercial Banks



Agricultural Bank Performance Ratios

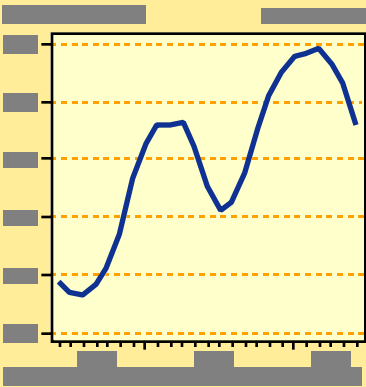
	U.S.	AR	IL	IN	KY	MS	MO	TN
Return on average assets (annualized)								
2nd quarter 1996	1.27%	1.40%	1.24%	1.32%	1.47%	1.63%	1.31%	1.40%
1st quarter 1996	1.27	1.35	1.26	1.34	1.50	1.49	1.34	1.42
2nd quarter 1995	1.23	1.23	1.22	1.20	1.44	1.54	1.26	1.19
Return on average equity (annualized)								
2nd quarter 1996	12.37%	12.99%	11.34%	13.61%	14.24%	17.79%	12.82%	13.22%
1st quarter 1996	12.30	12.47	11.49	13.92	14.45	15.23	13.01	13.46
2nd quarter 1995	12.02	11.86	11.27	12.24	14.38	16.40	12.35	12.40
Net interest margin (annualized)								
2nd quarter 1996	4.48%	4.39%	4.09%	4.55%	4.58%	5.27%	4.47%	4.52%
1st quarter 1996	4.46	4.23	4.08	4.56	4.53	5.16	4.46	4.44
2nd quarter 1995	4.57	4.29	4.15	4.71	4.68	5.28	4.51	4.36
Ag loan losses ÷ average ag loans (annualized)								
2nd quarter 1996	0.28%	0.06%	0.19%	-0.15%	0.18%	1.37%	0.29%	0.29%
1st quarter 1996	0.23	0.01	0.14	-0.16	0.12	0.60	0.19	0.68
2nd quarter 1995	0.14	-0.06	-0.07	-0.05	0.09	0.39	-0.10	0.10
Ag nonperforming loans <sup>1</sup> ÷ total ag loans								
2nd quarter 1996	1.92%	0.74%	0.97%	1.99%	2.01%	3.10%	1.26%	0.44%
1st quarter 1996	1.95	0.62	1.14	1.48	1.72	4.86	1.93	1.52
2nd quarter 1995	1.43	0.62	1.57	0.67	1.73	1.96	1.05	0.32

NOTE: Agricultural banks are defined as those banks with a greater than average share of agricultural loans to total loans.  
Data include only that portion of the state within Eighth District boundaries.

<sup>1</sup> Includes loans 90 days or more past due and nonaccrual loans

SOURCE: FFIEC Reports of Condition and Income for Insured Commercial Banks

U.S. Agricultural Exports\*

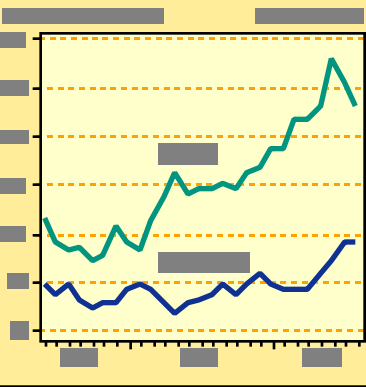


U.S. Agricultural Exports by Commodity

Dollar amounts in billions

Commodity	Apr	May	Jun	Year-to-date	Change from year ago
Livestock & products	1.04	1.01	.86	8.41%	11.6%
Corn	.84	.88	.63	6.71	47.2
Cotton	.23	.14	.11	2.79	-10.8
Rice	.10	.07	.07	.77	-5.8
Soybeans	.43	.35	.42	5.16	21.3
Tobacco	.11	.11	.95	1.17	5.1
Wheat	.52	.48	.45	4.81	40.9
TOTAL	5.11	4.83	4.83	46.30	12.7

U.S. Crop and Livestock Prices



Indexes of Food and Agricultural Prices

	Level			Growth <sup>1</sup>	
	II/96	I/96	II/95	I/96-II/96	II/95-II/96
Prices received by U.S. farmers <sup>2</sup>	112	108	100	18.5%	12.7%
Prices received by District farmers <sup>3</sup>					
Arkansas	136	134	118	8.2	15.2
Illinois	136	120	92	61.6	46.9
Indiana	146	124	97	90.4	50.2
Missouri	110	104	91	23.6	21.3
Tennessee	138	136	129	8.1	7.5
Prices paid by U.S. farmers					
Production items	115	113	108	4.8	6.2
Other items	115	113	109	4.8	4.9
Consumer food prices	152	151	148	4.3	2.7
Consumer nonfood prices	157	156	153	3.8	2.9

NOTE: Data not seasonally adjusted except for consumer food prices and nonfood prices.

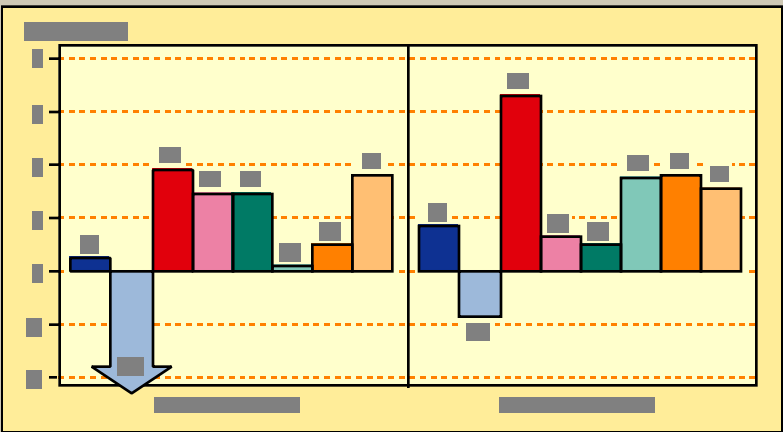
<sup>1</sup> Compounded annual rates of change are computed from unrounded data.  
<sup>2</sup> Index of prices received for all farm products and prices paid (1990-92=100)  
<sup>3</sup> Indexes for Kentucky and Mississippi are unavailable.

# Selected U.S. and State Business Indicators

## United States

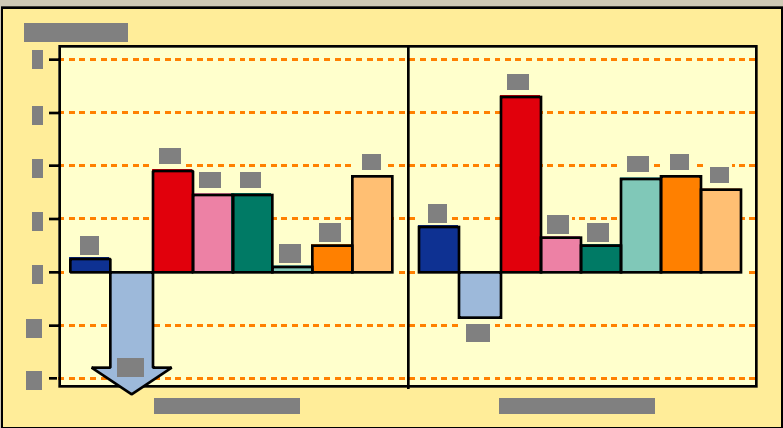
	II/1996	I/1996	II/1995
Labor force (in thousands)	133,647	133,192	132,183
Total nonagricultural employment (in thousands)	119,272	118,462	116,956
Unemployment rate	5.4%	5.6%	5.6%
	I/1996	IV/1995	I/1995
Real personal income* (in billions)	\$3,995.1	\$3,978.4	\$3,912.6

Compounded Annual Rates of Change in  
Nonagricultural Employment



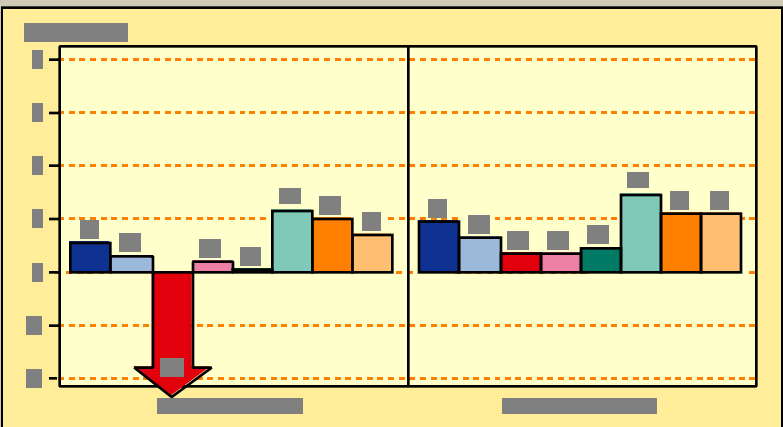
## Arkansas

	II/1996	I/1996	II/1995
Labor force (in thousands)	1,234.0	1,236.4	1,216.4
Total nonagricultural employment (in thousands)	1,082.4	1,081.0	1,063.9
Unemployment rate	4.8%	4.9%	4.6%
	I/1996	IV/1995	I/1995
Real personal income* (in billions)	\$29.1	\$28.9	\$28.2



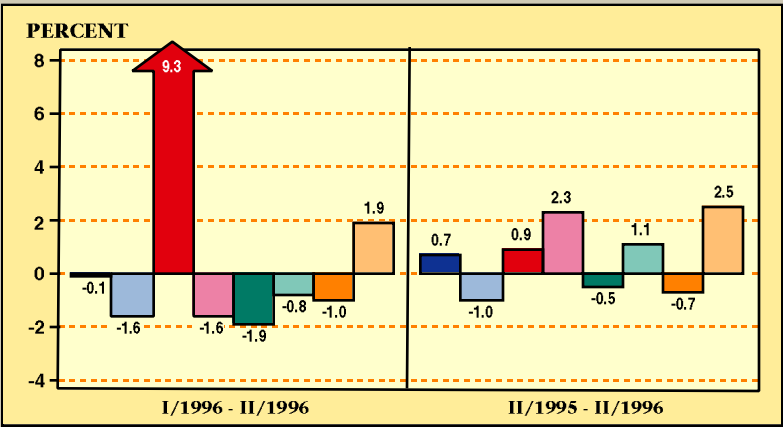
## Illinois

	II/1996	I/1996	II/1995
Labor force (in thousands)	6,149.3	6,147.0	6,074.1
Total nonagricultural employment (in thousands)	5,687.6	5,672.4	5,584.2
Unemployment rate	5.2%	5.2%	5.1%
	I/1996	IV/1995	I/1995
Real personal income* (in billions)	\$195.6	\$194.3	\$192.1



## Indiana

	II/1996	I/1996	II/1995
Labor force (in thousands)	3,096.3	3,116.1	3,139.7
Total nonagricultural employment (in thousands)	2,799.1	2,799.9	2,781.0
Unemployment rate	4.2%	4.4%	4.7%
	I/1996	IV/1995	I/1995
Real personal income* (in billions)	\$81.3	\$81.3	\$81.3



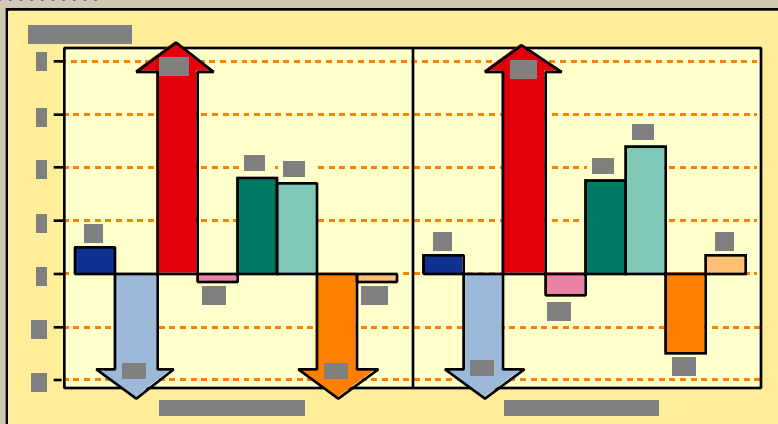
## Kentucky

	II/1996	I/1996	II/1995
Labor force (in thousands)	1,829.0	1,854.3	1,864.3
Total nonagricultural employment (in thousands)	1,671.1	1,656.4	1,640.2
Unemployment rate	5.2%	5.2%	5.4%
	I/1996	IV/1995	I/1995
Real personal income* (in billions)	\$47.8	\$47.7	\$46.9



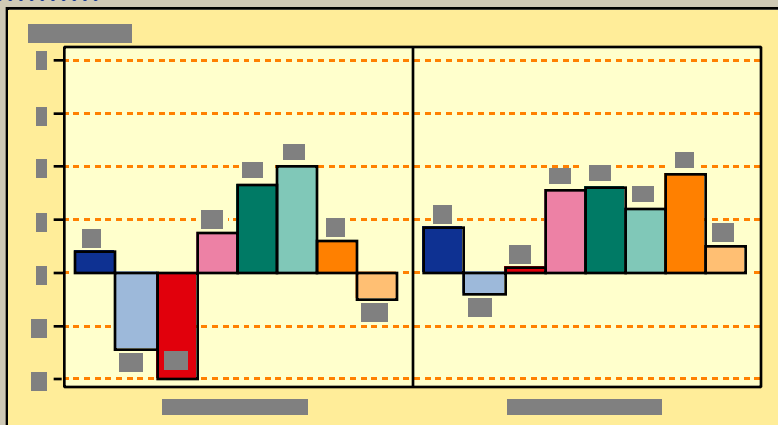
## Mississippi

	II/1996	I/1996	II/1995
Labor force (in thousands)	1,266.4	1,260.6	1,252.9
Total nonagricultural employment (in thousands)	1,080.9	1,078.1	1,073.1
Unemployment rate	6.1%	6.2%	6.1%
	I/1996	IV/1995	I/1995
Real personal income* (in billions)	\$29.9	\$29.7	\$29.1



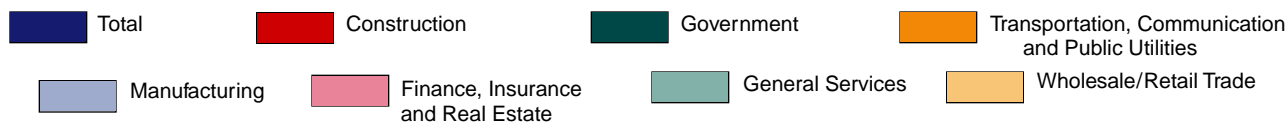
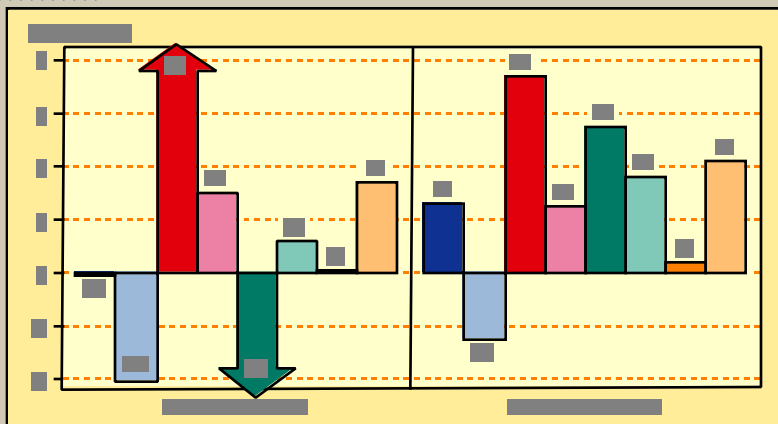
## Missouri

	II/1996	I/1996	II/1995
Labor force (in thousands)	2,847.0	2,815.9	2,830.9
Total nonagricultural employment (in thousands)	2,559.2	2,554.1	2,516.7
Unemployment rate	4.3%	3.7%	5.1%
	I/1996	IV/1995	I/1995
Real personal income* (in billions)	\$76.7	\$76.3	\$75.2



## Tennessee

	II/1996	I/1996	II/1995
Labor force (in thousands)	2,747.8	2,757.3	2,701.2
Total nonagricultural employment (in thousands)	2,554.1	2,554.8	2,489.0
Unemployment rate	4.8%	5.3%	5.1%
	I/1996	IV/1995	I/1995
Real personal income* (in billions)	\$72.6	\$72.0	\$69.7



NOTE: All data are seasonally adjusted. The nonagricultural employment data reflect the 1995 benchmark revision.  
\* Annual rate. Data deflated by CPI, 1982-84=100.