# President's Message

*"These costs might be easier to swallow if the quality of graduates were going up as fast as the cost of getting that sheepskin. Few think that's the case."*

William Poole

PRESIDENT AND CEO,
FEDERAL RESERVE BANK OF ST. LOUIS

## Colleges Need To Learn about Productivity

For the past 10 years, one of the secrets to the growth of the U.S. economy has been the dramatic improvement in productivity. "Doing more with less" has been the mantra for manufacturing, the service industry and most other sectors. As a result, since 1995 productivity has grown at a rate that's almost double what it was from 1973 to 1994.

One sector has yet to get on the bandwagon: higher education. Anyone who is paying college bills knows that there's a great need in the ivory tower to cut spending. The cost of tuition over the past two decades has risen even faster than the cost of medical care. The burden on many families and students has reached the breaking point. And there's no relief in sight. Fourteen states cut funding for public higher education between 2002 and 2003. In our District, the axe fell hardest in Missouri, which cut such appropriations by 10 percent. Not surprisingly, tuition jumped 20 percent—the second-highest increase then in the nation.

These costs might be easier to swallow if the quality of graduates were going up as fast as the cost of getting that sheepskin. Few think that's the case. One reason could be that instructional expenditures per student (at public institutions) rose just 17 percent between 1990 and 2001, while administrative expenditures per student jumped 54 percent.

Other sectors of the economy have taken action to boost productivity in order to survive. Colleges and universities might want to follow their example, beginning with these steps:

**1. Outsource.** Services that are not directly related to education—food service, housing, cleaning and records management, for example—could be contracted out. Competition from outside contractors would drive down costs.

**2. Decentralize.** Employment in the administrative area has grown faster than in any other on campus, partly because of additional state and federal mandates and partly because hiring in this area needs to be approved only by other administrators. If authority—and money—were put in the hands of department heads, they would probably use it more efficiently to meet student needs. That might mean hiring another secretary, but such a move could free faculty from the many clerical duties they perform. As a result, students would get more attention.

**3. Improve the product.** To do that in academia, more emphasis must be put on teaching—and quality teaching. At too many institutions, teaching is secondary to research. And even those who are in the classroom sometimes don't know how to teach. Student quality could also be improved by raising admission standards and weeding out those who aren't motivated to learn.

**4. Boost flexibility of the workforce.** As demand from students for one type of class rises and another falls, universities need to be able to move professors around, increase their time in the classroom, even lay them off. Of course, such flexibility is difficult where tenure exists. If "jobs for life" can't be eliminated, restrictions should be put on the percentage of faculty who are eligible for tenure. Decentralization could come into play here. A department could be allowed to exceed its tenure quota if it's willing to give up something when that extra person's classes fall out of favor—say, a portion of everyone else's salary.

These ideas just scratch the surface. Certainly, with all the high-powered thinkers on our campuses, more and better ways can be thought of to lessen the financial burden on those who want to get a college degree.

# Stop Paying More for Less

By Thomas A. Garrett and William Poole

## *Ways to Boost Productivity in Higher Education*

Higher education has seen a decrease in productivity over the past decade. Spending by colleges and universities is increasing as they use more resources to educate each graduating student, but the quality of the graduate is not improving commensurately.[1] The American Association of Colleges and Universities reports the fall in the quality of students graduating from institutions of higher learning and says, "Public policies have focused on getting students into college, but not on what they are expected to accomplish once there."[2]

Economists define productivity, in the simplest terms, as a measure of output per unit of input. Productivity in education can be measured in terms of units, such as average class size, or it can be measured in terms of dollars, such as the quality or value to students relative to the cost of educating students. These definitions allow for an evaluation of how a change in costs, quality or quantities influences productivity in higher education. Productivity will increase if student quality increases more than the cost of educating students. Similarly, a reduction in costs while student quality remains the same or rises will also increase productivity.

How can institutions of higher learning reduce costs and increase student quality in an effort to increase productivity?

### The Rise in College Costs

College tuition has increased dramatically over the past decade, as seen in the table on the next page.[3] Between 1991 and 2003, inflation-adjusted undergraduate tuition and fees per student increased by 49 percent at public institutions and by 39 percent at private institutions. Tuition increases, adjusted for inflation, averaged 3.4 percent per year at public institutions and 2.8 percent at private institutions, higher than the average annual rate of inflation of 2.5 percent. The increase in tuition and fees has also outpaced the growth of disposable personal income. Expenditures on higher education as a percentage of disposable personal income have increased from 1.07 percent in 1991 to 1.41 percent in 2004. Although this percentage may seem relatively low, the outlay for children's education is the second largest family expense, exceeded only by housing.

College tuition is rising rapidly for several reasons.[4] One is an increase in university costs. Total inflation-adjusted expenses at public universities increased by 28 percent between 1990 and 2000. The relative lack of a "bottom line" in public higher education compared to private sector enterprises reduces pressure to adopt cost-saving policies and procedures. This can result in the continued existence of excessive staff and unpopular academic programs or research centers, often coming at the expense of student instruction. For example, instructional expenditures as a percent of total expenditures at public institutions have decreased from 39 percent in 1977 to 34 percent in 2001. In addition, administration expenditures increased from 30 percent

of instructional expenditures in 1976 to 50 percent in 2001. More alarming is the fact that, while inflation-adjusted instructional expenditures per student increased by 17 percent between 1990 and 2001, administrative expenditures per student increased by 54 percent over the same period, as shown in the table.

Another reason for tuition increases is the recent recession and ensuing state budget crises. Fourteen states reduced state appropriations for higher education between fiscal years 2002 and 2003.[5] In response to state budget cuts for higher education, colleges and universities increased tuition by an average of 10 percent nationally between 2002 and 2003. This recent tuition increase was nearly double the average annual increase over the past decade.

Financial aid, including loans, may be another reason for tuition increases. The use of financial aid by universities is a form of price discrimination, meaning universities increasingly charge different tuition to different students, depending on ability to pay and university efforts to recruit students with special academic or athletic skills. Thus, more students can attend places of higher education than could otherwise. But, there has been almost no discussion of productivity enhancements that might constrain increasing university costs and, thus, tuitions that arise in part from the increase in student enrollments caused by financial aid.

As seen in the table, the percentage of students at four-year universities who received some financial aid increased from 60 percent in 1990 to 74 percent in 2000. Financial aid is now covering a larger percentage of tuition expenses. For example, financial aid covered 47 percent of tuition at four-year universities in 1990 compared with 54 percent in 2000. However, only some of the recent tuition increases have been offset by increases in financial aid.

## The Cost of Higher Education

| | 1990-1991 School Year | Recent School Year (year) | Percent Change (%) |
|---|---|---|---|
| Public - Average Undergraduate Tuition and Fees Per Student[a] | $1,964 | $2,928 (2003) | 49.1 |
| Private - Average Undergraduate Tuition and Fees Per Student[a] | $11,851 | $16,517 (2003) | 39.4 |
| Instructional Expenditure Per Student[b] | $7,395 | $8,654 (2001) | 17.0 |
| Administrative Expenditure Per Student[b] | $2,807 | $4,325 (2001) | 54.1 |
| Instructional Expenditures as a Percent of Total Expenditure[b] | 36.3% | 34% (2001) | –6.8 |
| Administrative Expenditure as a Percent of Total Expenditure[b] | 13.7% | 17% (2001) | 24.1 |
| Percent of Students Receiving Financial Aid[c] | 60% | 74% (2000) | 23.3 |
| Percent of Tuition Covered by Financial Aid[c] | 47% | 54% (2000) | 14.9 |
| Tuition as a Percentage of Disposable Income[c] | 1.07% | 1.41% (2004) | 31.8 |

NOTE: Data are in most recent year dollars. All expenditure and tuition data are from the National Center for Education Statistics, *Digest of Education Statistics, 2003*. Tuition as a percentage of disposable income is from the U.S. Census Bureau of Economic Analysis. Financial aid data are from *NCES Report: A Decade of Undergraduate Student Aid 1989-90 to 1999-2000*.

[a] full-time student equivalents, two-year and four-year institutions

[b] public institutions

[c] all institutions, full-time students

### Starting Points for Policy

How can universities reduce costs and increase student quality in an effort to boost productivity? Before addressing this question and before any cost-saving or quality-enhancing policies can be implemented, legislators and education officials must first address several issues. These are 1) defining the objectives of the college or university, 2) defining productivity inputs and outputs, 3) measuring productivity and 4) demonstrating productivity improvements.[6] Once these issues are addressed, strategies to enhance productivity can be implemented.

#### *Defining Objectives*

Objectives of the university may include increasing student quality, increasing access and diversity, achieving greater cost-efficiency, making a better contribution to the needs of the community and improving basic research. University officials and state legislators may have divergent views regarding the top objectives of a university, but both groups typically agree that improving student quality is the most important higher-education objective.

#### *Defining Productivity*

While the economist's general definition of productivity, namely outputs relative to inputs, is straightforward, the definition is too simple to guide management strategies aimed at increasing productivity. A more thorough definition of productivity recognizes that productivity can be divided into two parts: efficiency and effectiveness. Efficiency refers to the level and quality of service that can be obtained given an organization's fixed resources. Thus, an organization is considered more efficient if it can increase the level or quality of service without increasing the amount of inputs used. Effective-

ness, on the other hand, refers to how well an organization meets the demands of its customers. The customers in higher education are students, parents, employers and state legislatures. Customer demands may include such outcomes as a specialization of knowledge in a specific area, career assistance and job placement and, probably most important, the graduation of well-educated and productive students.

Thus, improving productivity in higher education requires undertaking measures that increase efficiency and effectiveness. Measures to cut costs, as universities across the country have done in the wake of the recent recession and state budget crises, only address the cost-efficiency dimension of productivity. Sound management practices to improve productivity in higher education must also look at the effectiveness of the organization, be it an academic department or the entire university.

### *Measuring Productivity*

Productivity measurement is difficult in most service industries, and education is certainly no exception. In education, administrators need to be wary of simple measures such as the number of students per faculty member. While some observers may assume that quality "must" be higher when the student-faculty ratio is lower, a class of 25 is likely to be better than a class of five because of student interaction. In any event, it is important to measure output directly and not make assumptions about what "must" be the case when studying productivity.

Before any measurement of productivity can occur, administrators need to decide what level or levels of the organization's productivity should be measured. For example, should a university measure the productivity of an individual faculty or staff member, or should it measure the productivity of an academic department or of the university as a whole? All are relevant and should be measured. An important point in measuring productivity is that measures should not be constructed prior to setting goals and objectives—doing so will lead administrators to value something that is measurable rather than measuring something that is valuable.

Measuring productivity in higher education requires a measure of both efficiency and effectiveness. Efficiency is often measured using ratios, such as physical output relative to an input or dollar cost of an input relative to an output. The exact efficiency measure used depends upon the objective set by the administration.[7] Efficiency ratios such as enrollment per section or contact hours per faculty member are reasonable and useful. An objective of improving students' progress toward a degree requires measures such as a withdrawal rate and average course load. Examples of cost-efficiency measures include instructional costs per student, library expenditures per student and administrative costs per student.

Measuring effectiveness can be difficult. One way is to assess community or client conditions and to benchmark them relative to community standards or those standards of other institutions of higher learning. An example could be the number of graduates who find a job within three months of graduation. Another option is to measure accomplishments, such as the number of graduates or the percentage of students taking a class that requires relatively advanced work, such as a technical research paper. The number of graduates going on to receive advanced degrees is another such measure. Finally, client satisfaction is an avenue to measure effectiveness. Clients can include alumni or businesses that frequently hire a university's graduates.

### *Showing Productivity Improvements*

Demonstrating productivity improvements can be done in several ways.[8] One is to show an increase in revenue or participation that results from efforts that did not require an increase in tuition, fees or taxes. Another is to show a significant increase in effectiveness, such as the employment rates of recent graduates, without increasing costs or using additional resources. Numerous measures are possible, and each university should concentrate effort on those that best fit its own circumstances.

## Strategies To Increase Productivity

Many of the strategies for increasing productivity require changes in the administrative culture and in the mind-set of faculty and administrators. These strategies include privatizing services, decentralizing the bureaucracy, improving student quality and increasing the flexibility of faculty. Attempts to implement these strategies may be met with resistance or even legal challenges from the various professional organizations and associations that support faculty and administrators.

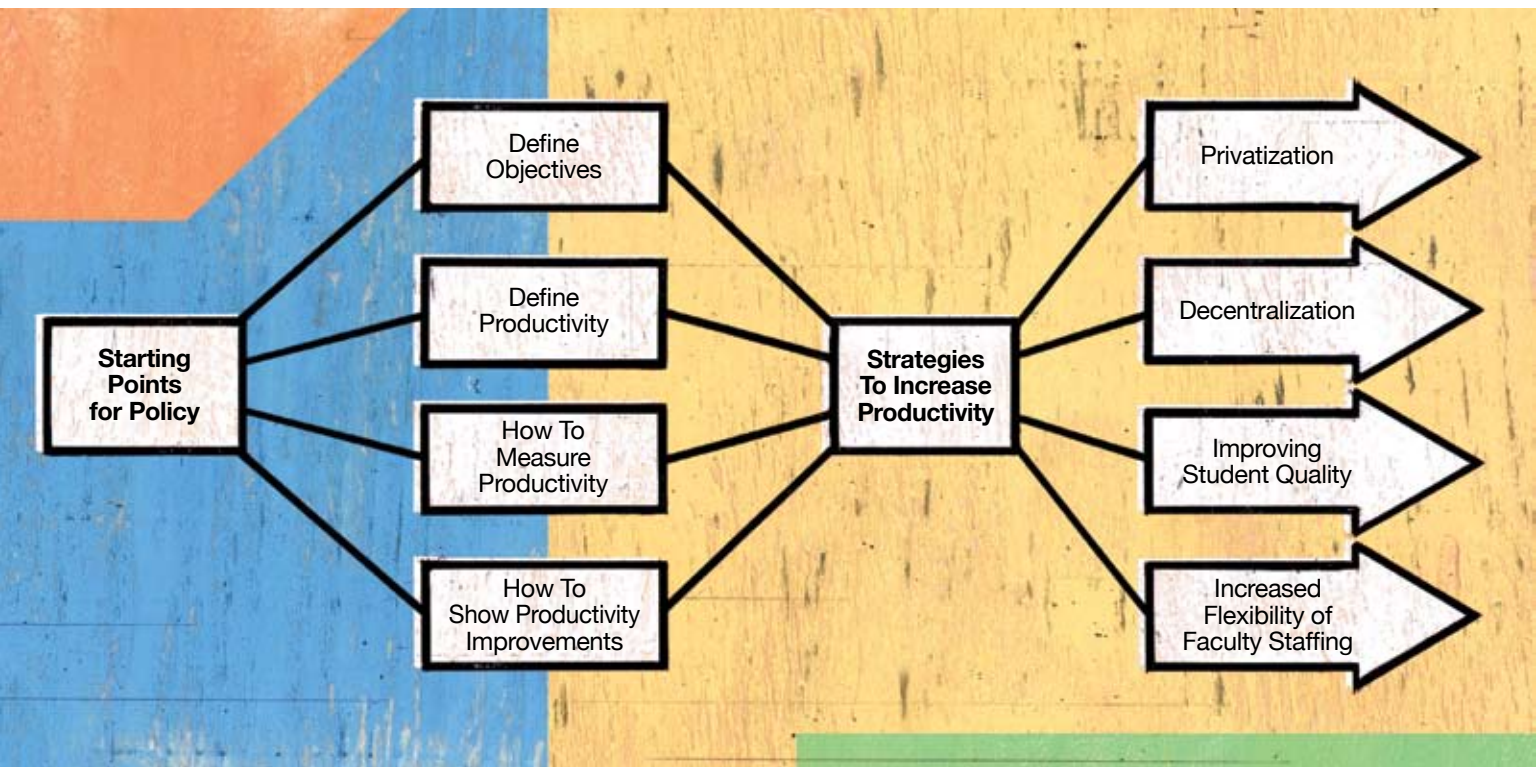
### *Privatization*

One way of increasing the cost-efficiency of higher education is through the privatization of certain services.[9] Most universities are vertically integrated; they not only provide education but also provide food service, student and faculty housing, cleaning and maintenance, and records management. Although these services contribute to student learning,

there is no reason why these services cannot be performed by private contractors.

With vertical integration, the full costs of inside staff, such as their wages and benefits, may be accounted for in other budget or service categories, thus making it difficult to assess the full costs of a certain service. The fees charged by outside contractors, however, will more clearly represent the full cost of providing a particular service. In addition, competitive pressures will increase the likelihood that private contractors will provide an efficient quantity and quality of labor for each service.

An issue that arises regarding the privatization of various university services is student employment. Currently, many students work for universities as library assistants, food preparers and custodians as part of a financial aid arrangement.




Privatization may result in a reduction of staff, forcing some students to find alternative financial aid. However, even if students cannot find other jobs on campus or even off campus, concern over student employment ought to be minimal relative to concern over the growing costs of universities.

### *Decentralization*

Privatization is part of the larger strategy of decentralizing the administrative structure. Although decentralization frequently occurs in the private sector, universities have generally not followed suit. One of the biggest criticisms of centralized administrative structures in universities is that administrators can generally add staff without having to justify the additions to anyone except other administrators.[10]

Decentralization can result in several benefits for universities. First, academic departments will have more control over their costs and staffing needs. As a result, departments will be better able to adapt to students' changing needs. The experience of many faculty is that universities provide too little in the way of support staff for faculty, thus forcing faculty to perform clerical duties. If individual academic departments had more control over their own budgets, they might decide to replace a faculty position with several support staff to improve efficiency. At the same time, administrators would have to resist the temptation to cut support staff in times of budget stringency. Creating a structure that gets the incentives right is not easy, but such a structure will be an essential feature of longer-run reforms to improve efficiency.

A case study of successful administrative decentralization at Antioch University provides some insights into the challenges of decentralization.[11] One such challenge was that a centralized administration had to reach a decision to decentralize the administration itself. The administration realized that decentralization was, in Antioch's case, the only real way to control costs. Another challenge was to realize and accept that some important senior and middle managers would be let go and that these individuals would resist any change in administrative structure. Antioch cut its centralized administration by 14 people, a reduction of 60 percent, and realized a 25 percent reduction in central administration costs. Resistance

by lower management, faculty and staff to any change in the administrative structure required ever more vigilant leadership by upper management. All employees were involved in decisions, ensuring that the process to decentralize remained a collaborative one among all ranks of administrators and faculty.

### *Improving Student Quality*

The quality of students—the knowledge and skills they gain from a university education—should be the primary goal of any institution of higher learning. Just how to increase student quality, however, remains unclear to many faculty. One reason for this lack of clarity is that many faculty, especially those at research institutions, see teaching as a secondary responsibility behind publishing in academic journals and acquiring research grants. Another reason is that most faculty members do not have training in good teaching strategies.

Good teaching practices include encouraging student/faculty contact, encouraging active learning, encouraging cooperation among students, giving prompt feedback, communicating high expectations, encouraging more time on each task, and respecting diverse talents and ways of learning.[12] An important point is that the passive lecture format that is found in most universities does not account for most of these practices. Even in smaller teaching-oriented colleges, many of these practices are likely to be absent. Furthermore, the use of student evaluations to judge the quality of faculty may lead some faculty to abandon good teaching practices and augment their evaluations through alternative means, such as leniency on grading, on assignment deadlines and on student absenteeism.

### *Increased Flexibility of Faculty Staffing*

Much of the discussion relating to the role of faculty in contributing to productivity in higher education involves lengthening the time that faculty spend in the classroom, enhancing the quality of instruction and increasing flexibility of faculty staffing. Given the size of instruction as a percentage of total university expenditures (35 percent on average), an important cost-saving and quality-enhancing strategy is to better align faculty with student needs.[13] At many universities, as student demand for certain majors or classes ebbs and flows over time, there is little change in the number of faculty in each department. A failure to match teaching capacity with student demand is completely opposite the private sector, where changes in business conditions directly influence staffing levels.

To rein in costs, universities must have the flexibility to hire more faculty or increase teaching loads of current faculty when demand for a major increases and, conversely, universities must have the flexibility to reduce the number of faculty when demand for a major decreases. Just as an automaker must be able to shift production from large SUVs to small cars when energy prices soar, universities must make similar adjustments when student interest in subject X soars and interest in subject Y sags.

Probably the greatest obstacle to increased flexibility of faculty is tenure.[14] An economic argument for tenure is that it saves initial expense on the part of the university. The saving arises because faculty with tenure, or those hired with the possibility of tenure, will work at a lower salary in return for the guarantee of lifetime employment. Thus, tenure can be viewed as a nonpecuniary payment in lieu of salary. However, while there may be initial cost savings from tenure, the resulting inflexibility imposed by tenure has greater costs in terms of both dollars and student quality. Tenure prevents significant staffing changes in response to changes in student demands; tenure also prevents lower quality faculty from being replaced by higher quality faculty. Clearly, however, the abolition of tenure would be met with opposition from faculty and would even face legal challenges. Strong department leadership would be willing to take such risks, as is typical of strong leadership in the business world.

## Conclusion

Institutions of higher learning are increasing their costs while student quality is stagnant, at best. While a private sector enterprise could not survive in this environment, a relative lack of competition shields universities from productivity-improving pressures. This article outlined several strategies aimed at increasing productivity in higher education, all of which require the unbiased attention of administrators, parents and legislators. Unfortunately, some parties are likely to dismiss such ideas out of hand, and that attitude is part of the reason universities have a productivity problem.

Universities that can deliver high quality education at an attractive price will make a difference—an enormous difference—to our society.

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### ENDNOTES

[1] See Vedder (2004).

[2] See American Association of Colleges and Universities (2002).

[3] All data on tuition and expenditures are based on school years and are from the National Center for Education Statistics, *Digest of Education Statistics, 2003*. See http://nces.ed.gov/programs/digest/d03/ch_3.asp#4.

[4] See Vedder (2004).

[5] See Trombley (2003).

[6] Much of the following discussion is from Gates and Stone (1997) and Epstein (1992).

[7] See Gates and Stone (1997).

[8] See Epstein (1992).

[9] See Hackett (1992).

[10] Guskin (1996) discusses several strategies for increasing productivity in higher education.

[11] See Guskin (1996), pp. 12-16. Antioch University is composed of five campuses across the country, overseen by a single administration.

[12] See Chickering and Gamson (1991).

[13] See Mortimer et al. (1985) and Waggaman (1991).

[14] See McGee and Block (1991).

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# What's in a Name?

## Reconciling Conflicting Evidence on Ethnic Names

BY KRISTIE M. ENGEMANN AND MICHAEL T. OWYANG


Bureau of Labor Statistics data show that median weekly earnings for full-time workers in 2004 were 28.6 percent higher for white men than for African-American men and 15.6 percent higher for white women than for African-American women. Differences in education, experience, occupation and industry may explain parts of these gaps.[1] Several years ago, economists Joseph Altonji and Rebecca Blank showed that after accounting for these worker characteristics, the gap in hourly wages between blacks and whites who worked full-time for all of 1995 was still 7 percent.

What portion of this gap—if any—can be attributed to discrimination rather than productivity-related effects? Several recent studies examined one signal of race—distinctively ethnic names—and asked whether those names are disadvantageous to African-American workers. Two studies offer seemingly opposite viewpoints; one focuses on *opportunity* and the other focuses on *outcomes*. The studies also discuss a variety of explanations, only some of which may indicate direct racial animus.

### Opportunity

Economists Marianne Bertrand and Sendhil Mullainathan investigated the impact of having an ethnic name on the initial interview process. For their experiment, they created fictitious résumés of high and low quality, based on important characteristics, such as experience, career profile and various skills. They selected employment ads for sales, administrative support, clerical and customer service jobs in Boston and Chicago newspapers and sent four résumés—two of each quality level—in response to each ad. As a control for nonracial differences across résumés, African-American names were assigned to one résumé of each quality, and white names to the remaining two. Distinctively African-American names were chosen based on the ratios of black babies assigned that name to white babies assigned that name. For example, the authors used Kenya and Hakim for black résumés and Allison and Brad for white résumés.

Bertrand and Mullainathan found that résumés with white names received 50 percent more calls for interviews than résumés with black names. In addition, 8.4 percent of the employers contacted at least one more white applicant than black applicant, while only 3.5 percent of employers contacted at least one more black applicant than white applicant.[2] The value of a high-quality résumé also varied between the two races. White résumés of high quality received 27 percent more calls than those of low quality, but for black résumés, the difference was only 8 percent in favor of the high-quality ones.

Do these results necessarily suggest discrimination? Bertrand and Mullainathan sought alternative explanations but failed to find a hiring rule consistent with their findings. For example, employers might seek to interview a certain number of African-American applicants, perhaps to match their proportion in the population. A disproportionate number of black applicants might then result in high-quality black applicants not receiving interviews. However, if firms were setting such hiring rules, one would expect the call rate for black applicants to even out when aggregated across all industries. In fact, it does not. The pervasiveness of a racial gap across all occupations and industries sheds doubt on the existence of such a hiring rule.

Bertrand and Mullainathan argued that their results suggest differential treatment based on name—and, hence, race—at least in the job search process. Explaining the difference in response rates using existing economic theories *other than* pure employer discrimination proved difficult since the only substantive difference was in the assigned names. Consequently, Bertrand and Mullainathan could not rule out employer discrimination.

### Outcomes

Another study on the role of names in the labor market found results that seem to contradict Bertrand and Mullainathan's conclusions. Economists Roland Fryer and Steven Levitt used information collected on non-Hispanic black and non-Hispanic white babies born in California between 1961 and 2000.[3] The authors measured how distinct an African-American name is by calculating a Black Name Index (BNI), which measures the percentage of babies with a given name who are black.[4]

Fryer and Levitt found the BNI to be related to a number of variables associated with socioeconomic status. For example, single black mothers, as well as younger and less-educated black parents, are more likely to give their children distinctively ethnic names. Additionally, lower birth weight is correlated with a higher occurrence of ethnic names. Fryer and Levitt

also found that the local socioeconomic environment can spill over to the likelihood of receiving an ethnic name. For instance, increasing per capita income in the residential ZIP code decreases the incidence of ethnic names. Moreover, children born in hospitals with lower percentages of black births—an indicator of the degree of neighborhood segregation—and children whose births are paid for by private insurance are, on average, less likely to be given ethnic names.

If employers believe both that low social background hinders human capital accumulation and that an ethnic name is a signal of low socioeconomic status at birth, then they may infer that an ethnic name signals low productivity. In this case, employers might forgo interviewing a person with an ethnic name on the basis of inferred productivity rather than animus. However, if employers use names to facilitate racial animus instead of as a signal of productivity, then one would expect to find variations in the effect on economic outcomes, and a black adult with an ethnic name would be worse off economically than an otherwise similar black adult with a race-neutral name, on average.

Do Fryer and Levitt's data indicate that having an ethnic name leads to worse adulthood outcomes after controlling for background characteristics? The authors used data on women who were born in California in 1973 or 1974 and later gave birth there by 2000. The authors compared information on the woman's own birth certificate, which provides information about her socioeconomic conditions at birth, with information about her that is available on her child's birth certificate, which provides information on the woman's adulthood economic outcomes.

Fryer and Levitt did not find any strong relationship between these measures. They found weak statistical evidence in favor of a relationship between BNI and life outcomes for only a few of the outcomes.[5] The authors estimated that an increase in the woman's BNI from 50 to 100 (i.e., from a race-neutral to a black-only name) is associated with a 0.9-percentage-point increase in the percent of African-American babies in the hospital, a 0.02-percentage-point increase in the probability that the woman was unmarried at the time of her baby's birth, just under a $100 decrease in the per capita income among African-Americans in 1989 in the woman's ZIP code and an increase in her child's BNI by three points.

In light of their results, Fryer and Levitt concluded that having a distinctively African-American name will not directly cause worse economic outcomes in adulthood. Rather, they argue that such a name typically goes hand-in-hand with a worse socioeconomic background and, hence, lower productivity on average. After the authors controlled for negative economic conditions at the time of birth, they found that name alone has virtually no impact. They argue that this evidence supports the notion that employers may be inferring productivity from an ethnic name.

## Discussion

Fryer and Levitt suggested three theories consistent with the findings of both studies. First, an ethnic name could provide a signal of race to an employer. While some discriminatory employers might interview fewer minority workers, the overall effect on a black worker's life outcomes might be mitigated by other fair-minded employers. Second, a distinctively black name might signal low social background and, hence, potentially lower levels of human capital.[6] Thus, when corrected for social background, the effect of name alone on outcomes disappears. Third, ethnic names might have a direct impact on calls for interviews and length of unemployment duration but not have a strong influence on the outcomes that Fryer and Levitt studied.

Despite the variety of interpretations that can reconcile the findings from the two studies, some caveats are necessary. Foremost, neither study directly measures outcomes of people with ethnic names. Bertrand and Mullainathan's use of fictitious résumés does not determine actual job market outcomes, whereas Fryer and Levitt used indicators but not direct measures of economic outcomes like personal income or wealth.[7]

To sum up, Bertrand and Mullainathan suggested that racial discrimination may affect the likelihood of being interviewed by some companies. However, it is unclear whether discrimination in some interviews leads to worse economic outcomes overall. Fryer and Levitt asserted that outcomes, as the authors define them, do not appear to be worse for those with ethnic names after controlling for social background. Only a small percentage of employers in the Bertrand and Mullainathan study seemed to discriminate based on name. Thus, that number of discriminatory employers may not be sufficiently large to affect job market outcomes across the board. Additionally, some employers may be attempting to infer underlying productivity from ethnic names.

In the end, ethnic names appear to serve as a hindrance in the labor market, but the exact extent has yet to be conclusively determined.

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### ENDNOTES

1 According to the Census Bureau, among those aged 25 and older in 2004, 28.2 percent of whites had a bachelor's degree or more, compared to 17.6 percent of African-Americans. Meanwhile, 19.4 percent of African-Americans had less than a high school degree, compared to 14.2 percent of whites.

2 Eighty-eight percent of the employers gave equal treatment, with the majority calling none of them.

3 The available data—obtained from birth certificates—include the baby's first name, race, sex, date of birth, hospital of birth, birth weight, mother's maiden name, parental ages and marital status. Beginning in 1989, parental education, residential ZIP code, form of payment, and the mother's first name and date of birth are available.

4 Fryer and Levitt found that use of ethnic names increased over time, beginning with the Black Power movement in the 1960s and 1970s. The mean BNI for African-American babies increased from 60.9 during 1961-1967 to 71 during 1989-2000, where 50 represents an even split in the race of children with that name. Additionally, the percentage of African-American babies with a BNI of *at least* 80 increased from 20 percent in the 1960s to 45 percent in 2000.

5 The woman's education and that of her baby's father, her age at her first birth, her baby's birth weight, whether or not she has private insurance, and her total number of children were not affected by her BNI.

6 Bertrand and Mullainathan, on the other hand, found no evidence suggesting that social background, as proxied by the mother's education, affected call rates.

7 Fryer and Levitt warned that their results concerning economic outcomes may not generalize because their sample included only women who remained in California and gave birth by age 27.

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# States Fight Predatory Lending in Different Ways

By Giang Ho and Anthony Pennington-Cross

To restrict predatory lending in the subprime (high cost) mortgage market, Congress enacted in 1994 the Home Ownership and Equity Protection Act (HOEPA). This law restricts some types of lending and requires lenders to disclose additional information about loans that have predatory features. Following the lead of federal regulations, at least 23 states, beginning with North Carolina in 1999, have introduced their own predatory lending laws, using HOEPA as a template.[1]

Perhaps not surprisingly, research focusing on the impact of the North Carolina law found that the rate of applications and originations for subprime loans declined after the law took effect. We extend prior research, which focused on the North Carolina law, and find large variations in market responses to the state predatory lending laws. These results suggest that a closer look at the design of the laws is needed. If market responses are contingent on how a law is written, then policy-makers may be able to craft predatory lending laws to either stimulate or depress the subprime market.

## Beyond HOEPA

HOEPA is designed in two phases. First, loans are covered by HOEPA if they meet the law's definition of high-cost loans. Second, for covered loans, certain product types and lending practices are restricted. The state predatory lending laws, although styled after HOEPA in terms of the coverage and restrictions approach, have aimed to go beyond the federal law.

In terms of coverage, the state laws are typically designed to cover a broader segment of the mortgage market. Loans covered under HOEPA include closed-end home equity loans (refinance and second mortgages only) that have an annual percentage rate (APR) and/or finance points and fees exceeding a certain threshold. The state laws typically extend the coverage of HOEPA by including both closed-end and open-end mortgages (lines of credit, refinance and for-purchase mortgages), as well as lowering the APR and/or fee trigger.[2] However, the extent of coverage increase varies among laws, ranging from almost no extension beyond HOEPA (for example, the Florida law) to almost full market coverage (for example, the Colorado law, which applies to loans of almost all purposes and types).

For covered loans, each law identifies different types of restrictions. Typically, state predatory lending laws strengthen restrictions beyond those required by HOEPA. These restrictions usually include additional limits on allowable prepayment penalties and balloon payments, prohibitions of joint financing of various insurance products with the mortgage, and requirements that borrowers participate in loan counseling.[3] Again, there is substantial variation among the state laws in terms of expanding the law's restrictions. For example, Maine and Nevada largely leave HOEPA restrictions intact, while Georgia is much more restrictive of balloon payments and prepayment penalties.[4]

## Impacts of Laws on Flow of Credit

Predatory lending laws are in large part designed to restrict the availability of high-cost credit because of evidence, although anecdotal, of abusive practices associated with certain product types. Therefore, holding everything else constant, we should anticipate a reduction in originations of subprime loans after a law is implemented. This reduction could come from more applicants being rejected or fewer households applying for subprime loans.

A series of studies has used tables of mortgage conditions before and after the North Carolina law took effect and compares these metrics with growth rates in nearby states and the nation as a whole. Using the Home Mortgage Disclosure Act (HMDA) data set, economists at the Center for Responsible Lending in North Carolina concluded that the volume of loan originations declined in North Carolina relative to the rest of the country.[5] However, a group of economists at the Center for Community Capitalism (University of North Carolina at Chapel Hill) used a different data set and found no volume impact on purchases or low credit score loans, but a decline in the volume of refinanced loans.[6]

Other studies have used regression analysis to identify the impact of the laws in North Carolina, Chicago and Philadelphia.[7] (Since publication, the Philadelphia law is no longer in effect.) All of the studies found evidence that the introduction of the North Carolina law substantially reduced the flow of subprime credit. The impact seems to be larger for low-income borrowers and minority borrowers. Also, the volume reduction was largely attributed to lower application rates rather than to increased rejection rates. The lower application rates could result from potential applicants being deterred by the tightened lending standards

under the new law or from lenders increasing pre-screening to comply with the law's restrictions.

### Going Beyond North Carolina

Using a treatment-control framework, we examine the impacts in a variety of locations to see if the North Carolina experience was representative of other states. For the treatment group, we sample only border counties in the state with a predatory lending law. The control group includes border counties in neighboring states that do not have a law in effect during the examined time period (the year before and the year after the introduction of the law). This sample design and HMDA availability reduce the sample to 10 state predatory lending laws.[8]

Following previous research, for each law sample (treatment and control loans), we estimate the probability of three separate outcomes: applying for a subprime loan, originating a subprime loan and being rejected on a subprime application. In our sample, which spans from 1999 to 2003, approximately 20 percent of the applications were for a subprime loan, while only 10 percent of loans originated were subprime. In addition, over 40 percent of the subprime applications were rejected. We control for various location and borrower characteristics using proxies, such as county unemployment rate, population growth, and borrower income and minority status. On most of these dimensions, subprime applications were very similar to prime applications. However, subprime applications on average are associated with lower borrower income and are more likely to come from locations with more minority households.

The table reports the impact of each law for each of the three measures on the flow of credit (application, origination and rejection).[9] The impact represents the change in predicted probability of the outcomes as the laws become effective. Consistent with the literature, the results indicate that the North Carolina law did reduce the flow of subprime credit through a reduction in both application and origination probabilities. However, the experience in North Carolina is replicated in only one-half of the laws examined. In the other half, the introduction of the law was found to increase the flow of subprime credit, as measured by application or origination.

Further examination of the design of the laws sheds some light on these inconsistent results. Each state's predatory lending law extends HOEPA in a different way. Some laws have broader market coverage, while others are more restrictive of certain lending practices; broad coverage does not necessarily translate into more restrictions, and vice versa. Most of the laws that were found to reduce the flow of credit, like the North Carolina, Georgia and Massachusetts laws, tend to have stronger restrictions, which could reduce the availability of loan types and lead to lower application and origination rates. On the other hand, laws that are associated with an increase in the flow of credit, like the ones in California and Maryland, tend to cover a larger segment of the subprime mortgage market. One way to interpret these results is that if borrowers view better coverage as a sign of better protection against predatory lending, then they will be more confident and, hence, more likely to apply for subprime loans.

Because state predatory lending laws are not created equal, future research should test in a more complete model whether coverage encourages more applications in the subprime market and the extent that these additional applications may be able to counteract any reductions in the flow of credit due to stronger lending restrictions.

*Anthony Pennington-Cross is a senior economist, and Giang Ho is a research associate, both at the Federal Reserve Bank of St. Louis.*

## Impacts of State Laws on the Flow of Credit

| **Law Sample** (treatment and control loans) | Application | Origination | Rejection |
|---|---|---|---|
| California | 3.2 | 6.7 | –25.8 |
| Connecticut | 1.4 | 2.3 | 1.3* |
| Florida | –3.0 | 0.8 | –5.7 |
| Georgia | –5.6 | –0.7 | –11.0 |
| Massachusetts | –7.4 | –3.2 | –3.0 |
| Maryland | 2.9 | 1.8 | –6.6 |
| North Carolina | –6.9 | –4.2 | –4.8 |
| Ohio | –0.5* | –0.4* | –2.2 |
| Pennsylvania | 3.7 | 3.2 | 3.2 |
| Texas | 18.9 | 10.7 | 14.8 |

The impact of a law is measured as the percentage point change in the share of subprime applications (first column), the percentage point change in the share of subprime originations (second column) and percentage point change in the share of subprime applications rejected (third column). In addition, * indicates that the estimated change could not be distinguished in terms of its statistical properties from zero—in other words, the law had no measurable impact.

### ENDNOTES

1 As of the end of 2004, the following states had a predatory lending law in effect: Arkansas, California, Colorado, Connecticut, Florida, Georgia, Illinois, Kentucky, Maine, Maryland, Massachusetts, Nevada, New Jersey, New Mexico, New York, North Carolina, Ohio, Oklahoma, Pennsylvania, South Carolina, Texas, Utah and Wisconsin.

2 A refinance mortgage replaces an existing mortgage with a new mortgage, whereas a for-purchase mortgage provides a new mortgage for buying a new home. Lines of credit typically do not have an amortization schedule and, therefore, are considered open-end credit.

3 A prepayment penalty charges the borrower a fee if the loan is paid off early. A balloon payment is payment made at the end of the mortgage to cover any outstanding principal and is typically much larger than the prior monthly payments. A loan with a balloon payment is by definition not fully amortizing.

4 For a detailed description of the local laws, see Appendix A in Ho and Pennington-Cross (2005), "The Impact of Local Predatory Lending Laws." Federal Reserve Bank of St. Louis Working Paper, WP 2005-049B. Available at www.research.stlouisfed.org.

5 See Ernst, Farris and Stein (2002)

6 See Quercia, Stegman and Davis (2003 and 2004)

7 See, for example, Harvey and Nigro (2003 and 2004) and Elliehausen and Staten (2004)

8 California, Connecticut, Florida, Georgia, Maryland, Massachusetts, North Carolina, Ohio, Pennsylvania and Texas.

9 Detailed results on other variables are available upon request.

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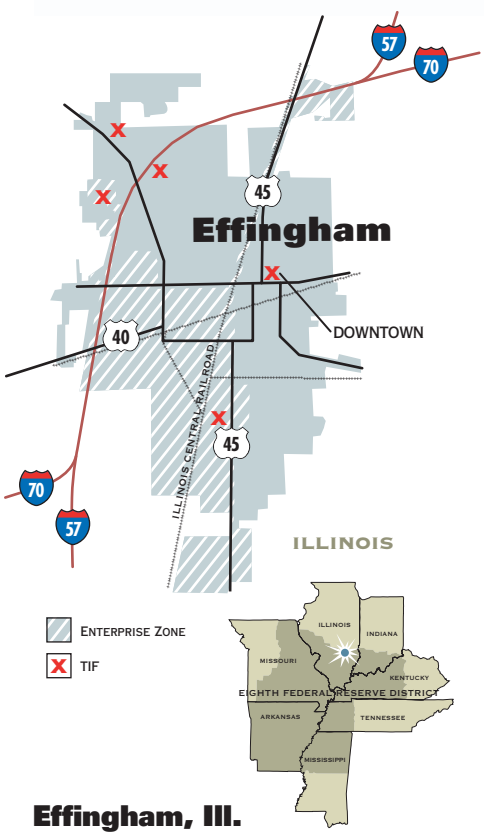
# Effingham Uses Tax Breaks To Bounce Back

*By Glen Sparks*

It isn't unusual at all to see a long line of trucks like this getting off Interstate 70 and turning on to Keller Drive, one of the main drags in Effingham. The Illinois Department of Transportation estimates that about 13,000 trucks pass through Effingham every day. The city lies next to the busy I-57/70 interchange.




## Effingham, Ill.

BY THE NUMBERS

**Population**.....Effingham 12,413 (2004)
Effingham County 34,575 (2004)

**County Labor Force**.....18,654 (Aug. 2005)

**County Unemployment Rate**.....5.3 percent (Aug. 2005)

**County Per Capita Income**.....$26,600 (2003)

**Top Employers**

Quebecor/Petty Printing.....860
St. Anthony's Memorial Hospital.....834
Sherwin-Williams Co.....454
Wal-Mart.....425
Effingham Community Unit #40 School District.....385

World Color Press shut down at the end of 2003. Fedders, the air-conditioning manufacturer, already had shifted its production facility to China. Effingham lost about 1,200 manufacturing jobs *just like that.*

"There was a perfect opportunity for this town to die," says Kevin Day, vice president of commercial lending at Midland States Bank in Effingham. "Losing that many jobs is a huge hit for a town like this."

But the town didn't die. Today, "For a small town, this is a booming place," Day says.

Effingham is booming, thanks, in part, to an ambitious development plan. The city has built six industrial and businesses parks. Among the tenants is the largest Krispy Kreme mixing plant in the country. About 40 factories and warehouses have been built or expanded over the past decade.

The city has taken advantage of its central location and easy access to interstates 70 and 57.

"When you factor in the proximity of Effingham to much of the rest of the country, the low cost of doing business here compared to a major city and the overall labor pool, Effingham is a great place to do business," says Mike McConnell, an executive with Sherwin-Williams. The company ships paint that it makes in Chicago to a 1.3 million-square foot distribution center that it built here 10 years ago. From here, paint is distributed to much of the Midwest.

Effingham also has attracted many businesses by offering Tax Increment Financing, or TIF, and by establishing an enterprise zone. TIF money comes from additional tax revenue that is generated from an improvement or new development on a site. This tax increment money goes to the city, which can use it to make street, water and sewer improvements in the TIF district.

Businesses can use the TIF money to demolish a property or fix it up, but not for new construction. When the TIF term expires, all the subsequent tax revenue goes to the regular taxing bodies—more than they would have received without the TIF.

In 1986, the Effingham City Council voted to use TIF to strengthen the local economy. The Effingham TIF District No. 1 generates tax revenue from three sources: property tax, city sales tax and

## Highways Bring Money to Town

It shouldn't be any surprise that so many trucks clog the roads in and around Effingham. The city lies within a day's drive of about 65 percent of the nation's industry, Effingham officials say, and two interstates run through town. I-70 connects Washington, D.C., to Southern California. I-57 runs from New Orleans to Chicago.

About 38,000 vehicles, including about 13,000 trucks, pass through Effingham every day on the two interstates. Plenty of drivers stop for the night. The city has 18 hotels and motels, with about 1,200 total rooms, and more than 60 restaurants. "That's a goodly number of facilities for a town that size," says Mike Right, a spokesman for AAA.

Not surprisingly, Effingham usually finishes near the top every year among Illinois cities in per capita sales tax collected. Todd Hull, economic development director for Effingham, says the city was on pace to collect about $6 million in sales tax revenue in 2005—about 55 percent of total revenue generated for the city.

A significant chunk of that money comes from the truckers and the five truck stops in town that serve them.

Donovan Smith, a trucker from North Dakota, rolls through Effingham once a week. He fills up with gasoline at the Flying J truck stop and gets a meal or a cup of coffee at the truck stop's restaurant. He doesn't need to sleep at a hotel if he stays overnight, though. Like some other truck drivers, he has a sleeper (plus a television, DVD player and microwave oven) in the cab.

Still, George Billows, executive director of the Illinois Trucking Association, says many truck drivers prefer sleeping in a hotel to sleeping in their rigs. He says Effingham makes life comfortable for truckers.

"The guys are on the road, and they need a place to go," Billows said. "Effingham accommodates them. It's a hub for truckers, but I don't think the people of Effingham realize how important trucking is to their city."

state sales tax. Property and city sales taxes are collected by the city and are put into a special fund. Approximately 20 percent of the state sales tax is appropriated to the city and is again put into a special account.

Following the local economic downturn in the 1990s, city officials decided that Effingham needed more than just one TIF district. Four more have since been formed.

To provide an additional boost, Illinois state legislators voted in 1988 to create an enterprise zone, covering the southern, western and northeastern sections of Effingham. Businesses can take advantage of 100 percent property tax abatement (10 years for industrial projects and three years for commercial projects), sales tax exemption on building materials, a waiver on building permit fees, an investment tax credit, jobs tax credit and more.

Todd Hull, the economic development director of Effingham and city TIF administrator, says, "In an ideal word, if we didn't have TIF and enterprise zones, I would say that we could compete just fine because of our excellent geographic location. But we're competing against other cities, and you need to offer incentives."

But is Effingham giving away the farmland by putting so much of the city in a TIF district or enterprise zone? No way, says Greg Curl, president and chief executive officer of Crossroads Bank in Effingham.

"People here know what it takes to grow, and TIF is a part of the game," Curl says. "If another town is offering TIF and you aren't offering it, then, everything else being equal, the business will go to a town that has TIF."

Some economists argue that revenue from a particular TIF project may fall short of projections made before the project was started, forcing the community to forgo other expenditures while it makes up for the shortfall. Also, because the TIF area does not generate any revenue early on, residents outside the area can end up paying for municipal services inside the area.

Jon Schafer, the owner of the downtown Baseball Card Connection shop, says he wants no part of TIF. He says business owners should spend their own money, rather than rely on TIF, to make building improvements.

"TIF helps the business owners who are not keeping up their property. I have made improvements to this building, but I spent my own money to do it," Schafer says.

Hull counters that downtown is bustling, in part, because of TIF improvements. He also says that money collected from TIF has gone to help pay for local projects like the construction of a new high school.

Curl says the future looks good for Effingham. "The infrastructure is here, the transportation needs are here," he says. "We still need to knock on more doors, though. We need to talk to more companies and tell them why Effingham is a good place to be."

*Glen Sparks is an editor at the Federal Reserve Bank of St. Louis.*


The 24,000-square-foot Legacy Harley-Davidson dealership in Effingham stocks new motorcycles that range in price from $8,000 to almost $34,000.

## Motorcycle Dealership Takes Different Path

Not every new business in Effingham is dependent on TIF or enterprise zone tax breaks. Take, for example, the new Legacy Harley-Davidson dealership that opened in April on the northeast side of town, near the I-57/70 interchange.

The city agreed to extend utilities to the new building, but only because the business planned to add employees. The owners had to pay for the extension but will be reimbursed if they generate enough sales tax in the next few years.

The limited incentive didn't dissuade the trio from Omaha—Paul Gutman, James Tonsfeldt and Bruce Auth—from acting on their dream to open a Harley dealership. Besides, they prefer their location—the site of a 150-year-old homestead—to being in a tax-break area. The owners hope the homestead's antique barn, already the site of several work events, can help turn the dealership into a destination. The three liked the site so much that they bought the new building for their business rather than lease it, as originally planned.

About 30 motorcycles sparkle inside the 8,000-square-foot showroom, which looks like a ski lodge from the inside and a rich man's barn from the outside. The business is about three times the size of the little-known shop that the trio bought on the other side of town and then moved at the suggestion of Harley executives.

"There are people from Effingham who come into this shop who didn't know there had been a Harley dealership (here) for decades," says Gutman.

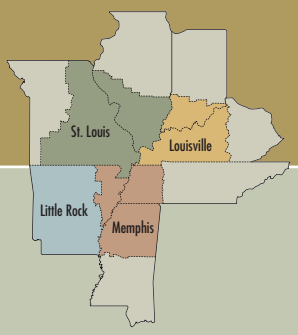
Motorcycle sales are up 20 percent from a year ago. Merchandise sales are up 40 to 50 percent. A year ago, the dealership had six workers. Now, it has 26.

Bike sales could be higher, says Tonsfeldt, but the Milwaukee-based maker of the motorcycles limits the number of Harleys it stocks in each shop. Dealers must show over the long run that they can sell motorcycles before their allocations go up.

"Harley-Davidson knows exactly what it takes to run a dealership," Gutman says.

Someday, the owners may open satellite locations in the small towns around Effingham, as well as additional dealerships.

"That's a part of the dream," Gutman says.

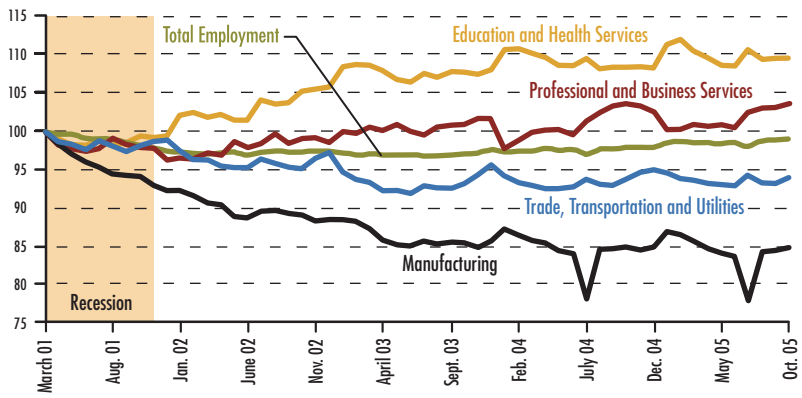



# Job Cuts in Manufacturing, Transportation Slow Recovery

*By Thomas A. Garrett and Lesli S. Ott*

As in most other areas of the United States, the Louisville metropolitan statistical area (MSA) experienced a decline in payroll employment during the 2001 recession. Employment in the MSA decreased by 2.1 percent between March 2001 and November 2001, compared to a 1.4 percent decrease for the state of Kentucky and a 1.2 percent decrease for the United States during the same period. Some sectors in the Louisville MSA experienced only moderate employment losses, but employment in professional and business services, manufacturing, and the trade, transportation and utilities sector fell significantly during the recession. Although the professional and business services sector has rebounded since the end of the recession, job losses have continued in the manufacturing and in the trade, transportation and utilities sectors, preventing Louisville's total employment from reaching its pre-recession level. As of October 2005, total payroll employment was 1.4 percent (8,550 jobs) lower than in February 2001, just before the recession started.

**Employment in the Louisville Metropolitan Area**
March 2001=100, seasonally adjusted




SOURCE: Bureau of Labor Statistics

## Growth Sectors

Despite the overall decline in Louisville's employment since March 2001, two sectors have displayed substantial post-recession growth: leisure and hospitality, and education and health services. Between November 2001 and October 2005, employment in the leisure and hospitality sector increased by more than 10 percent (5,500 jobs), despite a decline of 1.3 percent during the recession. Leisure and hospitality is the second smallest sector in Louisville. (Natural resources and mining, not reported, is the smallest sector.) Employment in the education and health services sector experienced a similar trend. Although posting a nearly 1 percent decline between March 2001 and November 2001, employment in the education and health services sector increased by 10.5 percent (7,100 jobs) between November 2001 and October 2005.

The financial services sector has also seen post-recession employment growth, although not as much as in the leisure and hospitality and the education and health services sectors. Employment in financial services increased by 4.2 percent (1,600 jobs) between November 2001 and October 2005 despite a decline of roughly 0.5 percent during the 2001 recession.

The professional and business services sector experienced the second largest recessional job loss, of 2.1 percent (1,400 jobs). However, employment in that sector increased by 6 percent (3,800 jobs) between November 2001 and October 2005. Despite employment growth in this sector and the aforementioned sectors, falling employment in manufacturing and in the trade, transportation and utilities sector since March 2001 has prevented Louisville's total employment from reaching pre-recession levels as of October 2005.

## Struggling Sectors

Of all sectors experiencing a decline in employment during the recession, manufacturing sustained the biggest blow. Payroll employment in manufacturing decreased by 7 percent during the recession and has continued to decline. Between November 2001 and October 2005, employment in manufacturing decreased by roughly 9 percent (7,800 jobs). As of October 2005, manufacturing employment was roughly 19 percent below its pre-recession level, which is about the same for the manufacturing sector in the nation as a whole. Because the manufacturing sector is the second largest with respect to Louisville's total employment, the loss of 14,400 manufacturing jobs since the recession has significantly stunted Louisville's post-recession recovery.

Trade, transportation and utilities, the largest sector in the Louisville economy, lost a smaller percentage (1.3 percent, or 1,850 jobs) of its total employment during the recession compared to the manufacturing sector. Similar to employment in the manufacturing sector, employment in trade, transportation and utilities has continued to decline since November 2001. As of October 2005, employment in trade, transportation and utilities was 4.7 percent (6,600 jobs) lower than at the recession's end.

## Conclusion

As evidenced by the overall loss of 6,350 jobs since March 2001, total employment in the Louisville MSA has been unable to make positive gains since the end of the 2001 recession. The recessional job losses in the professional and business services, manufacturing, and trade transportation and utilities sectors, along with the subsequent employment decreases in the latter two since November 2001, have outweighed the employment gains made in other sectors since the end of the recession.

*Thomas A. Garrett is a research officer and Lesli S. Ott is a research associate, both at the Federal Reserve Bank of St. Louis.*

# Employment Trends in Nearby Metro Areas Take Different Paths

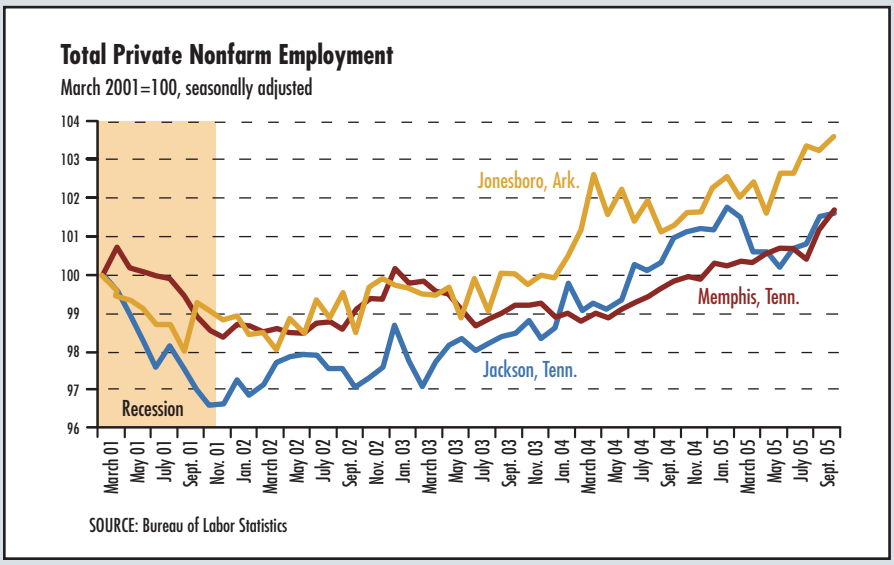
*By Rubén Hernández-Murillo and Deborah Roisman*

The Memphis Zone of the Eighth Federal Reserve District has two metropolitan statistical areas besides Memphis.[1] They are Jonesboro, Ark., and Jackson, Tenn. Although they are within three hours' driving time of each other, these two metro areas are rather far apart in their recent employment history. Jobs in Jackson fell more sharply than they did in Jonesboro during the 2001 recession. Jackson has been slower to recover, too.

Jonesboro and Jackson share some job history: During the recession, both experienced large employment declines in manufacturing and in professional and business services, and in recent years both metro areas have seen remarkable resilience in the education and health services sector and in the leisure and hospitality sector.

**Jackson's** downturn in total nonfarm employment started a year prior to the national recession. Between March 2000 and March 2001, when the U.S. recession began, Jackson lost about 1,700 jobs, a decline of 2.8 percent. During the recession itself, Jackson lost an additional 2,070 jobs, or 3.5 percent.[2] Employment in Jackson began to recover in November 2001, the same month that the U.S. recession ended. From then until October 2005, Jackson's employment increased by roughly 3,040 jobs, a net gain of about 970 jobs over the March 2001 level and about 80 percent of the jobs lost between March 2000 and November 2001.

As in Jonesboro, Memphis, and the country as a whole, the sectors that were most deeply affected in Jackson during the recession were manufacturing and the professional and business services sector. Between March and November 2001, employment in professional and business services declined by about 900 jobs, or 19 percent. From November 2001 to October 2005, this sector managed to recover only about 55 percent of those jobs. Manufacturing employment in Jackson experienced a boom during the 1990s, but it has declined steadily since early 2000. Manufacturing lost about 700 jobs during the recession, roughly 5.5 percent; the sector then lost 1,050 additional jobs between November 2001 and October 2005.




In contrast, two sectors saw increases in employment during the recession in Jackson: the education and health services sector and the leisure and hospitality sector. From March 2001 to October 2005, each of these sectors had grown by approximately 13 percent.

In **Jonesboro**, total nonfarm employment during the recession fell by about 460 jobs, roughly 1 percent. As can be seen in the chart, Jonesboro's employment performance relative to its March 2001 level exceeded that of Jackson and Memphis. Nonfarm employment in Jonesboro returned to its March 2001 level by February 2004, six months ahead of Jackson and the state of Arkansas and about 12 months ahead of Memphis. Jonesboro's employment continued to grow; from November 2001 to October 2005, about 2,180 new jobs had been created.

Manufacturing employment in Jonesboro during the recession declined by about 1,050 jobs, or 10 percent, and it continued to drop after the end of the recession, losing another 580 jobs between November 2001 and October 2005.

Professional and business services jobs fell by 6.4 percent during the recession, a loss of about 200 jobs, but unlike manufacturing, this sector recovered quite well. From November 2001 to October 2005, the professional and business services sector gained approximately 450 jobs, more than double the amount of jobs lost during the recession. Jonesboro's performance in this sector contrasts sharply with the performance of both Memphis and Jackson, where the number of jobs had not yet reached the March 2001 level by October 2005.

Jonesboro also experienced employment gains in the education and health services sector and the leisure and hospitality sector. Both sectors saw increases in employment throughout the recessionary period, with leisure and hospitality jobs growing by as much as 9.4 percent. Between March 2001 and October 2005, each of these sectors had grown by approximately 16 percent.

*Rubén Hernández-Murillo is a senior economist, and Deborah Roisman is a senior research associate, both at the Federal Reserve Bank of St. Louis.*

ENDNOTES

1 The Memphis Zone covers 39 counties in northern Mississippi, 21 in western Tennessee, and 13 in northeastern Arkansas. For a detailed report on the Memphis metro area, see our previous article, "Health-Care Industry Pulls Memphis Out of Job Slump," in the July 2005 issue of the Regional Economist.

2 The employment series used in this report are from the Bureau of Labor and Statistics' Current Employment Statistics survey of nonfarm payroll and have been seasonally adjusted.

# Despite Setbacks, the U.S. Economy Steams Forward

BY KEVIN L. KLIESEN

Hurricane Katrina ravaged New Orleans and surrounding areas, damaging and disabling a significant amount of the Gulf Coast's energy infrastructure. Immediately following the hurricane, most forecasters began to lower their estimates of U.S. economic growth for the third and fourth quarters of 2005 from their relatively upbeat pre-Katrina outlook. With crude oil and natural gas prices surging, forecasters also sharply raised their estimates of inflation. The economic outlook was further clouded by two additional hurricanes (Rita and Wilma) and the Boeing machinists' strike, which crippled commercial aircraft production.

Although some parts of the Gulf region will take years to recover, economic conditions at the national level three months later have, in many respects, turned out better than expected. The 4.3 percent growth in real GDP in the third quarter was much higher than most forecasters had expected. Manufacturing and labor market conditions have rebounded strongly. Moreover, crude oil and natural gas prices have fallen modestly from their hurricane-spawned peaks in September, while measures of core inflation have been fairly stable over the past year, at about 2 percent. Despite some significant countervailing forces in 2005, the U.S. economy looked to be heading into 2006 with a fair amount of forward momentum.

### A Shockproof Economy?

Higher oil prices and hurricanes are merely the latest in a series of shocks that have hit the U.S. economy in recent years. Others have included:

- the stock market bust in 2000, which erased several trillion dollars in accumulated household net wealth over the next two years and greatly increased the cost of capital to firms,
- the corporate accounting scandals thereafter
- and the devastating terrorist attacks on Sept. 11, 2001.

Through it all, the economy has exhibited extraordinary resilience, experiencing only a relatively minor recession in 2001 and only a moderate recovery over the next year or so. But since mid-2003, real GDP has increased at a little more than a 4 percent annual rate. This rate is about one percentage point higher than the Congressional Budget Office's estimate of potential real GDP growth but a bit lower than other estimates. With actual growth exceeding potential growth, the unemployment rate has fallen to 5 percent (as of November 2005) and the manufacturing capacity utilization rate in October rose to its highest level in five years.

The U.S. economy's resilience reflects two key developments. First, growth of labor productivity (output per hour in the nonfarm business sector) remains historically elevated. Over the past five years, labor productivity has increased at a brisk 3.4 percent annual rate, far above the 50-year average growth of 2.2 percent. Second, financial markets and the business community are confident that the Federal Reserve will keep inflation low and stable. This credibility not only reduces risk premiums that are embedded in interest rates, but it enables the Fed to offset potentially damaging economic disturbances without the markets calling into question its inflation-fighting bona fides.

As long as long-term inflation expectations remain low and stable and labor productivity growth stays strong, the economy should continue to grow at or slightly above its estimated potential rate of growth in 2006. Economic activity in 2006 should also receive a boost from the rebuilding efforts in the Gulf Coast and, hopefully, from the absence of further large increases in crude oil and natural gas prices. The rebuilding and relative stability in energy prices would help boost business investment and help produce a more moderate headline inflation rate in 2006. The end result would be an improvement in household purchasing power. With this outcome, the economy in 2006 should add jobs at a rate of about 150,00 to 175,000 per month.

One risk to the economy in 2006 is the potential for a slower pace of housing investment, threatening to end the multiyear housing boom. Growth of real residential fixed investment (RFI) is expected to decline about 1.75 percent during 2006, according to the Federal Reserve Bank of Philadelphia's November 2005 Survey of Professional Forecasters (SPF). It should be noted, though, that in November 2004, these forecasters predicted that RFI growth would average about –0.25 percent (annualized) over the first three quarters of 2005; instead, it averaged a little more than 9.5 percent.

*Kevin L. Kliesen is an economist at the Federal Reserve Bank of St. Louis. Joshua M. Ulrich provided research assistance.*

# National and District Data

SELECTED INDICATORS OF THE NATIONAL ECONOMY AND BANKING, AGRICULTURAL AND BUSINESS CONDITIONS IN THE EIGHTH FEDERAL RESERVE DISTRICT

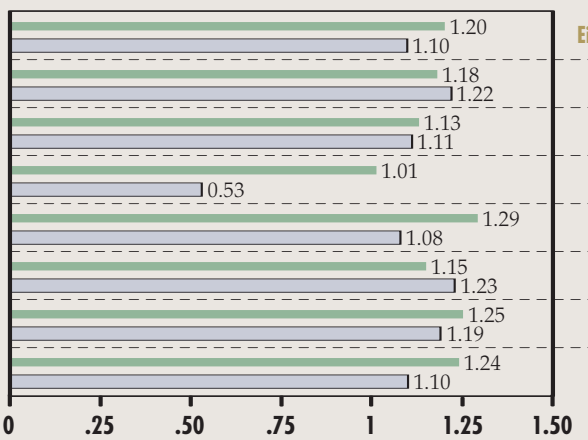
## Commercial Bank Performance Ratios

THIRD QUARTER 2005

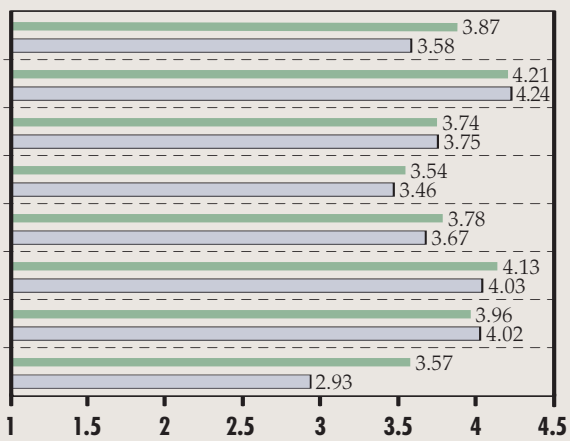
**U.S. Banks** by Asset Size

| | ALL | $100 MILLION-$300 MILLION | LESS THAN $300 MILLION | $300 MILLION-$1 BILLION | LESS THAN $1 BILLION | $1 BILLION-$15 BILLION | LESS THAN $15 BILLION | MORE THAN $15 BILLION |
|---|---|---|---|---|---|---|---|---|
| Return on Average Assets* | 1.34 | 1.28 | 1.20 | 1.39 | 1.29 | 1.42 | 1.35 | 1.34 |
| Net Interest Margin* | 3.57 | 4.35 | 4.34 | 4.29 | 4.32 | 3.88 | 4.10 | 3.36 |
| Nonperforming Loan Ratio | 0.76 | 0.72 | 0.77 | 0.63 | 0.70 | 0.63 | 0.67 | 0.80 |
| Loan Loss Reserve Ratio | 1.35 | 1.28 | 1.31 | 1.29 | 1.30 | 1.34 | 1.32 | 1.37 |

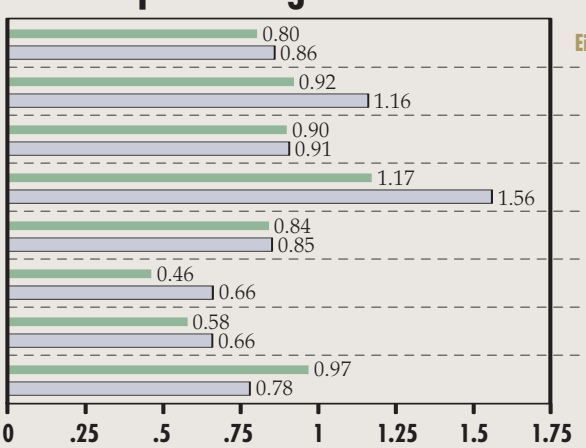
### Return on Average Assets*



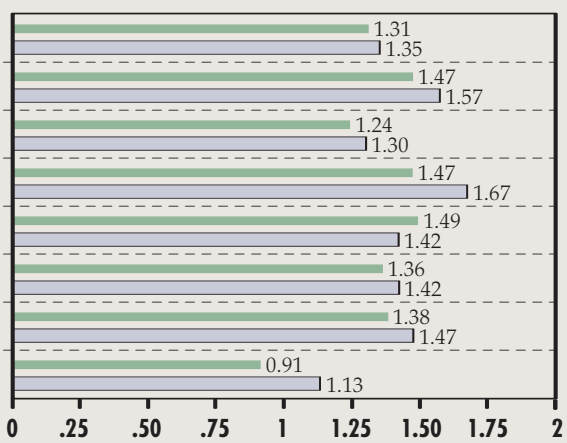

### Net Interest Margin*




### Nonperforming Loan Ratio




### Loan Loss Reserve Ratio




Third Quarter 2005 Third Quarter 2004

NOTE: Data include only that portion of the state within Eighth District boundaries.
SOURCE: FFIEC Reports of Condition and Income for all insured U.S. commercial banks.
*Annualized data

For additional banking and regional data, visit our web site at:
www.research.stlouisfed.org/fred/data/regional.html.

# Regional Economic Indicators

## Nonfarm Employment Growth*

YEAR-OVER-YEAR PERCENT CHANGE

THIRD QUARTER 2005

| | UNITED STATES | EIGHTH DISTRICT | ARKANSAS | ILLINOIS | INDIANA | KENTUCKY | MISSISSIPPI | MISSOURI | TENNESSEE |
|---|---|---|---|---|---|---|---|---|---|
| Total Nonagricultural | 1.7% | 0.8% | 1.0% | 0.8% | 0.8% | 1.2% | –0.5% | 1.1% | 0.9% |
| Natural Resources/Mining | 6.0 | 2.9 | 4.1 | –0.4 | 0.5 | 5.6 | –0.4 | 8.7 | 0.0 |
| Construction | 3.8 | 1.5 | 1.9 | 0.5 | 2.2 | 4.1 | 1.1 | 0.6 | 1.8 |
| Manufacturing | –0.7 | –0.4 | –1.0 | –1.0 | –0.3 | 0.3 | –1.3 | 0.9 | –0.3 |
| Trade/Transportation/Utilities | 1.5 | 0.7 | 0.8 | 0.6 | 0.5 | 0.9 | –0.6 | 0.9 | 1.6 |
| Information | 0.5 | –1.4 | –1.0 | –2.6 | 0.2 | –3.1 | –0.7 | 1.7 | –3.0 |
| Financial Activities | 2.3 | 0.9 | 2.0 | 0.7 | 1.1 | –2.6 | –0.3 | 2.6 | 1.5 |
| Professional & Business Services | 3.1 | 2.0 | 1.1 | 3.0 | 1.2 | 3.3 | 2.3 | 1.3 | 0.5 |
| Education & Health Services | 2.5 | 1.8 | 2.9 | 1.3 | 2.7 | 1.6 | 0.7 | 2.1 | 2.0 |
| Leisure & Hospitality | 2.4 | 1.3 | 1.0 | 2.6 | 1.6 | 2.9 | –4.4 | 0.6 | 1.1 |
| Other Services | 0.7 | 0.3 | –0.2 | –0.1 | 0.5 | 1.6 | –4.7 | 1.3 | 0.9 |
| Government | 1.0 | 0.2 | 1.9 | –0.1 | –0.6 | 0.1 | 1.0 | –0.1 | 0.4 |

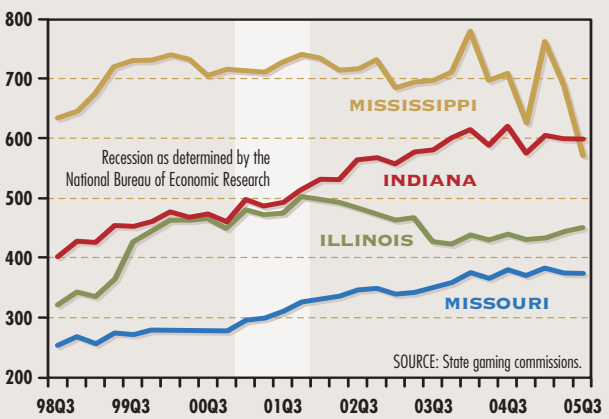
## Unemployment Rates

PERCENT

| | III/2005 | II/2005 | III/2004 |
|---|---|---|---|
| United States | 5.0% | 5.1% | 5.4% |
| Arkansas | 5.0 | 4.9 | 5.7 |
| Illinois | 5.8 | 5.9 | 6.2 |
| Indiana | 5.4 | 5.1 | 5.3 |
| Kentucky | 5.7 | 5.7 | 5.1 |
| Mississippi | 7.9 | 7.0 | 6.5 |
| Missouri | 5.0 | 5.5 | 5.9 |
| Tennessee | 5.3 | 6.0 | 5.3 |

## Adjusted Gross Casino Revenue†

MILLIONS OF DOLLARS




†NOTE: Adjusted gross revenue equals total wagers minus player winnings. Native American casino revenue (Mississippi only) is not included. In 2004 dollars.

THIRD QUARTER

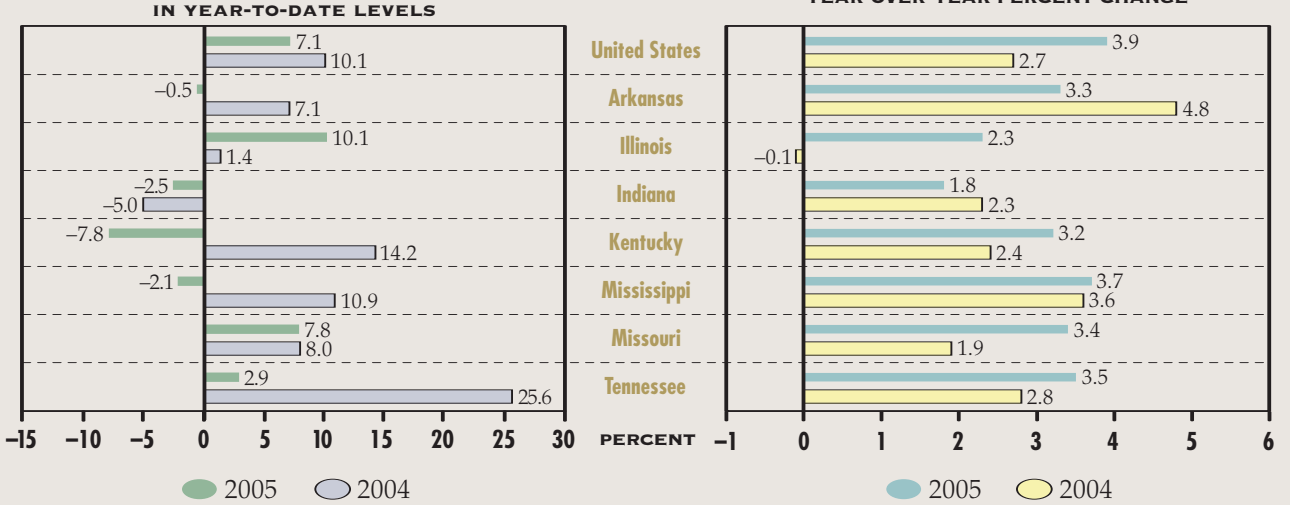
## Housing Permits

YEAR-OVER-YEAR PERCENT CHANGE IN YEAR-TO-DATE LEVELS

SECOND QUARTER

## Real Personal Income‡

YEAR-OVER-YEAR PERCENT CHANGE




*NOTE: Data have been converted from the 1987 Standard Classification (SIC) system basis to a 2002 North American Industry Classification (NAICS) basis.

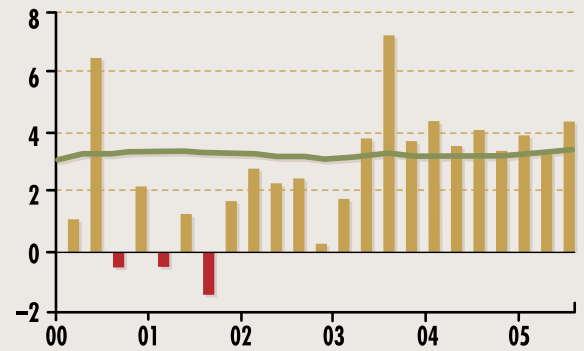
‡NOTE: Real personal income is personal income divided by the PCE chained price index.

# Major Macroeconomic Indicators

Additional charts can be found on the web version of *The Regional Economist*. Go to www.stlouisfed.org/publications/re/2006/a/pdf/1_06_data.pdf.

## Real GDP Growth

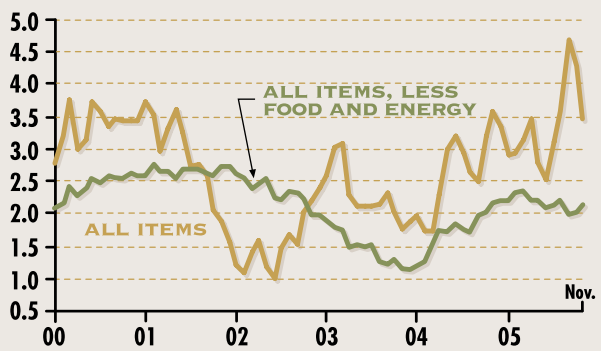
PERCENT




NOTE: Each bar is a one-quarter growth rate (annualized); the green line is the 10-year growth rate.

## Consumer Price Inflation

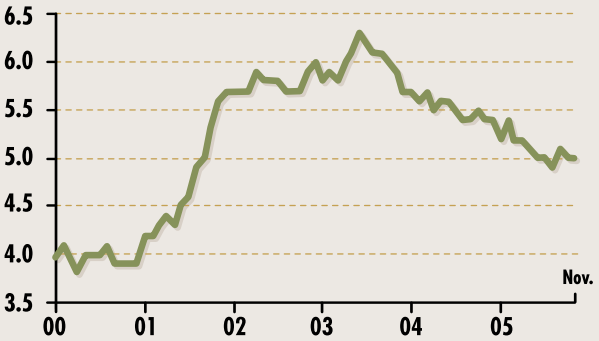
PERCENT




NOTE: Percent change from a year earlier

## Civilian Unemployment Rate

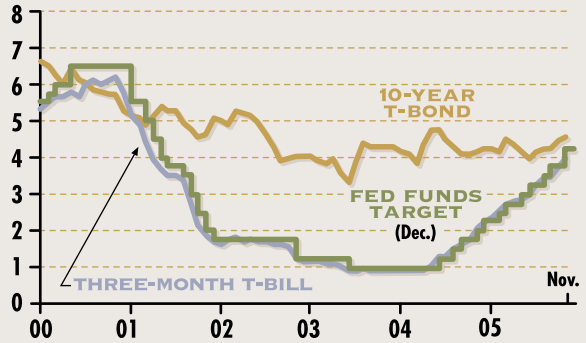
PERCENT




NOTE: Beginning in January 2003, household data reflect revised population controls used in the Current Population Survey.

## Interest Rates

PERCENT

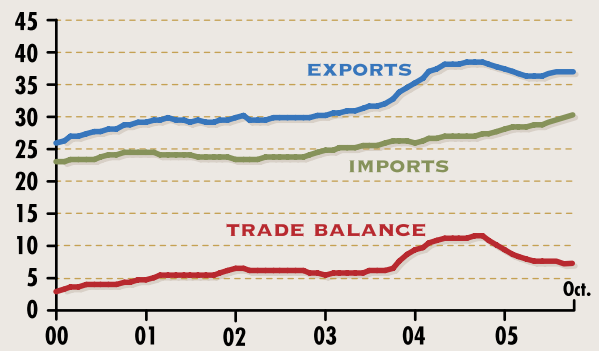



NOTE: Except for the fed funds target, which is end-of-period, data are monthly averages of daily data.

# Farm Sector Indicators

## U.S. Agricultural Trade

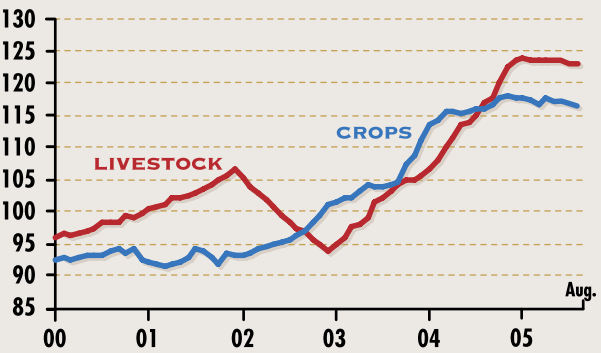
BILLIONS OF DOLLARS




NOTE: Data are aggregated over the past 12 months.

## Farming Cash Receipts

BILLIONS OF DOLLARS




NOTE: Data are aggregated over the past 12 months.

## U.S. Crop and Livestock Prices

INDEX 1990-92=100