

President's Message



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William Poole

PRESIDENT AND CEO,
FEDERAL RESERVE BANK OF ST. LOUIS

Productivity Is the Gift That Keeps On Giving

I do not remember a time in my professional life when uncertainty about productivity growth played such a large role in discussions about the U.S. economic outlook. Surely, some of this uncertainty reflects the fact that, over the short run, rising levels of productivity mean that, even if economic growth is strong, employment gains are harder to come by. Ultimately, though, robust productivity growth means increased real incomes and profits, and lower unit costs—a prescription for rising employment. Given the good job gains over the past few months, it appears that the economy is finally catching up with the theory!

To understand the importance of this point, consider how much larger our nation's future standard of living would be over the next decade if labor productivity continued to grow by 3 percent per year (roughly its annual rate of growth since 1995), vs. the growth of 1.4 percent per year seen from 1973 to 1995. At a growth rate of 3 percent per year, real per capita GDP in the United States would increase from about \$35,700 in 2003 to about \$48,000 by 2013. By contrast, if labor productivity growth were to revert to its earlier subpar performance,

then by 2013 real per capita GDP would rise to only about \$41,050, nearly \$7,000 per person less.

The rise in productivity growth since the mid-1990s raises a couple of important questions that remain unanswered. First, what was behind the increase? Some economists initially believed that faster productivity growth was largely an artifact of the extraordinarily rapid economic growth and tight labor markets that prevailed over the latter part of the 1990s. Thus, when economic conditions cooled, so too would the growth of labor productivity. However, productivity growth not only remained strong through the economic recession of 2001, but has continued to rise into the current business expansion; since the fourth quarter of 2001, productivity growth has averaged about 4.75 percent.

Eventually, most economists came to believe that a good portion of the rise in productivity growth during the latter half of the 1990s could be traced to advances in information technology. In particular, rapid productivity gains in the *production* of semiconductors and computers caused sharp declines in the prices of these types of capital goods, helping to fuel the investment boom of the 1990s and,

ultimately, enabling businesses to expand information sharing and to boost worker productivity. In this vein, more recent research has found that rapid rates of investment in IT goods by industries that are intensive *users* of IT capital, such as service industries, have also been important factors in explaining the acceleration in productivity growth. Put simply, it's doubtful that Wal-Mart could manage the world's largest commercial database using technology from the 1970s or 1980s.

The second unanswered question is potentially more important: Is 3 percent productivity growth sustainable? Sustainability is a difficult issue because labor productivity growth can increase or decrease for long periods of time, for reasons that are sometimes difficult to identify—particularly in real time, when policy judgments must occur. Although projecting productivity growth is hazardous, a projection of about 3 percent seems plausible to me. The nation will benefit enormously if this projection comes to pass.



The Housing Giants in Plain View



BY WILLIAM R. EMMONS, MARK D. VAUGHAN AND TIMOTHY J. YEAGER

In the past few years, the Federal Home Loan Mortgage Corp. (Freddie Mac), the Federal National Mortgage Association (Fannie Mae) and the Federal Home Loan Bank System (FHLBanks) have frequented the headlines in the financial press. These housing giants are government-sponsored enterprises (GSEs), government-chartered but privately owned entities charged with a public-policy mission. Congress has charged Freddie Mac, Fannie Mae and the FHLBanks with increasing mortgage-market liquidity, thereby promoting home ownership, particularly among low- and middle-income households. Between 1992 and 2002, the housing GSEs together grew by nearly 600 percent of assets—about 1.5 times faster than the combined growth of the top five U.S. commercial banks.¹ This rapid growth, many economists argue, has made the health of the financial system dependent on the health of these housing giants. The GSEs counter that the potential risks to the financial system (and, ultimately, to taxpayers) are overblown and that the benefits to homeowners are underappreciated.

In recent years, Congress has debated the proper scope of the GSEs. As this debate continues, taxpayers will need a primer to be able to reach an informed judgment on the pros and cons of housing-GSE activity, particularly because the good the GSEs do—promoting home ownership, for example—is easy to understand, while the risks they pose to the general economy are subtle. ■

The FHLBanks—A Closer Look

The Federal Home Loan Bank System was the first housing GSE. The FHLBanks were established by Congress in 1932 to advance funds against mortgage collateral. At the time, the country was in the midst of an unprecedented wave of depositor runs. Depository institutions faced the risk that loans would have to be liquidated at fire-sale prices to pay off anxious depositors. The FHLBanks enabled their members, primarily savings and loan associations and savings banks, to obtain cash quickly should depositors

come calling. This access to ready cash reduced the liquidity risk of mortgage lending, thereby freeing FHLB members to originate more home loans.

The FHLBanks also allowed the thrifts to offer better terms on mortgage loans. At the time, there was no secondary market for mortgages; so, thrift institutions were forced to hold loans until maturity. Consequently, they made only very short-term loans—three to five years at most. Moreover, these loans were nonamortizing “balloons”—upon maturity, the borrower either repaid the loan in full or paid a fee to renew the

loan. Few families had the incomes necessary to get funding under these terms; so, few families owned their own homes. The FHLBanks stepped in and provided a source of long-term stable funding, thereby allowing member institutions to separate the credit risk and the liquidity risk of mortgage lending.²

The FHLB System consists of 12 regional banks and an oversight board in Washington, D.C.—the Federal Housing Finance Board. Each Home Loan Bank is a private cooperative enterprise owned by member institutions in its district. Membership is voluntary, and FHLBank stock does not trade publicly. Originally, only thrift institutions and insurance companies could join the FHLB System. Over time, Congress broadened access to include commercial banks and credit unions. As of year-end 2003, the system boasted 8,101 members—5,946 commercial banks, 1,344 thrifts, 729 credit unions and 82 insurance companies. At year-end 2003, the FHLBanks held \$822.8 billion in assets, about 62 percent of which were advances to member institutions.

Although advances against mortgage collateral remain the focus of FHLBank activities, the justification for this focus

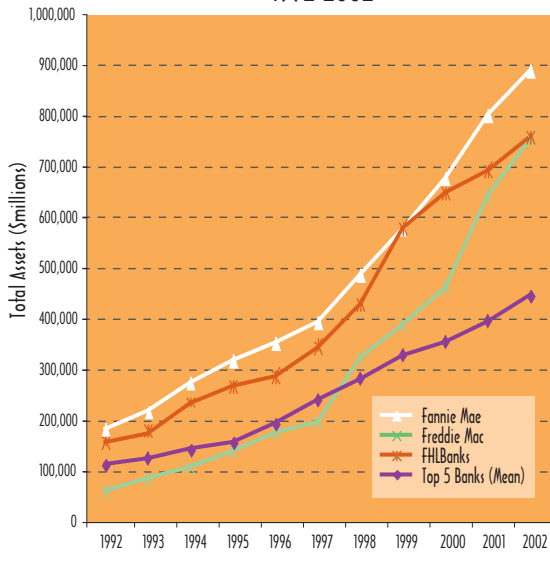
has widened beyond support for home ownership. Now, the system sees its mission as including support for community banking. Community banks are relatively small institutions that specialize in making loans to and taking deposits from small towns or city suburbs. Community bankers find FHLB membership and services attractive because the growth of core deposits—checking and savings accounts that are not very sensitive to interest-rate movements—has lagged behind the growth of loans. FHLB advances are dependable and convenient substitutes for core deposits. Indeed, the FHLBanks offer a wide variety of maturities, from overnight to over 20 years.

Freddie and Fannie—A Closer Look

The other two housing GSEs, Fannie Mae and Freddie Mac, support home ownership in a different way—by purchasing mortgages from originating institutions. Fannie Mae was originally chartered by the Reconstruction Finance Corp. in 1938 to buy mortgages insured by the Federal Housing Authority. Fannie’s purchasing authority and oversight structure evolved over time until 1968, when it assumed its current form as a privately owned, publicly traded, government-sponsored enterprise able to buy most insured and conventional mortgages. Freddie Mac was chartered in 1970 to compete with Fannie Mae. Initially, Freddie was capitalized and owned by the FHLBanks; in 1989, Freddie Mac stock was sold to the public. Since 1992, both Freddie and Fannie have been supervised by a single-purpose regulator housed in the Department of Housing and Urban Development, the Office of Federal Housing Enterprise Oversight.

Freddie Mac and Fannie Mae hold some of the mortgages they buy and “securitize” the rest. Securitization is the transformation of illiquid financial assets—like mortgage loans—into marketable securities. Freddie and Fannie do this by bundling mortgages into pools and selling claims on the pools, guaranteeing the resulting mortgage-backed securities against default. Freddie and Fannie are market leaders in asset securitization—a practice that private “securitizers” have extended to credit-card loans, auto loans and small-business loans. Homeowners benefit from securitization because it allows the credit risk of mortgage lending, which may be critically dependent on local economic conditions, to be diversified across the country. More than half of the single-family mortgages in the United States are securitized, and the lion’s share of this securitization is done by Freddie and Fannie. Indeed, at year-end 2002, the portion of single-fam-

The Amazing Growth of the Mortgage GSEs
1992-2002



ily mortgage debt financed through securitization topped 58 percent; Freddie and Fannie accounted for nearly 40 percent of the overall market. The FHLBanks, by contrast, do not securitize mortgages.³

Freddie and Fannie are also good customers for their own products, buying and holding their mortgage-backed securities along with mortgages in their asset portfolios. As of March 31, 2004, Fannie Mae held mortgage assets of \$880.9 billion and stood behind another \$1.346 trillion in mortgage-backed securities held by outside investors. Of Fannie Mae's mortgage assets, \$232.4 billion was mortgages and another \$648.5 billion was mortgage-backed securities. Freddie Mac's balance sheet has a somewhat similar configuration. Mortgage assets as of March 31, 2004, totaled \$635.6 billion; of this total, \$60.3 billion was mortgage loans, and \$575.2 billion was mortgage-backed securities. Freddie also boasted another \$798.9 billion outstanding in guaranteed mortgage-backed securities.

Government Support for GSEs

The housing GSEs receive considerable support from the federal government for their activities. This support does not take the form of direct subsidies; rather, it is implicit, taking the form of exemption from state and local taxation and securities-registration requirements, as well as a line of credit at the U.S. Treasury. Even more important is the implicit protection of housing-GSE debt against default—implicit, at least, in the eyes of the sellers and buyers of this debt. All three housing GSEs obtain funding by selling debt instruments in the capital markets. Outstanding debt of the three GSEs at year-end 2003 exceeded \$2.4 trillion, compared with publicly held debt of \$4.0 trillion for the federal government. Because of the size of this outstanding debt, much of which is held by U.S. depository institutions, a loss of confidence in Freddie Mac, Fannie Mae or the FHLBanks could send shock waves through the financial system. Therefore, the capital markets have concluded that the federal government most likely would not permit a default. This conclusion is not irrational; the federal government bailed out another government-sponsored enterprise, the Farm Credit System, in the 1980s. Although circulars for housing-GSE debt warn that the instruments do not carry the full faith and credit of the U.S. government, the small yield spreads over comparable Treasury debt suggest that investors believe otherwise. Estimates of the value of the reduced funding costs vary. One recent study concluded that it produced an average of a 40 basis point (0.4 percent)

reduction in the interest rate on Freddie and Fannie debt between 1998 and 2003.⁴

In part because of implicit default guarantees, the housing GSEs have been extremely profitable in recent years. Fannie Mae earned net income of \$7.9 billion during 2003, while Freddie Mac earned \$10.1 billion during 2002 (latest year available)—sufficient to generate returns on equity well above 25 percent in each case. The FHLBanks are cooperative institutions; their profit figures are not as meaningful because part of the profit is distributed to members in the form of low-cost services. Bank and thrift membership in the FHLB System is growing, however, indicating that its owner-members find the combination of services and dividends quite valuable.

Sources of GSE Controversy

Many economists believe that the implicit subsidization of the housing GSEs distorts the allocation of scarce funds in the capital markets. Left alone, these markets would allocate funds to the business and household borrowers capable of putting them to the best use. Cheaper funding for the housing GSEs means more new homes, more larger homes and higher rates of home ownership. On the other hand, this distortion might lead to fewer funds being available for business investment, possibly resulting in slower economic growth.

Of course, accusations of inefficient resource allocation are not unique to the GSEs. Depository institutions receive government subsidies in the form of (underpriced) deposit insurance, access to the payments system and to the Fed's discount window, as well as restrictions on the chartering of new institutions. Hence, one could argue that these subsidies cause too many resources to flow to depository institutions. Three problems are clearly associated with housing GSEs, however: moral-hazard problems related to risk-taking, incomplete pass-through of subsidies intended for mortgage borrowers and risk-shifting to the Federal Deposit Insurance Corp.

Moral Hazard

When a firm can take risks, enjoy the full benefits and avoid the full costs, economists say a moral hazard is present. The hazard is that the firm will respond to these incentives by increasing risk to imprudent levels. Moral hazard is a problem for the housing GSEs. Because the capital markets view their debt as virtually free of default risk, Freddie, Fannie and the FHLBanks can enjoy all the upside of risk-taking and little of the downside. Unlike truly private firms,

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housing GSEs need not pay higher interest rates when they ramp up risk because the markets believe the federal government guarantees the debt. The burden of the extra risk does not, of course, go away just because the housing GSEs do not bear it. Indeed, taxpayers ultimately would bear the extra risk if the federal government were to stand behind a failing GSE.

Taxpayer exposure to risk-taking by housing GSEs is not limited to potential losses from default. Risk-taking by housing GSEs could undermine the stability of the financial system because so many banks depend on them for liquidity. Commercial banks hold more than one-half of their securities portfolios—a key source of emergency liquidity—in the form of mortgage-backed securities and GSE debt.⁵ Moreover, the portion of commercial bank loans backed by real estate is at an all-time high. Banks are comfortable holding mortgage-related securities because these securities can be sold quickly with minimal transaction costs, and banks are comfortable holding real-estate-backed loans because these loans can be pledged against advances from the FHLBanks or sold to Freddie or Fannie. A severe shock to one or more of the housing GSEs could lead to a market lockup, in which investors become reluctant to hold GSEs' direct or indirect obligations. This could, in turn, lead to a temporary suspension of mortgage purchasing, mortgage securitizing or mortgage "advancing," thereby forcing the Federal Reserve to intervene to re-liquify the mortgage markets.⁶

Incomplete Pass-Through of Subsidies

Who actually benefits from the subsidy—homeowners or the employees and shareholders of GSEs? As noted, the implicit guarantee against default lowers housing-GSE funding costs. Lower funding costs can be used to reduce mortgage rates for homeowners or to raise employee salaries or dividends for housing-GSE shareholders. Estimates vary about the division of the subsidy; one recent study estimated that the subsidy to Freddie and Fannie lowered mortgage interest rates by about 7 basis points (0.07 percent), yielding a savings to homeowners of about \$44 billion.⁷ At the same time, the gain to Freddie's and Fannie's shareholders was estimated at \$72 billion. These estimates imply that much of the market value of Freddie Mac and Fannie Mae is traceable to subsidized funding.

Shifting Risk to the FDIC

Of the three housing GSEs, the FHLBanks are the least likely to increase their own risk. The shareholders of the

12 regional FHLBanks are also the customers. Therefore, the cost of excessive risk-taking by an FHLBank would fall on the same parties that enjoy the benefits. Still, the FHLB System may create moral hazard through another channel by implicitly encouraging its members to ramp up risk.

Advances from the FHLBanks may encourage risk-taking at member institutions because the FHLBanks have little incentive to demand higher interest rates when the credit risk of a borrowing bank increases. Advances are heavily collateralized—the market value of mortgage collateral typically covers 125 to 170 percent of the advance. This protection explains why the FHLB System has never lost a penny on an advance. Because advances carry no credit risk, the individual Home Loan banks can set terms that are largely independent of the failure risk of the borrower. Put another way, borrowing from the FHLB enables a bank to avoid any market-imposed penalty for failure risk. Moreover, the FDIC, which covers losses to insured depositors in the event of a bank failure, cannot make up the difference by hiking deposit-insurance premiums. Many observers believe that the current cap—27 cents a year per \$100 of deposits—is too low to deter risk-taking. In short, greater risk-taking by FHLB members implies a higher failure rate over time. A higher failure rate, in turn, implies greater losses to the deposit-insurance fund. Taxpayers ultimately stand behind this fund.⁸

Reform Proposals and Implications

The housing GSEs generally have been successful in achieving their dual housing mandates—increasing liquidity in the secondary mortgage market and encouraging home ownership, especially among low- and middle-income households. Reform proposals, therefore, are typically focused on the risk of GSEs' operations.

A radical approach to reform of the housing GSEs is "true" or "complete" privatization. All of the special privileges and exemptions currently enjoyed by the GSEs, including the lines of credit they have with the Treasury, would be eliminated. The former GSEs and all government representatives would state clearly, publicly and repeatedly that the firms' debts are not guaranteed by the government in full or in part. Provisions for declaring a GSE insolvent and for winding it down would be put into place. Sallie Mae, the Student Loan Marketing Association, provides a roadmap for GSE privatization. Its special status was dismantled piece by piece over several years. It will become the fully privatized SLM Corp. in the near future.

Privatization may address some of the aforementioned moral-hazard issues, and it could eliminate the government subsidy that the housing GSEs currently are failing to pass through to mortgage borrowers in full. Yet, privatization does nothing directly to eliminate the systemic importance of the housing GSEs. That is, a fully privatized Fannie Mae still might be considered too big to fail by the Federal Reserve and by the Treasury.

Other reform proposals include greater regulatory oversight, higher (or more flexible) statutory capital requirements, more transparency of GSE operations and greater financial disclosures. A beefed-up GSE regulator would enjoy stronger powers with respect to on-site examination, setting of both minimum and risk-based capital standards, intervention in internal control and governance functions, and authority to set up a conservatorship or a receivership in the event of default. The new regulator would be able to assess larger dollar penalties for malfeasance than currently allowed, would have discretion over new activities and products proposed by a housing GSE and would be able to order a firm to cease and desist from certain activities. The new regulator might even be empowered to limit the amount of borrowing a GSE could do—an intervention recently suggested by Federal Reserve Chairman Alan Greenspan and being investigated by the Bush administration.

Another approach to reforming the governance of the housing GSEs is to encourage more competition in their market. One initiative already under way is the Mortgage Partnership Finance Program operated by the Federal Home Loan Banks. This unique mortgage program, begun in 1997, competes with the mortgage-backed securities programs offered by Fannie and Freddie. In contrast to the “traditional” mortgage-backed securities allocation of credit risk to the GSEs and interest-rate risk to the buyer of the securities, the FHLBanks’ new program reallocates the risk-sharing. The FHLBanks bear the interest-rate risk, while the originating institution retains the majority of the credit risk. Many banks like this program because they can sell their loans to the FHLBanks for a better price than they can get from Freddie and Fannie.

Another example of increasing competition—in this case, for the FHLBanks—is the reform of the Federal Reserve’s discount-window procedures. The Fed now offers collateralized “primary credit” to highly rated depository institutions with “no questions asked.” This transaction resembles a short-term advance offered by a Federal Home Loan Bank to a depository institution and could eventually reduce the share of such wholesale

funding provided by the FHLBanks.

As already noted, Freddie Mac was created, in part, to provide competition for Fannie Mae. The housing GSEs have been so successful that the process could be repeated today. Granting new GSE charters to create competitors for Fannie and Freddie might force the GSEs to pass through more of the subsidy intended for mortgage borrowers.

Finally, Congress could encourage the housing GSEs to restructure themselves in ways that make them more competitive and transparent, fostering market discipline. Fannie Mae and Freddie Mac operate two distinct lines of business—a mortgage-backed security guaranty business and a retained-mortgage portfolio business. The first involves managing credit risk, while the second involves managing interest rate and liquidity risks. Fannie and Freddie each could be enticed to split themselves into two companies, one that provides only guarantees (as several private bond-insurance companies do) and another that only invests in mortgages (as many private mutual funds and thrifts do). This split would foster greater market discipline on the retained portfolio business because investors could assess the interest rate and liquidity risks independent from the credit risk. Meanwhile, the 12 FHLBanks could be split into several groups to compete with one another nationwide. Currently, the FHLBanks operate in nonoverlapping territories, although interstate branching is blurring these territories.

Time for Change?

The housing GSEs and their many advocates in the financial sector, in Congress and across the country argue that the housing GSEs have yet to cost taxpayers a nickel. They also note that stand-alone ratings of housing-GSE debt, that is, the bond ratings Moody’s and Standard & Poor would award absent implicit federal-government backing, are quite high. Finally, supporters point to the millions of Americans whose dream of home ownership became a reality due to housing-GSE activity. Because this reality is so vivid to most taxpayers, the downside of Fannie Mae, Freddie Mac and the FHLBanks is easy to overlook. An informed judgment about the proper scope of housing-GSE activity must take into account the potential costs of misdirected subsidies and financial instability.⁹

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ENDNOTES

- 1 Data were obtained from three sources—the *Reports of Condition and Income for U.S. Commercial Banks* (various years), the *Report to Congress* of the Office of Federal Housing Enterprise Oversight (June 2003) and the *Financial Report* of the Federal Home Loan Banks (2003).
- 2 See OFHEO’s *Report to Congress*, June 2003, Chapter 2, “The Development of the U.S. Secondary Mortgage Market.”
- 3 FHLBanks do offer a Mortgage Partnership Finance Program in which they purchase home loans directly from banks. This is discussed in the article.
- 4 See Passmore (2003) for further details.
- 5 Agency debt includes but is not limited to housing-GSE debt. Agency debt includes instruments issued by any U.S. government agency—such as the Federal Land Banks, the Veterans Administration and the Government National Mortgage Association.
- 6 Such an intervention occurred after Penn Central Railroad’s default on \$82 million in commercial paper in June 1970. Between June 24 and July 15, commercial paper rollovers became difficult, and outstanding nonbank paper dropped almost 10 percent. The market recovered only after the Fed announced that it would lend freely to banks willing to help customers with maturing commercial paper.
- 7 See Passmore (2003) for further details.
- 8 For more on the hazards posed to the deposit-insurance fund by FHLB activity, see Vaughan and Wheelock (2002) and Stojanovic et al. (2000).
- 9 Good sources include the web sites of Freddie Mac (www.freddiemac.com), Fannie Mae (www.fanniemae.com) and the individual Home Loan Banks (www.fhfb.gov/FHLB/fhlbs_banks.htm).

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ECONOMISTS HAVE LONG BEEN INTERESTED IN WHY SOME COUNTRIES ARE RICH AND WHY SOME COUNTRIES ARE POOR. Differences in labor productivity, inflation, and saving and investment rates are traditional economic explanations for variations in wealth across countries. But when these explanations fall short, researchers sometimes turn to noneconomic factors. Two such factors are a country's legal and social institutions. Religious factors can also help explain variations in economic growth, many economists are increasingly finding. In particular, in countries where large percentages of the population believe in hell, there seem to be less corruption and a higher standard of living.

Conventional Theories

Over time, a country's economic growth is ultimately a function of growth rates in population and labor productivity (output per hour worked). But since population growth tends to change slowly, a nation's labor productivity growth is what ultimately determines whether it will be rich (high productivity growth) or poor (low productivity growth).

What causes productivity growth rates to speed up or slow down? Improvements in the quality of labor, such as a more educated workforce, seem to matter, as do the quantity and quality of the tools and equipment that each worker uses. Also generally deemed important is a country's saving rate, since saving is used to finance investment in capital goods. Other factors that improve a country's prospects, but which are not readily captured by measured labor and capital inputs, are improvements in the distribution of goods and services that arise from just-in-time inventory processes.

Another significant influence seems to be a country's public and private institutions. These include laws and regulations that enforce contracts, guarantee property rights and promote well-developed financial markets.¹ Secure property rights, such as patents and software piracy laws, provide individuals and firms the needed incentive to take economic risks, while deep capital markets better enable financial resources to flow toward promising but unproven technologies.² Also critical are laws that promote good corporate governance by imposing harsh penalties against firms or



government officials that have enriched themselves from illegal or immoral activities. When these public and private institutions are lacking, or not very well-developed, there tend to be high levels of corruption and financial malfeasance, which can create economic uncertainty and destroy wealth. Recent examples of corruption and other misconduct can be found even in advanced economies, as in the United States (Enron, Tyco and WorldCom), Italy (Parmalat) and the Netherlands (Ahold).

While traditional growth theories go far in explaining cross-country patterns of economic growth, some economists believe they do not go far enough. Instead, many researchers are increasingly turning to noneconomic factors, such as religion.

Religion's Early Role

Adam Smith wrote that one of religion's most important contributions to

the economic development process is its value as a moral enforcement mechanism.³ He argued that, in a society imbued with these religious mechanisms, fewer resources will be devoted to determining the veracity of an individual's or firm's business ethics—what economists call the credit or default risk associated with lending to an unknown individual. In short, argued Smith, in societies where there is a widespread belief in God, the values of honesty and integrity are more prevalent.

In a similar fashion, Alexis de Tocqueville, writing about early 19th century America, said that "religion . . . for if it did not impart a taste for freedom, it facilitates the use of free institutions," so that Americans held it "to be indispensable to the maintenance of republican institutions."⁴ To de Tocqueville, a religious country lessened its dependence on the public sector, which not only left a larger amount of resources for the private sector but enhanced the country's moral fiber.

German sociologist Max Weber argued that the work ethic that was inspired by the Protestant Reformation helped to explain the rise of capitalism in Western Europe and America.⁵ According to Weber, capitalism existed in antiquity—for example, in China, India, Rome and Babylon—and even during the Middle Ages, but it couldn't have matched the rise and sustainability of Western European and American capitalism because a "particular ethos was lacking." The ethos that set the Protestant apart from all other religions, and which facilitated economic growth, was an intense commitment to work, dependability, diligence, self-denial, austerity, thrift, punctuality, fulfillment of promises and fidelity to group interests.⁶ Weber's critics instead argued that the Protestants, rather than helping to spur the rise of Western capitalism, were much better than other religious adherents in adapting to this newfound economic structure.⁷

Current Topics, Controversies

According to the secularization hypothesis, as a country's inhabitants become richer and more educated, their faith in religion and religious institutions wanes, and they attend church less regularly. Economists Edward Glaeser and Bruce Sacerdote find some support for this hypothesis. They wrote in 2002 that increased education results in a decrease in the extent of religious beliefs, perhaps

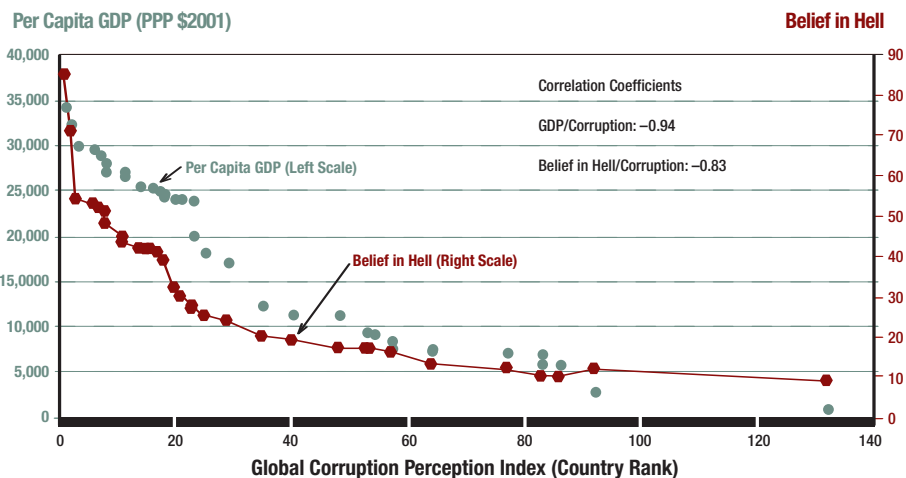
because public school systems tend to reinforce secular education that, the economists argue, conflicts with traditional religious beliefs. By contrast, economist Laurence Iannaccone wrote in 1998 that church attendance rises with education, which suggests that rich Western countries should have higher rates of church attendance. Ultimately, then, the issue is whether religious beliefs, as Weber and Smith argued, can be shown to have an effect on a country's economic growth.

In a paper last year, economists Robert Barro and Rachel McCleary provided evidence that church attendance and economic growth are negatively related, but a belief in hell—their meas-

and that the penalty of breaking this trust was so severe that economic commerce was to a large extent self-regulating.⁸ This parallels de Tocqueville's argument that a minimalist government can prosper in a more-religious society. One extension of this argument is whether more-religious societies are less corrupt. Corruption and graft, which tend to increase economic inefficiencies, act as taxes on economic growth.

As seen in the graph, there is some evidence that countries that have higher levels of per capita real GDP also tend to have lower levels of corruption.⁹ Moreover, the 1990-1993 World Values Survey asked people in 35 countries the following question: "Do you believe in hell?"

CONNECTING GLOBAL CORRUPTION WITH RELIGIOUS BELIEFS AND ECONOMIC OUTCOMES



SOURCE: Inglehart et al. and United Nations Human Development Report (2003).

See the online version of this issue for a list of the 35 countries in the World Values Survey, along with their per capita GDP and percentage of citizens who believe in hell. Go to www.stlouisfed.org/publications/re/2004/c/default.html.

ure of religious beliefs—was positively related to increased economic growth. According to Barro and McCleary, increased church attendance could lower growth because of more resources flowing to the religious sector. However, the net effect would be uncertain because increased church attendance may also increase religious beliefs, which, as Weber believed, raises economic growth by spurring individual behavior and actions that are thought to encourage productivity. Interestingly, Barro and McCleary also found that economic performance was largely unrelated to the dominant religious theology of the nation.

In a recent speech about corporate governance and financial market malfeasance, Federal Reserve Chairman Alan Greenspan argued that trust and reputation were such valued assets to bankers and firms in the 19th century

Belief in hell is the proxy for religious beliefs used by Barro and McCleary. As also seen in the graph, countries that tend to have higher percentages of their population that believe in hell also tend to be less corrupt.¹⁰ These correlations are quite strong. Although they do not provide evidence that one causes the other (causality), they are nonetheless consistent with the Barro and McCleary result that religious beliefs can influence economic outcomes.

What we also see from the graph is that the greater the belief in hell (religious beliefs), the less corrupt a country's public and private institutions tend to be perceived; this perception, in turn, can affect economic growth.

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ENDNOTES

- See Claessens and Laeven (2003) and Rosenberg and Birdzell (1986).
- See North and Weingast (1989).
- See Anderson (1988).
- Quoted in Johnson (1997), p. 390.
- See Weber (1996).
- Noted in Rosenberg and Birdzell (1986).
- See Tawney (1998).
- "Capitalizing Reputation," April 16, 2004. See www.federalreserve.gov/boarddocs/speeches/2004/20040416/default.htm.
- Real GDP per capita, measured in purchasing power parity terms (\$2001), is from the United Nations *Human Development Report 2003*. See <http://hdr.undp.org/reports/global/2003/>.
- Countries (and responses) are listed in Table V170 in the 1990-1993 World Values Survey (Inglehart et al.). The global corruption perceptions index is constructed from a series of polls and surveys posed to a country's residents and business persons, as well as country analysts. Data are from the Global Corruption Report 2004. See www.globalcorruptionreport.org/download/gcr2004/12_Corruption_research_I.pdf.

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LIGHT RAIL

Boon or Boondoggle?

By Molly D. Castelazo
and Thomas A. Garrett



LIGHT-RAIL TRANSIT SYSTEMS HAVE BECOME A COMMON FIXTURE IN MANY AMERICAN CITIES OVER THE PAST SEVERAL DECADES.¹ Proponents of light rail argue that rail transit increases community well-being by creating jobs, boosting economic development and property values, and reducing pollution and traffic congestion—all while providing drivers with an economical alternative to the automobile. Opponents counter that light-rail transit provides little of these benefits to citizens and that, even if some benefits are realized, the costs still outweigh any potential benefits to society. Whether light-rail transit is a boon or a boondoggle depends on whether the societal benefits of light rail outweigh its costs.

The Economics of Transportation Costs

The economic value that society places on light-rail transit is reflected, in part, by people's willingness to pay for it. This is true for most products and services in the economy. To make a profit and stay in business, private companies must offer a product or service whose production costs are below what consumers are willing to pay for it. The public provision of light-rail services, in contrast, costs more than consumers are willing to pay. For example, fare revenue covers only 28.2 percent of operating costs in St. Louis, 19.4 percent of costs in Baltimore and 21.4 percent of costs in Buffalo.² Nationwide, annual light-rail operating costs (\$778.3 million) far exceed fare revenue (\$226.1 million); the balance (\$552.2 million) is paid for with tax dollars. Note that these numbers refer only to operating expenses. With such large annual losses, no light-rail system could possibly recoup its construction costs, which can amount to several hundred million dollars. No privately owned system would ever be operated (or even be built) with such a dismal balance sheet.

One justification for the subsidies paid to build and operate light-rail systems is that light rail will reduce pollution and congestion from automobile traffic. However, building light rail is only a short-run solution to the problems of traffic congestion and pollution. To permanently alleviate the problems of traffic congestion and pollution, policy-makers must address the root cause of both: the inefficient pricing of roadway usage. Traffic congestion and pollution exist

because the costs of driving an automobile are artificially low. Consider the following explanation: A driver's use of the roadway imposes on him certain costs (such as the costs of fuel, time and depreciation of his automobile); the driver himself bears these costs. The driver also imposes costs on others by contributing to pollution and congestion, but the driver does not incur these costs he imposes on other drivers. (Economists term these costs externalities.) Because each driver does not bear the full cost (driver's own cost + externalities), the costs of driving are artificially low; so, each driver overuses the roadway rather than use alternative means of transportation like light rail.

To permanently reduce traffic congestion, policies must be enacted that force each driver to bear the full cost of his or her automobile usage rather than constructing costly public projects that only add to the overall inefficiency of a city's transportation system. Two methods of forcing drivers to bear the full costs of driving are to operate toll roads and to increase motor fuel taxes, with the toll or tax equal to the external cost each driver imposes on other drivers. Of these, toll roads would be more efficient, although also more difficult to administer.

The Cost of Providing Transportation to the Poor

Another justification for expenditures on light-rail systems is that they provide transportation to thousands of low-income individuals who otherwise would find their mobility quite limited. While providing public transit to the poor does produce tangible economic benefits, the following example suggests that light rail is not an efficient means of providing transportation to the poor. Specifically, the example shown in the table demonstrates that the money spent on MetroLink in St. Louis can be used to much better effect.

Based solely on dollar cost, the annual light-rail subsidies could instead be used to buy an environmentally friendly hybrid Toyota Prius every five years for each poor rider and even to pay annual maintenance costs of \$6,000. Increases in pollution would be minimal with the hybrid vehicle, and 7,700 new vehicles on the roadway would result in only a 0.5 percent increase in traffic congestion.³ And there would still be funds left over—about \$49 million per year. These funds could be given to all

other MetroLink riders (amounting to roughly \$1,045 per person per year) and be used for cab fare, bus fare, etc.

Does this example imply that light-rail subsidies to the poor should be abolished? If society obtains some intangible benefit (pride, generosity and compassion, for example) from knowing that light rail provides transportation for the poor, then the costs of light rail could be justified. However, the example in the table also provides transportation for the poor—but it is unlikely that this example would become reality. The MetroLink example demonstrates that there are ways of providing transportation to the poor that are less costly than light rail.

Instead of building light-rail systems to provide transportation for the poor, communities could expand bus service, offer more express bus routes or expand on-demand services; these would still realize the benefits of providing public transportation to the poor. Although these other forms of public transportation are also cost-inefficient compared to the automobile, fewer inefficient public transportation systems would be less costly to society.⁴

Light Rail: Concentrated Benefits and Dispersed Costs

If light rail is not cost-efficient, nor an effective way to reduce pollution and traffic congestion, nor the least costly means of providing transportation to the poor, why do voters continue to approve new taxes for the construction and expansion of light-rail systems?

One economic reason is that the benefits of light rail are highly concentrated, while the costs are widely dispersed. The direct benefits of a light-rail project can be quite large for a relatively small group of people, such as elected officials, environmental groups, labor organizations, engineering and architectural firms,

developers and regional businesses, which often campaign vigorously for the passage of light-rail funding. These groups would benefit from light rail, not from the subsidization of cars and money to all potential riders of light rail.

The costs of light rail, while large in aggregate, are often small when spread over the tax-paying population. (The cost of light rail in St. Louis totals about \$6 per taxpayer annually). A large group of taxpayers facing relatively minimal costs can be persuaded to vote for light rail based on benefits shaped by the interested minority, such as helping the poor, reducing congestion and pollution, and fostering development. Even if these benefits are exaggerated and the taxpayer realizes the cost-ineffectiveness of light rail, it is probably not worth the \$6 for that person to spend significant time lobbying against light rail.

Conclusion

Proponents of light rail argue that it will create jobs, foster economic development and boost property values. While there is some academic evidence of these benefits, it is important to realize that they are not free to society—light rail is kept afloat by taxpayer-funded subsidies that amount to hundreds of millions of dollars each year.

Concentrated benefits and dispersed costs are one economic reason for the existence of inefficient public projects. The many who stand to lose will lose only a little, whereas the few who stand to gain will gain a lot. Of course, if other public projects exist where overall costs outweigh benefits, then \$6 a year per project could add up to quite a hefty boondogger's bill.

Molly D. Castelazo is a research associate and Thomas A. Garrett is a senior economist, both at the Federal Reserve Bank of St. Louis.

ENDNOTES

- There are three types of regional rail transit: heavy rail, commuter rail and light rail. Heavy and commuter rail typically require the construction of subways and elevated tracks and platforms. Light rail usually follows old rail lines, is much cheaper to construct and does not share track space with commercial trains. See Garrett (2004) for a more detailed description. Also see Zaretsky (1994) for more discussion of light rail.
- See Garrett (2004), Table 3.
- The total number of registered vehicles in St. Louis City, St. Louis County and St. Clair County (the most populated areas of the St. Louis metro area) is about 1.4 million. Adding 7,700 to this number results in about a 0.5 percent increase in the number of registered vehicles on the roadways.
- Operating cost per-passenger-mile for an automobile is \$0.414 compared to \$0.544 for light rail. These data are from the National Transit Database, 2002, and from the Federal Highway Administration, 2001.

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COST COMPARISON: LIGHT RAIL SUBSIDIES FOR POOR VS. NEW CARS FOR POOR

1	Annual subsidy to MetroLink ^a	\$133,043,678	
2	Number of poor MetroLink riders (riders without cars) ^b	7,700	
3	12 monthly payments for hybrid Toyota Prius costing \$20,000 assuming 8% interest, \$0 down, for 60 months ^c	\$4,866.36	
4	Annual cost of operating a car ^d	\$6,000	
5	Total payment to poor riders	\$83,670,972	((3) + (4)) x 7,700
6	Funds remaining after car payment	\$49,372,706	(1) - (5)
7	Annual per-rider transfer possible to all other MetroLink riders	\$1,043.82	(6)/47,300

- a** This figure is equal to the total (operating + capital) subsidy to MetroLink in 2001 from local, state and federal sources (\$105,203,678) plus the opportunity cost of the \$348 million federal grant to pay for MetroLink construction. Assuming an 8 percent annual rate of interest, the annual opportunity cost amounts to \$27.84 million. Subsidy data are from the National Transit Database, 2002, and federal grant information is from www.metrostlouis.org/InsideMetro/insidemetrolink.asp.
- b** Computed using data from "A New Way to Grow," page 2, www.cmt-stl.org. Daily ridership on MetroLink is roughly 55,000. The analysis makes the assumption that all MetroLink riders without cars are considered poor (about 14 percent of all riders). There is evidence in support of this assumption. Roughly 30 percent of MetroLink riders earn less than \$25,000 a year (Citizens for Modern Transit, page 5). According to the 2004 Federal Poverty Guidelines (<http://aspe.hhs.gov/poverty/04poverty.shtml>), a family of two earning less than \$12,490 is considered poor. The average family size in the United States is 2.5 persons. Thus, of the 30 percent of MetroLink riders making less than \$25,000 a year, on average roughly half (15 percent) are officially poor, which is close to the 14 percent approximation used in the table.
- c** www.automotive.com/toyota/11/prius.
- d** Data are estimated from American Automobile Association, 2001.

Springfield

BOOMTOWN ONCE A



According to recent U.S. Bureau of Labor statistics, Springfield's Greene County ranked 21st of 315 urban counties for job growth. The magazine *Inc.* rates Springfield No. 15 among medium-sized metro areas in the country for doing business. The Springfield metro area has 27 percent more workers than a decade ago.

Springfield does not rely on one big automobile assembly plant or one big steel mill to carry the city's economy. About 92 percent of area businesses employ fewer than 25 workers. Even so, the city has several large employers, such as Bass Pro, MCI, Kraft Foods, 3M, General Electric and Northrup Grumman. CoxHealth and St. John's Health systems employ a total of 16,100 workers.

"When there happens to be a downturn in one sector of the economy, it always seems like the other sectors can pick up the load and carry it for a while," says Greg Williams, senior vice president of economic development for the Springfield Area Chamber of Commerce.

Brian Fogle, the vice president for community development at Springfield-based Great Southern Bank, adds, "We never have the peaks and valleys of other areas that rely on a sole industry."

Besides a diverse economy, Springfield has one of the top tourist attractions in the state. About 4 million people visit the Bass Pro Shops Outdoor World every year to take care of their fishing, hunting and other outdoors needs.

Johnny Morris founded Bass Pro in 1971 as a small space to sell fishing lures at his father's liquor store here. Now, he operates 21 stores across the country, including the 300,000 square-foot main store in Springfield. Some of the unusual features of this store are a 30,000-gallon saltwater aquarium, a waterfall, a firing range and a barber shop.

In the 1980s, Springfield's population, like that of many other small cities, grew only slightly. The upsurge started about 1990, and new subdivisions continue to go up all across the southern parts of Springfield, as well as in the nearby communities of Nixa and Ozark.

Some people call this phenomenon "the rural rebound." They credit it to the three R's—retirement, recreation and residential.

"Those three R's are being very kind to Springfield," Fogle says. "The 1990s were a tremendous decade for the Ozarks."

New residents come to Springfield from St. Louis, Kansas City, Chicago and California. They come for the affordable housing, good schools, the rolling Ozark

THERE IS HISTORY HERE, SOME OF IT BLOODY. The story goes that in 1865 the legendary gambler and gunfighter "Wild Bill" Hickok shot a man dead in Park Central Square in downtown Springfield, just a few feet from the old *Springfield Patriot* newspaper building. Supposedly, Hickok outdueled David Tutt after the two had argued over a timepiece.

Steve Warlick gets a kick out of telling that tale about tough men and bloodletting. Warlick is an architect and one of Springfield's energetic new entrepreneurs. He and business partners Aaron Buerge and Rich Branham bought the long-shuttered Patriot building on the cheap in 1999. They converted it into the Trolley Grill, a restaurant that opened in February 2003.

Business is good, Warlick says, but the real estate bargains in Park Central Square are getting hard to find.

"It wasn't long ago that you could get property for \$4 a square foot around here," Warlick says. "The going rate now on some properties is about \$10 for a square foot. This area is hot."

Buerge, who became somewhat of a national celebrity after starring in one of *The Bachelor* television programs, adds that, "On a Friday night or a Saturday night, there are people everywhere in the square. The lines are out the door here."

In another part of downtown, cappuccino flows all evening at Mudhouse. The coffee shop draws heavily from Springfield's approximately 40,000 college students. Co-owners Brian King and Rob Weislocher say that downtown Springfield has that energetic feel of a happening place. The boards are coming off buildings. Coffee shops, restaurants and hip retail stores are opening.

The rest of Springfield also is going strong. The Missouri Economic Research and Information Center (MERIC) has reported that Springfield is an "economic engine of Missouri." Springfield accounts for just 3 percent of Missouri's workforce, but the area created one-fourth of all new jobs in the state between March 2002 and March 2003. Kansas City reported a net job loss during that same time, and St. Louis reported just a minimal gain.

Photos (left to right)

Hammons Field, the new home of the Southwest Missouri State University Bears.

Downtown's new look harks back to an earlier golden age.

Scaffolding and construction crews are common sights downtown.

A stuffed bear is just one of the tourist attractions at the Bass Pro Shop.



Mo. AGAIN

By Glen Sparks



Springfield

BY THE NUMBERS

Population	City 151,010 (2002)
	Greene County 241,713 (2001)
Labor Force	City 89,108 (March 2004)
	County 133,707 (March 2004)
Unemployment Rate	City 3.8 (March 2004)
	County 3.4 (March 2004)
Per Capita Personal Income	City 17,711 (2000)
	County 19,185 (2000)

Top Five Employers

CoxHealth.....	8,600
St. John's.....	7,500
SMSU.....	3,310
Wal-Mart stores.....	3,270
Public schools.....	3,200

scenery and the chance to catch plenty of large-mouth bass. Just 30 miles away is Branson, one of the entertainment capitals of the country. The magazine *Employment Review* calls Springfield one of the top 10 places in the United States to work and live.

Williams acknowledges that some long-time residents are angry about the vanishing farmland, about the strip malls and about the traffic snarls during rush hour. He himself laments that it takes him 40 minutes to make the nine-mile commute from his house to the office.

Despite the traffic, he says, "You have a quality of life here that is unequalled in most parts of the country. The *News-Leader* (newspaper) pointed out in an article in 1996 that 33 percent of the people in this

area was razed and now boasts a 12-acre park featuring fountains, walking paths and an amphitheater. Jordan Valley Ice Park has two hockey rinks.

Across the street from the rinks, baseball fans can see the Southwest Missouri State University Bears play at Hammons Field. The privately developed ballpark opened this spring at a cost of \$32 million. The Bears drew an average of 5,206 fans per game this year. The 2003 team drew an average of 1,019 fans. Developers hope to attract a Double-A minor league baseball team to Hammons Field for the 2005 season.

Using state tax credits, the city is converting an old tobacco warehouse and dairy plant into the Creamery Arts Center. The Discovery Center children's museum is undergoing a major expansion thanks to a \$2.6 million federal appropriation. The city and SMSU hope to get state and federal grants to turn an old mill into an incubator for businesses involved in such things as advanced manufacturing, bio-systems software engineering and nanotechnologies.

Fogle credits Vision 20/20 for getting the redevelopment process going. Residents and city officials participated in the long-range planning program, which was started by the city and business leaders in the mid-1990s to rebuild Center City. Thanks in part to Vision 20/20, voters passed a hotel/motel tax in 1998 to fund projects such as the ice rinks.

"Vision 20/20 was the chief catalyst for our redevelopment," Fogle says. "That really took us to another level. Back in the late '70s, there was nothing going on in downtown. We've had an energetic group of developers willing to take risk. Now, we're about out of space.

"We talk a lot about the '50s being the golden era for Springfield," Fogle adds. "That was a time of tremendous economic growth. We got Kraft and Zenith and GE to come to our city. Now, there are several of us who've talked about these times being the second golden age of Springfield." ■

Glen Sparks is a free-lance writer.



area had been here less than five years. That's a lot of new wealth. Plus, just imagine the energy and synergy that you get from something like that."

Back downtown, developers are taking advantage of state and federal historic tax credits, property tax abatement, gap financing and loans of up to \$40,000 to make facade improvements. A low-interest loan program, using Community Development Block Grant (CDBG) funds, has provided help for many business people. Since 1997, about \$125 million has been invested in Center City, the area that includes downtown and the surrounding urban core.

"In the last few years, the area has started to boom," said Barb Baker, the manager of the Community Improvement District in Springfield. "Now, we're running out of buildings for people to buy."

One of the great success stories downtown is Jordan Valley. The old industrial



National and District Data

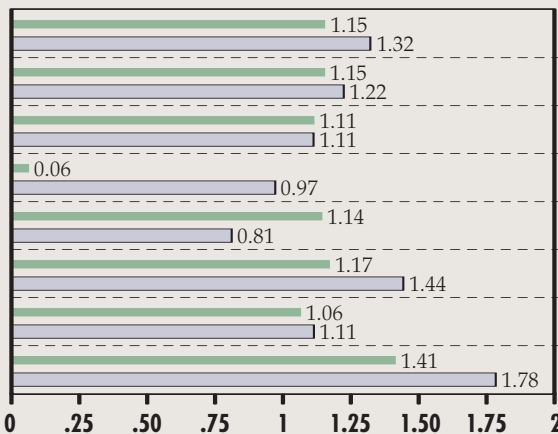
SELECTED INDICATORS OF THE NATIONAL ECONOMY AND BANKING, AGRICULTURAL AND BUSINESS CONDITIONS IN THE EIGHTH FEDERAL RESERVE DISTRICT

Commercial Bank Performance Ratios

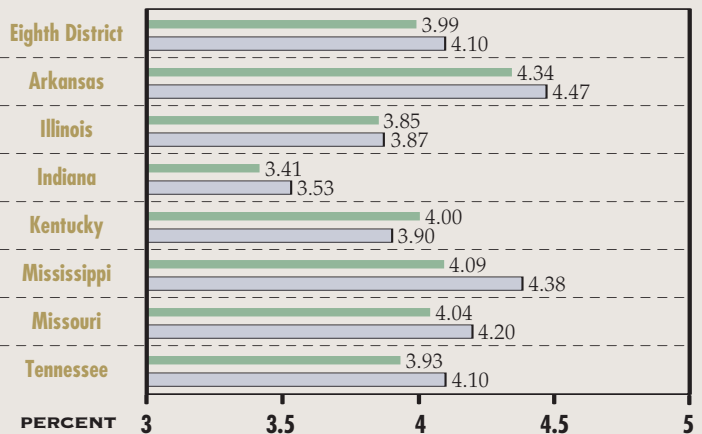
FIRST QUARTER 2004

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*	1.41	1.19	1.14	1.32	1.22	1.42	1.31
Net Interest Margin*	3.89	4.40	4.43	4.27	4.36	4.05	4.21	3.75
Nonperforming Loan Ratio	1.09	0.88	0.95	0.83	0.90	0.90	0.90	1.18
Loan Loss Reserve Ratio	1.70	1.38	1.41	1.45	1.43	1.65	1.53	1.78

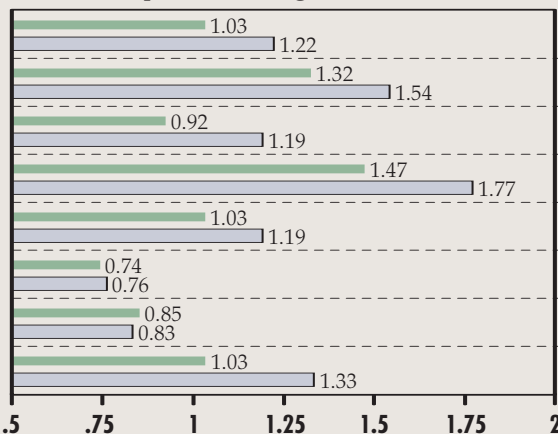
Return on Average Assets*



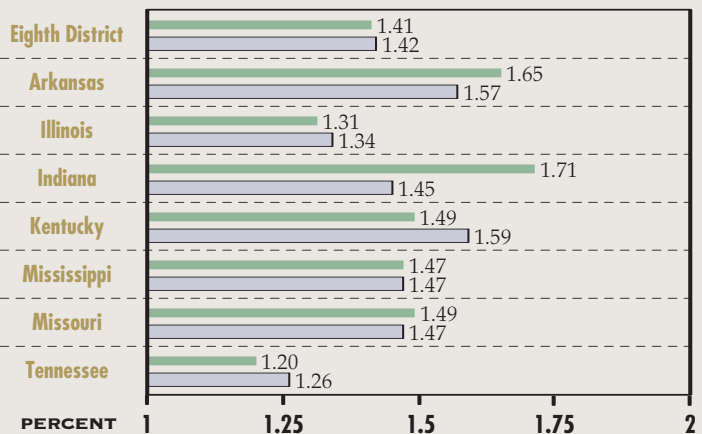
Net Interest Margin*



Nonperforming Loan Ratio



Loan Loss Reserve Ratio



● First Quarter 2004

○ First Quarter 2003

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

FIRST QUARTER 2004									
	UNITED STATES	EIGHTH DISTRICT	ARKANSAS	ILLINOIS	INDIANA	KENTUCKY	MISSISSIPPI	MISSOURI	TENNESSEE
Total Nonagricultural	0.2%	0.3%	0.3%	-0.3%	0.7%	0.7%	0.4%	0.2%	1.1%
Natural Resources/Mining	0.3	0.0	1.5	1.5	4.0	-3.8	1.6	1.5	0.8
Construction	2.3	1.4	-1.8	0.2	5.8	5.5	-5.2	0.6	1.3
Manufacturing	-3.1	-1.7	-2.4	-2.7	-2.1	-0.7	-1.4	-1.0	-0.6
Trade/Transportation/Utilities	0.0	0.1	0.9	-0.5	0.2	0.8	-0.1	-0.5	1.0
Information	-2.3	-2.6	-0.3	-3.3	0.1	-2.0	-5.2	-4.0	-1.7
Financial Activities	0.7	1.0	1.7	0.6	0.3	2.4	1.6	1.7	0.7
Professional & Business Services	1.7	0.5	-0.2	-0.5	2.2	0.7	4.1	-0.6	1.9
Educational & Health Services	1.9	1.8	2.5	1.3	2.0	1.1	1.7	2.0	2.3
Leisure & Hospitality	0.9	2.8	0.9	2.5	3.1	4.3	1.0	3.7	2.6
Other Services	-0.3	0.1	0.1	-0.3	-0.5	2.8	-3.7	0.7	0.6
Government	-0.4	-0.2	1.0	-0.9	0.3	-2.0	1.8	-0.8	1.0

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

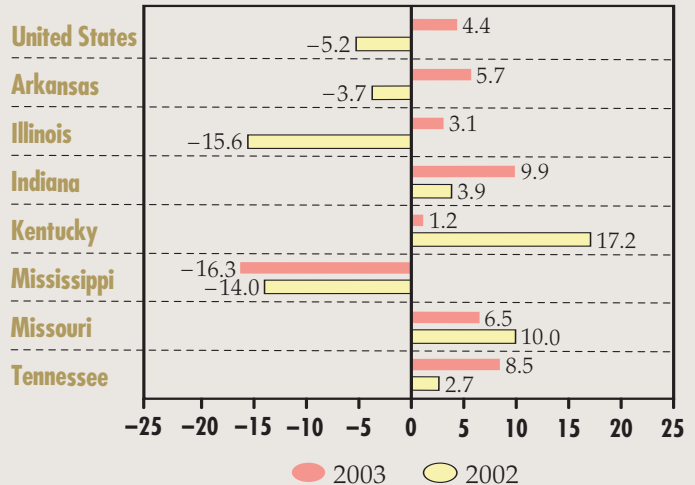
Unemployment Rates

PERCENT

	I/2004	IV/2003	I/2003
United States	5.6%	5.9%	5.8%
Arkansas	5.4	6.5	5.7
Illinois	6.2	6.7	6.6
Indiana	5.2	5.1	5.0
Kentucky	5.4	6.0	6.1
Mississippi	5.1	5.8	6.4
Missouri	4.9	5.4	5.6
Tennessee	5.0	6.1	5.4

Exports

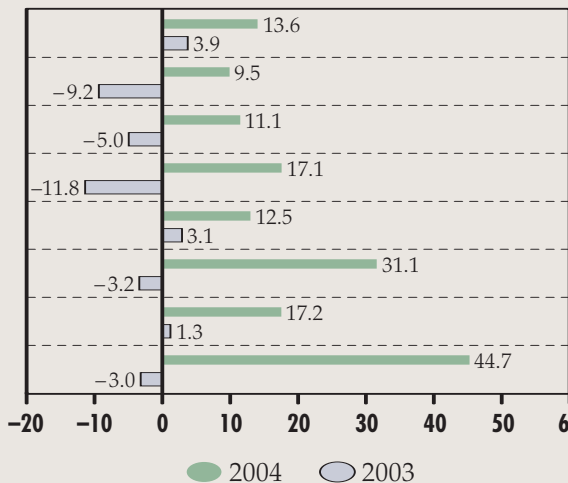
YEAR-OVER-YEAR PERCENT CHANGE



FIRST QUARTER

Housing Permits

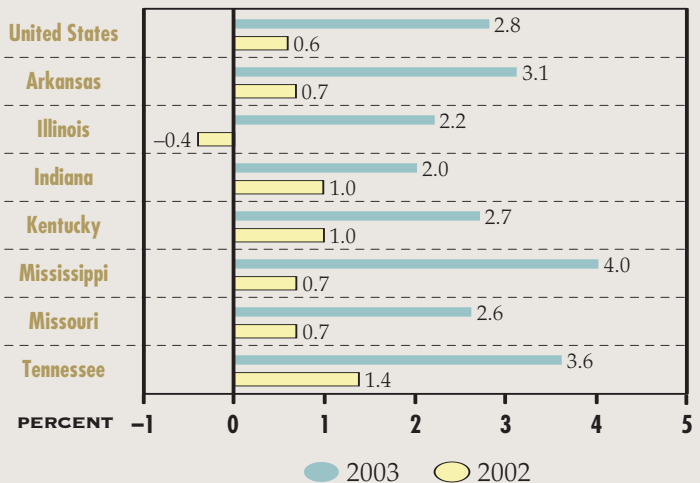
YEAR-OVER-YEAR PERCENT CHANGE IN YEAR-TO-DATE LEVELS



FOURTH QUARTER

Real Personal Income[†]

YEAR-OVER-YEAR PERCENT CHANGE

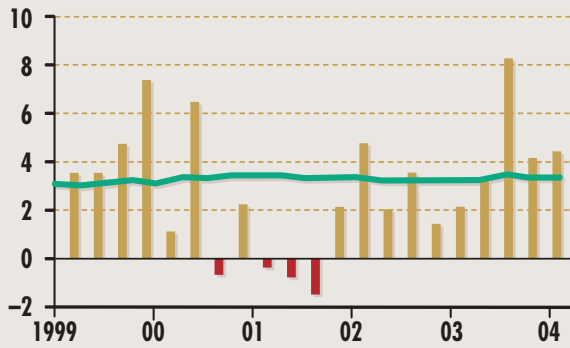


[†]NOTE: Real personal income is personal income divided by the PCE chained price index.

Major Macroeconomic Indicators

Real GDP Growth

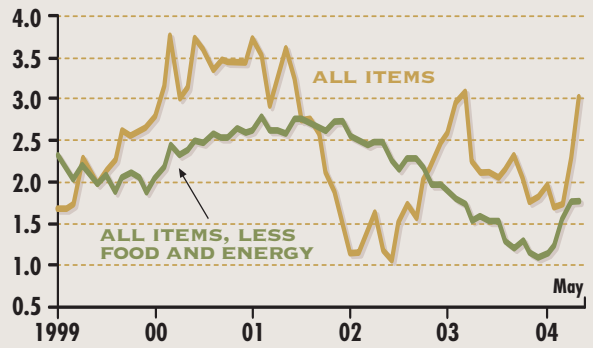
PERCENT



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

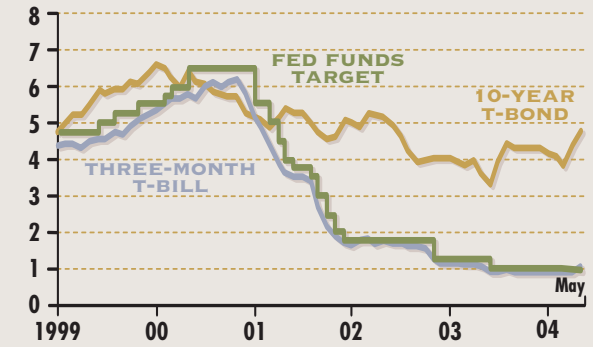
PERCENT



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

Interest Rates

PERCENT

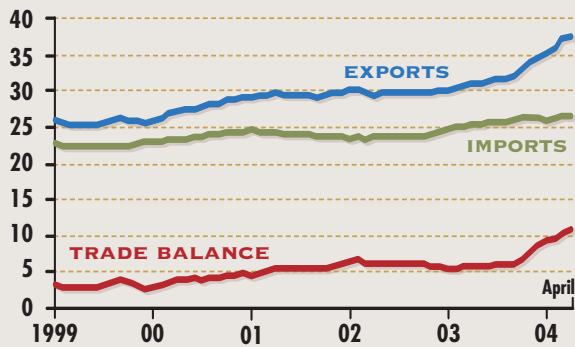


NOTE: Except for the fed funds target, which is end-of-period, data are monthly averages of daily data.

Farm Sector Indicators

U.S. Agricultural Trade

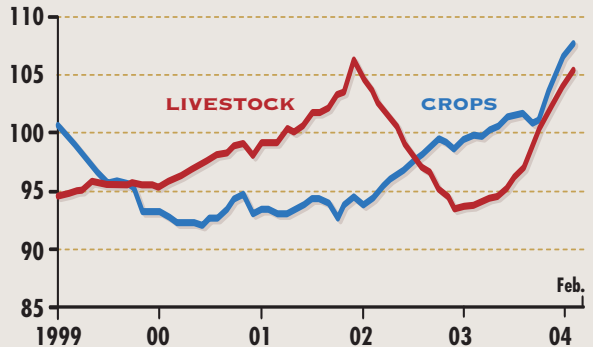
BILLIONS OF DOLLARS



NOTE: Data are aggregated over the past 12 months. Beginning with December 1999 data, series are based on the new NAICS product codes.

Farming Cash Receipts

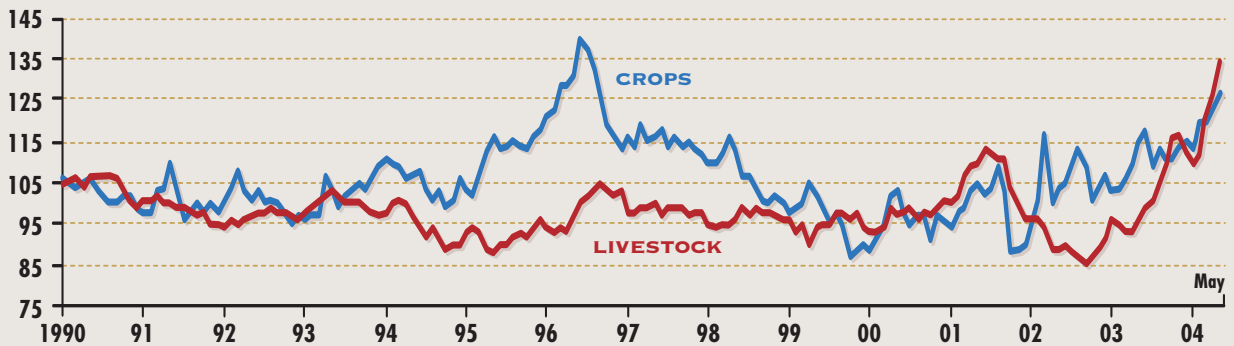
BILLIONS OF DOLLARS



NOTE: Data are aggregated over the past 12 months.

U.S. Crop and Livestock Prices

INDEX 1990-92=100



National and District Overview

WAITING ON THE FED

The U.S. economy continues to improve, although a palpable rise in inflation, driven in part by sharp increases in energy prices, has put a damper on an otherwise favorable outlook for the remainder of the year. With economic growth expected to remain about 4 percent over the final three quarters of 2004 and with firms starting to hire new employees at a faster rate, financial markets and forecasters expect the Federal Open Market Committee to unwind its self-described accommodative policy.

Help Wanted

Real GDP rose at a 4.4 percent annual rate in the first quarter—modestly stronger than the 4.1 percent growth seen during the fourth quarter of 2003. Over the past four quarters, real GDP has increased 5 percent—the strongest four-quarter growth in almost 20 years. Economic activity in the first quarter was paced by solid increases in consumer outlays for nondurable goods and services, by business expenditures for equipment and software, and by real defense outlays. The first quarter also saw a pick-up in job growth—nonfarm payrolls rose at their fastest rate in nearly four years—and continued robust labor productivity growth (3.5 percent). Despite improving economic conditions, firms remain reluctant to boost their inventories relative to their sales.

Nonfarm payroll employment rose in May by more than expected (248,000) for the third consecutive month, while in the same month, despite the marked rise in gasoline prices, automobile and light truck sales rose by 9 percent, and large retailers reported better-than-expected sales. Prospects for fixed investment by businesses remain solid, as new



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orders for nondefense capital goods were up about 12.5 percent in April from a year earlier. In response to increased expenditures by households and businesses, industrial production rose in April at a 10 percent annual rate, and the Institute for Supply Management's manufacturing and nonmanufacturing business indexes showed further gains in economic activity in May. Finally, foreign demand for U.S.-produced goods and services remains strong; exports in March were up almost 15 percent from a year earlier.

Although housing starts and new home sales slipped in April and forecasters expect a less ebullient housing market for the rest of the year in response to rising mortgage interest rates, real GDP growth is expected to average roughly 4 percent over the final three quarters of 2004, according to the Blue Chip forecast. This forecast also assumes some moderation in crude oil prices during the remainder of the year. Thus, if oil prices head higher, forecasters will probably temper their enthusiasm.

Rate Hike: When and How Much?

Noting improving economic conditions at their May 4 FOMC meeting, Fed policy-makers said that their accommodative policy stance "can be removed at a pace that is likely to be

measured." In other words, the days of a 1 percent federal funds target rate are drawing to a close. One concern is that inflation is running at a pace that is modestly more than what Fed policy-makers were expecting at the beginning of the year. Reflecting a sharp rise in oil

prices, the personal consumption expenditures (PCE) price index has risen at a 3 percent annual rate over the first four months of 2004, after rising at only about a 1.5 percent rate over the second half of 2003. However, price increases have not solely been an energy event, as the core PCE inflation rate (which excludes food and energy prices) has risen at about a 1.75 percent rate over the first four months of 2004 after rising at a 1.1 percent rate over the second half of 2003.

Another concern is keeping long-term inflation expectations in check. On this score, the evidence is mixed. Although participants in the Survey of Professional Forecasters continue to expect CPI inflation to average 2.5 percent over the next 10 years, where it has mostly remained since 1997, market-based measures (yield spreads between nominal and inflation-protected 10-year Treasury securities) have been creeping steadily higher over the past year and are currently, as of early June, at about 2.75 percent vs. 1.6 percent a year earlier.

With employment rising, economic growth expanding at a robust rate and inflation tacking modestly higher, it seems clear that a 1 percent target rate for federal funds is inconsistent with low and stable inflation. Based on current federal funds futures rate yields, the financial markets appear to agree.

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