Checkpoint

The Federal Reserve's Role in Ensuring Safety, Soundness and Competitiveness in a Consolidating Banking Industry

FEDERAL RESERVE BANK OF ST. LOUIS

Annual Report

2006

Not What You Might Expect

Banking mergers and acquisitions have occurred throughout our nation's history. Over the past two decades, they have led to an unprecedented reduction in the number of banking institutions. Despite fears to the contrary, institutions remain safe and sound, and the industry is as competitive as ever in local markets. The Federal Reserve works to ensure and enforce such outcomes in order to keep stability and confidence high within the banking industry.

William Poole
President and CEO
Federal Reserve Bank of St. Louis

America's banking landscape has changed dramatically over the past 20 years. The change started with banks being allowed to branch unfettered within state borders. The process expanded to banks being allowed, for the first time in our nation's history, to branch unrestricted across state borders. Permitting intrastate and interstate banking and branching led to thousands of mergers and acquisitions in the industry. Today, the number of banking organizations is about half of what it was in the 1980s. Still, thousands of banks remain, some as very large, multistate organizations and many others as small or moderate-sized institutions. All the while, new banks are created each year.

With so many banks disappearing, you might believe that banking competition must also be disappearing. But this is actually not the case. Fewer banks overall does not have to mean less banking competition in your neighborhood or mine. In fact, one of the Federal Reserve's jobs is to make sure that banking competition stays vigorous in local markets, even as the industry consolidates.

You might also believe that the consolidation trend has caused some banks to jeopardize their safety and soundness. This, too, is certainly not the case. Another of the Fed's jobs is to make certain that banks remain safe and sound, and that they are complying with all laws and regulations, even as the industry consolidates.

This year's annual report describes the role we play in monitoring, evaluating and overseeing mergers and acquisitions in the banking industry to ensure that consolidation occurs in an orderly and regulated manner. That is, we will describe how we act as a "checkpoint" on the road of an evolving banking landscape.

There was a time when American banking was quite different than it is today. In the 19th and early 20th centuries, our banking system was a model of active competition among tens of thousands of small banks. Unfortunately, our environment of many small, independent banks prevented these institutions from achieving maximum efficiency, and the system turned out to be fragile. Some banks failed, even in relatively good economic times. Many failed when economic conditions deteriorated. The Great Depression resulted in almost half of all U.S. banks failing, which devastated the economy. This period in U.S. history illustrates vividly that the number of banking institutions reveals little about the effectiveness or efficiency of the banking industry.

Although the total number of institutions has recently been dropping, these declines, fueled chiefly by intrastate and interstate banking and branching, have enabled banks to structure themselves more efficiently than ever before. No merger or acquisition, however, can proceed without the Federal Reserve or another regulator first reviewing, adjusting and, ultimately, approving or denying it.

Our annual report examines this less well-known, but very important, role that the Federal Reserve plays in making sure that such mergers and acquisitions do not endanger a bank's safety and soundness, compliance with laws and regulations, or the level of banking competition that is vital to economic welfare. Our goal is to make certain that the banking industry evolves in a way that preserves the benefits of competition and ensures a safe and sound banking system. So, even if your bank has changed owners three times in the past two years, rest assured that the Fed (or another regulator) has scrutinized each transaction to make sure that the best interests of the industry, the local market, the bank and you are upheld.

I. Introduction

"What's Happening to All the Banks around Here?"

It seems to be happening all the time, and everywhere. You can't help but notice. It has probably already occurred in your town. You open the newspaper one morning, and the headline glares at you: "Another Local Bank Is Sold!" Sometimes you recognize the buyer—a bank in town that you've heard of or an out-of-town bank that, well, everyone has heard of. Other times, though, the buyer is unfamiliar. All you know is that yet another bank is going to have a new owner.

You read further into the article. It says that the same buyer bought another bank in town a little more than a year ago. You ask yourself, "What's happening to all the banks around here?"

You recall a litany of other recent headlines—other transactions. You remember that Magna Bank became Union Planters, which then became Regions. Boatmen's became NationsBank, which became Bank of America. Mark Twain became Mercantile, which became Firstar, which then became U.S. Bank. Allegiant became National City; National Bank of Commerce and NBC Bank both became SunTrust …

You begin to wonder if competition among banks is disappearing. And, by the way, isn't the government supposed to do something about this?

"Government," in this case, actually refers to the Federal Reserve System, which has jurisdiction over many of the banking industry's merger and acquisition proposals. The St. Louis Fed is one of the 12 banks in the Federal Reserve, which is one of four primary federal regulators of depository institutions. The other regulators are the Office of the Comptroller of the Currency, the Federal Deposit Insurance Corp. and the Office of Thrift Supervision. Another federal agency, the National Credit Union Administration, regulates credit unions, which are very similar to depository institutions in some ways. Beyond the four primary regulators, the Department of Justice and the Federal Trade Commission are also responsible for enforcing the nation's antitrust laws.

So, is the Fed doing anything about all the banking mergers and acquisitions that are taking place? Yes. We thoroughly review and analyze proposed banking combinations, whether or not they make front-page news, to ensure that they satisfy all of the requirements set out in the antitrust and banking laws. The provisions cover financial condition, managerial resources, anti-money laundering safeguards, community convenience and needs, and competition, and they are spelled out in

detailed regulations so that everyone knows what they are up-front. Only after all of these requirements have been met to our satisfaction can we approve any deal.

Why do we go through such a thorough process for each transaction? Why do we care? On one level, we do it because the law requires us to. But there is a deeper reason, a more fundamental financial reason that explains why we should be, and are, involved. As the nation's central bank, the Federal Reserve is responsible for maintaining financial stability—that is, ensuring both the ongoing and smooth functioning of the nation's payments systems and financial markets, and a steady supply of credit to qualified borrowers—and the banking system plays a vital role in such stability. We pay attention to any shock that potentially affects the banking industry's normal operations in the financial and payments markets. It should, therefore, not be surprising that the Fed is heavily responsible and accountable for monitoring, evaluating and overseeing the banking industry's consolidation process.

This essay will examine the methods we employ to ensure that this process takes place in a regulated and orderly manner. We will demonstrate that the Federal Reserve operates as a checkpoint on the road of consolidation. But first, let's take a closer look at exactly what banking consolidation is and how it has changed the nation's banking landscape.

FEDERAL BANKING REGULATORS

AGENCY		REGULATES
Federal Reserve System	Fed	Bank holding companies and state-chartered commercial banks that are Fed members
Office of the Comptroller of the Currency	OCC	Commercial banks with national charters
Federal Deposit Insurance Corp.	FDIC	State-chartered commercial banks that are not Fed members
Office of Thrift Supervision	OTS	Thrifts
National Credit Union Administration	NCUA	Credit unions
Department of Justice	DOJ	Enforces all of the nation's antitrust laws
Federal Trade Commission	FTC	Enforces all of the nation's antitrust laws

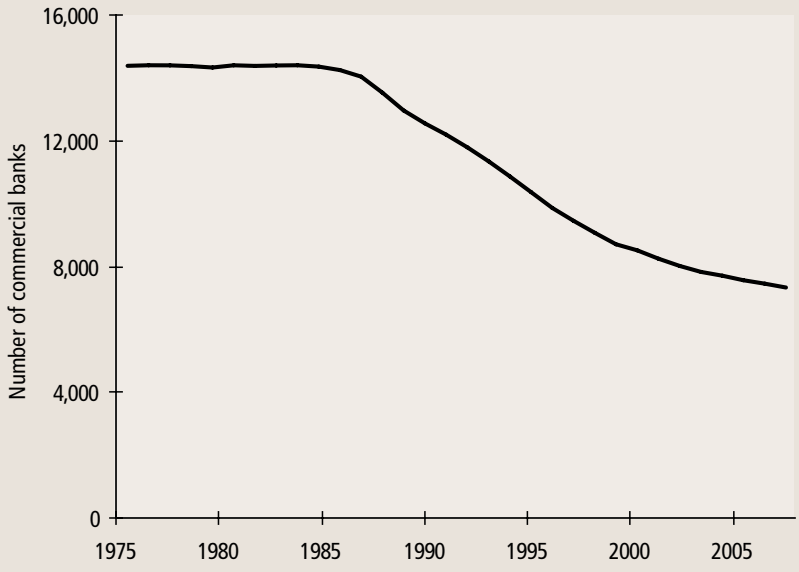
II. The Consolidation Conundrum

Can Fewer Banks Actually Lead to More Banking Competition?

Appearances Can Be Deceiving

Figures 1 and 2 reveal that even though the number of banks has declined over the past two decades, banking competition in local markets has actually increased. Remember, lower market concentration means higher competition.

Figure 1
The Declining Number of Commercial Banks in the United States



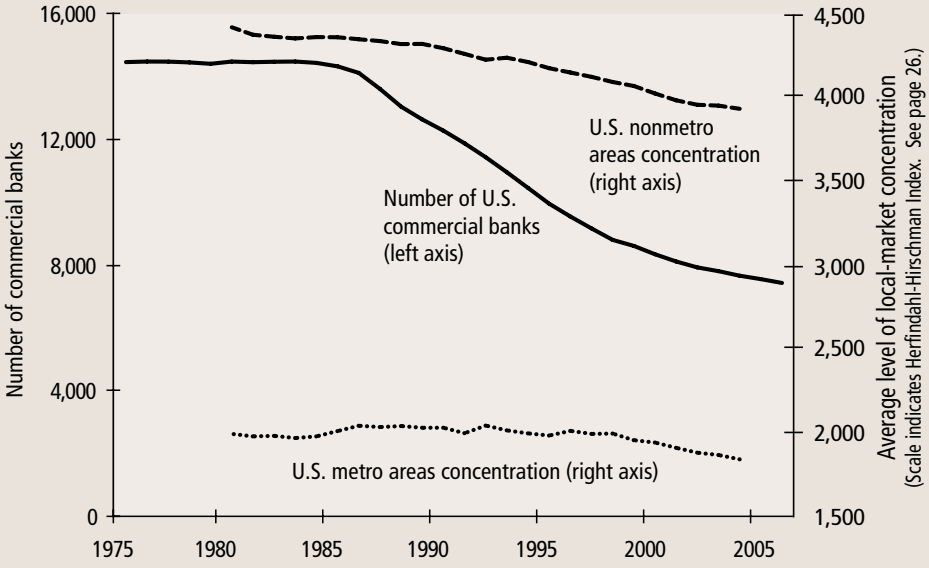
Source: Federal Deposit Insurance Corporation, Quarterly Banking Profile

Although banking mergers and acquisitions have occurred throughout U.S. history, the wholesale decline in the number of banking institutions—or consolidation in the U.S. banking industry—is a more recent phenomenon. As illustrated in Figure 1, the total number of commercial banks in the United States, which had been relatively steady through the 1970s and mid-1980s, has now shrunk to about half of what it was just 20 years ago—from more than 14,000 banks in 1986 to fewer than 8,000 in 2006. The total number of savings institutions (also known as thrifts, savings banks, or savings and loan associations), though not displayed in the figure, has followed an even more dramatic path—shrinking from almost 3,700 thrifts in 1986 to fewer than 1,300 in 2006, or about a third of the 1986 level.

All told, these figures mean that more than 6,000 banks (and about 2,400 thrifts) have disappeared over the 20-year period. Indeed, "What's happening to all the banks around here?" is an appropriate question. It's not a huge leap to conclude that this trend must have led to more concentration—that is, less competition—in banking. The reality, however, is quite different.

As shown in Figure 2, at the same time the total number of U.S. commercial banks was declining, a common measure of banking market concentration shows that the average levels of deposit-market concentration in U.S. metropolitan areas and nonmetropolitan areas (that is, counties not in metro areas) were ***also declining***

Figure 2
Declining Average Level of Local Market Concentration in U.S. Metropolitan and Nonmetropolitan Areas



Sources: Number of commercial banks: Federal Deposit Insurance Corporation, Quarterly Banking Profile; Indexes of concentration: FDIC Summary of Deposits and Board of Governors

moderately. In other words, as the total number of institutions was declining, banking competition in both metropolitan and rural areas was actually starting to increase. How can this be?

We can answer this question by pointing to a fundamental industry tenet: Banks compete for customers in local markets. Although some people or small businesses look beyond their local areas for certain financial services—for example, large-denomination time deposits or investment products—surveys and research continue to show that customers predominantly choose banks near where they live or work. Households and small businesses almost exclusively get financial services like checking or other transaction accounts (their primary account) and small-business loans from local financial firms, most often from banks, though sometimes from a thrift or credit union. Regardless of the type of institution, however, the underlying fact still holds: The institution of choice is in the customer's neighborhood. Thus, when we talk about banking competition and the effect of consolidation on it, we need to examine what is happening in local banking markets, not national or statewide markets. To better understand how local banking markets explain the consolidation conundrum, see "Thinking Nationally, Competing Locally," a sidebar series that begins on page 13.

Banks compete for customers in local markets. Although some people or small businesses look beyond their local areas for certain financial services—for example, large-denomination time deposits or investment products—surveys and research continue to show that customers predominantly choose banks near where they live or work.

In addition, at the same time the banking industry has been losing institutions, it has been making huge advancements in technology, dramatically changing how customers access their bank accounts. Moreover, changes to interstate branching laws have allowed banks to open branches where they couldn't before. Let's examine these effects a bit more closely.

Improved Accessibility Due to Technology

During the period over which the total number of banking institutions was declining, tremendous technological advances were taking place in the industry that, today, we

sometimes take for granted. ATMs give customers access to their accounts and to cash 24 hours a day, and ATM networks have made it possible for banks to locate machines away from branches, all vastly improving customer convenience and accessibility. ATM networks have also enabled smaller banks to give their customers access to any machine on the network, whether owned by the bank or not. Furthermore, ATM availability has increased dramatically since 1986, when there were about 64,000 machines nationwide. By 2004, that number had climbed to upwards of 383,000 units.

Today, many ATM features are found on bank web sites. Online, a customer is able to access his or her accounts, perform a multitude of transactions and, in many cases, pay bills. In such an environment, even a small institution can compete with a much larger one. Some banks have even taken the step of offering Internet-only accounts, which are paying higher interest rates to depositors. It's not a big step from here to Internet-only banks—that is, banks without any brick-and-mortar offices for customers to visit. A few Internet-only banks exist already.

A Historic First: Interstate Branching

While the total number of independent banking institutions has declined, the number of branches has skyrocketed—from about 66,000 in 1986 to almost 86,000 in 2006. Part of this increase comes from the introduction of unrestricted nationwide interstate branching, which was permitted for the first time in the mid-1990s. Interstate branching has allowed banks to streamline their organizations like never before, opening the door to a new type of bank—one that can operate offices in many different states simultaneously, all as branches of one bank under one bank charter. Previously, the same institution would have had to manage offices in different states as separate banks, each with its own bank charter. In addition, interstate branching, by allowing numerous banking organizations to eliminate many managerial and other back-office redundancies, has improved organizations' overall operating efficiency. And although these mergers have reduced the overall number of institutions, they have had no effect on the number of branches.

Combine interstate branching with the technological advances mentioned above, and you end up with a very different banking landscape than 20 years ago, one in which hundreds of multistate banks span regions of the country or even the entire nation. The modern environment gives customers more access points to banking products and services than ever before.

At the same time, the law that permitted interstate branching also restricted any bank from purchasing another if, in the end, it would control more than 10 percent of total U.S. deposits. This prohibition, however, does not prevent a bank from having more than 10 percent of national deposits if the increase occurs through its own growth. So far, only Bank of America has come close to that 10-percent mark—at the end of the first quarter of 2007, it controlled about 9 percent of U.S. deposits. JPMorgan Chase, the second largest institution, trailed Bank of America with 7.1 percent of U.S. deposits, followed by Wachovia with 5.8 percent. State laws also cap the share of total deposits any institution can control in a state, though the thresholds are often between 25 percent and 30 percent.

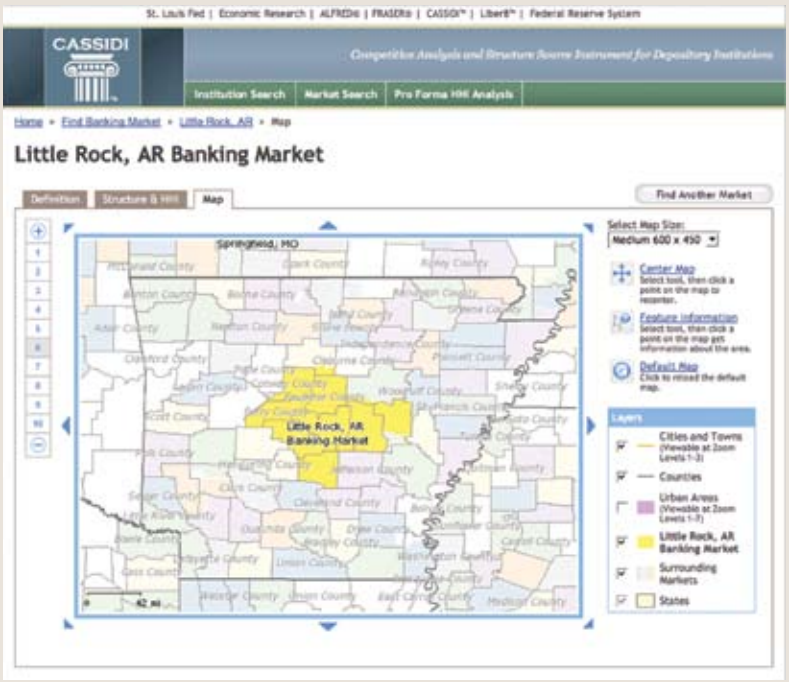
Thinking Nationally, Competing Locally

How Does the Fed Define Local Banking Markets?

Each of the 12 Federal Reserve banks, in consultation with the Board of Governors of the Federal Reserve System, is responsible for defining the boundaries of local banking markets within its district. The other federal banking regulators usually use these definitions when analyzing a merger or acquisition application.

A local banking market is an economically integrated area that includes and surrounds a central city or large town. Often, banking markets are based on metropolitan or similar areas in urban regions, and on counties in rural regions. Local economic and demographic data—such as commuting patterns, locations of large employers and retailers, and other information that could demonstrate an economic tie or separation between two areas—are then used to enlarge or shrink the size of the market from the base.

To date, more than 1,500 banking markets have been defined in the United States, covering almost all parts of the country. These definitions are always subject to change as local areas grow or shrink, however. For help in finding a banking market definition, you can visit CASSIDI™, an application on the St. Louis Fed's web site that includes all market definitions in the country and interactive maps for many of them. Visit **http://cassidi.stlouisfed.org**. (See sidebar on page 29.)

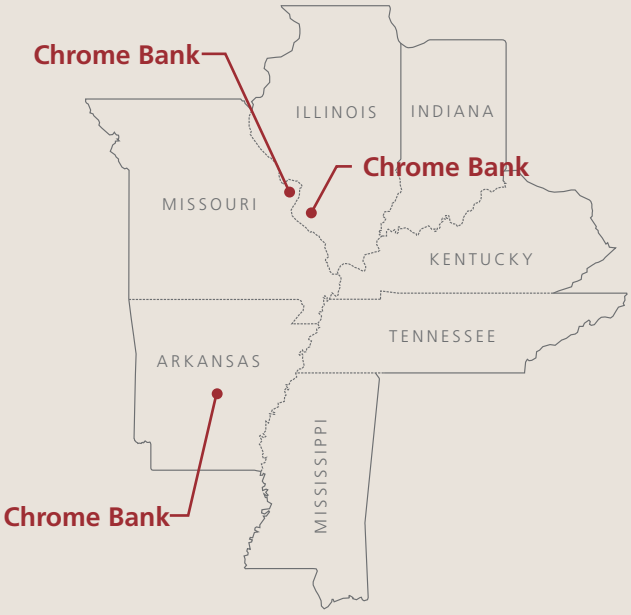


Thinking Nationally, Competing Locally

Inside the Numbers: Fewer Banks, Not Necessarily Fewer Offices

We've already seen that one of the effects of interstate branching is fewer banking institutions overall; this reduction, however, does not translate into fewer offices in local markets. Suppose, for example, **Chrome Bank** has offices in **St. Louis**, **Carbondale, Ill.**, and **Little Rock, Ark.** Although the name above the door is the same, before interstate branching was allowed, these were three separate banks because of branching restrictions. That is, there were three institutions and three offices. After interstate branching, though, the three banks could be combined into one. Now, there is one institution, but still three offices. These types of mergers have no effect on local banking competition even though the total number of institutions goes down.

Before Interstate Branching



After Interstate Branching

Another type of transaction could have **Chrome Bank** buying **Town Bank**, which has one office located in **Memphis, Tenn.** Before the transaction, there were two institutions and four offices. After the transaction, there will be one institution, but still four offices. Again, we see that although the overall number of institutions has declined, there has been no effect on local competition. All that has happened in Memphis is that Town Bank has become Chrome Bank. Many of these types of transactions have occurred over the past 20 years too. All the while, many small banks have started up in numerous communities, adding to local competition. The "crazy-quilt banking system" example on pages 16-17 further illustrates these principles in a simple way.

Before Transaction

After Transaction

Thinking Nationally, Competing Locally

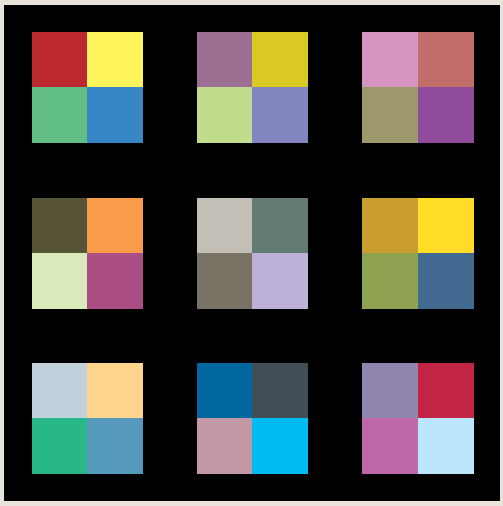
A Crazy-Quilt Banking System Consolidates

To illustrate how the number of independent banks nationwide can decrease, while the average number of banks in each local market stays the same or increases, think about the patterns and colors in a quilt. Suppose we represent the U.S. national banking market as a huge quilt. Each two-by-two group of squares within the quilts below corresponds to a local banking market. These are separated from each other by black lines, representing the distinctness of local markets. Each individual colored square stands for a bank or one of its branches. The identities of banks are differentiated by their colors. Changes in the colors of the quilt represent the changing structure of the U.S. banking market.

Before interstate branching was allowed, U.S. banking was composed largely of single-market banks. The quilt representing this situation consists of colored squares, each of which appears only once. There are 36 different banks and 36 different colors. That is, each unique bank in a local market also is unique in the larger, national market. Each local market has four competing banks; this simple statistic can be used as a measure of local banking competition.

Since interstate branching has been allowed and thousands of bank mergers have taken place, the U.S. banking market today is composed of both multimarket and single-market banks. Multimarket banks appear in many local markets. Single-market banks appear in only one local market.

Before Interstate Branching Allowed



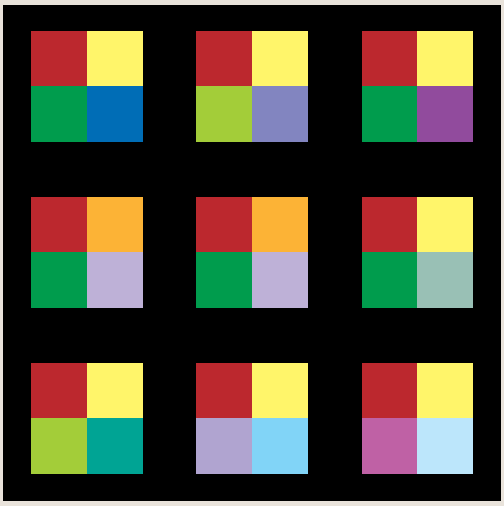
The quilt representing this situation consists of some colored squares that appear many times—for example, red appears nine times, yellow appears seven times, dark green appears five times, etc.—while other colors appear only once (for example, sky blue). There now are 14 different banks, down from 36. So, the banking system as a whole has undergone a significant consolidation. But each local market still consists of four competing banks; so, local market competition remains unchanged.

The key point of this illustration is that even though many mergers have occurred and there now are far fewer independent banks—represented by fewer unique colors in the quilt—each local banking market has four competing banks (four different colors), just as before. Thus, bank mergers need not decrease competition in local markets as long as the specific mergers that take place are controlled.

For example, the bank represented by a red square probably would not be allowed to acquire another bank in any local market, while the bank represented by yellow probably would be allowed to acquire another bank only in one of the local markets in which it does not already appear, and so on. Even a single-market bank (represented by sky blue) probably would be prohibited from acquiring another bank in its own local market, though it likely would be allowed to buy another bank in any other market.

The quilts illustrate the Fed's attempt to balance competing goals in our bank-merger policy—namely, to allow efficiency-enhancing bank mergers to occur across local banking markets without sacrificing the benefits of competition within each local banking market.

After Interstate Branching Allowed



III. Eagle Eye

How the Fed's Regulation Ensures the Safety and Soundness of Newly Combined Banking Organizations

FEDERAL RESERVE

Not all banking deals are the same. Transactions take two basic forms. In the more direct combination, at least two banks merge to form one institution. The primary federal banking regulatory agency with responsibility for the "surviving" bank must approve these transactions. (See box on page 7.) If the surviving bank has a state charter, then the state regulatory agency must also approve the transaction.

The other common form of combination involves an existing bank holding company acquiring a bank. The Federal Reserve, as sole federal regulator of bank holding companies, must approve all of these transactions. Some states also require state approval of these acquisitions. In addition, some states require banks to have been operating for a minimum number of years before another bank or bank holding company can buy it—known as a "minimum-age requirement"—further restricting some transactions.

Regardless of the type of combination and which banking regulatory agency has primary responsibility for the transaction, all proposals must meet the following standards:

- **Financial condition:** An applicant must be in at least satisfactory financial condition, both before and after the transaction;
- **Managerial resources:** An applicant must have adequate managerial resources to operate the new, larger institution in a safe and sound manner;
- **Anti-money laundering safeguards:** An applicant must have in place adequate systems for preventing money laundering and must be capable of extending these safeguards to the new, larger banking organization;
- **Convenience and needs of the communities served by the applicant and target:** A proposed transaction must be likely to make banking services more convenient and to meet the financial needs of the communities served; and
- **Competition:** A proposed transaction must not reduce competition in any local banking market by an unacceptable degree.

Each application, therefore, goes through a multistep process that covers each of the above areas. The first four criteria ensure the safety, soundness and service orientation of banks and the banking system. The last requirement—competition—ensures that banks operate in locally competitive markets. We will cover competition in detail in Part IV of this essay.

Although it is true that the Fed approves nearly all proposals it evaluates—giving rise to the impression that we merely rubber-stamp banking merger and acquisition applications—approval comes only after an exhaustive process during which we keep a keen eye out for apparent and, sometimes, hidden weaknesses that could lead the proposal to fail one of the criteria. To avoid any unforeseen obstacles in the process, applicants often contact us before filing an application. Doing so enables us to point out areas that could be troublesome during the actual application process. Lesser problems most often can be addressed through committed actions documented in the process. If problems are severe or not correctable in a reasonably short time frame, then the applicant typically is asked to delay the proposed transaction until it has corrected the problem and demonstrated improvement. In this way, the Fed uses its "moral suasion" to discourage flawed proposals, which benefits us and applicants because it enables all parties to address weaknesses before the process officially begins.

Although it is true that the Fed approves nearly all proposals it evaluates—giving rise to the impression that we merely rubber-stamp banking merger and acquisition applications—approval comes only after an exhaustive process during which we keep a keen eye out for apparent and, sometimes, hidden weaknesses that could lead the proposal to fail one of the criteria.

So, what exactly is the Fed looking for when examining applications for each of the first four criteria? And how are we fulfilling our role?

Financial Factors

The applicant and the resulting combined institution of a proposed transaction must be judged as satisfactory with respect to relevant financial factors. These factors are the same as those reviewed during a bank examination—capital adequacy, asset quality, profitability, liquidity and sensitivity to market risk. Equally important for a transaction involving a holding company acquisition of a bank is cash flow. The company must demonstrate its ability to generate sufficient cash from operations to cover principal and interest payments on debt incurred from the acquisition, as well as its other operating expenses.

We develop an overall picture of the strengths and weaknesses of the combining banking organizations by reviewing examination reports, periodic financial reports, information provided in the application, and other available data. We project this information to portray the financial profile of the consolidated organization. Financial weaknesses or deficiencies that are determined in the analysis of the proposal must be addressed before the Federal Reserve approves the application. Some financial issues, such as a capital deficiency, might be addressed by raising more equity capital. Other weaknesses, such as poor loan quality or an imbalanced asset/liability mix, are not easy to fix in a short period of time. Banks can sometimes address deficiencies of this type with commitments to policy changes or specific actions focused on the weakness.

Notwithstanding a solid commitment that would be expected to improve a problem area, the Federal Reserve normally will require some evidence that the proposed action has had the intended effect. Improvement usually must be demonstrated before we approve a transaction.

That's not to say that any weakness must be corrected or requires improvement before the Fed approves the proposed transaction. For example, when the acquiring institution is in satisfactory financial condition, but the target institution is financially weak, the size and financial strength of the acquiring entity is a favorable consideration that can offset weaknesses in the target institution.

Managerial Factors

As with the analysis of financial factors, each transaction involving the combination of banking organizations must undergo a management assessment, which considers the competence, experience and integrity of the officers, directors and principal shareholders of the acquiring organization. However, the process of judging officers and directors and their ability to operate the consolidated institution lacks the objectivity that comes with the review of financial data, including trend analysis and peer comparison.

We often can learn something about a bank's management by reading previous examination reports. Feedback from other regulators, who may have knowledge of relevant factors not covered in reports, also helps to clarify the management picture. This information might come through a letter responding to a request for comments on a pending application, or informally through a telephone call. For some banking combinations, we may require certain officers, directors and principal shareholders to undergo a background check. In this process, we ask law enforcement agencies to provide any unfavorable information that they may have on an individual.

As with financial weaknesses, managerial deficiencies must be addressed or corrected before an application is approved. Again, this can occur through informal discussions and actions taken before the submission of the application or through an action plan as part of the formal proposal.

Occasionally, even though each institution involved in a proposed banking combination has effective management, the larger and more complex resulting institution

could end up being beyond the managerial capacity of the existing officers and directors. In such a case, the Fed might require additional management staffing as a condition of approval.

Combating Money Laundering

The USA PATRIOT Act of 2001 introduced additional strong measures to prevent, detect and prosecute international money laundering. Among other things, the PATRIOT Act requires federal banking regulatory agencies to take into consideration a banking organization's effectiveness in combating money laundering activities when that banking organization files a merger or acquisition application. This assessment involves a review of the banking organization's policies and procedures to detect and prevent money laundering.

Minor weaknesses in an anti-money laundering program often can be addressed during the application process. However, if significant program weaknesses exist, then the acquiring banking organization may be required to demonstrate verifiable improvement over a period of time before being allowed to expand through combination.

Convenience and Needs

The Federal Reserve is required to assess whether a proposed banking combination would likely have any adverse effect on the convenience and needs of the communities served by the banking organizations. This assessment focuses on the availability and manner in which banks provide products and services to customers. Closing cost-inefficient branches of the resulting organization is one possible way in which customers' convenience and banking needs could be negatively affected.

Assessing convenience and needs also involves taking into account the acquiring organization's and the target institution's records of meeting the credit needs of their communities, including low- and moderate-income neighborhoods, as required under the Community Reinvestment Act (CRA). The Federal Reserve expects an acquiring organization to have an established record of satisfactory CRA performance before it files an application. A satisfactory CRA record for the target institution is also important. A less-than-satisfactory CRA examination rating on the part of the acquiring institution or the target can present an obstacle to approval.

IV. Competition Is Critical

How the Fed's Analysis Keeps Markets from Becoming Too Concentrated

When evaluating a proposed banking merger or acquisition for its potential effects on competition, we need to know how it will affect competition in every banking market in which both the applicant and target have branches. Each market is evaluated individually. Thus, for example, in any one of the more prominent mergers highlighted in Part I, literally dozens of banking markets were analyzed to ensure that the antitrust competition requirements were met in each of them.

The Before and After of Competition

After we determine which banking markets are involved in a proposal, we have to examine how each market will change if the proposal is allowed to proceed. To make this determination, we need to know what each market looks like before and after the combination. We start by building a picture of each market using bank deposit data.

We mentioned earlier that checking or other transaction accounts are the primary accounts customers have with their banks. From this information, we can infer that deposit information is a reasonable measure of a bank's presence in a market. Using branch-level deposit data, we can calculate a bank's total deposits and share of deposits in a market. For thrifts, we normally include only half of their deposits because thrifts do not offer all of the same products and services that banks do, particularly to businesses. In other words, thrifts are not "perfect substitutes" for banks. If a bank holding company owns several banks in the same market, then the deposits of the sister institutions are pooled together to determine the bank holding company's market share. Finally, credit union deposits are not normally included in a market's deposit calculation. Being membership organizations, credit unions offer their products and services only to certain groups of people, and these products and services are often quite limited when compared with those offered by banks and thrifts. That said, we may include a particular credit union's deposits in the calculation if substantial evidence supports their inclusion. One piece of such evidence would be that the credit union offers a wide range of consumer banking products. In addition, the credit union should have liberal membership rules (typically, at least 70 percent of market residents must be eligible for membership), and it should have easily accessible street-level branches.

Once we have market shares for all institutions in the market, we can take the next step and determine the market's concentration. To do this, we use a tool called the Herfindahl-Hirschman Index (more commonly referred to as HHI).

To calculate HHI, we simply square all the market shares (expressed as percentages) and add up the squared numbers. This sum is a number between zero and 10,000:

The smaller the HHI number is, the less concentrated the market is (the more competition there is among banks in the market), and the less likely any one bank is able to exert much control in the market. For example, if a market has only one bank, it would have a 100 percent market share, and HHI would equal 10,000, or $100^2 \times 1$. If, instead, there are 100 banks in a market with 1 percent market share each, HHI would then equal 100, or $1^2 \times 100$. To make this calculation even easier, CASSIDI performs it for you for any banking market in the nation. (See sidebar on page 29.)

To determine if a deal will satisfy the antitrust requirements, we need to look at the buyer's market share after the transaction and the market's HHI before and after the combination. If the "after"-market HHI is not above a certain level and the increase in the market HHI caused by the deal is not above a certain level, then the deal satisfies the Justice Department's merger guidelines. (See box at right.) Specifically, the department generally will not challenge a banking proposal unless the after-market HHI exceeds 1,800 points AND the increase in HHI resulting from the deal exceeds 200 points. This is often called the "1,800/200" rule and is unique to banking. Other industries are allowed only a 50-point increase in HHI when it is above 1,800 points. The difference is that the Justice Department recognizes that banks face competition from a variety of other financial providers, such as thrifts, credit unions and other types of financial firms. Allowing banking markets the leeway of a 200-point change in HHI accounts for the "expanded" competition banks face.

In addition to the Justice Department's rules, the Federal Reserve also will typically not allow a bank to buy its way to more than 35 percent of any banking market's total deposits. Although similar in structure to the national- and state-level deposit share caps mentioned earlier, this market-level threshold is a Federal Reserve policy, not a law, and exceeding it triggers a closer examination of the market's economic circumstances, not rejection of the proposal. As with the national- and state-level caps, banks can grow their way to controlling more than 35 percent of a market's total deposits.

What if the Picture Is Not Clear?

If one or more of the banking markets in a transaction do not satisfy the 1,800/200 rule, does that then mean the transaction cannot go through? No, not automatically. What it does mean, though, is that we will need to investigate those markets further to find out if perhaps other important factors aren't being picked up by the HHI calculation. One of the first items we'll look at is the number of other banks remaining in the market and each one's market share after the deal. We'll also want to know if any new banks have opened in the market recently and if deposit, income and population growth in the area have been relatively strong when compared with similar areas in the rest of the state. We'll look to see if a thrift in this market has been aggressively pursuing business customers, making its share of loans to businesses look more similar to other banks than to other thrifts. If so, we may end up including all of that savings institution's deposits rather than just half in the market's deposit calculation. Or, there may be a credit union in the market that has a storefront like a bank or thrift and opens its doors to most people in the area. If so, we may end up including a portion of its deposits in the market's deposit

Merger Guidelines

The Justice Department divides the spectrum of market concentration as measured by the HHI into three regions that can be broadly characterized as unconcentrated (HHI below 1,000), moderately concentrated (HHI between 1,000 and 1,800), and highly concentrated (HHI above 1,800). For a banking transaction not to require stricter economic scrutiny in a particular market, the transaction cannot both increase HHI by more than 200 points AND result in a highly concentrated market (a final HHI greater than 1,800 points).

calculation. We would also need to know if the bank being bought is in trouble, perhaps even on the verge of shutting down. We can then use some or all of this information to demonstrate that factors are at play in the market that are not being captured by the HHI, and, when these factors are considered, the deal will not end up substantially lessening competition in the banking market.

At times, though, a market's current concentration and the potential increase from a deal are just too large for some of these other economic factors to overcome. In such cases, the buyer may offer (or we may require the buyer) to sell branches to other banks in an attempt to keep a local market's HHI increase to below 200 points. This process, known as "divestiture," has become increasingly common over the past decade or so, and many institutions, particularly those engaging in large transactions, now come to the table with divestiture plans already laid out.

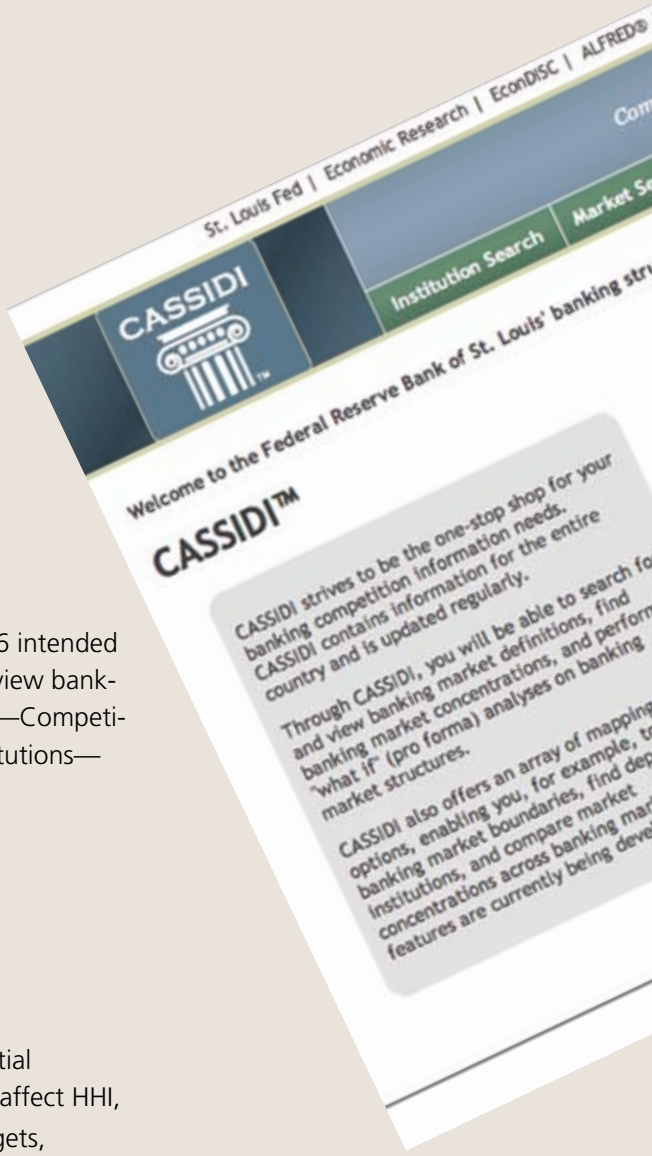
Competitive Analysis In Action—The Real World

To get a feel for how a competitive analysis might actually play out, let's look at a recent real-world acquisition—Regions Bank's purchase of AmSouth Bank. Before the deal, Regions was the 21st largest bank in the nation (based on total assets) and controlled less than 1 percent of national deposits. It operated branches in 16 states. AmSouth was the 27th largest bank in the country and also controlled less than 1 percent of national deposits. It operated branches in seven states. After the deal, Regions became the 13th largest bank in the country and controlled less than 2 percent of national deposits.

Regions and AmSouth had branches in 67 common banking markets across seven states: Alabama, Florida, Georgia, Kentucky, Louisiana, Mississippi and Tennessee. A competitive analysis like that described above was conducted for each of these 67 local banking markets. In 42 of them, the 1,800/200 rule was satisfied without divestitures or any further market examinations. That left 25 markets in which the 1,800/200 rule was violated and/or Regions' after-market share exceeded 35 percent. Each would require divestiture, further examination or both. In 12 of these 25 banking markets, divestitures of AmSouth branches were enough to satisfy the 1,800/200 rule.

The remaining 13 markets required further examinations because, even after accounting for any proposed divestitures, they fell outside the 1,800/200 guidelines and/or Regions' after-market share exceeded 35 percent. Credit-union deposits played a role in countering the initial HHI analysis in 11 of these markets, and thrifts in three markets were considered full competitors with commercial banks. In addition, new bank openings in the recent past, strong income, population and deposit growth relative to surrounding areas, and the number and strength of the remaining competitors in all 13 markets contributed to the final decision to approve the application. Thus, the initial HHI analysis did not fully explain the actual competitive picture in these markets. When all was said and done, the information gathered and actions taken were sufficient to conclude that the deal would not have a significantly adverse effect on competition in any of the banking markets. The acquisition was approved in October 2006. Read more about the outcome of this case at www.federalreserve.gov/boarddocs/press/orders/2006/20061020/attachment.pdf.

CASSIDI™

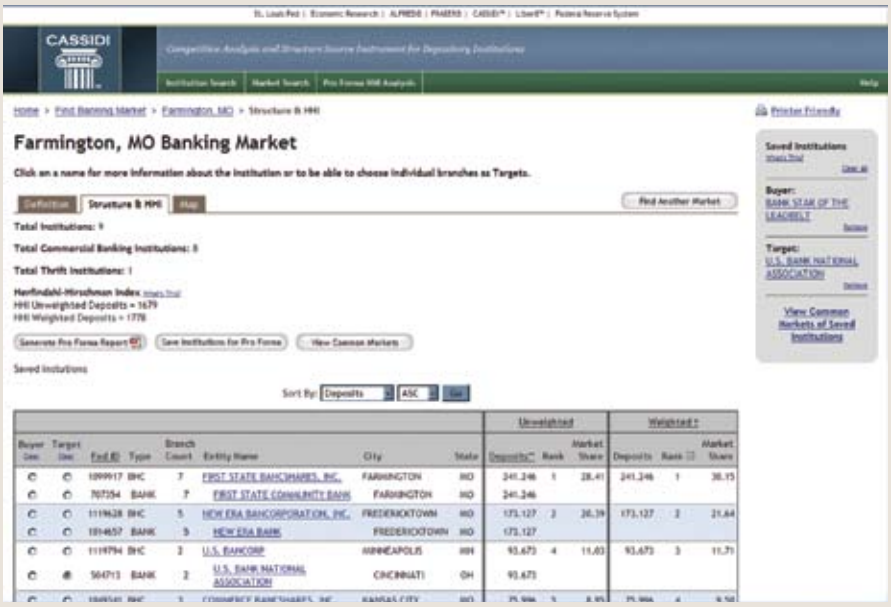


St. Louis Fed Offers Online Way To Get Banking Competition Information

The Federal Reserve Bank of St. Louis launched a web site in 2006 intended to give bankers, consultants and the public a convenient way to view banking competition information. The application is called CASSIDI™—Competitive Analysis and Structure Source Instrument for Depository Institutions—and is accessible at **http://cassidi.stlouisfed.org**.

A free application, CASSIDI allows users to:

- view banking market definitions for any part of the country,
- search for information in a user-friendly format,
- benefit from regular updates as market structures change,
- explore "what if" (pro forma) scenarios by seeing how a potential transaction might change a banking market's concentration or affect HHI,
- select whole institutions or individual branches as potential targets,
- look up geographic and depository information for all institutions and their branches, and
- view maps of many banking markets throughout the United States.



V. Conclusion

Before reading this essay, the average person most likely assumed that consolidation in the U.S. banking industry, which has been the norm for the past two decades, has reduced banking competition. This view is understandable because, over the past 20 years, mergers and acquisitions have cut the number of banking organizations to about half of its previous level. But a look at local banking markets—where banking competition actually takes place—tells a different story: Users of banking services still have many choices among competing providers. Today's institutions have about 20,000 more branches than all of the banking organizations in the 1980s. And because of interstate branching, customers are likely to find banks with branches in many states across a region or even across the country. Technologies that either did not exist or were in their infancy two decades ago—for example, online banking and ATMs—now offer customers access to their accounts every moment of the day.

Such dramatic changes in so relatively short a period naturally raise concerns about the safety and soundness of banking organizations and about the state of banking competition. The Federal Reserve, however, is responsible for ensuring—even as the banking industry consolidates—that institutions remain safe and sound, that they comply with all applicable laws and regulations, and that local banking markets remain vigorously competitive. To accomplish these goals, we (or one of the other primary federal regulators) review, adjust and, ultimately, approve or deny every application for a banking merger or acquisition to make certain that it satisfies all of the requirements set out in the antitrust laws. The requirements include financial condition, managerial resources, anti-money laundering safeguards, community convenience and needs, and local banking market competition. Only after we are satisfied that all of the requirements have been met can we approve a transaction. By engaging in such a thorough evaluation, we are indeed fulfilling our role of operating as a checkpoint in the banking consolidation process.

Thank You
(retiring board members)

We bid farewell and express our gratitude to those members of the Eighth District boards of directors who retired in 2006. Our appreciation and best wishes go out to the following:

LITTLE ROCK
Stephen M. Erixon
Raymond E. Skelton

LOUISVILLE
Norman E. Pfau Jr.

MEMPHIS
J.W. Gibson II
Russell Gwatney

ST. LOUIS
Walter L. Metcalfe Jr.

We also extend our deepest sympathies to the family and friends of Cornelius A. Martin, Louisville chairman, who passed away in 2006.

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C. Sam Walls
Chairman
CEO
Arkansas Capital Corp.
Little Rock, Ark.

Phillip N. Baldwin
President and CEO
Southern Bancorp
Arkadelphia, Ark.

Sonja Yates Hubbard
CEO
E-Z Mart Stores Inc.
Texarkana, Texas

Cal McCastlain
Partner
Pender & McCastlain P.A.
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Barbara Ann Popp

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New Albany, Ind.

Gary A. Ransdell

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Wabash Plastics Inc.
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L. Clark Taylor Jr.
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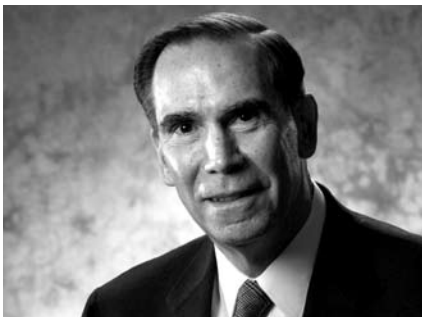
St. Louis



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First National Bank in Pinckneyville
Pinckneyville, Ill.

A. Rogers Yarnell II
President
Yarnell Ice Cream Co. Inc.
Searcy, Ark.

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State University, Ark.

Ted Huber
Huber's Orchard & Winery
Starlight, Ind.

Cal McCastlain
Pender & McCastlain P.A.
Little Rock, Ark.

(Mr. McCastlain is now a member of Little Rock's Board of Directors; he has been replaced by Keith Glover.)

John King III
King Farms
Helena, Ark.

At bottom, from left:

Dr. Leonard Guarraia
World Agricultural Forum
St. Louis

Richard Jameson
Jameson Farms
Brownsville, Tenn.

(not pictured)
Keith Glover
Producers Rice Mill
Stuttgart, Ark.

(not pictured)
Tim Gallagher
Bunge North America Inc.
St. Louis

(not pictured)
Dr. David Williams
Burkmann Feeds
Danville, Ky.

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Norton Healthcare
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Calvin Anderson
Blue Cross Blue Shield of Tennessee
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Baptist Health
Little Rock, Ark.

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SSM Health Care System
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(not pictured)
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Health Care
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Transplant Services
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FedEx Corp.
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Dennis Oakley
Bruce Oakley Inc.
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MEMCO Barge Line
Chesterfield, Mo.

Phil Trenary
Pinnacle Airlines Inc.
Memphis, Tenn.

(not pictured)
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C.W. Johnson Xpress
Louisville, Ky.

(not pictured)
Robert L. Lekites
UPS
Louisville, Ky.

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Little Rock, Ark.

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Associations of Realtors
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David Price
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Greg Kozicz
Alberici Constructors
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Pinnacle Properties of
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Mary Singer
CRESA Partners Memphis
Memphis, Tenn.

E. Phillip Scherer III
Commercial Kentucky Inc.
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(not pictured)

Jack R. McCray
Bank of the Ozarks
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Karl Ashman
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Julie Stackhouse
Senior Vice President

The Federal Reserve Bank of St. Louis ended 2006 and entered 2007 with a full charge of momentum. However one chooses to define it, 2006 was a successful year for us—whether it was our economists expanding their published research and number of presentations, the continued management of the Fed's Treasury services by our Treasury Relations and Support Office (TRSO), or our check operations exceeding revenue projections at lower-than-expected costs.

The St. Louis Fed in 2006 met all 25 key objectives in its strategic plan, all three Bank-wide financial objectives and one of two organizational climate objectives. We also met 34 of 45 key operating measures, many of which continue to have stretch targets. The Bank's total expenses came in under budget by 4.2 percent or $9.2 million. Our employees actively contributed to more than 100 System and District initiatives.

What follows are highlights of the District's 2006 accomplishments:

Research/Monetary Policy

- Continued strong economic research program and high publication and citation rate. The number of peer-reviewed journal articles published or accepted for publication was 62, up from 58 in 2005.
- Provided excellent support for the Bank's public programs through research on topics of interest to community leaders and through research presentations.
- Enhanced online economic information and implemented an online bank structural data information system (CASSIDI). Overall, Research's web pages were visited more than 60 million times during 2006, up more than 40 percent from the preceding year.

Supervision, Credit and Center for Online Learning

- Completed all mandated bank examinations in a timely manner and received excellent Board of Governors operations examination.
- Raised the Bank's visibility to bankers and increased the supervisory portfolio of state member banks from 85 to 94 banks.
- Continued to increase the volume of work for the Center for Online Learning, a recognized Fed System leader in the area of online training.

U.S. Treasury Support

- Received high marks from the U.S. Treasury for services and support provided on numerous Treasury revenue collection and cash management programs. The Treasury rated the Bank a 4.8 on a 1 to 5 satisfaction scale.
- Met 19 of 22 local Treasury objectives and stayed within the budget caps for 14 of 18 business lines. Budget overruns were all approved ahead of time by the Treasury. Local Treasury services were rated a 4.5 by the Treasury.
- Assisted the Federal Reserve System in completing 82 of 88 key Treasury business objectives, while underrunning the budget by $7.6 million, or 2.3 percent.

Financial Services

- Met seven of eight Retail Payments Office check performance targets, a large improvement from 2005, and significantly improved the Memphis check operation.
- Met seven of 10 cash performance targets and provided significant System leadership in cash services.

Administration

- Made substantial progress on facilities projects, including beginning construction of a new tower and renovations of cafeteria and conference facilities.
- Completed numerous human resources initiatives related to key areas of focus for the Bank—leadership and staff development, diversity, and compensation.
- Provided significant System leadership in the financial management, information technology (problem management), support services (physical security) and human resources (employee benefits, HR automation) functions.

Legal, Public and Community Affairs

- Continued to expand the District's outreach through additional economic education and community development programs, as well as local boards of directors engagement.
- Enhanced the Bank's monetary policy input programs in support of the Bank's president. Industry Councils, a new vehicle for gathering and sharing economic data with key business and community leaders, were established in all four zones.
- Continued to provide editorial and graphic design services to other Reserve banks for publications and web sites.

Organizational Initiatives

- Customer Service: The District continued its efforts to sustain a service-oriented culture. As a result, all divisions exceeded customer service targets.
- Innovation: To support the Bank's organizational value of innovation, the Bank implemented an online idea repository yielding 64 new ideas; seven were implemented, and 37 are in process.
- Staff Development: Human Resources completed several initiatives to further leadership and staff development. In addition, a new behavioral competency model was introduced to employees in 2006.
- Employee Communications: Several communications channels were reassessed or refined in 2006, and new electronic channels of communication were further explored.
- Enterprise Risk Management (ERM): The Bank enhanced the SOX (now AS2) and ERM programs in 2006 by working more closely with business areas to streamline data collection and assessment. Most business areas now discuss risks during regular management meetings throughout the year, and the type of risk information collected has been streamlined, resulting in more timely risk profile updates.

The Federal Reserve Bank of St. Louis is one of 12 regional Reserve banks which, together with the Board of Governors, make up the nation's central bank. The Fed carries out U.S. monetary policy, regulates certain depository institutions, provides wholesale-priced services to banks and acts as fiscal agent for the U.S. Treasury. The St. Louis Fed serves the Eighth Federal Reserve District, which includes all of Arkansas, eastern Missouri, southern Indiana, southern Illinois, western Kentucky, western Tennessee and northern Mississippi. Branch offices are located in Little Rock, Louisville and Memphis.

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