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Contents

January/February 1993, Volume 78, Number 1

Too-Big-to-Fail After FDICIA

Larry D. Wall

The special treatment historically accorded large failing banks—judging them "too-big-to-fail"—is an important issue in reforming deposit insurance. All unaffiliated depositors, and in some cases all creditors, at large failing banks have received 100 percent coverage of their funds even though coverage of only the first $100,000 deposited at domestic branches is guaranteed by law.[1] Following this too-big-to-fail policy has been justified in part as necessary for preventing systemic problems that might grow from a larger bank's difficulties. However, the policy itself created problems. It tended to reduce the incentive for large depositors to exercise market discipline, and it tended to increase the cost of resolving large failing banks.[2] Further, operating under a too-big-to-fail policy created a dilemma for bank regulatory agencies, which had to either leave large depositors at small banks uninsured and create an artificial incentive for large deposits to be shifted to too-big-to-fail banks or cover all deposits at all banks, further reducing market discipline at small banks and increasing the cost of resolving small bank failures.

Congress addressed the too-big-to-fail issue as a part of its deposit insurance reform bill, the Federal Deposit Insurance Corporation Improvement Act of 1991 (FDICIA). Section 141 of the act generally requires the resolution of failed banks at the lowest cost to the FDIC, though it provides for an exception that preserves the potential for banks to be considered too-big-to-fail. The exception may be invoked if failure to do so would "have serious adverse effects on economic conditions or financial stability" and providing

The author is the research officer in charge of the financial section of the Atlanta Fed's research department.
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additional FDIC coverage "would avoid or mitigate such adverse effects." FDICIA allows the exception only with the agreement of a two-thirds majority of the Board of Directors of the Federal Deposit Insurance Corporation, a two-thirds majority of the Board of Governors of the Federal Reserve System, and the Secretary of the Treasury ("in consultation with the President").

Two of the goals of FDICIA are to reduce both the potential for systemic problems and bank regulatory agencies' incentives to follow a too-big-to-fail policy. Having given a mandate to banking agencies to minimize FDIC losses, the act's prompt-corrective-action provisions provide a structured way of addressing a problem bank. A system of automatic review is set in motion whenever a bank failure imposes material costs on the FDIC or when the FDIC treats a bank as too-big-to-fail.[3] Specific changes intended to limit systemic risk include requiring the Federal Reserve to impose limits on interbank liabilities, authorizing the FDIC to provide for a final net settlement to a failed bank's creditors, and establishing statutory backing for net settlement provisions in bilateral and clearing-house payments agreements.

FDICIA also leaves in place the Federal Reserve's discount window, which is a powerful tool for addressing systemic risk. Indeed, only the Federal Reserve is guaranteed to have the resources to be able to address virtually all conceivable systemic risk situations because only the Fed has the power to create money. However, FDICIA discourages inappropriate uses of the discount window by requiring the Federal Reserve to share in the FDIC's losses if lengthy Fed lending to a failing bank causes an increase in the FDIC's losses.[4]

FDICIA substantially reduces if not eliminates most of the dangers associated with the failure of a large bank. Some systemic risk issues remain, however, and the purpose of this article is to review those concerns as well as FDICIA's provisions designed to reduce such risks. Probably the biggest unresolved issue is what the effects of a large bank's failure would be. According to some preliminary analysis, a too-big-to-fail policy may not be needed to protect financial markets.

Systemic Risk

The concern about systemic risk stems from a fear that a single bank failure could reverberate through the banking system and cause widespread bank failures, adversely affecting bank customers and the real economy in a number of ways. However, not every run on a large bank automatically generates systemic problems. A depositor run on any nonviable bank not 100 percent insured is rational and helps speed closure of an institution that should be closed. Further, the argument that large bank creditors suffer losses in such a closing is not, in and of itself, a legitimate systemic concern.[5]

Systemic risk arises when an institution's failure interferes with financial services consumers' ability to obtain important financial services in a timely manner to such an extent that overall economic activity is reduced.[6] Systemic problems result if the failure of a large bank causes contagious runs on viable banks, thereby diminishing the overall availability of financial services. In addition, failure of a single institution may generate systemic problems if it significantly impairs the payments system or financial markets. This section highlights the channels through which it would be possible for systemic risk concerns to arise. An analysis of the actual magnitude of these risks prior to FDICIA is provided in the box on page 7.

Risks to Other Banks. The failure of one bank poses a potential risk to other banks in a number of ways. For example, other banks could suffer insolvency because of losses on interbank deposits and other forms of credit. They risk illiquidity if access to interbank deposits is delayed or if contagious deposit runs occur. The extent of such risks is usually, but not always, proportional to the size of the failing bank. Larger banks have more interbank deposits likely to be at risk if depositors are not covered, and large bank failures are likely to be noticed by more depositors.

The magnitude of the credit and direct liquidity risks is also a function of whether the collapse of the failed bank occurs over a long period of time or comes as a surprise. If the failure is anticipated, other banks will have had time to implement steps limiting their exposure to the failing organization. In this vein, financially strong banks have recently been limiting their exposure to banks with lower credit ratings in the interest rate and currency swap markets.

Risks to the Nonbank Sector. Nonbank customers and even third parties may also be hurt by a bank's failure. Creditors, including large depositors, directly risk default losses and reduced liquidity when a bank fails. While these risks are analogous to those taken by providers of interbank credit, they differ principally in that nonbank customers, especially small businesses, may have less access to other sources of liquidity.

Nonbank firms can turn to the Federal Reserve discount window under certain situations if a substantial liquidity problem arises, but the central bank has strongly preferred to avoid such lending.[7] Moreover, even if the Federal Reserve chose to lend to nonbank customers, the discount window is not structured to serve as a direct lender to a large number of small businesses.[8]

The ability of bank customers to make payments depends not only on their bank's being solvent and liquid but also on the operation of various payments systems. The failure of a large correspondent bank, which provides check-clearing, ACH, and other ongoing payments services to certain small banks, could directly affect the small banks' access to certain parts of the payments system. Moreover, such a failure could lead to a loss of confidence in bilateral and clearinghouse arrangements that handle a large fraction of the payments transactions. While the Federal Reserve is an important supplier of many payments services and could help sustain confidence in its systems, private arrangements play a critical role in some—especially international—payments systems.

Another problem nonbank customers might face when a bank fails is a temporary reduction in credit availability. Such a reduction might affect local economic conditions adversely.[9] However, implementing a too-big-to-fail policy would protect bank borrowers only to the extent that doing so would prevent contagious runs on viable banks. Borrowers are not necessarily protected by efforts to protect depositors because whoever holds the loans after the bank's failure does not have to extend any prefailure loans. Further, because the postfailure loanholder could demand repayment at the earliest time permitted by the loan contract, protecting a failed bank's depositors would not protect its borrowers.

This list of issues has recently been expanded by increased concern about ways a bank failure would affect financial markets. Banks play an increasing role as market makers in many financial contracts, especially for interest rate and foreign exchange contingent contracts such as options, forward contracts, caps, floors, and swaps. The failure of certain large banks might significantly reduce this market-making capacity for some types of financial contracts. More generally, a bank's failure could result in a loss of confidence in certain markets, with the result that some banks would be unable to maintain adequate hedges for their existing exposure.

Systemic Risk. While certain problems plague a too-big-to-fail policy, it is nonetheless an effective way to limit systemic risk. It prevents one bank's failure from creating any direct solvency or liquidity risk for other banks or nonbank creditors. Its enactment also reduces the risk of contagious runs at other banks by reassuring their depositors. A challenge FDICIA attempts to meet is establishing ways to eliminate the too-big-to-fail doctrine while continuing to minimize systemic risk.

Incentive Changes

FDICIA both provides regulators with various tools for addressing problem banks and suggests changes in regulatory procedures.[10] A simple reading of the act may not disclose its real significance, however. Before FDICIA, regulators already had the power to enforce capital requirements and to stop unsafe or unsound banking practices. Thus, many of the tools the legislation specified were implicit in the agencies' existing authority. Moreover, many of the most important suggested changes in regulatory procedure are simply suggestions (as Richard Scott Carnell 1992 points out). The regulatory agencies retain substantial discretion in their treatment of problem banks, especially large ones.

The act's real significance is that it both provides the banking agencies with a clear goal of minimizing deposit insurance losses and sets up an incentive system to encourage compliance. The most important part of the act in terms of setting the goal and incentive system is section 131, which provides for prompt corrective action. That section begins by giving banking agencies one goal: "to resolve the problems of insured depository institutions at the least possible long-term cost to the deposit insurance fund." Toward that end, regulators are encouraged to strengthen bank capital, to respond to reduced capital levels by taking strong action that will limit risk and encourage recapitalization, and to close failing banks before they exhaust their equity capital. The provisions for prompt corrective action outline a number of steps that bank regulators may take as an institution's capital ratios decline. Although regulators generally retain the authority to tailor their actions to the specific circumstances, FDICIA mandates action in two particular situations: (1) banks that are undercapitalized must submit an acceptable plan to restore their capital to adequate levels, and (2) banking agencies must take action within ninety days of a bank becoming critically undercapitalized, with the act containing a bias toward receivership or conservatorship.[11]

Although the prompt-corrective-action guidelines specify regulatory action, they include a mandatory ex post review of any failure that imposes material costs on the FDIC and thus provide an incentive for regulators to prevent costly bank failures. If a material loss occurs, the inspector general of the appropriate banking agency must determine why and must make recommendations for preventing such a loss in the future. This report must be made available to the Comptroller General of the United States, to any member of Congress upon request, and to the general public through the Freedom of Information Act. Further, the General Accounting Office must provide an annual review of the reports and recommended improvements in supervision. These reporting and review requirements do not force the banking agencies to make any substantive changes in their supervisory practices. However, as discussed, these provisions supply strong political incentives to prevent costly bank failures.

Two sections of FDICIA—sections 141 and 142—change the legislative guidelines for deposit insurance and discount window decisions on banks that might be considered too-big-to-fail. Section 141 generally requires the FDIC to resolve bank failures at the least possible cost to the deposit insurance fund. The agency must document its evaluation of the alternative methods of resolving a failed bank, including the key assumptions on which the evaluation is based.

While section 141 permits a systemic risk exception to least costly resolution, it also provides for increased accountability when this exception is invoked. The FDIC, the Federal Reserve, and the U.S. Treasury must all agree that an institution's ill-health poses a systemic risk. The Secretary of the Treasury is required to document evidence indicating the need to invoke the systemic risk exception. The General Accounting Office must review any actions taken, examining the basis for finding action necessary and analyzing the implications for the actions of other insured depositories and uninsured depositors. The rest of the banking industry, required to pay the cost of a bailout through an emergency assessment to the FDIC that is proportional to each bank's average total tangible assets, is likely to act as a kind of watchdog.[12] The special assessment provides a strong incentive for the industry to question covering uninsured depositors, particularly when there is room for doubt about whether a failure would create systemic risk.

Section 142 limits the Federal Reserve's ability to provide through its discount window de facto too-big-to-fail treatment of a failing bank. Allowing a bank to borrow at the discount window makes it possible for uninsured deposits to be withdrawn prior to the resolution of a failing bank by providing the liquidity needed to cover withdrawals. This section of FDICIA limits such lending to undercapitalized banks to 60 days within any 120-day period unless the bank is certified as viable by the Federal Reserve or its primary federal bank regulator.[13] For banks that are critically undercapitalized the Federal Reserve is instructed to demand repayment no later than at the end of five days. If violation of the five-day limit occurs, the Fed is liable for part of the increased cost to the FDIC, and the Board of Governors of the Federal Reserve must notify Congress of any payments to the FDIC under this provision. Under FDICIA the Federal Reserve discount window retains substantial legal authority to lend to problem banks, but failure to comply with the intent of this portion of the act exposes the Fed to substantial ex post political pressure.

FDICIA clearly provides a mandate to banking agencies and seeks to create a system whereby there is political incentive for the agencies to follow the mandate. The biggest changes to occur as a result of the act will most likely result from the new climate of postfailure reviews and sanctions rather than from formal changes in the agencies' legal powers.

Changes that Mitigate Systemic Risk

Along with supplying a mandate to minimize FDIC losses, FDICIA addresses a number of systemic concerns raised by the banking agencies. The act aims to reduce the systemic risk associated with ending a too-big-to-fail policy by enhancing the overall stability of the banking system, by reducing the losses when a bank fails, and through targeted reforms that address specific potentially systemic problems.[14]

Enhanced Stability and More Timely Closure. A number of reforms in FDICIA call for reducing the likelihood of bank failure. The prompt-corrective-action provisions should result in higher bank capital ratios and are intended to ensure more timely supervisory intervention. The act requires that regulators revise existing credit risk-based capital standards to take account of interest rate risk, concentration of credit risk, and the risks of nontraditional activities. In addition, banks must undergo an annual, full-scope, on-site examination and an independent annual audit. These measures should help prevent significant undetected problems from arising at banks.

The prompt-corrective-action requirements that critically undercapitalized banks be placed in conservatorship or receivership mean that banks may be closed earlier with reduced losses to creditors.[15] Banks may also be closed earlier with higher expected recoveries to the extent that uninsured depositors become more likely to run on failing banks because of FDICIA's provisions virtually eliminating coverage of uninsured depositors.

Limits on Interbank Credit Exposure. The banking system relies heavily on interbank extensions of credit for intraday, overnight, and longer-term purposes, but interbank credit is a potential source of systemic risk. FDICIA directs the Board of Governors of the Federal Reserve to develop a regulation limiting interbank credit exposure. The Board has adopted a new Regulation F on interbank liabilities to satisfy this part of FDICIA.[16] The regulation restricts a bank's total exposure to its correspondent to 25 percent of the respondent's capital unless the correspondent is at least adequately capitalized.[17]

Final Net Settlement. Without immediate access to their funds at a failed bank, both bank and nonbank creditors could face severe liquidity problems. FDICIA addresses this problem by authorizing the FDIC to make a final settlement with creditors when it assumes receivership of a failed bank (section 416). Under these provisions uninsured and unsecured creditors may gain immediate access to their funds. The FDIC pays a sum that is the product of the amount of uninsured and unsecured claims times a final settlement rate. The final settlement rate is to be based on average FDIC receivership recovery experience so that the FDIC receives no more and no less than it would have as a general creditor standing in the place of the insured depositors. The FDIC's exercise of full powers under the final settlement provision should substantially alleviate liquidity problems for bank creditors.

Netting of Interbank Payments. Many payments systems result in banks' experiencing substantial intraday credit exposure to other financial institutions. This exposure may arise both as a result of bilateral agreements and through payments clearing organizations. FDICIA seeks to reduce the risk in these payments systems by explicitly recognizing contractual netting agreements and holding them legally binding if a member financial institution is closed. (Section 403 establishes that bilateral netting agreements are binding, and section 404 applies to clearing organization netting.)

Implications of the Changes. The net effect of FDICIA should be to reduce interbank risk substantially. The prompt-corrective-action provisions and the increase in market discipline are expected to constrain bank risk taking and increase the FDIC's rate of recovery from failed banks. In combination, these factors should almost eliminate the risk that one bank's failure would cause insolvency at other banks.[18]

The final settlement procedure provides the FDIC with a mechanism for resolving potential liquidity problems at creditor banks or nonbanks. The netting procedures under FDICIA further reduce the risk associated with payments systems. Any remaining credit risk is likely to be small as long as banks comply with the limits on interbank credit exposure.[19] The final settlement procedures and payments system netting together should eliminate most of the liquidity risk associated with the payments system. Any remaining liquidity problems could be addressed by the Federal Reserve discount window. Although FDICIA places increased limits on the discount window, as mentioned earlier, the Fed may still lend to adequately capitalized banks and to undercapitalized banks that the Fed (or the bank's primary federal supervisor) certifies as viable.

Unresolved Issues

FDICIA addresses a number of issues associated with large bank failure. However, at least two possible areas of concern remain: the effect of a large bank's failure on financial markets and the effect of sudden massive losses at one or more banks.

Financial Markets. A bank's failure could adversely affect selected financial markets by forcing the immediate unwinding of a large number of hedging transactions, by weakening confidence in derivative products that create credit exposure, and by causing the loss of one market maker.[20] These relatively new issues have received less attention than many others related to systemic risk. Nonetheless, some preliminary analysis is possible.[21]

Knowledge of the implications of large bank failures is most limited in the area of over-the-counter derivative products such as interest rate, foreign exchange, and commodity swaps. Available insight has been derived primarily from the failures of a few large financial institutions, including Drexel, Burnham, Lambert and the Bank of New England. These products seem to have several difficulties, but the biggest ones appear unrelated to systemic risk issues. The problems include (1) contract language in many swap agreements

that may yield a windfall profit to counterparties of the failed bank, (2) the occasional inability to unwind derivative contracts at market prices after the institutions' financial problems have become apparent, and (3) increased cost of or inability to maintain adequate hedges at the failed institution while it is unwinding its derivatives book.[22]

The failure of a bank with a large over-the-counter derivatives book poses two risks to its counterparties: credit risk and the risk that the derivatives contract will be closed and the counterparty will lose its hedge. Evaluation of the credit risk is complicated by the nature of most derivatives. Although the size of many markets for over-the-counter derivatives, such as interest rate swaps, is measured by the notional principal of the underlying contracts, this measure generally overstates risks for two reasons. Actual payments on many types of derivatives are a small fraction of the notional principal.[23] Further, at any given time a bank is likely to be winning on some contracts and losing on others. Credit losses to a failed bank's counterparties arise only on those contracts under which the failed bank owes money.[24]

However, the measure that is the obvious alternative to the notional principal, the current credit exposure of the derivatives book (mark-to-market value of those contracts that have positive value to the bank), may understate exposure for many banks affected by systemic risk. The credit exposure on derivative contracts varies with changes in the value of the underlying commodity (interest rates, foreign exchange rates, and so forth). In a systemic risk situation, there may be sharp price movements in the underlying commodity and large changes in the value, and hence credit exposure, of banks' over-the-counter derivatives book. Current U.S. regulatory practice at least partially compensates for the increased risk by requiring banks to maintain capital proportionate to the amount of potential increases in credit exposure.[25] The potential losses to derivative counterparties are limited in two ways: expected credit losses from failed organizations will likely be a small fraction of exposure, and liquidity problems may be addressed by final settlement procedures or the discount window.

A potentially serious problem related to over-the-counter derivatives is the effect of failure on the hedging position of counterparties. These derivatives purchased from large commercial bank dealers are used by corporations and institutions to hedge exposure to interest rate, foreign exchange, and commodity price changes. The failure of the bank dealer may result in early termination of the contracts, raising concerns in two areas. First, the bank's counterparties need to know when the contract will be terminated so that they can arrange for a substitute hedge.[26]

The second consideration is that the counterparties affected by early termination of derivatives contracts will need to reestablish their hedge positions in the over-the-counter derivatives market as quickly as possible to minimize their risk exposure. Most financially strong corporate and institutional users would be unlikely to have problems doing so, given the number of dealers in most markets. However, users whose financial condition had weakened may face greater costs in arranging a hedge.[27]

There may also be systemic implications in the failure of a large bank that results in the immediate termination of all over-the-counter derivatives contracts. Such a failure on the part of a major bank dealer could significantly, if only temporarily, reduce dealer capacity in some derivatives markets. Further, even if remaining dealers have the capacity to service the additional demand, individual dealers may face binding bilateral credit limits that restrict their ability to deal with specific counterparties.[28] Although these limits are most likely to be binding on interdealer hedging trades, that dynamic could reduce dealers' ability to arrange hedges for end-users.[29] Credit limits may also pose a problem in another way: new information that enters the market through a bank failure may cause a reevaluation and possible reduction of selected credit lines by some dealers. There is, therefore, at least the potential for some users to face significant problems reestablishing their hedges in the wake of a major bank dealer's failure.

It is important, however, in evaluating the use of the too-big-to-fail doctrine to protect financial markets, to recognize that whatever problems arise are rooted in a bank's failure, not its treatment of creditors. Providing the protection for uninsured creditors is significant only in that preventing runs may allow more time for the development of new market makers and expanded capacity at existing firms. Even this significance is limited, though, because a bank will come under prompt-corrective-action provisions as its capital position declines, and market participants will be warned about the possible restrictions facing a large market maker. Further, if the loss of market-making capacity through an institution's closing would pose a serious problem, then supervisors should consider encouraging the bank to begin phasing out its market-making activities before it becomes critically undercapitalized so that the market may gradually adjust to the reduced capacity.

Systemic Risk before FDICIA

An important issue in evaluating whether FDICIA is contributing significantly to reducing systemic risk is determining the baseline likelihood of a financial system collapse among generally viable banks before FDICIA. Three commonly expressed concerns about large bank failure need to be considered: The first is the idea that interbank liabilities could generate credit losses leading to widespread insolvency or that delays in access to interbank liabilities could cause widespread illiquidity. The second concern is that the failure of a large bank might spark runs on viable banks. The third, and farther-reaching, fear is that payments systems may collapse in the wake of a large bank's failure.

The analysis below seeks to address two questions central to evaluating FDICIA's merit: (1) What are the odds that one of these three problems would in fact emerge, and (2) how do the banking agencies' pre-FDICIA tools for mitigating a problem at a large bank compare with the tools post-FDICIA?

Interbank Liabilities

The most direct risk a large bank's failure poses for other banks is that they will lose part or all of their investment in that bank. A sudden failure incurring massive losses could threaten the financial stability of respondent banks. However, determining the level of systemic risk should include distinguishing maximum possible losses from expected losses. Expected losses for a bank closed when it first becomes insolvent are likely to be a small fraction of possible losses. For example, total interbank exposure to Continental Illinois greatly overstated other banks' likely losses when Continental was rescued by the FDIC. There were 65 banks with uninsured balances in Continental exceeding 100 percent of their capital, and another 101 banks had uninsured balances equal to between 50 percent and 100 percent of their capital. However, if a recovery rate of 90 percent is assumed for Continental's assets, no banks would have had losses in excess of their capital and only 2 banks would have had losses equal to between 50 percent and 100 percent of their capital.[1] George G. Kaufman (1990) states that the FDIC's estimated recoveries at the time of failure of Continental were 97 percent to 98 percent and that the current estimate is 96 percent.

Even when a failure would not result in substantial credit losses on interbank deposits, theoretically it might still place other banks at risk if they could not obtain immediate access to their funds or if they were to experience a run by depositors fearing insolvency or illiquidity. However, the danger is not as great as it sounds. Even if the FDIC did not provide immediate access to interbank deposits, other banks would not necessarily fail because of illiquidity. A bank widely recognized as viable despite temporary illiquidity could probably borrow from other banks or the Federal Reserve discount window.

Contagious Bank Runs

One bank's failure may lead to withdrawals at other banks if customers lose confidence that their deposits will be fully redeemed. Depositors may also lose confidence because the failure discloses new information on the value of other banks' assets.[2]

The likelihood that financial markets will mistakenly run on solvent banks is important in evaluating the risk of bank runs. Empirical evidence suggests that financial markets generally are able to assess the implications of new information accurately. For example, analysis of the Mexican debt crisis revealed that the stock market responded to individual bank stocks in proportion to each bank's loan exposure even though such information had not been publicly released.[3] Studies of five major domestic failures also found no substantial evidence of contagion risk.[4] Further, when a misleading television story prompted a run on Old Stone, the thrift was able to stop the run within two days by convincing investors it was solvent.[5]

There are also some puzzling examples of possible market mistakes, however. The failure of the Overseas Trust Bank in Hong Kong and that of Penn Square Bank in the United States are two such cases. Gerald D. Gay, Stephen G. Timme, and Kenneth Yung (1991) found evidence that the failure of the Hong Kong bank had a significant negative impact on other banks in the city. This result is surprising because the Overseas Trust Bank's failure resulted from fraud, and such conditions would generally not be expected to provide significant information about other banks. In the case of the Penn Square Bank, Robert E. Lamy and G. Rodney Thompson (1986) and John W. Peavy III and George H. Hempel (1988) discovered that banks with no direct connections to the organization nevertheless suffered significant losses in stock market valuation after that bank failed. Lamy and Thompson suggest that the drop in market value reflected the fact that Penn Square was liquidated with losses to depositors, and this action could have raised doubts about coverage afforded other banks. Another explanation, by Peavy and Hempel, is that the market may have overreacted to the news of Penn Square's failure. Supporting that hypothesis, their findings indicate that losses suffered immediately after the failure by banks not

directly connected to Penn Square were subsequently offset by significant positive abnormal returns for institutions.

Another study supplies weak evidence that there may be reason for concern about contagious runs. Randall J. Pozdena (1991) found that similarities in stock returns for firms in the same industry were much greater in banking than in other industries, suggesting that bank values may be more dependent on a common set of factors than those of many other industries. Pozdena also found that similarities in returns were fewer among banks with higher capital ratios.

Thus, there seems to be a risk that the failure of a large bank could spark contagious runs on viable banks if the markets fail to distinguish viable from nonviable banks. Studies of financial market performance generally suggest that markets tend to assess the implications of new information accurately. Some evidence of occasional errors has been found, however. Thus, at least a small potential for contagious runs apparently exists. The risk is minimized, though, by the Federal Reserve's option to provide funding to any viable bank experiencing a run.

Payments Systems

Other banks and the financial system may be exposed to a failed bank through their joint connections to the payments system.[6] The risk may occur through one of several mechanisms—the bilateral provision of services from the failed bank to its respondent, securities positions taken by the failed bank that need to be unwound, or a failure's effect on payments clearinghouses. The discussion that follows focuses on the potential for a bank failure to disrupt the processes by which payments are made in the banking system.[7]

Many small banks are dependent on correspondent banks for services such as check clearing, automated clearinghouse services and access to international payments systems. Loss of access to these services could create significant problems for some respondent banks, especially those that are too small to participate directly in certain payments systems. If a failing bank deteriorates gradually, respondents may reduce their risk by shifting their payments system business to other banks that are still financially strong or by making contingency plans. However, respondents that are still dependent at the time of failure would not necessarily lose access to the payments system. In the case of a troubled institution large enough to be an important supplier of correspondent services, the FDIC, under FDICIA, would likely try to sell the bank and could otherwise be expected to create and operate a bridge bank. Because the FDIC has these powers, invoking a too-big-to-fail policy is not essential for preserving respondent banks' access to the payments system.

Another bilateral issue that can affect payments systems concerns exchanging cash and various securities. The problem is that the exchange of value does not always occur simultaneously. Solvent parties are reluctant to surrender their part of the transaction before receiving value from the bankrupt party for fear that prompt and full payment will not be forthcoming. William S. Haraf (1991) noted that this situation occurred with the failure of the securities firm of Drexel, Burnham, Lambert in 1990 and that third parties were affected by the disruption.[8] Haraf also notes, however, that changes, some of which are being implemented, to the payments and settlement systems designed to shorten or eliminate lags in payments would be more efficient than resorting to declaring certain institutions too-big-to-fail. (He further notes that, despite some delays in winding up Drexel's affairs, their positions were ultimately liquidated.)

Multilateral clearinghouse arrangements may also be strained by the failure of a bank. These arrangements allow their bank members to make payments to each other with a single net payment at the end of each day to cover any net credit balances.[9] Transactions through clearinghouses may generate significant bilateral credit between banks. If the clearinghouse lacks a binding netting agreement and one bank fails to make a required payment, the failed banks are converted to bilateral agreements and the net positions of all other banks are recalculated. The danger is that banks that could have met their net position with the failed bank included may be unable to do so if the failed bank's position is excluded.[10] Thus, the potential exists for a single bank's failure to cascade through a payments system, forcing a number of banks to become illiquid and causing a loss of confidence in the entire netting arrangement.

The Federal Reserve has worked to reduce this risk by requiring banks to monitor and establish caps on their intraday liabilities and credit exposure to other banks. In addition, as a continuation of pre-FDICIA efforts to contain payments system risk, the Federal Reserve is imposing interest charges on banks that run large intraday overdrafts on Fedwire.[11] If a problem arises despite these restrictions the Federal Reserve retains adequate power under FDICIA to provide discount window loans to viable banks that temporarily lack liquidity.

Summary

Two common themes run throughout this review of the risk of systemic problems in the absence of a too-big-to-fail policy prior to FDICIA. First, although some risk of losses on interbank liabilities, contagious runs,

and failures in the payments system existed, that risk frequently has been overstated. Second, the Federal Reserve could have contained most systemic risk situations through the discount window.[12] The most likely system risk scenarios would have involved temporary, widespread liquidity problems but limited actual solvency problems. The Federal Reserve's discount window had, as it does now, the resources to resolve temporary liquidity problems. Furthermore, the Federal Reserve has historically had detailed, timely information on banks as a result of its supervision and regulation, and on the payments system as a consequence of its role as a provider of payments services. Thus, the Fed has had both the tools and the knowledge required to effectively address systemic risk situations arising from temporary liquidity problems.

Notes

1. These figures on other banks' exposure to Continental Illinois came from U.S. Congress (1984, 16-18).
2. Finance theory provides a third reason for depositors to lose confidence: they could become concerned about their bank's inability to meet an increase in demand for liquidity by other depositors. Diamond and Dybvig (1983) have developed a model in which banks are solvent at the beginning of the period but are subject to a random amount of withdrawal by depositors. The bank must prematurely liquidate projects at a loss if deposit withdrawals are too high. If too many projects are liquidated, the bank may become insolvent. Empirical examples that correspond exactly to the Diamond and Dybvig model are hard to find. However, the U.S. banking system in the late 1800s and early 1900s was subject to periodic liquidity crises during and shortly after harvest season, and some evidence suggests that the crises were due entirely to liquidity concerns about individual banks. A model of inelastic currency supply developed by Champ, Smith, and Williamson (1991) suggests the potential for periodic liquidity crisis and provides some evidence on the problem. However, Calomiris and Gorton (1991) raise questions about this history of panics in the period prior to the formation of the Fed. In any case, such random withdrawal models are not closely examined here because there is no evidence to suggest that such a problem has occurred since the Fed's creation or that the Fed could not fully resolve any liquidity-based runs with its existing authority. The Federal Reserve can and does provide an elastic supply of currency and liquidity.
3. See Cornell and Shapiro (1986) and Smirlock and Kaufold (1987).
4. Aharony and Swary (1983) found that no significant abnormal bank stock returns occurred around the failures of the United States National Bank of San Diego in 1973 and Hamilton National Bank in 1976. They did find significant negative abnormal returns associated with the failure of Franklin National Bank in 1974, but they suggest that this result could be based on a revaluation of the risks associated with foreign exchange trading. Aharony and Swary further note that some European banks were taking foreign exchange losses around this time. Former FDIC Director Irvine H. Sprague (1986) argued that regulators were concerned about the potential failure of other large banks if Continental Illinois failed in 1984 with losses to depositors. Saunders (1987), Swary (1986), and Wall and Peterson (1990) failed to find clear-cut evidence to support the regulators' concerns. Dickinson, Peterson, and Christiansen (1991) also failed to find evidence of contagion around the time of the failure of the First RepublicBank in 1988.
5. The story of how the run was stopped is provided by Leander (1991).
6. Haraf (1991) has noted that the failure of a nonbank institution can also impose strains on various payments mechanisms. For example, Fedwire and the Clearing House for Interbank Payments (CHIPS) were forced to remain open longer than usual to accommodate problems arising from the failure of Drexel, Burnham, Lambert.
7. See Baer and Evanoff (1990) for a review and analysis of the issues associated with large dollar value payments systems. Roberds (forthcoming, 1993) discusses ways of further controlling the risks of those systems.
8. Moen and Tallman (1992) found that the failure of nonbank firms also disrupted the payments system in the Panic of 1907.
9. For an example of such a system, see the discussion of CHIPS provided by the Group of Experts on Payments Systems (1990, 131-42).
10. Given that the failed bank was presumably financially weak immediately prior to failure, there is a high probability that depositors were, on net, withdrawing substantial amounts of money from the failing bank. These withdrawals would likely be transferred to other banks, with a substantial part of the withdrawals going through clearinghouses. Thus, odds are relatively high that, if a bank fails, it will be a large net payer to various clearinghouses.
11. See Cummins (1992) for a discussion of the Federal Reserve's decision to charge for intraday overdrafts.
12. See Smith and Wall (1992) for a discussion of how discount window and deposit insurance operations could address systemic risk issues without reliance on a too-big-to-fail policy.

Financial markets are also likely to take actions that would reduce their costs associated with the loss of a market maker if the problem bank's financial condition deteriorates gradually. Market participants may shift business to other market makers as a hedge against the institution's possible failure. Moreover, the troubled bank may find that its trading operations are more valuable if sold than if forced to operate as part of a financially weak organization.[30] Alternatively, there may be market adjustment through the individuals whose trading and technical expertise are at the heart of any securities trading operation. These key people may seek to leave the ailing bank or may be bid away by an organization having the resources to support and expand their trading operations.

Overall, there are some risks to financial securities markets when a large bank fails. Although the problems are likely to be temporary, some users may very well have problems arranging substitute hedges in a timely manner. Further research is needed on several issues: (1) the rate at which lost market-making capacity is replaced, (2) the likelihood that credit limits restrict dealers' ability to service users and engage in interdealer hedging, (3) the significance of the costs associated with a temporary reduction in liquidity, and (4) the significance of a large bank's exposure to risk if it lost access to derivative markets for several days.

If policymakers were to conclude that a too-big-to-fail policy is necessary to protect banks that are financial market makers, there would be implications for securities firms that have a similar presence in many financial markets. Securities firms not affiliated with bank holding companies currently have neither insurance like that provided banks by the FDIC or a mandate to comply with safety and soundness regulations like those imposed on banks. Although securities firms are partially regulated by the Securities and Exchange Commission (SEC), the agency regulates only some subsidiaries, and in any case, its historical mandate is consumer protection rather than maintaining financial system stability. If certain banks are considered too-big-to-fail in order to protect the securities markets, logic would suggest that securities firms should receive similar coverage and that the provider of liquidity or solvency guarantees should be able to protect itself via banklike safety and soundness regulations.

Unexpected Massive Losses. The mechanisms that may soften the impact of failure on the financial system are most effective in dealing with slow deterioration of one or more banks. In a variety of ways regulators and markets can gradually disengage troubled banks from the financial system and limit the damage of failure. However, a sudden massive loss at one or more banks could create a situation in which the market's exposure to a failing bank would be at its maximum, and regulators would be in a weak position to implement their full array of crisis management tools.

Fortunately, such economic losses appear to be exceptional. Sudden losses greater than a bank's capital are possible only if a bank has a very large concentration of risk to a single factor such as interest rate risk, foreign exchange rate risk, or having borrowers from a single geographic area that is devastated. Rather than truly being sudden, large losses may only appear to be so because banks and bank regulators have failed to provide for the timely recognition of reductions in asset values. Most often private sector parties will have begun reducing their exposure as soon as economic capital is significantly impaired, even though delays in accounting recognition may have slowed regulatory action.

Notwithstanding the extremely low probability of an unexpected failure of a previously well capitalized large bank that is engaged in a number of complex activities, such a failure would create a big problem for the regulators. The FDIC may be able to avoid invoking the systemic risk exception but only if it and the failed bank were exceptionally prepared for such a contingency. The FDIC would have to identify the bank's insured and uninsured creditors and calculate appropriate payouts for each of them. The Federal Reserve could buy a little time for the FDIC by exercising its discount window power to lend to a critically undercapitalized bank for five days. However, the failed bank would be crippled prior to its closure with a massive outflow of uninsured deposits, severe limits on its access to the payments system, and an inability to function in the over-the-counter derivatives market. Even with the additional time, the FDIC probably would be forced to establish a bridge bank while it evaluated alternative methods of resolving the failure. Further, the FDIC probably would not have time for careful review of the bank's books to determine the amount and type of each of the institution's liabilities (including off-balance-sheet activities). The FDIC could readily evaluate all liabilities only if the bank had organized its financial records in a way that permitted quick access.

Although it might be possible to manage a single bank's unexpected failure, the situation would probably be unmanageable in the even more unlikely case that the viability of a number of large banks became questionable. With several large banks in trouble, de-

positors would be likely to demand immediate withdrawal of their funds, refraining only if the government were providing 100 percent deposit insurance. Because regulators have limited operational resources (such as people) and may also face financial constraints that restrict the number of bank closings they can handle at one time, they may want to provide 100 percent coverage as a means to avoid closing too many banks in a short period.

The risk of sudden large losses to individual banks or groups of banks is remote and can be further reduced, but it cannot be eliminated. The key to reducing the risk is for institutions to minimize concentrations of exposure to specific events that could cause a sharp drop in their value.

Conclusion

FDICIA has mandated that regulators virtually eliminate deposit insurance losses. The act provides for a systemic exception to its requirement that problem banks must be resolved at the lowest cost to the insurance funds. However, FDICIA also creates some significant political incentives to avoid using the systemic risk exception. Moreover, it is clear from the series of measures to address specific systemic issues that the intent of Congress was virtually to eliminate the practice of the too-big-to-fail doctrine. Congress, having been told that interbank credit created systemic risk, mandated limits on interbank credit. Congress learned that delayed access to funds could pose a systemic problem, so it authorized the FDIC to use final net settlement. In response to reports that the shock waves from a large bank failure could be amplified through the payments system, Congress made contractual netting agreements binding. Indeed, Carnell (1992) has noted that the original bill passed by the House and the bill introduced to the Senate did not allow for a systemic risk exception to least-cost resolution and that the exception was added after regulators and the Bush Administration asked for the change. The earlier versions of FDICIA relied solely on the Federal Reserve's discount window to address any systemic problems.

Although FDICIA does not ban the too-big-to-fail doctrine, it has substantially reduced the likelihood of future large bank bailouts. Bankers and bank depositors should not casually assume that any given bank would be considered too-big-to-fail. Regulators would be well advised to look for ways to close a large failing bank without protecting uninsured creditors. If conditions were such that a large fraction of the banking system was potentially not viable, regulators may have no choice but to protect uninsured depositors.[31] However, for most other systemic risk situations, including financial market risk, the potential still exists for identifying and developing solutions. A careful review of FDICIA's provisions makes it clear that Congress is looking for an end to operating under a too-big-to-fail policy and not for more explanations as to why too-big-to-fail treatment is essential.

Notes

1. "Too-big-to-fail" does not literally mean that a bank cannot fail. The shareholders in large banks have lost their investment, and the managers have been fired. A bank is considered too-big-to-fail when it is thought to be too large to close in a way that imposes losses on uninsured depositors and certain other creditors.
2. Large depositors are not protected when a bank is liquidated, but they have frequently been covered when a failed bank has been sold as a part of a purchase and assumption transaction or when the FDIC assumed ownership of the failed organization and operated it as a bridge bank. The FDIC generally has sought to avoid liquidating a bank in order to preserve any franchise value remaining in the organization. However, the FDIC can preserve the franchise value without providing 100 percent coverage to all depositors by transferring only the insured deposits to the successor organization.
3. The act defines a material loss as one exceeding the greater of $25 million or 2 percent of the institution's total assets, whichever is greater.
4. The exact restrictions on Fed lending are discussed in the section titled "Incentive Changes."
5. Indeed, if a bank is closed by regulatory or market pressure before it wipes out its capital, losses to creditors should be small to nonexistent.
6. Gorton (1988) and Tallman (1988) challenge the view that bank panics caused declines in real economic activity. However, this debate is beyond the scope of this paper. It suffices to note that policymakers in the United States have believed that systemic problems could adversely affect the real economy.
7. One reason for the Federal Reserve to be reluctant to lend to nonbank firms is that, because discount window lending must be fully collateralized, such lending could imperil the

position of the firm's creditors. Thus, if the Fed lends to nonviable nonbank firms it may be transferring wealth away from creditors that cannot or do not withdraw their investment. The Federal Reserve is also not generally in a position to judge the viability of nonbank firms because the agency does not examine and rarely monitors the financial condition of specific nonfinancial firms.

8. For further discussion of the historic operation of the discount window see the Board of Governors of the Federal Reserve System (1985, chap. 4) and Garcia and Plautz (1988).
9. Calomiris, Hubbard, and Stock (1986) and Gilbert and Kochin (1989) have found that the failure of one or more banks may have negative effects on its regional economy. In Gilbert and Kochin's research the effects are largest in two of the three states in their sample if a bank is closed rather than merged with another institution.
10. Many provisions of FDICIA, including the general prompt-corrective-action provisions and the definition of material loss, have delayed effective dates or phase-in clauses. This article focuses on the effects of FDICIA after all parts of the act have taken full effect.
11. FDICIA creates five categories based on capital levels: well-capitalized, adequately capitalized, undercapitalized, significantly undercapitalized, and critically undercapitalized banks. Any bank having a tangible equity-capital-to-total-assets ratio of less than 2 percent is classified as critically undercapitalized. The act also provides that bank regulators may place a bank in receivership or conservatorship on a number of other grounds, including violation of a cease-and-desist order, concealment of records or assets, inability to cover deposit withdrawals, and an undercapitalized bank's failure to develop a plan that would raise its capital or its material noncompliance with a plan to raise capital.
12. Normal FDIC premiums are calculated on the basis of a bank's total domestic deposits. The expanded premium base provided in FDICIA for emergency assessments will tend to increase the relative proposition of costs borne by banks with foreign deposits and substantial nondeposit liabilities. Because banks with foreign deposits and substantial nondeposit liabilities tend to be larger and to affect the financial system more significantly, the effect of FDICIA may be to shift more of the costs to the banks most likely to receive too-big-to-fail treatment.
13. A critically undercapitalized bank is not viable according to the definition in the act.
14. An argument may also be made that the net effect of FDICIA will be to weaken banks. The act will increase the number of regulatory requirements imposed on banks (including some requirements such as Truth in Savings that are unrelated to bank safety) and will also increase bank reporting requirements. It does nothing to enhance banks' ability to compete with nonbank financial firms, which continue to take market share in many of the bank's most profitable markets while remaining free from most of the costly safety and consumer regulations imposed on banks. Moreover, the act was passed in an environment in which deposit insurance premiums had been substantially increased on healthy banks to rebuild the insurance fund.

   This argument that FDICIA will weaken banks has some merit but probably misjudges the impact of what is and is not in the act. FDICIA probably will strengthen the financial condition of individual banks and reduce the risk of bank failures that impose significant costs on the banking system. Banks that cannot strengthen their financial position will likely be forced to merge. Instead, the effect of higher regulatory costs will be that banks will continue to concede market share to nonbank firms in markets in which the law has made banks less competitive.
15. No losses need occur if a bank is closed before its losses become too large. However, closing a bank before its capital reaches zero does not guarantee that losses will be avoided unless bank assets are valued at liquidation prices. See Berger, King, and O'Brien (1991) for a discussion of the alternative definitions of "market value" and their limitations.
16. See the press release from the Board of Governors of the Federal Reserve System dated July 14, 1992, Docket No. R-0769.
17. The regulation on interbank liabilities uses a definition of "adequately capitalized" that is similar but not identical to that used to fulfill the prompt-corrective-action sections of FDICIA.
18. The only case in which the failure of one bank could cause insolvency at other banks would be that of a well-capitalized bank failing suddenly and its remaining assets providing creditors with a low recovery rate. These unexpected losses would have to be massive under the currently proposed capital requirements for prompt corrective action because a well-capitalized bank must maintain a total capital-to-risk-assets ratio of at least 10 percent.
19. The limits on interbank credit extension may not be effective at preventing insolvency if a group of related banks fail. For example, if a set of international banks from a foreign country were ordered by its government to stop payments, limits on exposure to any single bank might not be effective.
20. See Holland (1992) for a discussion of some of the risks in the swaps market. That analysis focuses on the credit risks posed by the interbank market for swaps. However, the issues raised by interbank credit exposure to swaps are not fundamentally different from the issues raised by other types of interbank credit exposure.
21. For a general discussion of the risks posed by over-the-counter derivatives to banking organizations see Hansell and Muehring (1992).
22. See Shirreff (1991) and Torres (1991) for discussion of some of the problems encountered in unwinding the derivatives books of some large financial firms. Shirreff (1992) discusses some of the regulators' general concerns about the swap market.
23. For example, consider an interest rate swap with a notional principal of $100 million. One party agrees to pay a fixed rate of 8 percent and the other party agrees to pay the London interbank offered rate (LIBOR) for five years. The $100 million notional principal will never change hands. The party that owes the larger interest payment will pay an amount to the other party equal to the absolute value of LIBOR minus 8 percent.

24. Further, many master derivatives contracts between two parties provide for netting across contracts so that gains on one contract may be offset by losses on other contracts.
25. See Wall, Pringle, and McNulty (1990) for a discussion of the (credit) risk-based capital guidelines as applied to over-the-counter interest rate and foreign exchange derivatives.
26. This issue may require some sensitivity on the part of the FDIC to the needs of the bank's counterparties. For example, the FDIC ordinarily likes to close a bank on a Friday after the U.S. financial markets close. If all over-the-counter derivatives are terminated at this point, those users that lack access to foreign markets may have problems arranging substitute hedges before Monday morning and would therefore be exposed to any changes in market prices during the weekend. A possible solution would be for swap contracts to provide that if a bank should fail at the start of a weekend the contract would be terminated at a fixed time on Monday morning and the remaining obligations of the two parties would be based on market prices at the time of termination. The FDIC may have to agree to this arrangement. The one risk in such an arrangement would be that some dealers may try to manipulate market prices around the termination time, but doing so is likely to be difficult in a market with a large number of users trying to arrange substitute hedges.
27. Many derivatives products involve two-sided credit risk. If a user's credit quality has deteriorated sufficiently, dealers may not be willing to take the credit risk ordinarily involved with products like forward contracts and swaps. Some derivatives contracts contain clauses to protect the parties against material adverse changes in the financial condition of their counterparties, and such contracts would force the parties to recognize deterioration in the user's condition prior to its failure. However, financially weakened users may need to provide additional protection to the dealer in order to reestablish their hedge if the derivatives contract contains no such clause. For example, rather than using an ordinary interest rate swap without collateral to protect against an increase in market interest rates, the user may be required to post collateral with the dealer or buy an interest rate cap.
28. Virtually all dealers impose a limit on their maximum credit to any given counterparty. The limit is established according to the counterparty's size and financial strength. The maximum exposure limits aggregate exposure from all types of credit risk, including any loans. See Arak, Goodman, and Rones (1986) for an example of ways a dealer could calculate its credit exposure on an interest rate swap and Chew (1992) for a recent discussion of a banks' management of derivatives credit risk.
29. The clientele of some dealers tends to be weighted toward one side of the derivatives market. For example, the customer bases of some commercial banks may be weighted toward firms that wish to pay a fixed rate of interest on their interest rate swaps. The bank ends up having a concentration of floating rate contracts. One common way for these commercial banks to hedge their transactions is to arrange offsetting swaps in which the bank pays a fixed rate with a dealer that has a different clientele. If credit lines became exhausted in the interdealer market, dealers could have more problems hedging deals with their natural clientele and, thus, be less willing to offer over-the-counter derivatives to their usual customers.
30. Financially weak banks may handicap trading operations in a number of ways. Their presence may bring the general credibility of the trading operations into question with customers.
31. The policy mistakes, if any, that led to the questionable viability of a large fraction of the banking system would have occurred prior to any decision to exercise the systemic risk exception.

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Banking Reform and the Transition to a Market Economy in Bulgaria: Problems and Prospects

William C. Hunter

The Bulgarian banking and financial system changed dramatically in 1989 when the Communist Party lost its ruling monopoly and Bulgaria, like most of its East European neighbors, started down the road to political and economic democratization. The enthusiasm accompanying the breakdown of Communist control made the obstacles to a smooth transition to a market economy seem relatively minor. However, the pervasiveness of these stumbling blocks (internal budget deficits, massive external debt, inefficient state-owned enterprises, and a banking system mired in nonperforming assets, to name a few) has now become painfully apparent. These problems, intensified by the recent collapse of the ruling political coalition on October 28, 1992, make the task of restructuring the financial system monumental indeed.

Despite the magnitude of the difficulties confronting Bulgaria, it is important that the country persist in efforts already under way to revitalize and privatize its banking and financial system, which will play a vital role in the transition to a market economy. This article presents an overview of the banking reform taking place in Bulgaria, discussing the lack of information on creditworthiness, the lack of effective accounting and legal systems, and the problems associated with bad loans within the banking system and among state-owned enterprises.[1] In Bulgaria, as in other transition economies of Eastern Europe, the banking system's ability to fulfill its role in stimulating economic growth depends directly on how it handles the deadweight

The author is vice president and senior economist in charge of basic research in the Atlanta Fed's research department. The views expressed in this article are the author's and not necessarily those of the Federal Reserve Bank of Atlanta, the Federal Reserve System, the U.S. Treasury, the Bulgarian National Bank and its Bank Consolidation Company, or other international agencies.

losses associated with failed state-owned firms, which have been transformed into bad loans on commercial banks' balance sheets.

The nature of the reforms being undertaken in Bulgaria parallel those occurring in other East European countries such as Hungary, Romania, the independent states of the former Soviet Union, and the Czech and Slovak Republics. Thus, while this article focuses on the Bulgarian case, the problems, prospects, and proposed solutions are also relevant to these other economies in transition. To begin, a brief overview of the economic history of Bulgaria provides the necessary background for describing the particulars of the Bulgarian banking system.

A Brief Economic History of Bulgaria[2]

Situated on the northeastern section of the Balkan Peninsula, the Republic of Bulgaria has a population of about 9 million people. The Bulgarian standard of living, while low, is above that of Romania and Albania, two of its neighbors. The average Bulgarian worker earns about $90.00 (U.S.) per month. Blessed with a warm climate and fertile soil, the country has a natural comparative advantage in the production of agricultural commodities.

The contemporary Bulgarian state dates back to 681, when the Bulgarian Kingdom was founded after the Byzantine Empire formally recognized Bulgar control of the region between the Balkan Mountains and the Danube River. For the next seven centuries the Bulgarian state was controlled by a succession of various ruling factions, and the Bulgars were gradually assimilated into the region's more numerous Slavic population. In the latter half of the fourteenth century Bulgaria was invaded by the Ottoman Turks and in 1396 lost its independence for the next five centuries. After the Russian-Turkish War in 1878 Bulgaria was liberated from Turkish domination and became an independent state.

Until well into the twentieth century Bulgaria's economy was dominated by agricultural production. Between 1920 and 1944 the Bulgarian economy showed signs of resilience despite the worldwide depression during the early 1930s. For example, from 1929 to 1939 the average annual growth rate in industrial output in Bulgaria was 4.8 percent, compared with only 1.1 percent for Europe as a whole. This economic resilience came at a price, however. The constraints imposed by the depressed world economy and a shrinking export market in Europe led Bulgaria to seek alternative trade arrangements, including bilateral trade agreements with Germany. While these agreements, which covered an estimated 88 percent of the country's agricultural output, guaranteed the sale of Bulgarian agricultural products to Germany, they also tied the Bulgarian economy closely to Germany's. As a result, much of Bulgarian industry was excluded from the European free trade zone, isolating the country from market forces governing the European and world economies and leading to its alignment with Germany during World War II.

Following the war, Bulgaria came under the Soviet Union's influence, and economic development was subjected to the Communist Party's doctrine. The government gradually assumed direct control of the entire economy, nationalizing agriculture, financial industries, and virtually all private industry and determining the allocation of resources and output at all levels of production.

During the period of Communist domination the Bulgarian government's main economic objective was to create new industries—engineering, metallurgy, chemicals, electricity generation, and appliances, among others. This emphasis virtually reversed the comparative contributions of industry and agriculture to aggregate production or output, resulting in a massive shift in occupations and in migration of the population from rural to urban areas.

Bulgaria's East European neighbors, including Czechoslovakia, East Germany, Hungary, Poland, and Romania, were also brought into the Soviet sphere after World War II. Given the similarity of their economic institutions and policy objectives and their common concern for fostering industrialization, income redistribution, and social equality, these countries, along with the Soviet Union and others with centrally planned economies, formed an economic union—the Council for Mutual Economic Assistance (CMEA)—in January 1949. An essential component of the Soviet growth strategy, the council provided a framework within which its members could promote their own (and the Soviet Union's) national objectives.[3]

The Bulgarian economy showed significant signs of weakness as early as the late 1950s, and the government's five-year economic plans issued following the nationalization of industry were rarely achieved. In recognition of this failure, the government introduced several economic reform programs during the 1960s and 1970s. At the end of the 1970s, the so-called New Economic Mechanism was introduced with the aim of creating self-financing firms at all

levels of industry and thereby enhancing productivity and efficiency. These reforms were deemed ineffective. Indeed, the rate of economic development actually slowed in the years following adoption of the program.

Attempts at economic reform continued through the 1980s. However, as late as 1988 state-owned enterprises and cooperatives still dominated the Bulgarian economy, producing virtually all of the country's output and employing almost all of the work force. With the downfall of the Communist Party in 1989, Bulgaria took its most important steps toward economic reform by discontinuing the central planning of firm management and developing the mechanisms to establish private ownership and property rights.

The country began the process of economic reform with a parliament controlled by a fragile democratic coalition. This coalition collapsed in late October 1992, and it is not yet clear how this development will affect the speed with which reforms are implemented. In addition, the country has an external debt of approximately $12 billion (U.S.) owed primarily to the Federal Republic of Germany, Japan, and the United Kingdom. The government also faces the difficulties of managing an internal budget deficit estimated to be approximately 9 billion Bulgarian leva (approximately $500 million [U.S.] at the current official exchange rate of about 23 leva to $1 [U.S.]) for fiscal 1992.

The Structure of the Bulgarian Banking System

The modern era in Bulgarian banking and finance began with the passage of the Banking Law of December 27, 1947, which effectively nationalized the system. From 1948 until 1981, this system, similar to those of other East European countries, comprised three distinct banks. The Bulgarian National Bank, much like the Gosbank in the classic Soviet economic model of centralized planning, monitored the financial aspects and financed the investments of the central government's annual economic plan. It also monitored the payments of enterprises, received their deposits, and extended credit in the domestic currency. The Bulgarian Foreign Trade Bank had sole responsibility for foreign exchange operations (payments associated with imports and exports, foreign credits, and management of foreign currency reserves). The State Savings Bank was limited to serving the household sector, receiving their savings deposits and financing housing credits much as savings and loan associations do in the United States.

Bulgaria's three-bank system ended in 1981 when the government created a special bank to finance business activities that were not included in its official economic plan or that exceeded the plan's target budget. Further change occurred in 1987, when the government set up seven specialized commercial banks, each restricted to lending in a particular economic sector, such as transportation, electronics, construction, or chemicals. The seven banks operated as full-service universal banks, able to provide loans in the domestic or foreign currency and to take equity positions in other firms, companies, and joint ventures in their respective sectors. In 1989 the government created fifty-nine new commercial banks out of the former branches of the Bulgarian National Bank and simultaneously eliminated the requirement that certain banks engage in specialized lending.[4] This action allowed all banks to function as universal banks. Since 1989 several new banks have been granted charters by the Bulgarian National Bank, including at least four private banks (as of late 1992). As of July 1991 there were a total of seventy-four banks (excluding the Bulgarian National Bank and the Bulgarian Foreign Trade Bank) with a total of 4,033 offices operating in the country.

Most Bulgarian banks are organized as joint stock companies. Until late 1991 the shares of all banks except the four recently created private banks were owned principally by the Bulgarian National Bank, the Bulgarian Foreign Trade Bank, and a few large state enterprises in the nonfinancial sector. As of July 1991 the Bulgarian National Bank owned approximately 32 percent of the shares of the older commercial banks (the seven created in 1987 and the Bulgarian Foreign Trade Bank) and about 65 percent of the shares of the fifty-nine banks created in 1989 out of its former branches. The Bulgarian Foreign Trade Bank and the seven specialized banks created in 1987 also own a significant percentage of the shares of these fifty-nine banks.

In conjunction with the World Bank, the Bulgarian National Bank has designed a merger and privatization program to consolidate Bulgaria's commercial banks into eight to ten institutions with shares held by private domestic and international investors. The shares of the commercial banks owned by the Bulgarian National Bank and the state-owned enterprises were recently transferred to the Bank Consolidation Company, a wholly owned subsidiary of the Bulgarian National

Bank established to manage and oversee the consolidation effort.

Banking and Financial System Obstacles to the Bulgarian Transition

Of the many problems confronting the Bulgarian and other East European economies, the lack of well-functioning money and capital markets is especially critical. The existing markets in these countries are less diverse and stable than those of Western economies primarily because they lack the complex information required to assess risks and the creditworthiness of borrowers. This dearth of information is understandable given that central planning regimes offered few incentives to accumulate such data.

Before 1987 the governments of centrally planned economies like Bulgaria served as the lender of last resort, automatically financing the losses of state-owned enterprises. These governments essentially provided a form of comprehensive insurance to firms without charging the appropriate premiums, and this practice led, in most cases, to the overextension of credit between state-owned enterprises and by commercial banks to these firms. In Bulgaria, where most commercial banks' balance sheets are dominated by such loans, an estimated 54 percent of all bank credits, equaling 34.4 percent of the country's gross domestic product, were nonperforming. For the specialized commercial banks created in 1987, nonperforming loans accounted for 65 percent of the loans held on their balance sheets.[5]

Currently, Bulgarian state-owned enterprises have an estimated total outstanding debt of about 100 billion leva. Of this total, more than a quarter is owed to other state-owned enterprises and about half is owed to Bulgarian commercial banks. This interdependence of the balance sheets of state-owned enterprises and commercial banks impedes the operation of the Bulgarian money and capital markets because it makes it difficult to distinguish efficient and economically or financially viable firms from those that are inefficient and nonviable. This situation, in turn, makes it almost impossible for banks or other investors to make rational credit decisions, creating negative spillover effects for consumers.

The overall uncertainty in the Bulgarian economy adversely affects the profitability of business enterprises in general and reduces the market value of their installed capital, thereby limiting their capacity to borrow against this capital. This atmosphere of uncertainty, overlying a complex system of interfirm credits that links the fortunes of well-run firms to the poorly run ones, is slowing the transition to a market economy.

The narrowness of the capital markets in the evolving economies of Bulgaria and other East European countries exposes investors and creditors to excessive degrees of systemic risk because they cannot diversify. This inability to diversify leads to large risk premiums and overly expensive credit, and, coupled with the interdependence of state-owned enterprises' and commercial banks' balance sheets, allows small shocks incurred by a particular firm or sector to be transmitted to other firms and sectors and eventually to the commercial banks and the entire economy. To limit their exposure to such risks, lenders and investors will tend to shorten their investment and lending horizons. From a social viewpoint the domination of short-term quick-payback investments may not be optimal because they may squeeze out more desirable (and more profitable) longer-term investments.

Removing the Obstacles

The factors identified above represent major impediments to Bulgaria's successful shift to a market economy. It is clear that the Bulgarian banking and financial system would be made more efficient by the implementation of policies that would (1) improve the financial information system and the legal instruments available to lenders, investors, and borrowers; (2) cleanse commercial banks' and state-owned enterprises' balance sheets of their bad loans; and (3) enhance Bulgarian policymakers' credibility.

Financial Information. An improved financial information system in Bulgaria and similar transition economies would provide for a better assessment of individual firms' creditworthiness, thereby encouraging more lending and investment. Developing a framework of legal instruments to enforce contracts and protect both lenders' and borrowers' property rights would also improve the lending environment.

A uniform set of transparent accounting standards, including rules for public disclosure of nonproprietary financial information, is critical to the further liberalization of Bulgaria's banking and financial sectors. Accounting standards form part of the resource allocation process, allowing banks to compare the merits of one borrower over another. Similarly, bank supervisors, investors, depositors, and managers need dependable

bank financial statements to make informed judgments about bank financial health and performance.

For banks, a vital component of the accounting system is a set of rules relating to valuation of assets and capital. Without such rules, accounting systems become relatively worthless and the value of banks' equity capital may be called into question. Assets need to be valued on a bank's books at their true worth, particularly when this value is less than the price paid for them. Considering the scope of the nonperforming loan problem among Bulgarian commercial banks, the application of accounting standards would require that such assets be written down or written off, depending on their status, before the banks will be free to function as true financial intermediaries.

Cleansing Balance Sheets. Finding appropriate ways to clean up commercial banks' and state-owned firms' balance sheets from bad loans would uncouple the fortunes of firms that should continue operating from those that ought to be shut down, restructured, or reorganized. A major challenge in Bulgaria and other former Soviet Bloc countries is to achieve this objective without imposing excessive costs on the national budget or further hampering the incentive structure faced by market participants.

A number of methods for cleansing the balance sheets of commercial banks and state-owned enterprises are being debated in the transition economies of Eastern Europe: the simple cancellation of state-owned enterprises' debts, socialization or nationalization of bad debts, privatization of bad debts through specialized asset liquidation or carve-out companies, or liquidation and restructuring of banks and state-owned enterprises through a specialized government restructuring agency or company.

The simple cancellation of all debts of state-owned enterprises is not advisable for several reasons. First, such a step would reduce the working capital of creditor firms and banks; it also carries the risk of driving good firms whose cash-flow requirements depend critically on debt service receipts into bankruptcy. Similarly, cancellation of only the acknowledged bad debts of state-owned enterprises is ill-advised because it could give rise to serious moral hazard or other incentive problems. Such a plan of debt forgiveness or cancellation might lead suppliers of inputs to the state-owned companies (both good and bad) to withhold financing in fear of further debt cancellation by the government or the outright repudiation of these obligations by state-owned enterprises in hopes of receiving further government protection. To the contrary, the East European governments should consider extending the credit of profitable state-owned enterprises to minimize disruptions to the financial sector as banks' and state-owned firms' balance sheets are cleansed.[6]

Separating the future prospects of the debtor and creditor enterprises and banks through the nationalization, socialization, or absorption of bad debts by the government is a feasible alternative to a simple debt cancellation policy. Such actions would transform the nature of these debts and alter their risk characteristics without changing their magnitude.

In nationalizing the debt, the government can engage in debt-for-debt swaps, exchanging its own debt (bonds or bills) for the bad loans that creditor firms and banks hold against other enterprises. In essence the transaction would recapitalize the firms and banks by replacing bad loans with government obligations and transforming debtor firms' liabilities to other enterprises and banks into government liabilities. By acting as a financial intermediary, the government essentially transfers the cost of the restructuring to Bulgarian taxpayers.[7]

By servicing its own debt the government would ensure that the creditor enterprises and banks are paid off. However, to secure its capacity to service its debt, the government must have at its disposal a functional tax system capable of collecting the needed revenues without resorting to inflationary finance. This need for revenue points out the urgency for quick development of an efficient tax and collection system.

The Bulgarian government has, in principle, adopted this bad-debt nationalization plan for a portion of commercial banks' bad loans granted before 1990. However, given Bulgaria's internal budget deficit, its tax system will have difficulty coping with the debt-service requirements on the government bonds used in this plan, as acknowledged by the existence of a five-year moratorium on the payment of interest on this debt.[8]

The presence of the internal budget deficit calls for other, innovative solutions to the country's bad debt problem. In addition to the debt swap program, the Bulgarian government has established the Bank Consolidation Company—similar in some respects to the Resolution Trust Corporation in the United States, which is charged with liquidating financially failed savings and loan associations—to oversee the restructuring, consolidation, and privatization of the banking system.[9] A similar agency is being formed to handle this process for state-owned enterprises. The use of government entities to carry out the restructuring reflects the general lack of information on asset values, a shortage of private risk capital, and the absence of

established markets for asset liquidation. Thus, unlike the United States in recent cases, Bulgaria cannot rely on the formation of private companies to purchase and liquidate the failed companies.

In short, cleansing the balance sheets of the commercial banks and viable state-owned enterprises is critical to the success of the ongoing Bulgarian transition. Once these balance sheets are cleaned up and better valuation of assets is possible, the economy can be further opened up and the benefits associated with foreign capital investment can be realized. These benefits include financial and managerial assistance and better access to international capital markets. Foreign investors and managers can bring the know-how, contacts, information, and other skills needed to augment the country's existing expertise and improve the functioning of domestic money and capital markets.

Enhancing Credibility. Among the countries of Eastern Europe, another obstacle to the successful transformation to a market economy is government policymakers' lack of credibility, which adds to the uncertainty faced by economic agents and results in inefficient decision making among market participants because they do not know the "rules of the game" in the newly liberalized markets. To enhance their credibility, policymakers must demonstrate that they are willing to introduce fundamental change in the manner in which policy is conducted and to be consistent in their policy choices. The adoption of a rule-based policy framework rather than one based on discretion represents one way of gaining credibility. A rule-based framework tends to reduce the perception of arbitrariness and thereby strengthens confidence in the policy-making process. However, a system devoid of some discretionary leeway is not advisable because it may not allow policymakers to respond to economic shocks or political crises in a timely and appropriate fashion.

Regardless of the degree of discretion allowed policymakers in these transition economies, at least two elements of policy credibility are crucial to the success of the changes. First, the economic reform program itself must be credible. It should be feasible, stand up to the test of professional scrutiny, and reflect the experiences and lessons from similar episodes in other countries. Second, policy commitments must be credible. They must not be changed in midcourse to take advantage of private sector agents' response to the initially announced policies. This practice can only result in policy ineffectiveness as economic decisionmakers learn not to trust their policymakers and react to policy pronouncements in perverse and undesirable ways that neutralize the policies' intended effects. Clearly, policymakers must find ways to guarantee to market participants that policy will not be used to their disadvantage after they have altered their behavior in response to policy pronouncements.

There are many ways of achieving consistency and credibility in policy making in Bulgaria and the other former Soviet Bloc countries. Among these are political constraints like those imposed by constitutions (such as balanced budget provisions); legal constraints set forth by parliaments, congresses, and other official governing bodies; and external constraints of the type imposed by international organizations such as the Basle Committee on Banking Supervision, the General Agreement on Tariffs and Trade (GATT), the International Monetary Fund, and the World Bank.

The newly formed democratic governments of Eastern Europe face enormous political pressures as they attempt to implement reforms. In such an environment, the value of economic policy constraints imposed by international agencies should not be underestimated. In most cases these restrictions, in addition to fostering a smooth transition, also contribute much in the way of binding policymakers to credible and consistent economic policies.

The Bulgarian Banking Industry's Future

The short-run prospects of the Bulgarian banking industry hinge directly on the ability of the Bank Consolidation Company to carry out its task of restructuring, consolidation, and privatization. Given the banking sector's key role in the economic development process, the future of the Bulgarian economic transition is seen to depend critically on developments in this sector.

The Bank Consolidation Company's initial goal was to reduce the number of commercial banks from about seventy-four to around eight or ten through a judicious merger and consolidation program beginning in October 1991 and ending in February 1992. For numerous reasons, this ambitious goal was not achieved. As of September 1992 one merger involving twenty-two commercial banks was formalized with the voluntary signing of a merger agreement, spearheaded by the Bank Consolidation Company and approved by the Bulgarian National Bank, that resulted in the formation of the United Bulgarian Bank (formerly named the Bulgarian Credit Bank). This bank anticipates receiving equity investments and technical assistance

from the European Bank for Reconstruction and Development and other foreign organizations. Currently, it is anticipated that two or three mergers involving other commercial banks will be formalized during the winter of 1993.

Considering the magnitude of its task, it is not surprising that the Bank Consolidation Company failed to meet its initial consolidation goals. Clearly, the consolidation effort cannot be effectively carried out without proper attention to the problems discussed in this article. In trying to achieve consolidation, the Bank Consolidation Company faces a banking industry characterized by numerous banks of inefficient size (too small to exploit economies of scale) with undiversified loan portfolios, poor-quality assets and excessive bad debts, inadequate equity capital, and a labor force generally lacking in modern banking and financial skills.

Despite its lack of resources, the Bank Consolidation Company has made important strides in establishing a framework for merging Bulgaria's banks. A uniform accounting system and an analysis system for appraising banks' financial health have been established. The analysis system resembles the CAMEL rating system used by commercial bank regulators in the United States, which appraises bank capital, asset quality, management, earnings potential, and liquidity for all commercial banks as well as for merger candidates. Under the Bank Consolidation Company's guidelines, the bank resulting from a merger must have sufficient equity capital in accordance with the existing international capital regulations (8 percent of total assets), must not contain excessive bad debts in its loan portfolio (nonperforming assets must be written down, written off, or reserved), and must be well diversified. In addition, the bank management must be of high quality, and the bank must have positive earnings potential and excellent liquidity on its balance sheet. As for most Western banks, the merged institution must also have formal written policies covering all aspects of its operations.

Conclusion

A natural function for banks in the transition from a command to a market economy is to replace central plans for financial intermediation and economic development in such a way as to bring market forces to bear on the process of transferring savings into investment. This process is the key to both the failure of the system of central planning in pre-1989 Bulgaria and to the country's prospects for future economic reform.

Unfortunately, as this article suggests, the Bulgarian banking and financial system is currently incapable of carrying out this function effectively. The problems in the Bulgarian banking and financial system are both broad-based and deep-rooted and will probably be eliminated only through a slow and difficult process of economic transition. Despite this pessimistic outlook, however, there are several positive developments taking place in the banking system. Bulgarian policymakers seem to understand the need for further banking system reform and are taking steps to restructure the industry to put it on a sound economic footing. As these system reforms are carried out, they should generate positive external effects for price reform, monetary policy, trade liberalization, and other key elements in the economic transition process.

Notes

1. During the spring of 1992 the author was on special assignment in Bulgaria working with the University of Delaware-Bulgarian Coalition and with the Bulgarian National Bank and its Bank Consolidation Company. More recently, he visited Bulgaria as part of a Federal Reserve Bank of Atlanta-U.S. Treasury short-term technical assistance mission at the Bank Consolidation Company. Much of this article is based on information obtained during these visits, such as unpublished memoranda and conversations with officials of the Bulgarian National Bank, the Bulgarian Bank Consolidation Company, the International Monetary Fund, the World Bank, the University of Delaware-Bulgarian Coalition, and the managements of several Bulgarian commercial banks.
2. This description draws heavily on documents of the Bulgarian National Bank, including its 1990 *Annual Report*.
3. Approximately 90 percent of Bulgaria's foreign trade was conducted with CMEA countries until 1989, when the CMEA relationships began to disintegrate.
4. Although sector-specific lending by commercial banks is no longer mandatory, many still lend to only a few firms in designated sectors. This behavior, combined with the fact that many of the newly created commercial banks were allocated

the loans accumulated by state-owned enterprises under the old Gosbank-type financial system, has resulted in a banking system characterized by inadequate loan portfolio diversification. Inadequate diversification exacerbates other problems in Bulgaria's banks, including small capital bases and inexperienced managements, that are discussed elsewhere in the article.

5. Given the accounting principles employed in Bulgarian banks, these estimates are extremely conservative by Western standards.
6. Identifying which state-owned enterprises are profitable requires the adoption of meaningful accounting conventions, as discussed earlier.
7. It should be kept in mind that, unlike bad loans that resulted from the savings and loan debacle in the United States, the bad loans of the Bulgarian commercial banks have always been government obligations. These loans were made by the government's monobank and assigned to the newly created commercial banks once the two-tiered banking system was adopted. However, as in the U.S. savings and loan crisis, the Bulgarian government should commit not to engage in future bailouts of banks if it is to avoid the problems of excessive risk taking associated with the moral hazard dilemma.
8. However it is financed, any plan to nationalize debt hinges on the question of government credibility; government bonds swapped for bad loans must be marketable if the plan is to be effective. By substituting public debt for private or quasi-private debt, the government is merely making explicit an existing obligation. The point is that it must commit itself to raise taxes or earmark revenues (for example, cut future spending) to service this newly issued debt. If the government cannot credibly commit, its debt will not be marketable. An alternative to the issue of government debt would be obligations of the central bank serviced by earmarked taxes (fees) collected from the banking system.
9. The activities of the Bank Consolidation Company are discussed in more detail in the section that follows.

FYI

Competitive Considerations in Bank Mergers and Acquisitions: Economic Theory, Legal Foundations, and the Fed

Christopher L. Holder

In the past decade the U.S. banking industry has experienced major structural changes, including a significant reduction in the number of independent banking organizations. This change is partly the result of the increased pace of bank mergers and acquisitions.[1] During the twenty-year period from 1960 to 1979, mergers averaged 170 per year, with an average of $4.9 billion in total bank assets being acquired each year. In contrast, from 1980 to 1989 there was a yearly average of 498 mergers and $64.4 billion in total bank assets acquired.[2] Whatever dynamics underlie this industry consolidation, the overall result at the national level has been the increased concentration of banking resources among fewer banks. At the same time, local market share concentration levels have remained virtually unchanged during the eighties, a particularly important factor because local banking markets are the arena in which banking agencies measure competition between banks in considering antitrust issues.[3]

Consolidation in the banking industry has been a hot media topic in part because one alternative means of exit open to banks—failure—carries such negative force.[4] Ordinarily, stockholders and creditors operating in a market economy accept the risk of failure as a normal part of their investment, but in the banking system the deposit guarantees of the federal government put public funds at risk. Because any funds lost are drawn from insurance premiums

The author is an analyst in the financial section of the Atlanta Fed's research department. *He gratefully acknowledges comments from Dwight Blackwood, Jim Burke, Angela Dirr, Frank King, Al Martin, Bobbie McCrackin, Steve Rhoades, Aruna Srinivasan, Sheila Tschinkel, and Larry Wall.*

paid by the insured institutions, they in fact come only indirectly from taxpayers and consumers of bank products. Nonetheless, the savings and loan crisis has made a direct taxpayer bailout of the banking system all too conceivable. To the extent that consolidation is necessary for the U.S. banking system to remain strong and globally competitive, mergers and acquisitions are clearly preferable, as a means to this end, to large numbers of bank failures.

The Federal Reserve System, created by the Federal Reserve Act in 1913 to provide for a safer and more flexible banking and monetary system, shares responsibility for banking supervision with other federal banking agencies. Part of the Fed's responsibilities includes administration of the laws that regulate bank holding companies and supervision of state-chartered member banks. These institutions are required to obtain approval from the Federal Reserve Board of Governors prior to completing a bank merger or acquisition.[5]

The Fed does not automatically grant approval of applications for merger. Several factors are taken into account—the likely effects of the acquisition on banking competition, financial and managerial resources and prospects for the acquirer's future, the convenience and needs of the community to be served, and any other legal issues related to a particular application. In considering the competitive aspects of a proposed merger, the Fed determines the extent to which existing competition would be adversely affected by the acquisition if an acquiring bank or bank holding company already has one or more banking offices in the market in which it seeks to acquire a bank. The Fed also examines the likely effects of the acquisition on probable future, or potential, competition if the acquirer is not already represented in the markets in which the bank to be acquired operates.

To ensure that safety and soundness criteria are met, the Fed considers the financial and managerial resources and the expected future of both the acquirer and the bank to be acquired. Some of the major factors taken into account include (1) the present and future capital position, asset quality, income, liquidity, and riskiness of the acquirer, (2) the means by which the acquirer intends to finance the merger and its level of debt and ability to service that debt, and (3) the quality of the acquirer's management and any plans for improving it.

The effect of the acquisition on banking products and services in the relevant banking markets is another concern examined by the System. If new or better services or lower prices for bank services are likely to result from an acquisition, the merger is more likely to win approval. The Fed also examines an acquirer's record under the Community Reinvestment Act, such as its performance in meeting the credit needs of its community, including low- and moderate-income areas.

The dynamic nature of the U.S. banking system, the several purposes of bank regulation, and the numerous variables to be considered in each merger transaction—such as different supply and demand conditions and the unique characteristics of different geographic markets—necessitate examining mergers on a case-by-case basis. It is the purpose of this article to focus on one aspect of the Fed's analysis of bank acquisitions over the last decade: the likely effect of mergers on competition.[6] The discussion summarizes the Federal Reserve's general approach to antitrust issues over the last decade. The economic factors and legal precedents that serve as the Fed's foundation for competitive analysis and changes in those criteria over the last decade are also considered.[7] For example, regulators have taken into account that banks have faced increased competition not only from within the banking industry but also from thrifts and other financial institutions as they have experienced deregulation.

Antitrust Issues

Antitrust regulation seeks to fulfill several objectives for bank customers and the general public. One goal is to prevent monopoly prices (excess profits) in the banking industry. Another is maintaining public access to bank products and services, an issue that can be especially problematic in small markets.[8] Antitrust laws seek to avoid static (noninnovating) markets and to allow efficiency-increasing, service-enhancing mergers. In addition, antitrust regulations are connected with safety and soundness issues, including limiting Federal Deposit Insurance Corporation (FDIC) losses.

The Federal Reserve keeps the objectives and concerns of antitrust regulation in mind in analyzing the consequences of bank mergers and acquisitions on market competition. Although few deals are actually denied by regulators on competitive grounds, antitrust issues play an important role in structuring mergers and acquisitions. Many deals are restructured to include divestiture, and an unknown number of banks are deterred from even filing a merger application because of anticipated antitrust concerns.[9]

*E*conomics of Market Structure

One of the main purposes of antitrust regulations in mergers is to prevent acquirers from earning abnormal profits at the expense of consumers within the market where the merger occurred.[10] Defining the relevant market, in terms of both product and geographic area, is crucial for analyzing the economic effects of a proposed merger. Simply defined, a market is a group of buyers and sellers that significantly influence prices, quality, and quantity of specific products and services and the geographic area in which these buyers and sellers interact. A market can also be defined as an area in which the prices of all similar (substitute) goods are dependent on each other but are unaffected by prices for goods outside of the area.

For example, consider the case of two merchants who sell essentially the same product at similar, but not necessarily identical, prices (as banks do). One merchant is located on the north side of town and draws customers entirely from that area while the other merchant, located on the south side of town, draws customers exclusively from the south side. Because these merchants have no common customers, it might seem that they operate in separate markets. That assumption is not necessarily correct, however. To determine whether they are operating in the same market it is necessary to observe buyers' responses to a nontrivial and nontransitory price change in the good being sold. Suppose that one of the merchants—the one on the north side of town—raised the price of the product being offered. If this price change did not affect demand for the comparable good offered by the southside merchant, who did not change prices, the two would be functioning in separate markets. However, if some customers were willing to switch the store from which they buy, the merchants would be in the same market and would be direct competitors, even though they previously had currently drawn their customer base from separate areas.

Besides direct competition, the potential for competition is an important factor in determining markets. A potential competitor is one who would have to make an entry decision, and thus incur entry costs, before competing in a particular market. Because potential competitors help deter the exercise of market power (a single buyer's or seller's ability to influence the price of its product or service) within a market, their presence enhances competition. The degree to which they can forestall anticompetitive behavior is directly related to the proportions of obstacles—the size of entry costs and the existence of legal barriers to entry—standing between the potential competitors and entry. The lower the entry costs, or the fewer the legal restrictions on entry, the more potential competition contributes to sustaining competition within a market. Unfortunately, the importance of potential competition cannot be assessed numerically with the currently available empirical data.

In measuring the effects of either direct or potential competition in markets, it is necessary to determine the degree of substitutability between products—in economic terms, the cross-elasticities of supply and demand. The cross-elasticity of supply indicates the relationship between the produced quantity of one good and a change in the price of another. The cross-elasticity of demand indicates the relationship between the demanded quantity of one product and a change in the price of another. The more responsive the quantity of one product produced or demanded is to a change in price of another product, the higher the cross-elasticities and the more those products are viewed as substitutes (see Frederic M. Scherer 1990 or Jean Tirole 1988).

However, cross-elasticities alone cannot precisely determine markets. For one thing, cross-elasticities are difficult to estimate, and current theory does not define specific numerical levels at which a product becomes an adequate substitute for another product and would be included in the market. Another issue is that of the time frame in which customers and suppliers might switch products—that is, switching products may not be possible in the short term. In addition, the price changes that would induce buyers or sellers to substitute must take into account the relative prices of products and transactions costs. In practice, only those producers that might have a direct and immediate effect on competition are included in the market. The manner in which markets are currently defined by the Fed is discussed later.

Once the relevant market has been determined, competition within the market must be assessed. To do so, federal banking agencies apply theories developed in the field of industrial organization, the area of applied economics that seeks to explain the behavior of firms in a market. In particular, the agencies rely heavily on the concept known as the structure-conduct-performance (SCP) paradigm, which contends that the structure of a market indicates the amount of competition among firms in that market.[11] In this view, market structure is considered to be affected by the basic conditions underlying an industry, such as demand and supply functions and legal constraints. In turn, market

Box 1
Determination of Geographic Markets

The Supreme Court's decision in the 1963 Philadelphia National Bank case—to consider a bank's geographic market to be its local area—remains the foundation of the Fed's delineation of geographic markets. The Fed attempts to define markets in terms of the area in which buyers and sellers can interact without significant transaction costs. Because the market is the basis for calculating the structural effects of a proposed merger, this market definition is often crucial in deciding whether a merger is permissible under antitrust laws.[1]

The job of determining local banking market definitions at the Fed falls to the twelve Federal Reserve Banks, with procedures and guidance from the Board. Recent national studies of consumer and business behavior and local market surveys by various Reserve Banks confirm that the Board's definition of a market as a local banking market is still current (see Gregory E. Elliehausen and John D. Wolken 1990, 1992). The following discussion reviews some of the factors considered by the Reserve Banks in defining banking markets. While their general approach is similar, some Reserve Banks may give greater or less emphasis to certain factors. The Board's staff coordinates general consistency among Reserve Bank definitions. The approach discussed here is that used by the Federal Reserve Bank of Atlanta.

Empirical evidence indicates that convenience is an important determinant in an individual's selection of a financial institution and that many people maintain their primary banking relationships near where they live or work.[2] Commuting patterns are therefore important for identifying an integrated market area. Metropolitan Statistical Areas (MSAs) or Ranally Metro Areas (RMAs) are generally used as a first approximation in delineating urban markets, and county boundaries help define rural markets. MSAs are areas consisting of a central city (or Census Bureau–defined urbanized area) and its dependent fringes. RMAs are similar, made up of areas that contain at least seventy people per square mile and have at least 20 percent of the labor force commuting into the RMA's central city for employment. RMAs are not, however, restricted to following county borders, as are MSAs.[3]

Although RMAs and county boundaries form a good first approximation of market boundaries, other factors also help determine a final market definition. One of the most important is the actual banking patterns of bank customers. This information is obtained partly through interviewing bank and thrift managers, whose detailed knowledge of the customer base can sometimes provide unique insights into market dynamics. In addition, banks often keep detailed records of customer demographics, such as customer addresses analyzed by zip code. Surveys of consumers and small businesses are also conducted to identify actual banking patterns.

Another important question to address in delineating markets is whether there is a continuous chain of development between two areas. For instance, consider three banks, A, B, and C. Bank A does not compete directly with Bank C, but both Bank A and Bank C compete with Bank B. Because Bank A's pricing policies directly influence those of Bank B and indirectly influence those of Bank C, all three banks are considered to be in one market. The fact that prices tend toward equalization within a market makes evidence of pricing discrepancies useful in determining a market's boundaries. Two areas are viewed as becoming more integrated if there are indicators like road construction between the areas and new residential subdivisions and planned commercial development involving both areas. In addition, natural or political barriers that may prohibit integration of two areas are considered in defining markets.

Information regarding the ease with which customers can shift banking relationships is also important for determining markets. U.S. Census Bureau data are used to track commuting between counties. Other items that may be helpful are traffic counts, transportation routes (number, condition, approximate commuting time and distance, existence of controlled access roads, and so forth), major employers in the area and information on where their employees live, and the growth of population compared with employment and public transportation routes.

In addition to examining commuting patterns for what they indicate about customers' ease in shifting banking relationships, it is helpful to consider the extent to which residents and businesses in one area rely on another area for goods, services, and entertainment. This assessment is based on several indicators, including (1) location of major retailers, (2) location of major service providers (hospitals, airports, colleges, and universities), (3) media coverage patterns (newspaper circulation patterns, radio and television coverage patterns) and bank and thrift advertising patterns, (4) mall surveys showing where customers live, and (5) local (toll-free) calling areas.

Market definition in antitrust analysis is not an exact science. Each market has a unique set of economic, legal, and political conditions. In practice, market delineation must rely on secondary and anecdotal evidence. Markets are not static, and changes in demand and supply factors cause the shifting of market boundaries over time.

Notes

1. For a review of the economic literature on geographic market delineation, see Wolken (1984).
2. For a bibliography and further details, see King (1982) or Wolken (1984).
3. The Office of Management and Budget (OMB) establishes the official requirements for defining MSAs; see "Revised Standards for Defining Metropolitan Areas in the 1990's," *Federal Register* 55 (March 30, 1990). See also Jerry J. Donovan, "A Primer on MSAs," Federal Reserve Bank of Atlanta *Regional Update* 5 (January-March 1992). RMAs are Rand McNally and Company's definitions of the metropolitan areas of the nation's major cities. For more information see *Rand McNally: 1992 Commercial Atlas and Marketing Guide.*

structure, consisting of the number, size distribution, and market shares of firms, influences the conduct of firms. This conduct—for example, the degree of competition or collusion between firms—determines the firms' performance, measured by profits or prices. The SCP paradigm implies that the fewer the number of firms and the greater their market shares, the more likely it is that those firms have the potential to earn abnormal profits (defined as profits greater than those that would be earned in a perfectly competitive market or as profits exceeding those commensurate to the level of the firm's risk). Banks' abnormal profits imply costs to the public that antitrust regulation seeks to avoid. Estimation of the SCP model for the U.S. banking industry has generally shown that a statistically significant and positive relationship does exist between market concentration and profitability.[12]

Legal Framework

The standards by which the Fed assesses the competitive effects of mergers and acquisitions comes from the Bank Holding Company Act (1956) and the Bank Merger Act (1960) and their amendments in 1966. These acts require federal banking agencies to consider the probable effects on competition of proposed mergers. If a merger is expected to have a substantially adverse impact on competition, the application is to be denied unless the anticompetitive effects of a merger are clearly outweighed by its favorable impact on the convenience and needs of the community. However, neither piece of legislation specifies precise standards for ensuring market competitiveness. In addition, once a merger or acquisition is approved by the appropriate federal banking agency, the Department of Justice has thirty days in which to file suit if it believes the transaction would violate antitrust statutes. If a suit is filed, the merger is automatically stopped pending resolution of legal action.

In a case involving the Philadelphia National Bank in 1963, the Supreme Court clarified the means by which regulators should measure competition.[13] This ruling established three major legal precedents still used by the Federal Reserve. First, the court confirmed that the Sherman and Clayton Antitrust Acts apply to banking, and the court used market structure (as defined above) as an indicator of competition within the market. Secondly, the ruling determined that the "cluster of products (various kinds of credit) and services (such as checking accounts and trust administration) denoted by the term 'commercial banking'. . . composes a distinct line of commerce" for Clayton Act purposes. Third, the sections of the country affected by an acquisition (the geographic market) must be taken into account. The court opined that "in banking, as in most service industries, convenience of location is essential to effective competition. Individuals and corporations typically confer the bulk of their patronage on banks in their local community; they find it impractical to conduct their banking business at a distance."

Product Market. In determining the relevant product market in which to assess the probable competitive effects of a bank acquisition or merger, the Supreme Court, in the Philadelphia National Bank case, determined that commercial banking is the appropriate line of commerce. The court stated that "the cluster of products . . . and services" provided by commercial banks is unique relative to other institutions, including thrifts. This conclusion was based partially on the fact that, by law, only commercial banks could offer demand deposits at the time. In addition, it was recognized that the availability of a package of products and services at a single institution provided a customer convenience and value that surpasses the economic significance of these products and services individually. In measuring this cluster of services, the court used deposits as a proxy for estimating market share.[14]

Geographic Market. Once the appropriate product market has been determined, the relevant geographic market in which competition occurs must be defined.[15]

In the Philadelphia National Bank case the Supreme Court ruled that the market consisted of that area "in which the seller operates, and to which the purchaser can practicably turn for supplies."[16] The Court also concluded that convenience factors tended to localize markets in banking. Accepting that at least some consumers and small businesses are limited to their communities for banking services, the standard has been that local markets are the correct area in which to measure the effects of competition between depository institutions.[17]

The Fed

In his 1991 testimony before the Committee on Banking, Finance, and Urban Affairs, John P. LaWare, a member of the Board of Governors of the Federal Reserve System, stated that the "primary objectives of public policy in this area [antitrust] should be to help manage the evolution of the banking industry in ways that preserve the benefits of competition for the consumers of banking services, and to ensure a safe, sound and profitable banking system" (LaWare 1991). With this objective in mind, and given current antitrust laws and judicial precedents, the Federal Reserve analyzes competition, using market structure (concentration) as an important measure of competition and using the concept of a cluster of banking products in a local geographic market.[18]

The Fed's process of analyzing a bank merger's effects on competition begins at one of the twelve Federal Reserve Banks, which are delegated most analysis, data-gathering, and recommendation functions because of the unique information they can access. As a result of their functions, the Reserve Banks are aware of local factors in their districts that might serve to integrate or separate market areas. In addition, the Reserve Banks have, or can acquire from local sources, knowledge of special factors that may reinforce or mitigate public losses through anticompetitive impacts of a proposed merger. For example, information on subtle issues, such as mortgage market concentration, is readily available to the Reserve Banks, which can make use of banker contacts and surveys of local businesses and consumers.[19]

In this process the Reserve Bank first identifies the relevant geographic market and then conducts an initial structural screening, including calculation of market shares and the market's Herfindahl-Hirschman Index (HHI). (See the box on page 26 for a discussion of the factors considered by the Federal Reserve Bank of Atlanta in defining banking markets.) The HHI is calculated by summing the squares of each firm's market shares. (See the box below for a practical example of how the HHI is calculated.) If no serious issues are raised—that is, if the HHI and market shares are within acceptable limits—the Reserve Bank generally approves the application for merger. However, if structural measures exceed benchmark levels, the transaction is deemed to have possible anticompetitive effects. Reserve Bank and Board staff findings and recommendations are then subject to review by the Board of Governors, which makes the final decision based on all factors laid out in the governing laws.[20]

In deciding if a merger potentially involves significant anticompetitive issues and therefore cannot be delegated to the Reserve Bank, the Board uses guidelines similar to those established by the Department of Justice.[21] (See the box on page 32 for a brief discussion of the Department of Justice's activity in recent years.) Although the numerical guidelines the Board uses are admittedly somewhat arbitrary, they do provide a consistent approach to antitrust enforcement, reducing the costs of uncertainty associated with applying antitrust laws.

Box 2
Calculation of the Herfindahl-Hirschman Index

The Fed currently relies extensively on a measure of market concentration—the Herfindahl-Hirschman Index—specified by the Department of Justice in its 1982 merger guidelines.[1] The HHI is calculated by summing the squares of the market share of each firm: HHI = $\Sigma[x(i)/x]^2$, where $x(i)$ is the total deposits of firm i, and x is the total deposits of all firms in the market.

The HHI is generally considered to be better than other concentration measures (such as market-share concentration ratios) because it captures both the number and size distribution of all firms in the market.[2] The calculation of HHIs in practice is illustrated by analyzing two markets in a recently approved Board case in which Barnett Banks, Inc. (Barnett) proposed to acquire First Florida Banks, Inc. (First Florida).[3]

The first market to be considered is the North Lake/Sumter banking market, defined by the Federal Reserve Bank of Atlanta as Sumter County, Florida, plus that

portion of Lake County north of the Florida Turnpike. A total of eight banks with $1.58 billion in deposits competed in this market. In addition, there were four thrift institutions holding $405 million in deposits (see Table 1). To compute the HHI, first calculate the market shares of each firm, using bank deposits only (column 4) and bank-plus-thrift deposits at half weight (column 5).[4] For instance, Barnett has a banks-only market share of 24.09 percent and a thrifts-at-half-weight market share of 21.36 percent {381,589/[1,584,019 + (0.5 • 405,215)]}. These market shares squared indicate each firm's contribution to the market's HHI (columns 6 and 7). For example, Barnett Bank adds 580 points (24.09 • 24.09) to the market's banks-only HHI and 456 points (21.36 • 21.36) to the market's thrifts-at-half-weight HHI. To calculate the HHI for the market, sum each firm's contribution to the HHI. In Table 1 the market's banks-only HHI is 1,801 and its thrifts-at-half-weight HHI is 1,468.[5]

To calculate the structural changes that would occur after a merger, add First Florida's $39.7 million in deposits to Barnett's $381.6 million in deposits to get the total amount of deposits for the combined institution. This new deposit total of $421 million represents a new banks-only market share of 26.60 percent [(381,589 + 39,707)/1,584,019] and a new thrifts-at-half-weight market share of 23.58 percent {(381,589 + 39,707)/[1,584,019 + (0.5 • 405,215)]}. Barnett's contribution to the banks-only HHI becomes 708 points (26.60 • 26.60), increasing the market's banks-only HHI by 121 points to 1,922. Barnett's contribution to the thrifts-at-half-weight HHI becomes 556 points (23.58 • 23.58), increasing the market's thrifts-at-half-weight HHI by 95 points to 1,563.

Because the applicable guidelines (the 1,800/200 rule with thrifts at 50 percent weight) were not breached, the Fed would generally conclude that this merger would have no significant anticompetitive effect in the North Lake/Sumter banking market.

To illustrate what happens when competitive guidelines are breached, consider another market in which Barnett and First Florida competed, the Highlands County banking market. Delineated by the county's borders, this market had a total of six banks competing for $691.4 million in total deposits. In addition, five thrifts operated in the market, holding $366.9 million in total deposits (see Table 2). Again calculate the market share of each institution, first with banks-only deposits, then adding thrift deposits at half weight. Then calculate each firm's contribution to the market's HHI, summing to get a total premerger HHI of 2,359 (with thrifts at half weight). Next, add First Florida's deposits to Barnett's and recalculate the market shares and HHIs. This market would have a

Table 1
North Lake/Sumter Banking Market
(Deposits as of June 30, 1991)

Depository Institution	Total Deposits ($000)		Market Share		HHI	
	Banks	Thrifts	Banks Only	Thrifts 50%	Banks Only	Thrifts 50%
Barnett Banks, Inc.	381,589		24.09	21.36	580	456
First Union Corporation	321,203		20.28	17.98	411	323
SunTrust Banks, Inc.	312,120		19.70	17.47	388	305
Citi-Bancshares, Inc.	286,550		18.09	16.04	327	257
First FS&LA of Lake County		205,305		5.75	0	33
First Family FS&LA		154,157		4.31	0	19
UniSouth, Inc.	114,593		7.23	6.41	52	41
First National Bank of Mt. Dora	82,314		5.20	4.61	27	21
BankFirst	45,943		2.90	2.57	8	7
First Florida Banks, Inc.	39,707		2.51	2.22	6	5
Mid-State Federal Savings Bank		24,198		0.68	0	0
Citizens Federal Savings Bank		21,555		0.60	0	0
TOTAL	1,584,019	405,215	100	100		
Premerger HHI					1,801	1,468
Postmerger HHI					1,922	1,563
Change in HHI					121	95

Table 2
Highlands County Banking Market
(Deposits as of June 30, 1991)

Depository Institution	Total Deposits ($000) Banks	Total Deposits ($000) Thrifts	Market Share Banks Only	Market Share Thrifts 50%	HHI Banks Only	HHI Thrifts 50%
Barnett Banks, Inc.	383,714		55.50	43.86	3,080	1,924
Huntington FSB		174,365		9.97		99
First Union Corporation	97,053		14.04	11.09	197	123
SunTrust Banks, Inc.	89,298		12.92	10.21	167	104
BancFlorida, FSB		73,437		4.20		18
Home Savings Bank, FSB		73,385		4.19		18
First Florida Banks, Inc.	57,525		8.32	6.58	69	43
Highlands Independent Bank	32,927		4.76	3.76	23	14
NationsBank Corporation	30,883		4.47	3.53	20	12
Goldome FSB		28,918		1.65		3
Harbor FS&LA		16,777		0.96		1
TOTAL	691,400	366,882	100	100		
Premerger HHI					3,556	2,359
Postmerger HHI					4,479	2,936
Change in HHI					923	577

postmerger thrifts-at-half-weight HHI of 2,936, producing a change in the HHI of 577 points.

This change of 577 points in a highly concentrated market exceeds the applicable 1,800/200 rule with thrifts at half weight, and the Reserve Bank would have had to notify Board staff that applicable guidelines were breached and that the merger was potentially anticompetitive. At this point, both Reserve Bank staff and the Board staff would have conducted an in-depth analysis of the likely effect of the merger within the market.[6] Such an analysis would involve considering a variety of factors such as market attractiveness, potential competition, the financial strength of the target firm, and so forth.

Notes

1. The HHI was developed independently by Orris C. Herfindahl, "Concentration in the U.S. Steel Industry," Ph.D. diss., Columbia University, 1950, and by Albert O. Hirschman, *National Power and the Structure of Foreign Trade* (Berkeley and Los Angeles: University of California Press, 1945).
2. The three- or four-firm concentration ratio, which was used extensively by the Department of Justice and federal banking agencies in the past, ignored the competitive influence of banks not ranked in the top three or four of the market. For an empirical justification of why the HHI might be preferred to firm concentration ratios, see Rhoades (1985b).
3. "Barnett Banks, Inc." *Federal Reserve Bulletin* 79 (1993): 44.
4. The Board's use of thrifts at half weight is discussed on page 31.
5. Notice the substantial difference the inclusion of thrift deposits makes. The market is highly concentrated using bank-only deposits but only moderately concentrated with thrift deposits at 50 percent weight.
6. In the above merger, Barnett committed to divest the only First Florida branch in the market in order to mitigate potentially adverse competitive effects. In light of this divestiture the Board concluded that consummation of the proposed merger would not affect competition in the Highlands County market.

Criteria for Judging Potential Anticompetitive Effects

This article examines all bank merger applications considered by the Federal Reserve System for potentially significant competitive issues during the decade from December 1982 until December 1992. It does not examine applications in which a thrift was to be acquired or merger proposals filed with another federal regulator. In determining whether a particular application entailed potentially significant competitive issues, both Department of Justice merger guidelines and Board rules regarding delegation of authority to the Reserve Banks that were in effect when the application was filed were considered. Consequently, the data were divided into three periods (December 1982-December 1985, January 1986-June 1987, and July 1987-December 1992) in which different benchmarks were used to determine a transaction's potential anticompetitive effects.

In June 1982 the Department of Justice issued new merger guidelines applicable to the enforcement of antitrust laws in all industries. The Board first referred to these guidelines, and specifically to the HHI as a measure of concentration, in a merger decision on November 19, 1982. The Board's publication of this decision in the *Federal Reserve Bulletin* in December 1982 marks the beginning of the data period reviewed in this article.[22]

The Department of Justice guidelines established three postmerger concentration ranges to consider in determining whether a particular transaction is likely to pose a significant anticompetitive threat and thus be subject to in-depth economic analysis and possible challenge by the Justice Department. The Fed continues to make decisions in terms of these three ranges. A market with a postmerger HHI below 1,000 is considered unconcentrated, a market with a postmerger HHI between 1,000 and 1,800 is moderately concentrated, and a market with a postmerger HHI greater than 1,800 is a highly concentrated market. The Department of Justice stated that it was more likely than not to challenge transactions that would result in a change greater than 100 points in a moderately concentrated market and was also likely to challenge mergers producing a change greater than 100 points in a highly concentrated market. Depending on the postmerger concentration of the market, the size of the resulting increase in concentration, and the presence or absence of several other factors relating to the market, the Department of Justice might decide to challenge an approval on the basis of a change between 50 and 100 points in a highly concentrated market.

For the purposes of this article, a merger was flagged as potentially raising competitive issues unless it fell clearly in a category the Department of Justice was unlikely to challenge. For the data sample from December 1982 to December 1985, this set includes mergers in markets that were moderately concentrated (as defined above) and resulted in a change greater than 100 points and mergers in a highly concentrated market effecting a change of at least 50 points.

In February 1985 the Department of Justice informed the Office of the Comptroller of the Currency (OCC) that it would not, ordinarily, challenge a bank merger unless there was an HHI change of at least 200 points in a highly concentrated market.[23] This increase in concentration benchmarks was intended explicitly to recognize competition from nondepository institutions, a factor not captured in deposit market-share data. Although the Board referred to this new rule in six applications in 1985, the new benchmark was not used consistently until 1986, as reflected in the Board's amended "Rules Regarding Delegation of Authority" to the Reserve Banks on December 17, 1985.[24] In examining data from the beginning of January 1986 until December 1992, this so-called 1,800/200 rule is the benchmark that was used to identify applications for mergers that might be significantly anticompetitive.

In the Connecticut National Bank case in 1974, the Supreme Court recognized thrifts as significant competitors for a broad range of consumer services.[25] However, the court concluded that thrifts should not, at that time, be a factor in assessing the competitive effects of bank mergers because thrifts were not competitive in the area of commercial lending. With the passage of the Depository Institutions Deregulation and Monetary Control Act (1980) and the Garn-St Germain Act (1982), which effectively deregulated the thrift industry, thrifts were authorized to compete with banks in providing the cluster of products previously unique to banking. In recognition of this increased competition, the Board began including thrifts as competitors in specific applications. By March 27, 1987, competition from thrifts had grown to such a point that the Board changed its rules regarding delegation of authority to the Reserve Banks to give thrifts a weight of 50 percent when calculating concentration numbers, to reflect both actual and potential competition from thrifts.[26] Beginning with the June 1987 decisions (published in the July 1987 *Federal Reserve Bulletin*), determinations made regarding the competitive effects of mergers were based on this assumption of 50 percent

Box 3
Department of Justice Antitrust Activities in Recent Years

The Department of Justice held a relatively relaxed view of antitrust in banking throughout much of the 1980s. Merger guidelines adopted in 1982, based on permissible market shares, generally were less restrictive than standards used previously and thus enlarged the pool of potentially valid mergers. The 1982 guidelines also established factors that could be used to justify mergers that failed the market concentration test. In 1985, recognizing the increasing importance of nonbank competitors, the Department of Justice established the 1,800/200 rule (with thrifts generally given 20 percent weight), which was quickly adopted by the other federal banking agencies (which generally give thrifts 50 percent weight). Importantly, until 1991 the Department of Justice did not challenge any merger that passed the 1,800/200 rule with thrifts at 50 percent and was approved by one of the federal agencies, even if it failed the 1,800/200 rule with thrifts at the Department of Justice's standard of 20 percent.

In 1989 the Department of Justice began taking a more aggressive approach toward bank mergers. Four large transactions since 1990 demonstrate the changes. In the first of these, late in 1990, the Federal Reserve Board approved First Hawaiian, Inc.'s acquisition of First Interstate of Hawaii, Inc.[1] The Department of Justice sued to block the transaction, citing adverse market effects for small and medium-sized businesses. Then in 1991, the Department of Justice raised strong objections to Fleet/Norstar's acquisition of the failed Bank of New England, citing concentration in three banking markets. In addition, the Department of Justice stated that the "failing firm" defense did not apply to Fleet/Norstar because there were other bidders for the Bank of New England that did not pose any competitive concerns. In a third transaction, on February 13, 1992, the Fed approved the acquisition of Ameritrust Corporation by Society Corporation despite Department of Justice objections that the proposed branches to be divested were weak.[2] The Department of Justice filed suit, citing adverse competitive effects on the availability of loans to small businesses in two counties in Ohio. The agency eventually dropped its opposition to each of these mergers after negotiating divestitures beyond those required by the Fed. In a separate case in 1992, the Department of Justice held talks with BankAmerica Corporation over its proposed acquisition of Security Pacific Corporation. However, after BankAmerica amended its application to include additional divestitures, the Department of Justice did not file to block this merger.

The new merger guidelines published in 1992 spotlight the approach the Department of Justice is now taking with respect to mergers.[3] The guidelines describe the department's five-step process currently conducted with respect to each proposed merger. First, the relevant product and geographical markets are identified, and the structural impacts within these markets are calculated. Second, specific characteristics of the market are then considered to determine whether there are antitrust concerns. Third, the timeliness, likelihood, and sufficiency of entry into the market as it relates to anticompetitive behavior are forecast. Any efficiency gains expected from the merger are calculated, and, as the last step, if the continued existence of either party is doubtful, the expected results of the failure are analyzed.

While this process sounds very similar to the Fed's, there are several important differences. First, in the transactions cited the Department of Justice did not use the cluster of services provided by commercial banks as the relevant product market but instead segregated various financial services into separate product markets.[4] Within these separate product markets, the Department of Justice's emphasis was on the market for commercial loans, especially to small and medium-sized businesses, designated according to various size definitions. Although this case-by-case approach may better reflect market realities, it also increases uncertainty among merging parties concerning the Department of Justice's likely response to a merger proposal.[5] The Department of Justice also indicated that its 1,800/200 rule applied only to the initial screening of a particular merger and that a transaction failing that benchmark was subject to closer investigation using the more restrictive 1,800/50 rule.[6] In addition, although the weighting of thrifts will continue to be determined on a case-by-case basis, the Department of Justice has indicated that it believes thrifts have substantially retreated from business banking and, therefore, deserve no weight in this product market.[7] The Department of Justice has also indicated that divestitures must introduce new and viable competitors into the market. In this regard, the agency has taken a direct hand in choosing which branches are to be divested, as opposed to the Fed's practice of allowing the applicant to select the branches for divestiture.

Notes

1. See "First Hawaiian, Inc.," *Federal Reserve Bulletin* 77 (1991): 52.

2. See "Society Corporation," *Federal Reserve Bulletin* 78 (1992): 302.

3. See "Department of Justice and Federal Trade Commission Horizontal Merger Guidelines," April 2, 1992.
4. This was not the Department of Justice's first attempt at breaking up the "Philadelphia National" cluster. In 1985 the agency appealed a transaction that had been approved by the appropriate federal regulators, arguing that transaction accounts and small business loans were separate product lines. The Court of Appeals held that the District Court did not err when it "concluded that the government failed to factually support its claim that existing circumstances in this case warranted a departure from the definition of the relevant product market as the cluster of banking services traditionally offered in the commercial banking industry adopted by the Supreme Court in U.S. v. Philadelphia National Bank." See U.S. v. Central State Bank, 817 F.2d 22 (6th Cir. 1987).
5. In Society's acquisition of Ameritrust, the Department of Justice concluded that businesses with more than $10 million in annual sales "appear to be able to obtain loans from institutions in Detroit and Pittsburgh as well as locally" (Society Corporation Competitive Factor Report). In First Hawaiian's acquisition of First Interstate of Hawaii, the Department of Justice determined that the "unique geography" of Hawaii limited businesses with less than $50 million in annual sales in obtaining loans from nonlocal institutions (First Hawaiian, Inc., Competitive Factor Report). In BankAmerica's acquisition of Security Pacific, the Department of Justice concluded that businesses with annual sales of less than $100 million were locally limited (BankAmerica Corporation Competitive Factor Report). See Letzler and Mierzewski (1992).
6. See Report of the Department of Justice on the Likely Competitive Effects of the Proposed Acquisition by First Hawaiian, Inc. of First Interstate of Hawaii, Inc. (1990).
7. Letter from James F. Rill, Assistant Attorney General, Antitrust Division, to Hon. Alan Greenspan, Chairman, Board of Governors of the Federal Reserve System, on the application of BankAmerica Corporation to acquire Security Pacific Corporation, March 12, 1992.

weighting for all thrifts, the so-called 1,800/200/50 rule. This rule was the selection criterion used in analyzing the sample data from July 1987 through December 1992.[27]

A total of 155 applications in the sample were identified as mergers that might have significant anticompetitive effects. Of these applications, sixteen involved "prior common control," that is, an attempt to restructure ownership of two or more banks from individuals to a corporation owned by the same individuals.[28] Because none of these mergers were denied and such applications raise issues not relevant to most bank merger transactions, the applications involving prior common control appearing in the sample period were dropped from the data set.

Total Divestiture. The 139 remaining applications for mergers presenting potentially significant anticompetitive problems involved a total of 297 banking markets that exceeded the structural criteria described above. (Many bank mergers involved multiple markets, some but not all of which posed competitive problems.) In eighty-six of these markets, an applicant agreed to divest (sell) all of either its own or its target's branches in the market.

The Board (as well as other federal banking agencies and the Department of Justice) considers divestiture to be an effective way for applicants to address areas of competitive concern to regulators while allowing the nonobjectionable portion of the transaction to proceed. Generally, it is preferred that these divestitures be made to institutions not currently operating in the market, thereby insuring that the competitive structure of the market remains unchanged. However, divestiture to an in-market competitor is permissible, provided that the market's resultant structural changes are not too severe. Because total divestiture usually addresses the competitive issues involved in a market and no further factors are generally considered by the Board, these eighty-six markets were also excluded from the sample studied.

Mitigating Factors. In the remaining 211 markets the Board approved the vast majority of applications for mergers that exceeded the criteria for delegation of authority and were likely to be challenged by the Department of Justice according to its published merger guidelines. The Board cited a number of factors that mitigated the potentially significant anticompetitive effects of these transactions, as indicated by the structural numbers (HHI). Relevant issues included competition from thrifts, market attractiveness, and the financial health of the target firm. As noted earlier, the second part of this discussion, in the next issue of the *Economic Review*, will examine all of the mitigating factors discussed by the Board in applications dating from December 1982 through December 1992.

Conclusion

The increased number and size of bank mergers over the last few years, as well as the larger number of bank failures, has renewed interest in antitrust enforcement by federal authorities. The Fed, considering the public-interest protections of antitrust regulations, has adopted a two-stage approach to competitive issues in bank mergers, first determining whether a competitive problem might exist and then, if so, determining whether the proposed acquisition would have a significantly adverse anticompetitive effect. This article summarizes the Fed's general approach to antitrust analysis over the last decade. It presents the economic theory and legal framework behind the Fed's analysis and cites empirical evidence both for and against the Fed's approach.

Certain elements are essential for each evaluation: specification of the correct geographic and product markets in which competitive effects take place, determination of direct and potential competitors, and analysis of the effects of mergers on the structure of individual markets. While all merger applications are examined in light of the same criteria, the dynamic aspects of the U.S. banking industry and the several objectives of antitrust laws are such that bank merger analysis must be done on a case-by-case basis.

Notes

1. Throughout this article the terms *merger* and *acquisition* are used synonymously.
2. See Rhoades (1985a) and LaWare (1991). Numbers do not include acquisitions of failed banks. Numbers for 1988 and 1989 are estimated.
3. See LaWare (1991), who states that "over the last decade, the average proportion of bank deposits accounted for by the largest three firms in urban markets has increased by only one percentage point, and has remained virtually unchanged in rural markets. These ratios have actually declined in both types of markets since the mid-1970s."
4. Firm shrinkage is an alternative vehicle for consolidation that BankAmerica Corporation has shown can work.
5. The Federal Reserve has jurisdiction over mergers of state member banks and mergers or acquisitions by bank holding companies. The Comptroller of the Currency has primary responsibility for national banks. The Federal Deposit Insurance Corporation oversees insured state nonmember banks. In addition, section 18(c) of the Federal Deposit Insurance Act provides that "before acting on any application for approval of a merger transaction, the responsible agency . . . shall request reports on the competitive factors involved from the Attorney General and the other two banking agencies."
6. A second article, in the next issue of the Atlanta Fed's *Economic Review*, will examine all merger applications filed by state member banks or bank holding companies (applications to acquire another bank or bank holding company) that involved potentially significant competitive issues since the Board first began applying the 1982 Department of Justice merger guidelines to bank mergers in November of that year. The discussion will specifically consider mitigating factors the Board referred to in these applications.
7. The Fed's approach to antitrust issues is not the only accepted view. For instance, the Department of Justice may implement antitrust regulation slightly differently (see Guerin-Calvert and Ordover 1992). Others are critical of the application of antitrust standards to the banking industry, arguing that the current approach of regulators is antiquated and fails to recognize much of the competition currently faced by banks (see, for example, Bove 1991 and Demsetz 1973). A comprehensive analysis of the various approaches concerning antitrust issues is beyond the scope of this paper.
8. See, for example, "SouthTrust Corporation," *Federal Reserve Bulletin* 78 (1992): 769.
9. Federal agencies consider divestiture an acceptable means of reducing the anticompetitive effects of a proposed merger. Reducing the resultant market share of the acquiring bank in turn reduces the ability to exercise anticompetitive behavior in the market. Divestiture as a solution for competitive problems has become increasingly more important over the last decade because of the proliferation of large mergers, in which divestitures are small relative to the size of the entire transaction. For the Federal Reserve Board of Governor's position on the timing of divestitures see "BankAmerica Corporation," *Federal Reserve Bulletin* 78 (1992): 338.
10. For a thorough discussion of the economics of market structure see Scherer (1990) or Tirole (1988).
11. For an overview of the SCP paradigm and a review of the empirical literature, see Rhoades (1977, 1982).
12. See, for example, Hannan (1991), Berger and Hannan (1989), and Rhoades (1982). For alternative explanations of the profit-concentration relationship in banking, such as the efficiency-structure hypothesis, see Smirlock (1985), Berger (1991a, 1991b), and Hasan and Smith (1992).
13. U.S. v. Philadelphia National Bank, 374 U.S. 321 (1963).
14. Recent empirical evidence supports the use of this cluster concept in commercial banking. For instance, studies indicate that businesses and consumers tend to purchase additional products and services from the institution at which they maintain their primary checking account (see Elliehausen and Wolken 1990, 1992).

15. For a review of the economic literature on geographic market definition see Wolken (1984).
16. U.S. v. Philadelphia National Bank, 374 U.S. 321 (1963).
17. Recent empirical evidence supports the idea that banking markets, at least for some consumers and small businesses, are still local in nature (see Elliehausen and Wolken 1990, 1992; Hannan 1991). For another viewpoint see Dunham (1986).
18. While the courts are willing to hear arguments that the appropriate product or geographic markets have changed, it requires that this claim be factually supported, which has not yet been demonstrated in Court. See U.S. v. Central State Bank, 817 F.2d 22 (6th Cir. 1987). In addition, some products offered by banks and bank holding companies have regional, national, or even international markets. Although the Board considers nonbanking activities, only rarely are there any significant anticompetitive effects owing to the large number of competitors within these markets and their small market shares.
19. See "SouthTrust Corporation," *Federal Reserve Bulletin* 78 (1992): 769.
20. The Reserve Banks have been delegated authority to approve transactions that present no significant concerns. If a particular transaction does involve significant competitive, legal, or other issues, the application becomes nondelegated and is subject to Board review. Authority to deny a transaction rests solely with the Board. The Fed's "Rules Regarding Delegation of Authority" spell out the criteria used to determine whether an application is delegated and can be approved by the Reserve Banks or nondelegated and must be acted upon by the Board. The Fed does not structure acceptable deals, such as by adding divestitures to an applicant's original application. However, Fed staff will consult with an applicant on how to structure the application to maximize the chances of approval.
21. See U.S. Department of Justice Merger Guidelines, June 14, 1982. The Department of Justice assumed an important role in bank mergers and acquisitions when the Bank Holding Company Act (1956) and the Bank Merger Act (1960) applied the antitrust provisions of the Clayton Act to the banking industry.
22. "First Bancorp of New Hampshire, Inc.," *Federal Reserve Bulletin* 68 (1982): 769.
23. Letter from Charles F. Rule, Acting Assistant Attorney General, Antitrust Division, to Hon. C. Todd Conover, Comptroller of the Currency, on the application of First National Bank of Jackson, Jackson, Mississippi, to acquire Brookhaven Bank and Trust Company, Brookhaven, Mississippi, February 8, 1985.
24. The six 1985 application decisions in which the Board referred to the new rule were: "United Banks of Colorado, Inc.," *Federal Reserve Bulletin* 71 (1985): 647; "Marshall & Ilsley Corporation," *Federal Reserve Bulletin* 71 (1985): 663; "The Marine Corporation," *Federal Reserve Bulletin* 71 (1985): 795; "Central Wisconsin Bankshares, Inc.," *Federal Reserve Bulletin* 71 (1985): 895; "First Security Corporation of Kentucky," *Federal Reserve Bulletin* 71 (1985): 898; and "First Railroad & Banking Company of Georgia," *Federal Reserve Bulletin* 71 (1985): 963.
25. U.S. v. Connecticut National Bank, 418 U.S. 656 (1974).
26. Letter from Don E. Kline, Associate Director, Board of Governors of the Federal Reserve System, to all officers in charge of supervision at all Federal Reserve Banks, March 27, 1987.
27. The Board continues generally to use 50 percent weight for thrifts in calculating structural numbers. It may give 100 percent weight to thrifts in cases in which thrift behavior suggests that it is appropriate to do so—when thrifts are substantially exercising their banklike powers.
28. In 1978 the Change in Bank Control Act was passed requiring regulators to assess the competitive effects when an individual purchases a bank. In examining such an application, if the common control was established before 1978, the Board considers the competitive effects of the transaction(s) at that time rather than current market conditions. A traditional structural analysis based on deposit data at the time of affiliation is conducted. Other factors considered include the absolute size of the banks at the time of affiliation, the number of years that the institutions have been affiliated, and whether the affiliation existed before antitrust laws were applied to bank mergers. (Prior to the Bank Merger Act of 1960, the banking laws did not refer to competitive effects.) In addition, the Board considers any other issues that would mitigate potential anticompetitive effects of the merger.

    In denying approval of a prior common control application, the Board recognizes that any existing anticompetitive effects of the institution's affiliation cannot be reversed. A denial would, however, preserve the possibility of a reversal at some point in the future, whereas approval could perpetuate anticompetitive possibilities.

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Review Essay

Business Information Sources For Eastern Europe and the Newly Independent States: A Guide to Periodical Literature

Jerry J. Donovan

The collapse in late 1989 and early 1990 of the Eastern Bloc's seemingly impenetrable wall of socialism has opened up new markets for the United States and other industrialized nations.[1] For the industrial West the immense area of Eastern Europe and the countries that formerly made up the Soviet Union represents some 400 million potential consumers as well as a pent-up need for investment capital, up-to-date technology, new management skills, and an orientation toward capitalist marketing and sales techniques.

Businesspeople and investors who seek opportunities in the former Eastern Bloc countries need to understand not only the economies of these countries but also the democratization and privatization processes that are occurring in them. A number of factors—collectively referred to as "country (or sovereign) risk"—must be evaluated, including countries' political stability and their policies toward foreign loans and investments. The latter determine the presence or absence of such barriers as wage-price controls, profit controls, tariffs, and expropriation of foreigners' assets.

The urgent demand for this type of information has spawned a rapidly growing body of periodical literature designed to help businesspeople and investors evaluate the opportunities available in East European markets. Policymakers, analysts, and academics should also find many of these publications of interest. This essay reviews several periodicals focusing on Eastern Europe and the newly independent states. (See the box on page 39 for prices and subscription information for the periodicals reviewed here.) Most of these publications were inaugurated since 1990, reflecting the critical need for information about this area. This review is one of two parts; part 1, in the November/December 1992 *Economic Review*, focused on U.S.

The reviewer is the research librarian in the Atlanta Fed's research library. *He is grateful to a number of people who assisted in evaluating the publications reviewed, especially Molly Molloy, Slavic reference librarian at the Hoover Institution Library at Stanford University, and Julie Pfeffer, publications manager at FYI Information Resources, Washington, D.C.*

government sources, general reference works, and directories providing information about foreign investment and trade with the former Soviet Bloc countries. While the majority of works discussed in part 1 provide background information, the periodicals reviewed here give more up-to-the-minute information about developments. Taken together, the works examined in these two essays provide investors, businesspeople, and policymakers with unprecedented access to information about this dramatically changing part of the world.

ABSEES: Soviet and East European Abstracts Series (Oxford, England; quarterly; began July 1970) is an English-language indexing and abstracting service that scans articles originally published in eleven languages of the nine East European countries and the former Soviet Union. Articles are gleaned from fifty newspapers, general interest magazines, and trade journals published throughout the area. The articles cover a wide range of subjects—from agriculture to economic planning, from labor and wages to science and technology—and the abstracts always include a literal English translation of their headline or title.[2]

ABSEES issues are arranged in three parts: (1) introductory material with definitions; (2) a country/subject index, with each entry including a one- or two-line English summary that points the user to the desired abstract entry; and (3) the abstracts, also arranged by country/subject. Each year's final issue also contains a cumulative index, by country/subject, for that year.

ABSEES abstracts can be an important first step in the research process for businesspeople and investors. Of course, the articles abstracted should always be scrutinized for exaggerated claims and unreliable statistics that may have been promulgated by the defunct socialist governments. In addition to this obvious caveat, however, users should also be aware that the weighting of titles included in *ABSEES* does not necessarily reflect the size of the respective national economies represented nor their degree of economic liberation. (The newspapers and periodicals abstracted by *ABSEES* are heavily weighted toward the Russian language (thirteen), followed by Bulgarian (eight), Serbo-Croatian (seven), and Czech (six). The remaining sixteen are divided among Albanian, German, Hungarian, Lithuanian, Polish, Romanian, and Slovak.)

Another deterrent to using *ABSEES* may be the general unavailability of the publications abstracted. Few libraries in the United States subscribe to all fifty titles covered, although research collections in major universities or population centers will likely have a majority. The technical translators that may be needed to deal with the original-text languages are most likely to be available in or near research and population centers.

Arguments and Facts International (San Francisco: AFI, Ltd.; monthly; began 1990), as the title suggests, presents a blend of editorial opinion ("arguments" on political, social, and economic issues) with news coverage ("facts" about business conditions arranged by industrial sector, topic, and location). The Russian-language version, published in Moscow, boasts a circulation recently reported as more than 26 million. The publication's success is built on factors like the high caliber of informed contributors to its editorial opinion pages. In the June/July 1991 issue, for instance, American and Russian intellectuals contributed eleven pages of discussion on such matters as U.S. and Russian views on the political and economic foment occurring in the Soviet Union just before the attempted coup d'état in late summer 1991.

News items in the June/July 1991 issue cover macro- and microeconomic conditions, regional news of the Socialist Republics, legislation, and trade and commercial developments, including emphasis on industrial sectors. Abundant detail in the form of names, addresses, and telephone, fax, and Telex numbers provides great convenience to the reader.

Arguments and Facts International is expensive, but the informed thought of the editorial opinions and the scope and detail of its reporting make it a worthwhile investment.

The Business International/Economist Intelligence Unit provides country and industry coverage for business and academicians. *Country Reports* (quarterly) and *Country Profiles* (annual), mentioned previously in this *Economic Review* (July/August 1991, 56), monitor political, economic, and business conditions within each country. Both publications are available for the Commonwealth of Independent States as well as all East European countries except Albania. The quarterly *European Trends: Key Issues and Developments in the EC, EFTA, and the Single Market*, also reviewed in the July/August 1991 *Economic Review* (56), warrants mention again because of its strong emphasis on governmental and economic events in Eastern Europe and the newly independent states. Political and economic developments require serious scrutiny and insightful interpretation by the European Community. *European Trends* provides articles to these ends. For instance, issues in the past two years have featured articles like "Financing Europe's Regions in the 1990's," which

discusses funding the economic restructuring of the five *Länder* of former East Germany, and "The Commonwealth of Independent States: The Crossroads," which examines the evolution of the former Soviet Union's search for an optimum balance between full independence of each state and a coordinating center as a central government.

Business International/Economist Intelligence Unit recently developed an *East European Risk Service* to incorporate into the broader, existing *Country Risk Service*. This service provides full internationally comparable, macroeconomic country risk analysis, updated quarterly, on the newly independent states and all the East European countries except Albania. The service's format stresses the essential matter of external financing forecasts along with other external finance indicators like reserve cover, as well as medium-term lending risk, political and policy risk, and short-term trade risk. The service is available on diskette, tailored to the subscriber's specific requirements. It reflects, as does the array of Business International/Economic Intelligence Unit publications, solid, thoroughgoing analysis by a research staff that frequently works on site in the subject countries. Although the publications are expensive, the information can be quite useful.

Central European: Finance and Business in Central and Eastern Europe (London: Euromoney Publications; monthly; began 1991) continues the Euromoney Publications tradition—begun in 1969 in *Euromoney* (see the review in *Economic Review*, July/August 1991, 57)—of general but detailed coverage of important financial market developments. The May 1992 issue of *Central European*, for instance, offers a six-page discussion of the internal squabbling in the Yugoslav state of Slovenia that has impeded privatization and reform of the banking system. Another seven pages are devoted to problems with obtaining Western bank financing for a desperately needed new Central and East European infrastructure. The issue also contains feature sections, of varying length, on deals, privatization, joint venture alerts, a bank profile (Megabank in Poland), secondary markets, and regulation. This new publication shares the principal attributes of *Euromoney*—solid information for practitioners tracking current capital and money markets and a vehicle to keep academicians broadly conversant with those developments.

The English-language edition of *Commersant: The Russian Business Weekly* (Moscow; English edition published jointly with Refco Group, Ltd., Chicago;

Subscription Information*

ABSEES: Soviet and East European Abstracts Series. $695. ABSEES Limited, 76c Roupell Street, London, SE1 8SS, England.

Arguments and Facts International. $600. AFI, Limited, 243 Kearny Street, San Francisco, CA 94108.

Central European: Finance and Business in Central and Eastern Europe. $435. Reed Publishing Group, 205 East 42nd Street, Suite 1705, New York, NY 10017.

Commersant: The Russian Business Weekly. $265. Request order form by mail for English (or Russian) edition from Refco Group Limited (USA), 111 West Jackson Boulevard, Chicago, IL 60604, or by fax, (312) 930-6534.

Country Reports; Country Profiles. $295/package (per country). The Economist Intelligence Unit, Business International, 215 Park Avenue South, New York, NY 10003.

Dateline: Russia. $360. Dateline International, Inc., PO Box 1270, Minden, NV 89423-1270.

European Trends. $375. The Economist Intelligence Unit, Business International, 215 Park Avenue South, New York, NY 10003.

Finance International. $150. To set up a subscription and be billed for it, fax an order letter to 44-71-823-1001 (Subscription Department, Springfleet Publishing Limited, 4 and 5 Grosvenor Place, London SW1X 7HJ, England).

Global Finance. $120. Global Finance Joint Venture, 11 West 19th Street, Second Floor, New York, NY 10011.

Perspectives. $225. International Freedom Foundation, 200 G Street, NE, Washington, DC 20002.

Russian Business Monitor. $8 per issue. For subscription instructions, write RBM Eurokosmos, PO Box 233, 103051 Moscow, Russia, or telephone (7-095) 208-12-88.

** Prices and addresses shown are current as of December 1992. Prices are annual subscription rates (in U.S. dollars) for individuals in the United States, unless otherwise specified; postage may be extra. Addresses are for subscriptions only and may differ from place of publication.*

weekly; began 1908, suspended 1917, resumed January 1990), straightforwardly organized and written in smoothly idiomatic American English, is decidedly pitched toward the American business market. The current format, commencing with the September 15, 1992, issue, reflects the responses to a survey that asked its readers to help create a publication they would like to read. This issue includes articles on top stories of the week, investment, banking, and defense spending, as well as reproductions of selected documents like the Russian Federation Resolution "On Information about Gold Mining and Production" and a detailed presentation of economic indicators.

Exporters may find useful the explication of the list of import commodities eligible for subsidy by the Russian Federation and the coefficients for converting these commodities' foreign trade contract prices. Economists may appreciate the emphasis given to tables of economic indicators and the statistical analyses of various kinds of economic activity (for example, exchange rates, commodity prices, and the central bank and commercial banking system). However, researchers will doubtless balk at the omission of references for data sources.

Dateline: Russia (Minden, Nev. [U.S.A.], and Moscow, Russia; monthly; began October 1992) presents a wide selection of topics—about twenty, ranging (alphabetically) from aerospace to transportation—offering "information, understanding, [and] opportunity," for the American businessperson and investor. The subject of most articles in the table of contents is self-evident, although some need amplification. "Conversion," for example, refers to the transformation of economic activity formerly associated with the military-industrial complex to civilian activities. Given the significant part of Russia's gross national product represented by the military, this topic is, of course, one of the most important issues in Russia today. The article discusses the ways in which enterprises whose defense contracts have been reduced or canceled can convert their capacities, scientific and technical potential, and manpower. New laws governing the situation are discussed, as are plans for the then-impending International Conference on Conversion held in Moscow, October 14-16, 1992. One suggested conversion activity is the plan under which ballistic missiles withdrawn from service would be used as delivery vehicles to launch commercial space probes.

Dateline: Russia includes some lighter features such as a table of daily rates (in U.S. dollars) in state-run Moscow hotels for single, double, half-suite, and suite accommodations. A "How To" column takes up learning the Russian language, with a beginning lesson in the Cyrillic alphabet that includes some basic English words translated into the Russian.

Finance International (London: Springfleet Publishing Limited; quarterly; began 1992) consists of clusters of articles pulled together around geographical area or banking/finance topics. Contributing authors often are prominent national figures and authorities in the international financial field. A twelve-page study on Eastern Europe focusing on Hungary (March 1992), for example, featured articles by the Minister of Finance, the chairman and CEO of the Budapest Bank, and the Minister of Industry and Trade discussing, respectively, the Hungarian economic program of structural adjustment and development, the state's role in privatization, and Hungary's progress toward a market economy that makes it one of the more attractive countries for Western investment. In the same issue three sections on global custody have general interest for securities investors around the world. The discussion in the three sections centers on trends toward concentration in custody services, technology's effects on competition for clients, and establishing and managing an agent network. The authors of these sections are seasoned executive practitioners with varied custody experience at firms in New York and Boston.

Finance International is geared to the financial executive interested primarily in area-specific studies, but it also includes some topical articles. Although not limited to Eastern Europe and the newly independent states, this new publication informs financiers of significant issues affecting trade with that part of the world.

Global Finance (New York: Global Finance Joint Venture; monthly; began 1987) offers sophisticated insight into investment and finance around the world, including places until recently considered off-beat for Western purposes, such as China, Hungary, Poland, Sri Lanka, and Peru. For some months the publication has placed increasing emphasis on Eastern Europe and the newly independent states, representative of which is the article (in the March 1992 issue) "Russian Roulette," delineating specific problems of resolving legal disputes in Russia. The article discusses such obstacles as unclear law, big gaps in the law, defining what income is for the purpose of levying new income taxes (which are payable in hard currency), ill-qualified judges, ambiguities surrounding authority to sign a contract, and disputes over contracts signed before the breakup of the Soviet Union. The May 1992 issue

includes a substantial article about "Bulgaria's Slow Trek to the Market," investigating the 90 percent devaluation of the currency, which has a uniquely managed float among East European currencies; favorable changes in the laws governing restitution of private property; reform of the banking system; and liberalization of a foreign investment act. All issues include departments that deal regularly with features like risk management, global trends, futures and options, and a central European roundtable.

Global Finance's growing focus on Eastern Europe and the newly independent states makes it a worthwhile publication for investors and creditors seeking opportunities in those areas, as well as for academicians scanning the horizon. The publication's attractive format and exceptionally creative artwork do not vitiate a serious approach to the subject matter.

Perspectives (formerly *Soviet Perspectives*) (Washington: International Freedom Foundation; monthly; began March 1991) guides the reader through principal issues in the continuing maze of economic reform and the panorama of joint venture business opportunities in the former Soviet Union. The style is terse, and the selection of news and feature topics targets information useful to U.S. business and investment interests vis-à-vis the newly independent states. For example, the lead article in the August 10, 1992, issue examines the Munich G-Seven Summit, which called for billions of dollars in aid to the former Soviet republics. The article highlights particular sectors that will likely be most enhanced by the aid—personnel and other management training, nuclear safety, and oil and gas. The issue also contains a calendar of upcoming trade shows and conferences on opportunities in the newly independent states as well as articles on notable privatization events in the republics, significant newly agreed-upon joint ventures, and U.S. and Canadian government offices created to facilitate trade with the newly independent states.

The publication is available electronically on the *NewsNet* on-line service; information on this service is available (in the United States) at 800-345-1301.

Russian Business Monitor (Moscow: RBM Eurokosmos; five issues per year; began April 1992) promises to provide needed information for investment and business with Russia and the other newly independent states. The first issue presents a balanced array of expository and factual articles. An essay on political and economic reform from August 1990 through February 1992, complete with tables, graphs, charts, and other illustrations explicating Russian economic fundamentals, occupies almost half the issue. Other useful features of this issue include a section that discusses steps being taken to bring Russian financial statements into accord with the "world standard" and the "British and American Model" and a section listing contacts for business opportunities in Russia.

The *Russian Business Monitor* editorial board and the staff are economists, lawyers, political scientists, and other professionals, many of whom are affiliated with the Russian Academy of Sciences, the Academy of National Economy, and other governmental and independent organizations.

A Western reader, particularly one not already versed in Russian background, may find that a lack of systematic definition of terms slows comprehension of technical economic discussions (for example, the interchangeable use of "Russia" and "Russian Federation"). Moreover, the English translation of the text is at times awkward and not smoothly idiomatic. Nevertheless, the *Russian Business Monitor* has made a good beginning in providing businesspeople and investors with a broad range of information.

Notes

1. The Eastern Bloc comprised East Germany and the other countries of Eastern Europe—Albania, Bulgaria, Czechoslovakia, Hungary, Poland, Romania, and Yugoslavia—and the Soviet Union (Armenia, Azerbaijan, Byelarus, Estonia, Georgia, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Moldova, Russia, Tajikistan, Ukraine, and Uzbekistan, sometimes referred to as the newly independent states). There is at present no broadly accepted alternative name for the states of the former Soviet Union. *Commonwealth of Independent States* encompasses only some of those nations. The people of the area object to the term *States of the Former Soviet Union*. Hence, following the lead of the U.S. Department of Commerce International Trade Administration, this article will use the term *newly independent states*, where appropriate, to designate the former Soviet Union.
2. The informed reader may wonder whether the *Current Digest of the Post-Soviet Press* (formerly *Current Digest of the Soviet Press*) is an alternative to *ABSEES*. The former concentrates on the political arena within the former Soviet Union with neither particular emphasis on the East European nations nor the subjects that are the special concern of *ABSEES*.

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Public Affairs Department
104 Marietta Street, N.W.
Atlanta, Georgia 30303-2713
(404) 521-8020

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MS. CAROL ALDRIDGE
FED RES BANK OF PHILADELPHIA
10 INDEPENDENCE
PHILADELPHIA, PA 19106