Staff Papers Series

P87-13 April 1987

CHANGES IN U.S. FINANCIAL MARKETS RELEVANT TO MIDWESTERN COMMUNITIES

by

Jo Ann Paulson

Department of Agricultural and Applied Economics

University of Minnesota
Institute of Agriculture, Forestry and Home Economics
St. Paul, Minnesota 55108

Staff Paper P87-13 April 1987

Changes in U.S. Financial Markets Relevant to Midwestern Communities

by

Jo Ann Paulson

Changes in U.S. Financial Markets Relevant to Midwestern Communities

Jo Ann Paulson

Introduction

In the six years since deregulation, the financial sector has frequently dominated national economic news. We have seen the proliferation of financial instruments, non-financial firms moving into the financial service business, severe financing problems in agriculture and energy, a growing number of bank failures, the insurance crises in the thrifts in Maryland and Ohio, the growing problems of the public insurance scheme for savings and loan associations (FSLIC), uncertainty about monetary growth and policy in the U.S., and the integration of financial markets of developed countries. Not all of the changes in the financial sector since 1980 can be attributed to deregulation or the competitive forces unleased by deregulation. The US economy of the 1980s is very different from the 1970s. We have moved from high to low inflation, from low to high real interest rates, from strong to weak export growth, from a weak to a strong to a potentially weak dollar, from fast to slow to unpredictable money supply growth, and so on. We started the decade with a severe recession, followed by a half decade of only moderate economic growth. We have had wide swings in primary commodity prices with concomitant boom and bust in agriculture and domestic energy. We have also had rapid technological change in information processing and communications which has changed the way we do business. Given the changes in the US and world economy during the 1980s, technological

---

Paper presented at the University of Kansas Midwest Symposium on Public Policy, "Community Impacts of Deregulation," April 23, 1987.

change, and deregulation, it is difficult to separate temporary responses from permanent changes in the financial service industry. And it is hard to sort out which changes should be attributed to deregulation. It is harder still to predict future financial sector developments. Nevertheless it may be useful to examine the evidence on changes in the 1980s and highlight the emerging issues. Many Midwestern communities are primarily concerned about changes in the delivery system and the implications for the pricing and availability of services, efficiency, equity, and stability.

The Roots of Financial Sector Regulation

The rash of bank failures during the Great Depression set the agenda for bank regulation for the following 45 years. Those failures were originally attributed to "excessive competition" among financial institutions. The primary objectives of public policy adopted during the Depression were to discourage "excessive competition," prevent bank failures and encourage "safety and soundness" in the banking system. The regulatory framework included restrictions on competition among financial institutions, monitoring and inspection by regulatory agencies, and deposit insurance schemes administered by the Federal Deposit Insurance Corporation (FDIC) and the Federal Savings and Loan Insurance Corporation (FSLIC) to restore public confidence in the banking system. Efforts to discourage "excessive competition" and risk-taking by banks led to an elaborate set of restrictions on pricing, product-lines, and branching and location of banks. The regulatory framework for thrifts, i.e. savings and loan associations, and mutual savings banks, came later, but also restricted competition and further segmented financial markets by

limiting the range of activities allowed to each type of institution. This legislative framework made finance one of the most highly regulated sectors in the U.S.[1]

The regulatory framework did provide the semblance of stability in the financial sector.[2] There were few bank and thrift failures in the 1940s, 1950s, and 1960s. Financial institutions, protected from competition, generally prospered. But this stability was based on a system of restricted competition, segmented markets, distorted prices and implicit subsidies. The costs and benefits of the regulations varied over time depending on macroeconomic conditions. For example, the interest rate ceilings, Regulation Q, became more of a burden after the mid-1960s. For most of the period from 1933 to 1966 the deposit rate ceilings were not binding. However, after market interest rates rose above the deposit rate ceilings in 1966, the ceilings were usually binding until deregulation. The system sent distorted savings and borrowing signals to the economy. During periods of high market interest

---

[1] Bank entry and expansion was regulated by the McFadden Act of 1927. The Banking Acts of 1933 and 1935 prohibited interest payments on transactions accounts (checking deposits) and limited the interest rates payable on time deposits. The Glass-Steagall Act of 1933 segmented the financial service industry, restricted competitive behavior in banking, and limited the activities of commercial banks, e.g. commercial banks were not allowed to engage in investment banking or provide investment-related financial services such as underwriting, brokerage, or mutual funds. The Bank Holding Company Act of 1956, grandfathered in existing institutions, but restricted further interstate expansion by BHC, thus halting the growth of interstate systems. State laws determined the in-state branching and expansion privileges of commercial banks.

[2] It is not clear that the stability in the financial sector was due to restrictions on competition. It has been argued that the stability of the financial sector was due to the more appropriate post-Depression policy for the discount window and the deposit insurance schemes rather than the specific pricing and activities restrictions placed on financial institutions.

rates, savers subsidized borrowers and deposit ceilings functioned as an implicit tax on small savers. Deposit rate restrictions also contributed to several credit crunches during the second half of the 1960s and first half of the 1970s. Inflation and volatile macroeconomic conditions made financial regulation increasingly burdensome throughout the 1970s. Starting slowly in the 1960s, and at a rapid clip during the 1970s, more aggressive managers of financial institutions learned to circumvent the regulations.

Financial Innovation

The inflation of the 1960s and 1970s provided the incentives for financial institutions, as well as the business sector to improve liquid asset management. Financial institutions developed creative non-interest means of competing for deposits, including extensive branching, implicit subsidies on financial services, and deposit "bonuses." Financial institutions also began to experiment with loopholes in the regulations to pay interest on deposits to compete with the interest-bearing depository facilities available from nonfinancial competitors. One of the most dramatic experiments was the introduction of negotiable order of withdrawal (NOW) accounts by a commercial bank in Massachusetts in 1972. During the remainder of the 1970s regulations on deposits were eased gradually to accommodate new savings instruments developed by innovative financial institutions.[3] As the financial industry became more efficient at circumventing regulations by introducing new financial instruments or institutions, there was a need to either reregulate or

---

[3] For example, automatic transfer savings (ATS) were introduced in 1978 and six-month money market certificates were allowed after 1978.

deregulate the system.

Deregulation

While ad hoc changes in the financial laws and regulations had taken place during the 1960s and 1970s, there were sweeping changes in the 1980 Depository Institutions Deregulation and Monetary Control Act (DIDMCA) and the 1982 Garn-St. Germain Act.[4] These two pieces of legislation represented a change in philosophy from strict regulation to allowing

---

[4] Major provisions of the Depository Institutions Deregulation and Monetary Control Act of 1980:

(1) deposit ceiling for all depository institutions were phased out over a six-year period ending March 31, 1985;
(2) all depository institutions were allowed to offer interest-bearing transaction accounts;
(3) usury ceilings on many asset categories were eased, subject to state approval;
(4) deposit insurance coverage was increased from $40,000 to $100,000 at federally insured institutions;
(5) all depository institutions, including thrifts and credit unions, were required to hold reserves with the Federal Reserve system
(6) Federal Reserve correspondent services were to be competitively priced and made available to all depository institutions;
(7) nonbank depository institutions, including credit unions, savings and loan associations, and mutual savings banks gained borrowing privileges at the Federal Reserve System discount window;
(8) portfolio restrictions were relaxed on savings and loan associations, mutual savings banks, and federal credit unions;
(9) savings and loan associations were allowed to issue credit cards, offer trust services, and invest up to 20 percent of their assets in consumer and commercial loans and corporate debt securities.

The Garn-St. Germain Act of 1982 broadened the power of thrifts and allowed all depository institutions to offer deposits paying a market interest rate. In addition the Garn-St. Germain Act attempted to address the growing problem of financial institution failures. Major provisions of the Garn-St. Germain Act of 1982:

(1) authorized depository institutions to offer an account that would be competitive with money market mutual funds;
(2) allowed depository institutions to cross state lines to acquire a failing institution;
(3) expanded the authority of the FDIC to provide assistance to prevent the closing of FDIC insured banks;
(4) each deposit insurance agency was to develop a proposal for deposit insurance reform.

market forces and competition to play a role in shaping the financial industry.[5] A few provisions of the new laws strengthened the role of the regulators, but in most respects restrictions on the activities of financial institutions were reduced. Deregulation allowed price competition, marketing of new financial instruments and services, and reduced the regulatory disparities between banks and thrifts. Market forces were to be used to supplement regulation and monitoring of the "safety and soundness" of the banking system. If weak financial institutions were allowed to fail, the regulators hoped that the public would also monitor performance and penalize financial institutions for excessive risk-taking.

The laws of 1980 and 1982 left a major aspect of regulation intact; restrictions on interstate and intrastate expansion by financial institutions. The dismantling of geographic restrictions was left under state control. State governments were allowed to set the timing and conditions under which out-of-state institutions would be allowed to enter local markets. A majority of states have now eased geographic restrictions.

Deregulation dismantled the price structure and restraints on competition that had made commercial banking a very profitable and low risk business. Reducing restrictions on pricing, product development, and competition allowed market forces to influence market structure and practices. Deregulation, combined with volatile macroeconomic conditions during the 1980s, has accelerated the rate of change in the financial

---

[5] Because of the central role of commercial banks in monetary control and the federally-sponsored deposit insurance schemes, it is highly unlikely that banks will ever be totally deregulated.

service industry that had started in the 1960s and 1970s.[6]

Changes in the Financial Sector during the 1980s

Market Structure and Size Distribution

At the beginning of the 1980s, there were over 14,000 commercial banks; most were small.[7] The money-center banks of New York, California, and Chicago controlled a significant proportion of the national financial assets. At the end of 1982, the ten largest banks controlled 23 percent of the total liabilities of all commercial banks in the U.S. However, basic financial services were readily available in even small communities in the rest of the country.[8] Many Midwestern states retained unit banking or restrictive branching laws so communities had locally-owned and controlled banks. Even in states that permitted bank branching, the prohibition on interstate branching kept bank operations confined within state boundaries and guaranteed a distinctly local character to financial markets.

---

[6] Merris and Wood (1985) argue that developments in U.S. financial markets since deregulation are a continuation of patterns evidenced before regulation in the 1930s. There is still an active debate on the supposed instability of banking before regulation. (e.g. see Rolnick and Weber, 1985)

[7] This is still true in the mid-1980s even though there has been a increase in the number of very large institutions. The total number of banks in the country declined from 14,208 in 1981 to 13,916 in 1985. About 84 percent of commercial banks are considered small with assets under $100 million. About 53 percent of the 3,200 thrifts have under $100 million in assets.

[8] As of December 1984, there were 7,900 rural banks, and 5,157 agricultural banks of which 4,523 were also rural. Banks were classified as rural if the headquarters were located in a nonmetropolitan county. Agricultural banks had more than the national average of 17 percent of the loan portfolio in agricultural loans. (Gajewski, 1986, p. 4)

Some argued that small institutions survived and prospered under the old system of regulation because of limitations on competition, regulated prices, and branching restrictions. Proponents of deregulation argued that small institutions would survive even if the restrictions were lifted. Small financial institutions have not disappeared during the six years since deregulation, but larger institutions have generally been more profitable and have grown faster.[9] The conventional wisdom that small banks are as efficient as large banks may not be true. There are reasons to believe that larger financial institutions will become even more important in the future.

With only a few exceptions, a generation of cost studies showed that U.S. banks did not exhibit significant economies of scale.[10] The evidence suggested that community institutions were efficient and could survive and profit after deregulation. However, there were problems with past cost studies that make projection to the future questionable. Past studies found there were not significant economies of scale in providing basic financial services. Previous cost studies have not controlled for variation in output mix by bank type e.g. corporate versus farm banks.

---

[9] Larger banks have maintained their pre-1980 income levels, but small banks, with assets of less than $100 million, have not. Since about 84 percent of banks are "small," average bank income has fallen since deregulation (Fortier and Phillis, 1985, p. 66). The total income of federally insured commercial banks declined in 1986 for the first time in 25 years. (Wall Street Journal, March 19, 1987)

[10] The Federal Reserve Bank of Atlanta published a collection of studies on the economies of scale of banking in Nov. 1982. Those studies showed there was not a large advantage for size above some threshold level of deposits, usually about $25 million. One study in that collection found evidence of disadvantages to "bigness". (Benston, Hanweck, and Humphrey, 1982) Other studies found there was not a significant difference between unit operating costs at large and small financial institutions.

Few of the past studies checked for the cost savings from joint production of a range of financial services. There is some evidence of economies of scope which will be more important in the future with a broader range of financial services. Also the results of past cost studies may no longer be valid because of the changing technology in the financial sector. There has been rapid technical development in some of the support services for banking, especially computer and communication technology. While recent improvements have made automated equipment more easily divisible, there are still indivisibilities. Only the most recent cost studies have examined technological change or economies of scope and some have found a cost advantage for large banks.[11]

The market structure of the past was characterized by highly concentrated banking markets at the local level. Concentration in local markets has been decreasing since the early 1970s, and may decrease further if large banking systems continue to expand into new market areas.[12] This will mean less control and market power for local banks. However, this does not mean that smaller financial institutions will disappear. Small community financial institutions are expected to survive even with growing concentration in national financial markets. There will still be a niche for providing localized or specialized financial services, but that niche may not be as profitable as in the past. While some financial services can be provided through nation-wide

---

[11] e.g. Shay and Lawrence, 1986, Hunter and Timme, 1986 and Kolari and Zardkoohi, 1987. The evidence on economies of scope is not conclusive yet.

[12] Concentration in local banking markets, in general, decreased from 1970 to 1983. (Evanoff and Fortier, 1986)

networks, such as deposit-taking or credit cards, loan evaluation remains a labor-intensive activity dependent on local knowledge. However, community institutions may have to be more efficiently managed and expand services to survive in the face of competition. For example, in a survey of Wisconsin banks done at the time of deregulation, Taff, Pulver, and Staniforth found that many small banks were not prepared to make complex business loans and lacked experience in recruiting nonlocal funds.[13]

Small banks may have to develop new expertise or develop linkages to institutions with that expertise to survive. There are ways for small financial institutions to purchase rather than produce some services. There are wholesalers that provide financial and information services that cannot be efficiently produced in small institutions, e.g. banker's banks. Another possibility for maintaining local control is to move to a system of franchises, with local institutions operating under the name and with the support of a national system.

Therefore the best "guess" for future market structure is that many local institutions will develop closer working relationships with regional and national systems, and the large systems will grow in importance. The possibility of exploiting the new technologies and advantages of size will be even more important as interstate systems spread.

Geographic Restrictions

National deregulation did not remove the restrictions on interstate

---

[13] Taff, Pulver, and Staniforth, 1984.

and intrastate expansion by banks.[14] Location restrictions were left under the control of state governments.[15] Most states have acted in the last few years to reduce in-state branching restrictions and are now negotiating multi-state banking arrangements.[16] By early 1987, 36 states had passed some form of interstate banking legislation.[17] Several states have allowed entrance to financial markets tied to job creation or economic development targets. Many states have adopted regional compacts to allow reciprocal entry from neighboring states. There are multi-state banking regions already functioning in New England and the Southeast.

Interstate banking is not entirely new in the 1980s and many types of interstate activity can already be found in the banking community. Even without interstate banking laws, there are six methods for acquiring a bank in another state and six additional methods for providing banking services across state boundaries without owning a bank in the state being

---

[14] The laws on interstate expansion by thrifts were not as restrictive as the laws for banks. However the Federal Home Loan Bank Board rarely permitted interstate expansion, except in supervisory cases. After April 24, 1986, the Federal Home Loan Bank Board policy changed to allow chartered thrifts to branch across state lines in regions covered by multi-state bank and thrift compacts.

[15] Under the McFadden Act of 1927 and the Banking Act of 1933 nationally-chartered banks were subject to the branching laws of the home state. Under the Douglas Amendment of the Bank Holding Company Act of 1956, bank holding companies could acquire banks in another state only if the laws of that state permitted the acquisition. Most states restricted entrance of institutions from out-of-state and many states restricted the branching activities of in-state institutions.

[16] The number of states permitting either statewide or limited branching rose from 33 in 1960 to 43 in 1983. The number of unit bank states declined from 18 to 8 during the same period.

[17] Midwestern states that have approved some form of regional interstate banking legislation include Illinois, Indiana, Kentucky, Michigan, Minnesota, Missouri, Nebraska, Oklahoma, New Mexico, and Wisconsin.

served.[18] With the exception of interstate branching to acquire failed institutions,[19] the other mechanisms for branching across state lines existed, and were used, before the banking laws were changed. An April 1987 Supreme Court decision, in effect, allowed the continued interstate spread of nonbank banks. Even though it is doubtful that interstate banking will have a direct impact in smaller banking markets soon, particularly in the less lucrative markets in rural areas, even areas that do not adopt interstate legislation will feel some influence from out-of-state banking systems. The growth of regional or national systems under interstate banking will reinforce the trends discussed in the previous sections towards larger financial systems, and more system affiliation.

Ownership and Bank Performance

Changing technology may be making larger systems profitable and state laws are allowing such systems, but it is not clear how this will affect the pricing and availability of services. There have been several attempts to test how the performance of locally-owned banks differ from system banks. Most of the studies done to date have relied on the comparison of financial ratios and cannot be considered valid tests of

---

[18] Banks can acquire across state lines if explicitly permitted by state law, under the grandfather clause of the 1956 Bank Holding Company Act, to acquire a failing bank or thrift under the Garn-St. Germain Act of 1982, under international banking provisions, and as chain banks owned by individuals rather than corporations. Banking services can be provided across state lines by nonbank subsidiaries of bank holding companies, nonbank banks, loan production offices, franchise agreements, ATM networks, and direct mail. (Duwe, 1986, pp. 1-11.)

[19] In the Garn-St. Germain Act of 1982, the FDIC and FSLIC were authorized to accept bids for failed institutions across state lines if an acceptable in-state buyer could not be found. This provision has been used aggressively by a few money center banks to gain entry into new markets.

the hypothesis that bank performance varies with ownership.[20] Given the results available at this juncture, it is not possible to generalize about the relationship between ownership and performance. Also, it would be hard to project from past studies because financial markets are changing rapidly and earlier studies may tell us little about the future.

The debate on system versus independent banks seems to center on the costs and benefits of facilitating flows of funds. Larger banking systems offer the potential benefits of achieving economies of scale and scope and portfolio diversification. A priori, it seems that financial systems can diversify across markets and therefore be "less conservative" in lending within any given local market.[21] But the option of diversifying a portfolio across areas and sectors also raises the fear of funds flowing out of local areas. The flow of funds from rural to urban areas through banking networks has been a particularly sensitive issue. Even before the change in regulation there were massive interregional flow of funds in this country. Markets and instruments were already available to facilitate interregional transfers, regardless of the ownership or affiliation of local financial institutions.

---

[20] A different approach was reported by Struck and Mandell. A 1980 survey of small businesses found that businesses located in unit branching states were more likely to perceive that their credit needs were met than in states that permitted branching or multibank holding companies. While the survey found a perceived difference in availability of credit, there was not a difference in terms of lending to small businesses. (Struck and Mandell, 1983)

[21] Tentative support for this finding cited in Markley, 1985, p. 14. Also in the 1986 Economic Report of the President the government-sponsored credit programs were justified with the argument that geographic restrictions on bank branching restricted the ability of private financial markets to diversify portfolio risk as well as a national program.

Integration of National Financial Markets

Even before deregulation, market forces and institutional innovations had integrated national financial markets. During the 1960s and 1970s individuals had started arbitraging interest rate differentials directly. During several periods after 1966, the real interest rate paid on Regulation Q savings deposits was negative, leading to a flow of funds out of commercial banks. The growing public sensitivity to interest rate differentials initially led to a shift among local institutions such as savings and loan associations and credit unions that were allowed to pay a slightly higher rate on savings accounts and later to inter-regional flows of funds as a response to differences in interest rates. National competition for deposits was spearheaded by the spread of NOW accounts in New England after 1976, followed by money market mutual funds offered by brokerage houses and nondepository institutions.[22] Another alternative to reliance on local banking markets came from nation-wide credit card systems as a partial substitute for non-interest bearing checking accounts at commercial banks.

The growing competition for deposits had spread into rural areas by the mid-1970s. Rural banks were forced to compete in interest rates and deposit structure to hold the local deposit base. The interest differential between rural and urban areas narrowed. After six-month money market certificates were introduced on June 1, 1978, rural banks used this interest-sensitive liability to hold funds. Adjusting for

---

[22] Money market mutual funds, introduced in 1974, grew rapidly after 1978 as savers transferred funds out of regulated interest accounts. After money market deposit accounts (MMDA) were offered by banks on Dec. 14, 1982 and Super NOW accounts as of Jan. 5, 1983 the phenomenal growth in MMMF slowed.

differences in size, metro and nonmetro banks held about the same percentage of interest-sensitive deposits.[23] By mid-1981, thirty percent of the deposits of agricultural banks were in six-month money market certificates and rural banks were also paying market rates on the 30-month small saver certificates and large CD's.[24]

It is hard to evaluate regional differentials in lending rates because of differences in industrial concentration, credit needs, and concomitant differences in maturity, collateral, and risk. One study done shortly before deregulation found a "national" commercial lending market.[25] However, another study done in the early 1980s found there were still regional differentials in mortgage lending rates.[26] In certain areas there are now sizeable deviations in lending rates from national trends because of recent loan losses, small inefficient banks operating without competition, etc. However these cases represent exceptions with the rule being loose conformity to national trends in lending rates.

The rapid development of inter-bank and secondary financial markets during the 1960s and 1970s further integrated U.S. financial markets. The net flow of funds from rural to urban areas through federal funds markets had been documented since the early 1970s.[27] This was part of the net flow from small to large banks. On average, both metro and

---

[23] Milkove, 1985, p. 3.

[24] Melichar, 1983, p. 20.

[25] Osborne, 1983.

[26] Morrell and Saba, 1983.

[27] e.g. Shane, 1975.

nonmetro banks with assets of under $500 million were net sellers of federal funds in 1981 to banks with assets over $500 million.[28] Use of inter-bank markets to place surplus funds drew small rural markets into closer alignment with national financial market trends.

Therefore even though the physical market structure at the time of deregulation still "looked" localized, most local units were linked into national networks. Deregulation not only strengthened those linkages, but made it impossible to avoid the competitive forces that integrate the system.[29] Local financial institutions that compete for deposits can no longer afford to operate a lending policy independent of national market trends.

Integration of financial markets and interregional funds flows will not always work against rural areas. One study found that multi-branch banking also facilitated intrarural flows so that rapidly growing rural areas benefitted.[30] There is no way to generalize about whether an area will be a net supplier or recipient of funds without examining local market conditions.

Changing Financial Market Practices

Volatile macroeconomic conditions, especially credit risk and interest rate fluctuations, have forced most financial institutions to adopt new operating practices. This process started with rapid inflation in the 1970s and sped up after deregulation removed pricing and product

---

[28] Milkove, 1985, pp. 3-4.

[29] This discussion focused on integration of national financial markets in the 1960s and 1970s. By a similar, albeit slower process, the capital markets of the industrialized economies are now being linked.

[30] Barkley, et al, 1984.

restrictions. Just a few years ago most consumers had an established relationship with a local bank covering the basic financial services. Maintaining a non-interest bearing checking account usually entitled the customer to free checking, and other free services such as funds transfers, cashier checks, and some business advice. In exchange for loyal patronage, customers also qualified for occasional loans. Established borrowers had automatic lines of credit. The nature of the customer relationship with financial institutions has changed in the 1980s and the traditional relationship built on cheap deposits, subsidized services and credit is no longer guaranteed.

The DIDMCA of 1980 mandated that deposit interest ceilings were to be phased out over a six-year period ending in mid-1986. In addition, the 1980 law allowed all depository institutions to offer checking accounts which increased competition for deposits. Banks no longer have a guaranteed supply of cheap "core deposits" held in checking accounts. Under price deregulation, financial institutions are expected to "unbundle" and explicitly price financial services. Complementary services are no longer part of the compensation for holding non-interest bearing checking deposits. Service fees are a growing source of income for financial institutions.[31]

---

[31] Noninterest income as a percent of average net assets of insured commercial banks has risen steadily since deregulation from .90 in 1981 to 1.03 in 1983 to 1.31 in 1985. (Danker and McLaughlin, 1986, p. 618.)

Noninterest income, which includes fee income and off-balance sheet activities, is higher for non-agricultural banks than agricultural banks in the Midwest. "Other" income at non-agricultural banks in the Midwest rose from .77 in 1980 to 1.09 in 1985. At agricultural banks other income rose from .37 in 1980 to .46 in 1985. (Federal Reserve Bank of Chicago, Macroreport)

The pricing of financial products now not only reflect the cost of the service but also interest rate risk. The need to deal with interest rate risk has spawned new financial instruments. As we moved from negative real interest rates in the 1970s to high real interest rates in the 1980s, financial institutions had to worry more about the gap in maturity and interest sensitivity between the asset and liability sides of the balance sheet. One of the most common tools in managing interest-rate risk now is variable rate lending.[32] Loan maturities have also been shortened and new secondary markets have been developed to help bankers allocate interest rate risk.

Changes in operating practices of financial institutions have redistributed costs and benefits through the system with new pricing arrangements. The changes have generally benefitted savers by allowing them to earn a rate more responsive to market interest rates. Ideally, competition among institutions should provide savers with a range of savings instruments with differing combinations of minimum balance, service fees, interest rates, withdrawal fees, etc. However some of this product differentiation may be trivial rather than substantive, leaving consumers to chose among a confusing range of accounts.

Financial institutions are expected to "rationalize" pricing as services are separately priced. This will offer the opportunity for cost savings for some businesses. Other businesses will pay more as cross subsidization is reduced. Businesses should have the advantage of more

---

[32] In April 1981 the FHLBB authorized thrifts to offer adjustable mortgage loans, including adjustable rate mortgages. By 1984 the percent of thrift assets in variable rate mortgage instruments had increased to 22 from 1.4 in 1980. (Fortier and Phillis, 1985, p. 65)

competition among service providers, but information and search costs may be significant.

Evaluating the changes in financial markets for borrowers is more difficult. There have been changes in both the pricing and availability of commercial credit. Borrowers no longer have the benefit of the artificially low rates common during the years when banks had access to free funds held in checking accounts. Borrowers have also had to assume more interest-rate risk with variable rate loans. In addition to changes in pricing, many borrowers are finding new problems with the availability of credit. The extreme cases have been in the sectors suffering high default risk e.g. agriculture, energy and real estate. It may be harder to establish "creditworthiness" for some types of business.

Efficiency and Equity Since Deregulation

Deregulation of financial markets was to promote efficiency by replacing legislative discretion with market forces driven by competition. In sweeping terms, the competitive delivery system and new practices should allow greater efficiency in pricing, movement of funds, and product development. The integration of national markets has facilitated the flow of funds to productive areas and projects. (Of course, it also facilitates the flow of funds to high risk banks willing to rely on borrowed funds.) Larger systems can diversify portfolios across regions and sectors. There has been a proliferation of new products and services tailored to specialized needs. Deregulation has also moved the financial system towards a more rational pricing system with explicit pricing of services and more financial contracts tied to the prevailing market rate of interest, the signals that should be used

for savings and investment decisions. Weak financial institutions have been closed and then placed with new management. While there are obvious exceptions to these simplistic generalizations, the evaluation of the changes in financial markets during the 1980s and the contribution of deregulation to efficiency has generally not been negative. However the incentives for efficiency in the financial service industry are still weak in some areas.

The competition that is to drive financial institutions towards lower cost production of financial services is more likely to be evidenced in money centers and among larger institutions. Many areas of the Midwest have low population densities and few financial institutions. Some counties may have as few as three or four banks. Spatially dispersed service centers and high transaction costs leave significant concentration and market power in local financial markets and may account for some of the observed variation in lending rates.[33] Many small localized banking markets are not exposed to much direct competition, have been slow to adopt new technology or practices, and have been slow to move to the greater efficiency that was suppose to come with deregulation. Therefore the rating on efficiency might be mixed depending on the level of the system examined. Many areas have yet to

---

[33] For example, a survey of farm credit done early in 1987 found considerable variation in interest rates on farm loans at banks. The generalization formerly used was that large bank farm loan rates tended to follow the national prime rate while the lending rate at small banks reflected the average internal cost of funds. Since the introduction of interest sensitive deposit instruments, the lending rate on farm loans at small banks has become more closely linked to the national prime rate; but is still more stable than the lending rate at large banks. (Melichar, 1987)

reap the benefits of efficiency promised under deregulation.

Changing practices in financial markets have raised concern about equity and fairness. The changes in financial markets in recent years have redistributed costs and benefits among savers, consumers of services, and borrowers. The introduction of market-responsive deposit rates on most accounts, the move from cross-subsidization to explicit pricing of services, use of new instruments to pass interest-rate risk back to borrowers, etc. have effected almost everyone who uses the financial system. In some cases the redistribution has been considered undesirable and inconsistent with other public objectives, such as access to banking services for low income individuals.

It is clear that changes in financial services have redistributed costs and benefits among users, but it is not clear that the changes will make much difference in inter-regional growth patterns. There is variation in the pricing and availability of services among communities and regions depending on the efficiency of the financial institution and the health of the local economy. Given the density of financial institutions, growing consumer sophistication and the forces of competition, price differentials on basic services should not be great, but differences will exist. However, it is unlikely that differences in financial services will contribute much to variation in interregional growth rates. There does not seem to be a strong relationship between activities of financial institutions and regional economic growth patterns, but this observation is still open for debate.

There is an unresolved debate on the nature of the interactions between real and financial activities in economic development. Some

believe that the activities of financial institutions can affect the general health and growth of the local economy. It is argued that bankers can promote the local economy by funding new business ventures plus providing financial services for on-going businesses, and providing consumer credit to support sales., Some maintain bankers who refuse to take risks in the local economy choke-off the growth potential of the area.[34] However, this view has been challenged by the argument that the roles of financial institutions and credit in economic growth have been overrated.

Those who oppose the emphasis given to financial institutions argue that financial services are just one of a range of services needed for business success and that too much attention is focused on credit while neglecting entrepreneurial, marketing, or other functions. Furthermore financial institutions provide only a limited portion of the credit available through formal and informal channels. It can also be argued that local economic conditions are swamped by broader national economic

---

[34] A few studies have supported the belief that the activities of financial institutions can stimulate local economic conditions. Ho and Shaffer used a simultaneous equation system of local income and bank performance measures to study the relationship in Wisconsin counties for the period 1969 to 1973. They concluded that bank lending had a positive impact on per capita income change.

forces and even good financial services can do little to change the growth prospects of a community.[35]

It is easy to point to case studies to support either of these viewpoints. Attempts to examine the relationship between bank activities and local economic performance empirically have not had consistent findings and have not resolved the uncertainty. While researchers continue to grapple with the issue of how to measure the interaction between real and financial flows, the public will continue to focus on the availability of credit.

Availability of loans, will remain a sensitive political issue in evaluation of the financial system on a community level. Ideally, the financial system should be capable of channeling credit across regions to the most productive projects. It is not clear that our, or any other, financial system does a good job of credit allocation. Without objective standards, it is very difficult to evaluate the credit allocation process. Simple indicators of financial institution performance are frequently misleading. For example a low loan-to-deposit ratio may

---

[35] Barkley and Helander examined time-series data on bank lending and retail sales for 27 communities in Arizona. Using Granger and Sims tests for causality, they found that economic activity leads bank lending. The authors concluded that while banks obviously facilitate growth, banks do not initiate the growth process. (Barkley and Helander, 1985.) It should be noted that retail sales may be a weak measure of economic activity. Additional indirect support for the argument that local bank performance is not a primary determinant of economic activity comes from a study by Milkove and Weisblat. That study used data on non-urban areas in the mid-1970s and found a relationship between structure and performance in rural financial markets but not between structure of the banking market and local economic growth measured by employment growth. The authors pointed out that this finding was consistent with the existence of national capital markets so that local units were not exclusively dependent on local financial markets. (Milkove and Weisblat, 1982)

indicate a reasonable strategy to protect deposit funds and control lending risk in an undiversified agricultural area rather than an overly conservative lending policy. A large number of credit denials may be based on the correct assessment of poor local economic conditions. Similarly a higher interest rate for small businesses may be a realistic reflection of default risk rather than discrimination. Of more concern are arbitrary credit allocation decisions that do not correctly reflect expected profitability or risk.[36]

Credit market imperfections are probably much rarer than the public perceives, since many loan rejections can be traced to high credit risk. However, there are significant "gaps" in financing. Financial institutions frequently do a poor job in assessing the creditworthiness of new businesses,[37] service firms without tangible collateral, very small businesses, and very rapidly growing firms. In some areas of the country and with some products, venture capital sources may be available to fill these gaps. While there are some venture capitalists operating in the Midwest, activities are not geographically dispersed and they

---

[36] If discriminatory credit allocation decisions can be documented, an individual does have some protection under the Equal Credit Opportunity Act. If there are blatant credit allocation problems in a community, such as redlining certain neighborhoods, these can be brought to the attention of regulators under the Community Reinvestment Act. However the legal recourse for arbitrary credit allocation decision is very weak.

[37] A survey of small Wisconsin firms found that owners' savings, funds from friends and relatives, and loans from commercial banks were the major source of funds for new businesses. (Combs, Pulver, and Shaffer, 1983). Another survey showed that most startups and small operations relied on owners' capital, although the definition of this term was somewhat ambiguous. (University of Michigan, 1985). For a survey of small business finance, see The State of Small Business, 1986, Chapter 2.

rarely lend in smaller communities.[38] State and community economic development funds have been developed to fill financing "gaps." While an evaluation of these funding schemes is beyond the scope of this paper, it can be noted that many schemes have discovered that loan losses tend to be very high in the areas where formal financial institutions are unwilling to lend.

After deregulation there has been less leverage to impose equity objectives and the view that financial institutions should be evaluated as a "public utility" has less credibility. The move to "level the playing field" among financial institutions reduced the privileges for commercial banks. Since banks are no longer protected from competition, there may be less "slack" to contribute to public service and banks may feel less obligation to perform a public service role.

It is too early to make blanket statements about efficiency and equity with partially deregulated financial markets. The system is still evolving. However, early efficiency gains attributed to deregulation have been tempered with the fear that deregulation has contributed to instability in financial system during the 1980s.

Stability and Financial Institution Failures

Bank and thrift failures or forced mergers are now a familiar part of the economic landscape. This stands in sharp contrast with the pre-1980 record. Between 1947 and 1980, there was an average of 6.4 insured bank failures per year. The number of failures started to rise in the mid-1970s, with an average of 12.9 failures per year from 1975 into the early 1980s. The increase after 1981 was startling. There were 10 bank

---

[38] Hustedde and Pulver, 1985.

failures in 1981, 42 in 1982, 48 in 1983, 79 in 1984, 120 in 1985, and 138 in 1986.[39] Forty banks failed in the first quarter of 1987. Financial problems in thrifts started earlier and were severe in the early 1980s. Only 130 thrifts failed from 1934, when deposit insurance was introduced by FSLIC, until 1980. Between 1980 and 1985, 581 federally insured S & Ls failed. In 1986, 21 savings and loans were closed, 43 were forced to change management and 22 were forced to merge with stronger institutions. While the number of S & L failures has declined since the high of 252 in 1982, and the interest rate environment for thrifts has improved since 1981, there are still several hundred thrifts close to insolvency and the FSLIC does not have the funds to close all the insolvent thrifts.[40]

There is considerable debate about the causes of the rash of financial institution failures. Several characteristics of the macroeconomic environment during the 1980s have increased the risk of financial institutions: volatile interest rates; "boom and bust" problems in several sectors of the economy such as agriculture and energy; and the repayment problems of Third World debtors. These factors eroded the profit margins of some institutions and undoubtedly

---

[39] In 1986 there were 26 bank failures in Texas, 16 in Oklahoma, 14 in Kansas, 10 in Iowa, 9 in Missouri, 8 in California and Louisiana, 7 in Colorado and Wyoming, 6 in Nebraska, 5 in Minnesota, and one in South Dakota and Wisconsin.

[40] As of June 1985 there were 88 thrifts with total assets of $16.8 billion with negative net worth by regulatory accounting principles. By generally accepted accounting principles, 461 thrifts with total assets of $111.4 billion had negative net worth. (Economic Report of the President, 1986, p. 205.) The situation has deteriorated since that time. Nearly one of every four federally insured S & Ls lost money in 1986. Losses by unprofitable S & Ls rose from $3.6 billion in 1985 to $8.3 billion in 1986.

contributed to weakness in the system.

In the Midwest we are especially aware of the problems of agricultural banks. There has been a dramatic reversal for agricultural banks[41] since the 1970s when financing agriculture was highly lucrative. The rate of return on equity earned by agricultural banks peaked in 1980 and has declined every year since then. The return on assets at the 2200 agricultural banks in the four midwestern Federal Reserve districts, Chicago, Minneapolis, St. Louis, and Kansas City, dropped to .33 in 1985 and .29 in 1986. That was about one-third of the 1979 rate. Agricultural banks relied heavily on gains in security trading for income in 1985 and 1986. The return on assets, net of security gains, was only .20 in 1985 and .07 in 1986.[42] There were some indicators that the loan-losses of agricultural banks started to stabilize towards the end of 1986.[43]

Many of the banks that have failed, have been heavily involved in agricultural or energy finance. Of the 239 commercial bank failures between 1983 and 1985, 137 were rural banks and 107 specialized in financing agriculture. There were 68 agricultural bank failures in 1986,

---

[41] These banks represent 15 percent of all U.S. banks but less than five percent of all U.S. banking assets. The Federal Reserve Bank of Chicago defines agricultural banks as banks with at least 30 percent of total loans to agriculture. (Federal Reserve Bank of Chicago, "Macroreport".)

[42] Even with bond trading profits and tax credits, 23 percent of the agricultural banks in the four midwestern Federal Reserve districts lost money in 1985, compared with 14 percent in 1984 and only one percent in 1980. The definition of an agricultural banks used by the Chicago Federal Reserve Bank is at least 30 percent of total loans to agriculture. Federal Reserve Bank of Chicago, "Macroreport", 1985.

[43] Melichar (1987).

the same number as in 1985. The problem of failing banks was particularly severe in the grain producing areas of the Midwest. Half of all bank failures from 1983 to 1985 were in the Northern Plains and the Corn Belt[44] and that area had three-fifths of the rural bank failures and three-quarters of the agricultural bank failures.[45]

Besides the volatile macroeconomic conditions, there have been changes endogenous to the financial sector which may have escalated failures. There has been an explicit change in regulatory policy since deregulation to use market forces to "weed out" weaker financial institutions. In practice, this policy has been applied to smaller financial institutions, but regulators have not been as anxious to see "market forces" close larger banks. Therefore a change in regulatory practice explains why small financial institutions that get in trouble have not been "bailed out".

Aggressive competition and new activities have also been cited as causes of financial institution failures. Many financial institutions have taken advantage of deregulation to move into more risky

---

[44] The Northern Plains includes South and North Dakota, Nebraska and Kansas. The Corn Belt covers Iowa, Illinois, Indiana, Ohio, and Missouri.

[45] A larger proportion of bank failures in 1985 were rural agricultural banks than in 1983. Almost 70 percent of the failed banks in 1985 were rural banks, up from 34 percent in 1983; and more than 55 percent were agricultural banks, up from 16 percent in 1983. Here agricultural banks are defined as banks with over 17 percent of total loans to agriculture. (Gajewski, 1986, p. 2 and p. 5) While the number of agricultural bank failures remained constant in 1985 and 1986, these represented a smaller proportion of the national total in 1986.

activities.[46] There has been more direct lending[47] more off-balance sheet activities, etc.[48] The flat-rate deposit insurance schemes of FDIC and FSLIC do not force financial institutions to pay a higher premium on more risky activities. In addition, poor management, frequently coupled with illegal activities, has been a factor in many, if not most, failures.[49]

The impact on the local community of a financial institution failure has been mitigated by government intervention. At least so far, few failed financial institutions have been closed for more than a few days. Usually the institutions are taken-over immediately by healthy

---

[46] For example, Marcus (1984) argues that deregulation lowered the value of a bank charter by easing entry, making high-risk strategies more attractive.

[47] This trend pre-dates deregulation. Loans as a percentage of bank earning assets rose from 21 percent in 1945 to 61 percent in 1960, 70 percent in 1970, 73 percent in 1980, and 78 percent in 1984. (Merris and Wood, 1985, p. 70) This generalization has not held true for Midwestern agricultural banks in recent years because of weak loan demand. For example net loans as a percent of total assets fell from 50.3 in 1984 to 45.1 in mid-1986. (Federal Reserve Bank of Chicago, "Macroreport")

[48] Financial institutions have moved more activities "off balance sheet" to avoid regulatory scrutiny and to circumvent the capital standards. There has been a dramatic increase in "off-balance sheet" activities, such as loan commitments, lines of credit, bankers acceptances, financial futures, forward transactions, and stand-by letters of credit. These new activities have not been closely monitored by regulators yet and may represent greater risk for financial institutions.

[49] Several studies on bank failures are reviewed in the Nov. 1983 issue of Economic Review prepared by the Federal Reserve Bank of Atlanta.

institutions with assistance from FDIC or FSLIC.[50] There is no threat to the security of deposits under $100,000 because of deposit insurance from FDIC or FSLIC. However, there is no guarantee of continuing service to borrowers after the failure of a financial institution. The FDIC or FSLIC may not be able to find a buyer willing to assume all outstanding loans.[51]

As mentioned before, the regulators have been more reluctant to allow large banks to fail. About 80 percent of the banks that failed between 1982 and 1985 had assets of less than $50 million; fewer than 5 percent were "large" with assets of over $300 million.[52] Therefore the rash of bank failures has not been seen as a threat to the stability of the national financial system. Of more immediate concern are the solvency of the deposit insurance schemes and regulatory reform to stabilize remaining institutions.

The potential budgetary costs of financial institution failures looms large with the solvency of the insurance schemes, particularly the FSLIC, in question. Several hundred thrifts have negative net worth or are near insolvency. It has been estimated that the cost of closing insolvent thrifts would be as high as $22.5 billion against the reserves

---

[50] Of the 239 bank failures between 1983 and 1985, 185 were passed to new owners under purchase and assumption agreements. In an additional 21 cases the deposits and some of the assets of the failed bank were passed to a healthy bank under an FDIC arranged deposit transfer arrangement.

[51] FDIC has been more aggressive lately in negotiating with bank buyers to assume all outstanding loans.

[52] Gajewski, 1986, p. 4.

of $4.6 billion held by the FSLIC to deal with failing institutions.[53] The conditions for federal budget intervention in the deposit insurance schemes have not been worked out yet, but there is little doubt that FSLIC will need federal assistance.

There are several options now under discussion to discipline the risk-taking activities of financial institutions in an attempt to stabilize the system.[54] There are three general approaches under consideration: to raise the required capital standards for financial institutions engaged in more risky activities; to adjust deposit insurance premiums for risk; and to shift more responsibility for monitoring the risk of financial institutions to the public. Clearly the impending reform of deposit insurance and regulatory policy will have a major impact on providers and users of financial services since the reforms will determine which institutions survive, the pricing, security and availability of services, and the division of responsibility for monitoring between the public and the regulators. Reform of the deposit insurance schemes will also have to confront the issue of which institutions are to be insured.

Porous Boundaries and Increasing Competition

There is still an unresolved debate on which institutions will be allowed to sell financial services and the nature of allowable competition among financial service providers. Experimentation and innovation in financial markets in the 1960s and 1970s included testing

---

[53] Barth et al, 1986, p. 38.

[54] The proposed reforms in deposit insurance are discussed in Wall, 1984, and the March 1984 issue of Economic Review published by the Federal Reserve Bank of Atlanta.

the porous legal boundaries between financial and nonfinancial firms, between investment and commercial banking, and between commercial banks and thrifts. Existing institutions developed new products or new institutions were started, to circumvent the boundaries drawn by past regulations. Deregulation did lessen the segmentation among depository institutions, but did not remove the explicit barriers between financial institutions and nonfinancial firms.

Deregulation attempted to "level the playing field" among depository institutions to allow broader competition. For example, all depository institutions, including commercial banks, savings and loans, mutual savings banks, and credit unions, must now meet reserve requirements with the Federal Reserve system. Segmentation of financial markets by product-lines was also reduced somewhat, e.g., after 1980 savings and loans were allowed to diversify into commercial and consumer loans, issue credit cards, and accept negotiable order of withdrawal (NOW) accounts. All depository institutions are now allowed to offer checking accounts, a service formerly reserved for commercial banks.

The new regulations increased the range of potential direct competition between commercial banks and thrifts but specialization has been maintained. In practice, banks are still the most diverse financial institutions with savings and loan associations overwhelmingly

concentrated in housing finance.[55] Only a few savings and loan associations have moved to become broader-based financial institutions. Deregulation did not remove all institutional segmentation. Banks and thrifts still have some product restrictions, different regulators, and different insurance schemes.

The boundaries between commercial and investment banking from the Glass-Steagall Act of 1933 were drawn not only to prevent commercial banks from undertaking more risky activities, but also to restrict concentration and market power in the financial sector. Commercial banks were limited to deposit-taking and lending while investment banks were held to underwriting debt and equity issues. This division was to prevent the concentration of both debt and equity finance in a few "super banks." The widespread adoption of the Bank Holding Company structure allowed commercial banks to expand into some new activities, such as dealing in securities backed by any unit of government. Deregulation permitted an even larger menu of activities; some overlapping with investment banks. Since 1981 commercial banks have started to provide

---

[55] Both Title IV of DIDMCA and the Garn-St. Germain Act expanded the lending privileges of S & Ls into consumer and commercial real estate. However, thrifts (S & Ls and mutual savings banks) remain dependent on mortgage lending. There has been a decrease in the proportion of assets in direct mortgage lending from 97.3 percent in 1975 to 93.4 percent in 1984; but much of the increase in other investments has gone into mortgage-backed securities. By June 1984, the average ratio of consumer loans to assets was 3.8 and commercial loans to assets was .8 for all thrifts (Fortier and Phillis, 1985). The increase in commercial lending has been concentrated in relatively few institutions. By the end of 1983, only 9 percent of the S & Ls surveyed in Wisconsin and Illinois were making commercial loans and the end of 1985 this had only risen to 20 percent. Most S & Ls surveyed only planned to devote 1 or 2 percent of total assets to commercial loans. (Pavel and Phillis, 1985) More thrifts have moved into consumer lending. By 1984, 88.6 percent of all thrifts were making consumer loans. (Fortier and Phillis, 1985, p. 65.)

discount brokerage services, with about 1,500 banks offering services by the end of 1983 and 1800 by 1985. The SEC estimated that commercial banks accounted for about 20 percent of securities trading by 1986.[56] Commercial banks are anxious to move into several other activities, such as underwriting, rather than just placing commercial paper, mortgage-related securities not backed by government, municipal revenue bonds, and securities backed by consumer receivables like car loans. State governments have some leeway in regulating the services and products available from state-chartered banks and several states have expanded the range of allowable activities. For example, state-chartered banks in eleven states, can engage in insurance activities which are prohibited to national banks and BHCs. Congress has debated since 1982, but has not yet passed legislation on allowable activities. So far the changes have been established in ad hoc regulatory and court rulings on the state and national level.

The U.S. is one of the few countries that has tried to enforce a strict separation between financial and business interests. Deregulation of the financial industry did not reduce the boundaries between financial and non-financial firms but again market forces have poked holes in the wall. Non-financial firms have purchased nonbank banks to provide a limited range of financial services.[57] The Federal Reserve has tried to close the nonbank bank loophole used by commercial firms to enter the financial service sector, but has not been successful. Also many non-

---

[56] The Wall Street Journal, Dec. 23, 1986, p. 44.

[57] Nonbanks either offer demand deposits or make commercial loans, but not both, and therefore are not covered by bank holding company regulations.

financial firms have started to offer a limited range of financial services. Several large retail companies have entered the financial service business, e.g., Sears Roebuck and Co. now owns Sears Savings Bank, Allstate Insurance Co., the Dean Reynolds securities firm, and is offering a "Discover" credit card.

The problem of encouraging competition in financial services while maintaining boundaries among commercial banks and thrifts and investment banks and commercial ventures was not resolved in the 1980 and 1982 legislation. While it is widely recognized that the nature of allowable competition in financial services needs to be clarified, the attempts to get further national legislation has not been successful yet. The issue of maintaining barriers between commercial and financial firms is closely tied to the issue of "safety and soundness" of financial institutions. First it is not clear whether expanding into new areas of business would increase or reduce the volatility of earnings for banks and thrifts.[58] Financial institutions have special government-sponsored mechanisms for stabilizing the system i.e. discount window privileges and deposit insurance. If these mechanisms are used to stabilize earnings across a broader range of subsidiary activities, financial firms have an unfair competitive advantage over commercial firms. On the other hand, if engaging in new activities destabilize the earnings of financial firms, the burden may fall either on the deposit insurance schemes or the government. Therefore the issue of allowable activities and competition with commercial firms will have to be decided in conjunction with reform

---

[58] The evidence is reviewed by Wall and Eisenbeis (1984) and Saunders and Smirlock (1985).

of the deposit insurance scheme.

Unless regulators become more decisive about drawing and maintaining the distinction between financial and non-financial firms, current experiments in the market suggests the distinction will narrow. The same may be true about the distinctions among different types of financial institutions. In the near future we should expect to see a debate on the costs and benefits of overlapping and potentially competing regulatory agencies within the financial sector, and enforced segmentation by activity.[59] Local communities will have a stake in this debate since it will determine the structure and competitiveness of the delivery system for financial services. Depending on future legislation and regulatory action, we may move into an era with retail chains in direct competition with financial institutions for providing basic financial services. But it is still too early to predict what the nature of competition will be, or if that competition will bring the promised benefits to all areas.

Conclusions

The financial services industry is being transformed by technical change, innovation, deregulation, and increasing national and international competition. The importance of deregulation in allowing the transformation to proceed rapidly should not be minimized, but many of the most important forces changing markets were evident before

---

[59] The international perspective will undoubtedly enter the debate on segmentation of financial markets. In many markets U.S. banks are now competing with foreign banks with a different legislative framework. Many American financial firms are engaged in activities abroad that are prohibited in the U.S. In the next round of deregulation, the issue of international competition will be a more important issue, especially if trade in services is liberalized under GATT.

deregulation.

The trends discussed in this paper suggest likely directions of change, but the future is far from clear. The trends, directions, and unresolved issues will be reviewed briefly:

1) Local financial markets have developed close linkages with national financial markets. Competition, particularly for deposits, means local institutions cannot deviate much from national market trends and have little autonomy.

2) We are already witnessing changes in the size distribution and ownership patterns of financial institutions with growing importance of large banks and interstate systems. It is very difficult to draw inferences from either size or ownership to performance. Under deregulation small banks will be subject to more competition and may have a cost disadvantage, but small banks are likely to survive in the system and continue to play a vital role in local communities.

3) The emphasis in state control of geographic restrictions has changed from unit versus branching restrictions, to the timing and conditions for interstate entry. A majority of states have now entered regional compacts or allowed some form of interstate banking. The impacts of this will be felt first in the regional banking centers. Increased competition in financial services may be slow to come to small markets.

4) Financial market practices have been changing rapidly in response to price and product deregulation and the volatile market environment. In general, depositors may benefit as more

accounts pay a market interest rate. Consumers of financial services should expect to purchase unbundled and explicitly priced services. It is harder to generalize about expected changes for borrowers. Large borrowers can take advantage of competition. New, smaller, or less creditworthy borrowers are likely to have more difficulty establishing a banking relationship and signaling creditworthiness.

5) We should expect changes in the policy towards maintaining "safety and soundness" in the financial sector. Several hundred financial institutions are close to failure. Closing these institutions while protecting depositors will be expensive and the insurance schemes, particularly the FSLIC, will need federal funding. Mispriced deposit insurance creates problems throughout the system and is being reviewed.

6) Deregulation allowed for an increase in competition among different types of financial institutions; but in practice segmentation is still strong. There is even greater unrealized potential for competition in financial services from commercial firms. The issue of allowable competition between financial and commercial firms has not been resolved yet.

Because many of these changes are being driven by technology and macroeconomic conditions, it would be extremely expensive to reimpose tight regulations on financial institutions. Many of the features of the new financial system are here to stay. However the transition to a new financial system is far from complete. There are still many unknowns. Several critical issues, such as allowable competition and reform of the

deposit insurance scheme, must be decided through new legislation or regulatory action.

Bibliography

Barkley, David L. and Peter E. Helander. "The Role of Commercial Bank Loans in Nonmetropolitan Economic Development." The University of Arizona, Agricultural Experiment Station Technical Bulletin No. 253, 1985.

Barkley, David L., Glenn T. Potts and Cindy Mellon. "Bank Structure and Performance at the Nonmetropolitan Level: The Arizona and Colorado Experience." The University of Arizona, Agricultural Experiment Station Technical Bulletin No. 251, 1984.

Barth, James R., Donald J. Bisenius, R. Dan Brumbaugh Jr., and Daniel Sauerhaft. "The Thrift Industry's Rough Road Ahead." Challenge, Sept./Oct. 1986, pp. 38-43.

Benston, George, Gerald A. Hanweck, and David B. Humphrey. "Operating Costs in Commercial Bankings." Economic Review. Federal Reserve Bank of Atlanta, Nov. 1982, pp. 6-21.

Benston, George, J., Allen N. Berger, Gerald A. Hanweck, and David B. Humphrey. "Economies of Scale and Scope in Banking." in Proceedings of a Conference on Bank Structure and Competition, Federal Reserve Bank of Chicago, 1983, pp. 432-456.

Combs, Robert, Glenn Pulver and Ron Shaffer. "Financing New Small Business Enterprise in Wisconsin." University of Wisconsin-Madison, Dept. of Agricultural Economics, CALS Research Bulletin No. 3198, Jan. 1983.

Danker, Deborah J. and Mary M. McLaughlin. "Profitability of U.S.-Chartered Insured Commercial Banks in 1985." Federal Reserve Bulletin, Sept. 1986, pp. 618-632.

Duwe, Richard. "Interstate Banking in the Tenth District." Banking Studies, Federal Reserve Bank of Kansas City, Division of Bank Supervision and Structure, 1986 Annual Report, pp. 1-11.

Evanoff, Douglas D. "Priced Services: The Fed's Impact on Correspondent Banking." Economic Perspectives, Federal Reserve Bank of Chicago, Sept./Oct. 1985, pp. 31-44.

Evanoff, Douglas D. and Diana Fortier. "The Impact of Geographic Expansion in Banking: Some Axioms to Grind." Economic Perspectives, Federal Reserve Bank of Chicago, May/June 1986, pp. 24-38.

Federal Reserve Bank of Chicago. "Supervision and Regulation Macroreport: Annual Review," 1985 and mid-1986.

Fortier, Diana and Dave Phillis. "Bank and Thrift Performance Since DIDMCA." Economic Perspectives, Federal Reserve Bank of Chicago, Sept./Oct. 1985, pp. 58-68.

Gajewski, Gregory. "Rural Bank Failures Not a Big Problem - So Far" Rural Development Perspectives, Vol. 2, Issue 3, June 1986, pp. 2-8.

Ho, Yan Ki and Ron Shaffer. "Banking, Economic Structure, and Community Development." University of Wisconsin-Madison, Dept. of Agricultural Economics, draft, 1980.

Hunter, William C. and Stephen G. Timme. "Technical Change, Organizational Form, and the Structure of Bank Production." Journal of Money, Credit and Banking, Vol. 18, No. 2, May 1986, pp. 152-166.

Hustedde, Ron and Glen Pulver. "Venture Capital in Rural Areas." University of Wisconsin-Madison, Dept. of Agricultural Economics, draft, 1985.

Kolari, James and Asghar Zardkoohi. Bank Costs, Structure, and Performance. Lexington: Lexington Books, 1987.

Markley, Deborah Morentz. "The Impact of Financial Deregulation on Rural Capital Markets in Virginia: An Analysis of Bank Decision Making." Blacksburg, Virginia: Unpublished Ph.D. dissertation. Department of Agricultural Economics. Virginia Polytechnic Institute and State University. June 1984.

Markley, Deborah Morentz. "Deregulation of Financial Institutions: Implications for Rural Areas." University of Tennessee, Department of Agricultural Economics and Rural Sociology Staff Paper (No. Sp-85-01). August 1985.

McCall, Alan S. "The Impact of Bank Structure on Bank Service to Local Communities." Journal of Bank Research, Summer 1980, pp. 101-109.

Marcus, Alan J. "Deregulation and Bank Financial Policy." Journal of Banking and Finance, Vol. 8, No. 4, Dec. 1984, pp. 557-565.

Melichar, Emmanuel. "Trends Affecting and Exhibited by Commercial Banks in Agricultural Areas." Presented for a Symposium on Agricultural Communities, Congressional Research Service, May 19, 1983.

Melichar, Emmanuel. "Farm Financial Experience and Agricultural Banking Experience." Presented to the Subcommittee on Economic Stabilization of the Committee on Banking, Finance, and Urban Affairs. U.S. House of Representatives, Oct. 23, 1985.

Melichar, Emanuel. "Farm Credit Developments and the Financial Condition of Agricultural Banks: A Preliminary Report for the National Agricultural Credit Committee." March 16, 1987.

Merris, Randall C. and John Wood. "A Deregulated Rerun: Banking in the Eighties." Economic Perspectives, Federal Reserve Bank of Chicago, Sept./Oct. 1985. pp. 69-79.

Milkove, Daniel L. "Do Bank Size and Metro-Nonmetro Location Affect Bank Behavior?" Washington, D.C.; United States Dept. of Agriculture, Economic Research Service, Rural Development Research Report No. 47, April 1985.

Milkove, Daniel L. and David B. Weisblat. "The Effects of the Competitive Structure of Financial Institutions on Rural Bank Performance and Economic Growth." Washington, D.C.: United States Dept. of Agriculture, Economic Research Service, April 1982.

Morell, Stephen O. and Richard P. Saba. "The Effects of the Federal Home Loan Mortgage Corporation Secondary Market on Regional Mortgage Yield Differentials." The Quarterly Review of Economics and Business, Vol. 23, No. 1, Spring 1983, pp. 85-98.

Osborne, Dale K. "Is the Southwest Short of Capital?" Economic Review, Federal Reserve Bank of Dallas, Jan. 1983, pp. 1-10.

Pavel, C. and Dave Phillis. "Cautious Play Marks S & L Approach to Commercial Lending." Economic Perspectives, Federal Reserve Bank of Chicago, May/June 1985, pp. 18-26.

Rhoades, Stephen A. "Concentration in Local and National Markets." Economic Review, Federal Reserve Bank of Atlanta, March 1985 pp. 28-30.

Rolnick, Arthur J. and Warren E. Weber. "Banking Instability in the U.S. Free Banking Era." Quarterly Review, Federal Research Bank of Minneapolis, Summer 1985, pp. 2-9.

Saunders, Anthony and Michael Smirlock. "Intra- and Interindustry Effects of Bank Securities Market Activities: The Case of Discount Brokerage." New York University, Saloman Brothers Center for Study of Financial Institutions, Working Paper No. 352, July 1985.

Shane, Matthew. "Minnesota's Bank Structure and Rural Credit." University of Minnesota, Dept. of Agricultural and Applied Economics, Staff Paper P75-7, April 1975.

Shay, Robert P. and Colin Lawrence. "Technology and Financial Intermediation in a Multiproduct Banking Firm: An Econometric Study of U.S. Banks, 1971-1982." in Robert P. Shay and Colin Lawrence (eds.) Technological Innovation, Regulation, and the Monetary Economy, Ballinger, 1986.

Struck, Peter and Lewis Mandell. "The Effect of Bank Deregulation on Small Business: A Note." The Journal of Finance, Vol. 38, No. 3, June 1983, pp. 1025-1031.

Taff, Steven J., Glen C. Pulver, and Sydney D. Staniforth. "Are Small Community Banks Prepared to Make Complex Business Loans?" University of Wisconsin-Madison, Dept. of Agricultural Economics, April 1984.

U.S. Economic Report of the President.

U.S. Small Business Administration. The State of Small Business. Washington, D.C.: U.S. Government Printing Office, 1986.

University of Michigan, Institute of Social Research. "Measuring the Flow of Capital and Credit to Small Firms: A Pilot Study." Washington, D.C.: U.S. Small Business Administration, Office of Advocacy, August 1985.

Wall, Larry D. "Deposit Insurance Reform: The Insuring Agencies' Proposals." Economic Review, Federal Reserve Bank of Atlanta, Jan. 1984, pp. 43-57.

Wall, Larry and Robert A. Eisenbeis. "Bank Holding Company Nonbanking Activities and Risk." In Conference on Bank Structure and Competition, Federal Reserve Bank of Chicago, 1984.

Wall, Larry and Robert A. Eisenbeis. "Risk Considerations in Deregulating Bank Activities." Economic Review, Federal Reserve Bank of Atlanta, 1984, pp. 6-19

Appendix: Midwestern Commercial Banks

The following stylized facts about Midwestern financial markets were drawn from the data prepared for the "Macroreport" of the Federal Reserve Bank of Chicago and cover the Chicago, St. Louis, Minneapolis, and Kansas Federal Reserve districts:

1. Most small agricultural banks are in the Midwest. Of the 14,331 commercial banks in the US, over 50 percent (7768) are in the Midwest. Midwestern banks control about 23 percent of the total banking assets in the US.

Almost seventy percent of the commercial banks in the Midwest have less than $50 million in assets, and about 43 percent have less than $25 million in assets.

Of the 7768 commercial banks in the Midwest, 2163, or about 28 percent are agricultural. Agricultural banks are defined as banks with 30 percent or more of total loans to agriculture. Over half of the banks in Iowa, Nebraska, Kansas, South Dakota, and North Dakota are classified as agricultural under this definition.

2. Earnings of Midwestern commercial banks have declined in the 1980s. While the earnings of agricultural banks were higher than for small non-agricultural banks during much of the 1970s, this has not been true during the 1980s. The rate of return on assets declined from 1.44 in 1980 for Midwestern agricultural banks to a dismal .29 by end of 1986. The rate of return on assets for non-agricultural banks started lower at .92 in 1980 and was .72 by the end of 1986. The rate of return on assets for non-agricultural Midwestern banks was above the national average of

.63 for 1986. However the national average was low last year because the severe problems in the energy sector. The average rate of return on assets for commercial banks in the Dallas Federal Reserve district was -.37 for 1986.

Even the low reported returns on assets for agricultural banks overstate performance since a significant portion of the earnings came from gains on securities and use of tax credits. For example, at the end of 1985, the reported return on assets was .33, but net of security gains it was only .20. For 1986 the average return on assets of .29 was only .07 net of security gains. Non-agricultural banks also boosted earnings in 1985 and 1986 with security gains, but not to the same extent as agricultural banks. For example, at the end of 1985, the rate of return on assets for non-agricultural banks was .71, but only .66 net of security gains. In 1986 subtracting security gains dropped the return on assets from .72 to .55.

Besides the decline in the average level of earnings performance for agricultural banks, there has been a significant increase at the lower end of the distribution, with an ever growing number of agricultural banks losing money. At the end of 1985, about 23 percent of the agricultural banks in the Midwest lost money, compared with less than one percent in 1980. The number of non-agricultural banks losing money increased from about 6 percent to 13 percent over the same period.

3. Much of the decrease in earning capacity in agricultural banks can be traced to deteriorating loan quality in agriculture. Since 1980 net revenues of agricultural banks has declined slightly and overhead has increased slightly, but provisions for bad and doubtful debt have

increased dramatically, from .2 percent of assets in 1980 to 1.6 at the end of 1985. Non-agricultural bank provisions also were about .2 percent in 1980 and have not risen as much. Average provisions for non-agricultural banks were .7 percent of assets at the end of 1985.

Loan losses and nonperforming assets at agricultural banks continued to climb in 1985, but year-end 1986 data will showed that the rate of increase in losses has moderated. Loan losses for non-agricultural banks have been about half the level of losses for agricultural banks. However, it should be noted that loan losses in small non-agricultural banks, with assets of less than $25 million, have been rising more rapidly than for other non-agricultural banks.

4. Agricultural banks are generally better capitalized than nonagricultural banks. However the capital base may not be sufficient to save a few of the banks. At the end of 1985 there were 108 agricultural banks in the Midwest with nonperforming assets greater than primary capital. By the middle of 1986 the number had risen to 137, so 6 percent of the agricultural banks in the Midwest were technically insolvent. Year-end 1986 is expected to show a slight improvement in the loan quality and position of agricultural banks and fewer banks with nonperforming assets greater than capital.