OKLAHOMA BANKING: AN ANALYSIS OF THE ANTICIPATED EFFECT OF BRANCH BANKING LEGISLATION

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Scope and Method of Study: This study examines the effects of a change in banking structure upon banks in Iowa and Arkansas in order to determine the possible effects of such a change upon Oklahoma banks. Five categories for comparison were identified including: bank office availability, concentration, allocation of credit, operating efficiency, and prices of services. Banking data relevant to these categories was examined over the 1967-1977 time period. Comparisons were made for data prior to and following the enactment of branch banking legislation in Iowa and Arkansas. Oklahoma banking data was compared with Iowa and Arkansas data as a means of differentiating change associated with structural differences from change associated with other economic factors.

Findings and Conclusions: The major result of this study is the finding that of the criteria examined, only bank office availability and allocation of credit were shown to be affected by a structural change from unit banking to limited area branching. Assuming limited area branching legislation was enacted in Oklahoma the following changes could be anticipated: (1) increased bank office availability and (2) better allocation of credit. Based upon the results observed in Arkansas, one other change may be anticipated. Service charge levels may increase in Oklahoma following enactment of branch banking legislation.

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CHAPTER I

INTRODUCTION

Purpose

The purpose of this paper is to explore the anticipated effect of branch banking legislation upon Oklahoma banking. Currently Oklahoma banks are required to operate under unit banking statutes. However, structural change may occur in the near future. The Oklahoma legislature is considering legislation to change banking structure and the branch banking issue is under litigation in an Oklahoma City district court. Because of these factors, an investigation of the anticipated effect of branch banking legislation in Oklahoma is appropriate at this time.

Description of Methodology

In order to determine the possible effects of a change in banking structure upon Oklahoma banks, the effects of such change upon other states will be examined. Of the states which have changed their banking structures since 1960 from unit banking to limited area branching only, Iowa and Arkansas appear to be similar to Oklahoma. An examination of state population, income, and industry established that both Iowa and Arkansas were suitable for comparison of their banking structures with that of Oklahoma.

Five categories for comparison were identified including: bank office availability, concentration, allocation of credit, operating efficiency, and prices of services. Banking data relevant to these categories was examined over the 1967-1977 time period. Comparisons were made for data prior to and following the enactment of branch banking legislation in Iowa and Arkansas. Oklahoma banking data was compared with Iowa and Arkansas data as a means of differentiating change associated with structural differences from change associated with other economic factors.

Summary of Results

The analysis of banking data from Iowa, Arkansas, and Oklahoma produced the following conclusions assuming limited area branch banking legislation were enacted in Oklahoma.

Bank office availability would increase in Oklahoma, but the effect upon main banks remains unclear. Better allocation of credit would be expected as measured by loan to deposit ratios. The loan mix would not be expected to change substantially. Service charges may increase on the statewide level following enactment of branch banking legislation.

The most important result of this study is that of all the criteria examined, only bank office availability and allocation of credit were shown to be factors affected as a result of the structural change from unit banking to limited area branching.

CHAPTER II

BRANCH BANKING: GENERAL CONSIDERATIONS

Definition of Branch Banking

Branch banking is the system of banking in which banking institutions conduct business at a main office as well as at one or more other locations. Branch banking systems exist on a nationwide basis in many foreign countries, such as Canada, England, France, and Germany. In the United States banks may be chartered and regulated by state or federal banking agencies. Within any given state, national banks and state banks are subject to the branching regulations of that state. Since federal law defers to state law, interstate branch banking does not exist in the United States at this time.

A Brief History of Branching Legislation in the United States[1]

The primary reason for the lack of a nationwide branch banking system in the United States may be traced back to the 1865 interpretation of the National Bank Act of 1863. The stated purpose of this act was to provide for the establishment and supervision of a system of federally chartered banks, to provide a uniform national currency, and to assist in financing the Civil War. This 1863 act included a requirement for organizers of a national bank to specify the "place" where its operations of discount and deposits were to be carried on. The Comptroller of the Currency in 1865 made a strict interpretation of the singular noun "place"

[1]This section draws heavily upon an overview of banking history presented by Mote [28].

used in the act. This interpretation restricted national banking offices to one location. This interpretation was followed for over fifty years. Thus the national banking system consisted of unit banks with few exceptions. State banks that converted to national charters during this period were allowed to maintain their branches, which were operational at the time of conversion.

The Comptroller of the Currency in 1922 realized that national banks were at a competitive disadvantage in states where state banks were permitted to branch. He reversed the previous policy, ruling that national banks could open limited service branches in their home office city in states which permit branching. The American Bankers Association adopted a resolution, condemning the Comptroller's action. According to the resolution branch banking was contrary to public policy and concentrated the power of credit and money in the hands of a few.

In 1927 the McFadden Act gave national banks legislative authorization to operate full service branches in states where branching by state banks was permitted. These branches were limited geographically to the home office city. A sponsor of this bill refered to it as an anti-branching measure enacted to limit future growth of branch banking in the United States. Following the passage of the McFadden Act, several states enacted statutes prohibiting branch banking.

An important force working in favor of the branching movement during the 1920's was the large number of rural bank failures. Between 1921 and 1929, 5,712 banks failed in the United States. Most of these bank failures occurred in rural areas. Many other banks were prevented from failure by merging with other banks. From 1930 to 1932, 5,096 commercial banks closed their doors. It appeared that branching laws would be liberalized as part of any banking reform measures. Branch banking supporters in the 1920's and 1930's argued that branch banks could operate more economically than unit banks and that the geographical diversity of branch banks would be less susceptible to local economic fluctuations.

The Banking Act of 1933 included a provision which allowed national banks to establish branches outside the home office city, subject to state laws which regulate branch banking. No further enlargement of branching powers on the national level occurred because Congress found an alternate means of providing bank safety. The adoption of federal deposit insurance effectively limited the effects of bank failures to the stockholders and large depositors of the failed institution.

Since the end of the Depression, the controversy over branch banking has shifted from the federal to the state level. Statutory change occurred at a slow pace between the 1930's and the early 1960's, but since then the pace has quickened. Branching has made large gains in states where it has been permitted. Between 1933 and 1973, the number of branch offices in the United States increased from 2,780 to over 26,200.

The Current Status of Branch Banking In the United States[2]

The task of classifying states with respect to the legal status of branch banking is difficult because of two factors: (1) the wording of statutes is often unclear and (2) classification must be broad in order to incorporate individual state variations. For example, in some states limited service facilities may be unrestricted in number and location

[2]This section is based upon a 1974 study conducted by Jacobs and Beighley [21].

while in other states full service facilities may be allowed, subject to constraints on number and geographic location. Three classifications will be used to summarize branch banking statutes for the fifty states: (1) "Unit Banking States," (2) "Limited Area Branching States," and (3) "Statewide Branch Banking States."

States which prohibit the operation of any form of full service branch office are classified as unit banking states. In 1960, 17 states were classified as unit banking states. Between 1960 and 1976 statutes governing the establishment of limited service detached facilities were relaxed in all but one of these states. Wyoming is now the only state which prohibits any form of detached facility. Four of these states, during this period, passed legislation to permit limited area branching, including New Hampshire (1963), Wisconsin (1968), Iowa (1972), and Arkansas (1973). Currently 13 states prohibit branch banking (Refer to Table 1).

In 1960, 15 states were classified as limited area branching states. Of these 15 states, 7 enacted legislation to permit branch banking over a wider area. Three of the 15 states authorized statewide branch banking: Virginia (1962), New Jersey (1973), and New York (1976). Presently 16 states are classified as limited area branching states. Thus, 21 states may be classified as statewide branch banking states. Refer to Table 1 for the current list of limited area and statewide branching states:

TABLE 1

STATE CLASSIFICATIONS

UNIT BANKING STATES	LIMITED AREA BRANCHING STATES	STATEWIDE BRANCHING STATES
1. Colorado	1. Alabama	1. Alaska
2. Florida	2. Arkansas	2. Arizona
3. Illinois	3. Georgia	3. California
4. Kansas	4. Indiana	4. Connecticut
5. Minnesota	5. Iowa	5. Delaware
6. Missouri	6. Louisiana	6. Hawaii
7. Montana	7. Kentucky	7. Idaho
8. Nebraska	8. Massachusetts	8. Maine
9. North Dakota	9. Michigan	9. Maryland
10. Oklahoma	10. Mississippi	10. Nevada
11. Texas	11. New Hampshire	11. New Jersey
12. West Virginia	12. New Mexico	12. New York
13. Wyoming	13. Ohio	13. North Carolina
	14. Pennsylvania	14. Oregon
	15. Tennessee	15. Rhode Island
	16. Wisconsin	16. South Carolina
		17. South Dakota
		18. Utah
		19. Vermont
		20. Virginia
		21. Washington

Source: Donald P. Jacobs and H. Prescott Beighley, "The Changing Dimensions of Banking Structure," Journal of Bank Research, Autumn 1974, p.146, updated to 1976.

The changes in laws governing branch banking, for the most part, have tended to foster wider area branching. Several states have passed legislation to reduce or eliminate home office protection. This legislation could encourage further branch bank expansion. As branch banking over a wider area has become possible in several states, banks have responded by establishing many new branch offices. This fact suggests that legal restrictions have served as a binding constraint on branch expansion.

Hypothesized Advantages and Disadvantages Of Branch Banking

Over the years a substantial amount of research has been conducted in an attempt to determine the effects of branch banking on commercial banks and the public. No single theory has been developed which explains all the effects of branch banking on commercial banks and/or the economy. Branch banking proponents have sought to extend branch banking structure to areas which prohibit branch banking. A principal argument for branch banking is that branch banks operate more efficiently and offer more services than unit banks. Opponents of branch banking state that branch banking would enable a few large banks to monopolize the market, resulting in higher costs of services. The issues raised by the branch banking controversy have remained relatively unchanged for over two decades.

Hypothesized Advantages and Disadvantages of Branch Banking:

Advantages:

(1) Branch banking allows better allocation of credit.
(2) Branch banking increases bank operating efficiency.
(3) Branch banking offers a wider range of services with increased bank availability.

Disadvantages:

(1) Branch banking fosters decreased competition and increased concentration.
(2) Branch banks charge higher prices for services.
(3) Branch banking harms small unit banks.

Allocation of Credit

Proponents of branching argue that branch banking allows better allocation of credit. Since branch organizations tend to operate in several local markets, they are able to offset the effect of deposit fluctuation in one market by intermarket transfer of funds. By doing this branches are able to reduce risk and place a greater proportion of deposits into loans than unit banks. Another argument of branching proponents is that branching allows the transfer of funds from capital surplus to capital deficient markets. Branching opponents claim that branching organizations are insensitive to local needs and may divert funds from local markets to large borrowers in other markets [17].

The ability of commercial banks to extend credit is usually measured by the loan to deposit ratio. Higher loan to deposit ratios indicate the degree to which commercial banks place funds with borrowers. Schweiger and McGee [35] reported that branch banks had higher loan to deposit ratios for installment, business, and mortgage loans in 1959. This study used regression analysis and adjusted for the effects of bank size, population, growth rate, the type of community, and the ratio of time deposits to total deposits. Kohn [23] conducted a study of branch banking in New York. Loan to deposit (l/d) ratios of major New York City banks were compared to the l/d ratios of their branches. Kohn found that one third of the branch banks had higher l/d ratios than their parent banks. In most cases where this occurred, l/d ratios of the branch banks exceeded the l/d ratio of its parent bank by more than ten percentage points. Anderson [3] conducted a banking study in which he compared three states, California (statewide branching), Ohio (limited branching), and Illinois (unit banking). Anderson found that statewide branching banks had the highest l/d ratios for installment, business, and mortgage loans. Limited branching states had the lowest ratio of business loans to assets, while unit banks had the lowest l/d ratios of installment and mortgage loans [12].

In branching states, commercial bankers most likely give consideration to the extent to which a proposed branch will attract both new depositors and new borrowers. The establishment of a new branch office will result in two changes in the branch banking system: (1) there will be an initial increase in excess reserves through the initial deposits of new depositors, and (2) there will be an initial increase in loans financed by the creation of secondary demand deposits [41].

Existing evidence supports the hypothesis that branch banking allows better allocation of credit. Branch banking provides an effective means of allocating funds without diverting funds from local needs.

Operating Efficiency

Operating efficiency refers to the cost per unit of output of providing a financial service. The existence of operating efficiency, economies of scale, is clearly relevant to the branching issue since branching laws affect the size distribution of banks [13]. The argument that branch banks may enjoy some advantage in operating efficiency appears to be valid. An efficient banking structure is desirable because the public benefits from bank services being produced at the lowest cost [28].

It has been argued that branch banks have better and more capable administrators which will result in greater operating efficiency. Numerous studies of economies of scale for commercial banks have been conducted with mixed results. Studies by Alhadeff [2], Schweiger and McGee [35], and Horvitz [17], revealed expense to asset ratios decline for both unit and branch banks as size increases. Unit banks were found to have a slight advantage over branch banks. This led Horvitz to conclude that economies of scale do exist on a limited basis, but the costs of branching more than offset these economies. These studies, however, failed to consider the number of banking offices operated by the banking organizations [12].

Benston [6] and Bell and Murphy [5] dealt with this problem to some extent. Both of these studies analyzed banking services individually, using data from the Federal Reserve's Functional Cost Analysis Program. These researchers defined bank output as the average number of deposit accounts and loans processed per year, holding constant variations in the size and activity of accounts and loans. Bell and Murphy found that increases in the number of accounts resulted in economies of scale for demand deposits, installment, business, and real estate loans, if the effect of the number of offices was weighted statistically. They also found that the increased costs of branching tended to offset the cost savings of economies of scale. Benston's study showed similar results. Benston's data showed that consolidation of unit banks into a branch banking system raised costs slightly [7].

One of the most recent and comprehensive studies on operating efficiency is a study conducted by William Longbrake [25]. This study found that unit banks with less than $15 million in deposits had lower costs than branch offices of similar size. The cost advantage of unit banks decreased as the number of branch bank offices increased. In banks with above $15 million in deposits per office, branch banks were found to have lower costs than unit banks. The advantage of branch banks in this situation also increased as the number of branch offices increased. Longbrake's study indicates that growth under branching reduces costs relative to comparable offices under a unit banking structure. The introduction of new banking technology is likely to strengthen this tendency [13].

The studies reviewed have shown that branch banks do realize small levels of operating efficiency. However, cost savings as a result of economies of scale appear to be offset by the increased costs of operating branch offices.

More Services and Bank Availability

Banks offer a variety of services including demand and time deposits, check cashing, trust departments, safety deposit boxes, as well as others. The services provided by banks vary with deposit and check cashing services offered at most banks. Institutions operating under the widest branching privileges would be expected to develop the largest number of services [19]. A larger institution generates the volume needed to make specialized services profitable. Because branch banking may lead to larger banks, we would expect branching to be associated with a wider range of services [13].

Guttentag and Herman [14] reported that the services offered by large banks more often than by small banks are: revolving credit, trust departments, payroll services, and foreign exchange transactions. Mergers of unit banks into branch banks often results in new services by the merged office. Guttentag and Herman questioned the significance of the differences in services provided by unit and branch banks. In areas where unit banks dominate, there may be little demand for additional sevices offered by branch banks, and where there is a demand, unit banks can usually offer the service through correspondent banks [13].

Weintraub and Jessup [42] found that branch banks with deposits less than $25 million offered a wider range of services than unit banks of the same size. Larger branch banks provided a much wider range of services than small unit banks. Kohn [23] in his study of bank mergers in New York found that 80 percent of the mergers resulted in at least one new service [12]. Horvitz and Shull [19] found that an average of 5.1 new services were offered following bank mergers.

Other things being equal, it would be desirable to have more banking offices and have them located so they would provide the greatest convenience to the largest number of bank customers. It has been argued that because branch banks do not need to perform all of the functions unit banks perform, such as personnel administration, accounting, and investment management, they can operate profitably in locations where the character and volume of business would not support a unit bank, i.e., rural areas and small towns [28].

Jacobs [20] in a study of bank availability used regression analysis to control for income growth, population growth, and the percent of the population living in urban areas. Jacobs concluded that the increase in banking offices from 1943 to 1963 was significantly greater in branching states than in unit banking states. Guttentag [13] found large differences in office availability associated with branching, especially in small communities. Residents of communities with 400 or less inhabitants were on average within 5 miles of 4.1 banking offices in county-wide branching counties, 3.3 offices in limited branching counties, and 0.9 offices in unit banking counties.

From the evidence cited, the hypothesis that branch banking offers a wider range of services with increased bank availability cannot be totally rejected. It appears that a wider range of services may be available through a branching system and that branch banking offers the opportunity for increased bank availability. The development of increased services and office availability may be determined by other factors.

Concentration and Competition

One of the most debated issues in the controversy over branch banking is whether branching increases or decreases concentration of financial resources and competition in financial markets. Because branching tends to lead to larger banks, we can hypothesize that branch banking fosters decreased competition and increased concentration. Concentration is measured by the degree to which deposits, loans, or other services are controlled by the largest banks in the market.

The general presumption is that greater concentration is associated with less competitive behavior. Another presumption is that competition leads to socially desired performance by banks; i.e., lower prices, higher quality services, more product innovation, etc. Larry Mote [28] notes that several important qualifications regarding the relationship between concentration and competition should be considered: (1) individual cases cannot be predicted with certainty because even in highly concentrated markets, banks may exhibit competitive behavior in order to maximize their market share, (2) the relationship between concentration and competitive behavior should not be assumed to be continuous over all levels of concentration because it is possible that concentration must exceed a critical level before pricing behavior ceases to be competitive, and (3) if entry into the market is relatively easy, the degree of concentration in the market will have little or no effect on competitive behavior.

Jack Guttentag [13] presented a paper to the United States Senate Subcommittee on Banking, Housing, and Urban Affairs. This paper asserted that special problems arise when researching the impact of branching on concentration and competition in banking. The specifications of geographical market areas is extremely difficult. This implies that branching may affect the boundaries of market areas. Market areas under unit banking are customer determined since the costs and inconvenience to customers of banking with more distant banks largely defines a bank's market area. To determine the impact of branching on market concentration, it is necessary to distinguish the short-run impact when branches are entering new markets from the long-run effects when the banking structure has become more settled. Entry conditions are an important part of market structure.

In a study by Bernard Shull [37], an analysis was made of the effects of the liberalization of branch banking laws in New York and Virginia. Statewide concentration of banking resources for the largest, three largest, five largest, and ten largest banking organizations were examined. Shull found that the number of banking organizations declined, while deposit concentration in the largest organizations increased between 1961 and 1969. States with similar branching laws and economic-demographic characteristics experienced much smaller declines in the number of banking organizations. In fact statewide concentration in these states experienced declines over the 1961-1969 period. Shull's results indicate that less restrictive branching laws lead to increased statewide concentration of banking resources. Juncker and Oldfield [22] in their study which simulated changes in market structure that would result from the 1969 liberalization of New Jersey's branching laws, concluded that appropriate regulatory policy could prevent excessive deposit concentration.

Shull [36] states that while statewide concentration may go up - concentration in local markets may go down when branching laws are liberalalized. There is reason to believe that branch banking may result in more rival banks in small local markets than under unit banking. This is due partially to less constrained regulatory authority when approving the establishment of a new branch vs. chartering a new bank. Branch banking seems to result in fewer banks within a state. However, one should not expect more banks under branching in large metropolitan areas. Recent studies of changes in the number of banks and concentration in metropolitan areas in states permitting multi-office banking[3] indicates that multi-office banking expansion is not associated with a decreasing number of banks or a higher level of concentration. There is some indication that it results in lower levels of concentration.

Table 2 compares average concentration ratios for commercial banks in states grouped by branching law classifications. This table shows that a substantial difference has existed among states with different branching laws for some time.

TABLE 2

CONCENTRATION RATIOS (CR)

Branching Classifications	# of States	CR 1973	# of States	CR 1962
Statewide Branching	19	75.4%	17	75.5%
Limited Branching	18	41.1%	17	41.2%
Unit Banking	13	34.3%	16	34.3%

Source: Jack Guttentag, "Branch Banking in Alabama," and Bernard Shull and Paul Horvitz, "Branch Banking and the Structure of Competition."

A major element of bank structure which effects concentration and competition is the restriction of entry into the banking industry. Peltzman [33], Benston [7], Alhadeff [1], and others have criticized restrictions on entry into banking on many grounds. By limiting entry regulators have limited "ruinous" competition, as well as curtailing the desirable effects of potential competition. Restrictive entry policies have failed to prevent unsound banking practices and subsequent bank failures. It is argued that

[3]Includes branch banking and multi-bank holding companies.

less restrictive entry policies would enable market forces to discipline the market. Alan McCall and Manferd Peterson [26] state that restrictions on entry into commercial banking can be relaxed in one or more of the following ways: (1) freer chartering of new banks, (2) expanding current geographic markets through branching and automated banking facilities, or (3) granting thrift institutions powers and functions currently reserved exclusively for commercial banks.

Howard Crosse [9] expresses the opinion that there can be little question that there are great pressures in the economy for a more concentrated banking structure. Without regulatory controls there would be a great many more new branches established. These are the views of management on both sides of the branch banking controversy.

Evidence supports the hypothesis that branch banking increased concentration in local markets to a certain extent, but research has failed to prove that branch banking leads to decreased competition. Changes in banking regulations may be able to control any undesirable effects of branching on concentration and competition.

Higher Prices for Services

If competition among financial institutions was purely competitive, all institutions would charge or pay the same rates for the same services. Since banking is not purely competitive branch banks may charge different prices for services. Several factors may influence the prices charged and the rates paid by financial institutions. These include: location, advertising, differentiation of services, regulation, and banking structure [12].

Studies concerning service charges on demand deposits indicate that branch banks charge higher service charges than unit banks. This result was discovered by both Horvitz and Shull [19] and Kohn [23]. Motter and

Carson [29] found that conversion of a unit bank to a branch bank is most likely to result in an increase in service charges. The entry on New York City banks into Nassau County by de novo branching induced most local banks to increase their service charges.

Evidence concerning the interest rates paid on time and savings deposits is unclear. Guttentag and Herman [14] suggest that unit banks in branch banking states pay higher rates than branch banks of equal size. Unit banks in branching states may pay higher rates to overcome the disadvantage of having only one location. Another factor which constrains interest rate competition is governmental regulation of interest rate ceilings [28].

Edwards [10], Flechsig [11] and Phillips [34] used Federal Reserve Board data to look at interest rates charged on business loans. Edwards found a small statistically significant positive relationship between the rates charged on business loans and bank concentration. Flechsig used Edwards data and found that the relationship could be due to regional differences. Neither of these studies accounted for the size of loans. Phillips corrected this error by computing separate regressions for interest rates on each of four size categories of loans. Phillips found the same relationship that Edwards and Flechsig had found, a small positive relationship between interest rates and concentration [7].

Research supports the hypothesis that branch banks charge higher prices for services than unit banks. These prices are effected by structure as well as by other factors such as location, advertising, and regulation. As Phillips found, the higher prices of services may be a small positive relationship which would only slightly affect banking costs.

Branch Banking and Small Unit Banks

Since liberal branching laws are associated with smaller numbers of large banks, in a broad sense branching reduces the number of unit banks. Do branch banks drive unit banks out of business by using unfair labor practices? Does branch banking provide an environment in which unit banks are acquired by branch banks, or where the economic incentives to form new banks are reduced? It is important to know how branch banking affects unit banks.

Unit bankers often express the fear that branch banks, if allowed to enter their markets, would drive unit banks out of business through predatory price cutting. Studies of branch banking since World War II have not found evidence of predatory price cutting. This practice, price cutting, would be in violation of antitrust laws. In general predatory competition is not a profitable strategy (even if it were legal) because once prices are raised, competition will be attracted to the market [18].

The existing evidence shows that unit banks can be profitable and survive the entry of branch banks into their market area. In California, where statewide branching has existed for many years, unit banks represent one-third of all California banks. Merger and new entry activity are watched closely by regulatory authority. If the regulatory authority believes that other banks will be harmed by approval of a merger or branch bank application, the approval will not be granted [13].

In a study by Thomas Hawk [15], a comparison was made of the banking alternatives available within the Philadelphia SMSA. Between 1946 and 1966, the banking structure within the Philadelphia SMSA changed drastically. The number of banks in the four county area declined from 115 to 38. The concentration ratio of the four largest banks in the SMSA, in terms of deposits, increased from 23 percent in 1947 to 69 percent in 1962. These changes suggest that the market should have become less competitive. A different picture was shown in this study. The four county area was divided into 38 districts, which were determined to be local trading areas. The number of banking facilities, main and branch banks, per district increased from 3.8 in 1946 to 5.1 in 1966. This study shows that under a branch banking structure the number of main banks may decrease while the number of banking alternatives actually increased [28].

Small unit banks must be able to change and innovate when faced with branch banking competition; these are prerequisites for small unit bank survival [13]. The hypothesis that branch banking harms small unit banks has not been supported. Unit banks have been able to survive and prosper in California, the state with the largest branch banking system. Increased competition may result from a liberalized banking structure, however, competition should not harm small unit banks. Research does not support the view that price cutting would be implemented under a branch banking structure to drive unit banks out of business.

Conclusions

Literature pertaining to the hypothesized advantages and disadvantages of branch banking appears to support each hypothesis to varying degrees. Evidence supports the hypothesis that branch banking allows better allocation of credit. Loan to deposit ratio analysis has shown that branch banking allows better allocation of credit. Loan to deposit ratio analysis has shown that branch banking states have higher loan to deposit ratios than unit banking states. Small operating efficiencies have been found for branch banks by bank researchers. These cost savings, however, may be offset by increased operating costs. It appears that branch banking allows a wider range of services and increased bank availability. Other factors, however, may affect bank availability and the range of services offered. Although research supports the hypothesis that branch banking fosters increased concentration, support has not been found proving that this banking behavior harms the banking community. The prices of bank services under branch banking legislation have been found to be slightly higher than under unit banking statutes. However, factors other than structure may also affect the prices of bank services. The effect of branch banking activity upon unit banks appears to show that the number of unit banks may decrease. Research has shown that more banking alternatives are available under a branch banking structure. Unit banks have been able to survive in branch banking states such as California. The hypothesis that branch banking harms small unit banks has not been strongly supported in the literature reviewed. Factors other than structure influence the ability of small unit banks to survive increased competition.

CHAPTER III

THE OKLAHOMA BANKING STRUCTURE

Number and Size Distribution Of Oklahoma Banks

Oklahoma currently has 476 commercial banks to serve Oklahoman's banking needs. In 1977 the commercial banks of Oklahoma held assets of $15.1 billion, deposits of $13.1 billion, and equity capital of $1.1 billion. A recent Federal Deposit Insurance Corporation (F.D.I.C.) report indicated that Oklahoma's deposit level ranked as the 21st largest in the United States with 1.4 percent of the nations total deposits. In the Greater Southwest[4], Oklahoma was the third fastest growing state based on deposits. Oklahoma was also the fourth largest state in deposits and loan growth [32].

Oklahoma's 77 counties all have at least one commercial bank. Geographic location and distribution by county is shown in Figure #1. Oklahoma and Tulsa counties have the largest number of banks, 49 and 39, respectively. The number of banks in these two counties was significantly greater than the state average of six banks per county.

The largest Oklahoma banks in 1978 were single bank holding companies. The largest bank in Oklahoma, First National Bank of Oklahoma City, held deposits of $1.015 billion and loans of $680 million in 1978. These amounts represent approximately 7 percent of total state deposits and 8.8 percent of total state loans. The nine largest banks (Refer to Table #3) collectively hold 34 percent of Oklahoma's total deposits. These banks also

[4] A seven state area including Arkansas, Kansas, Louisiana, Missouri, New Mexico, Oklahoma, and Texas.

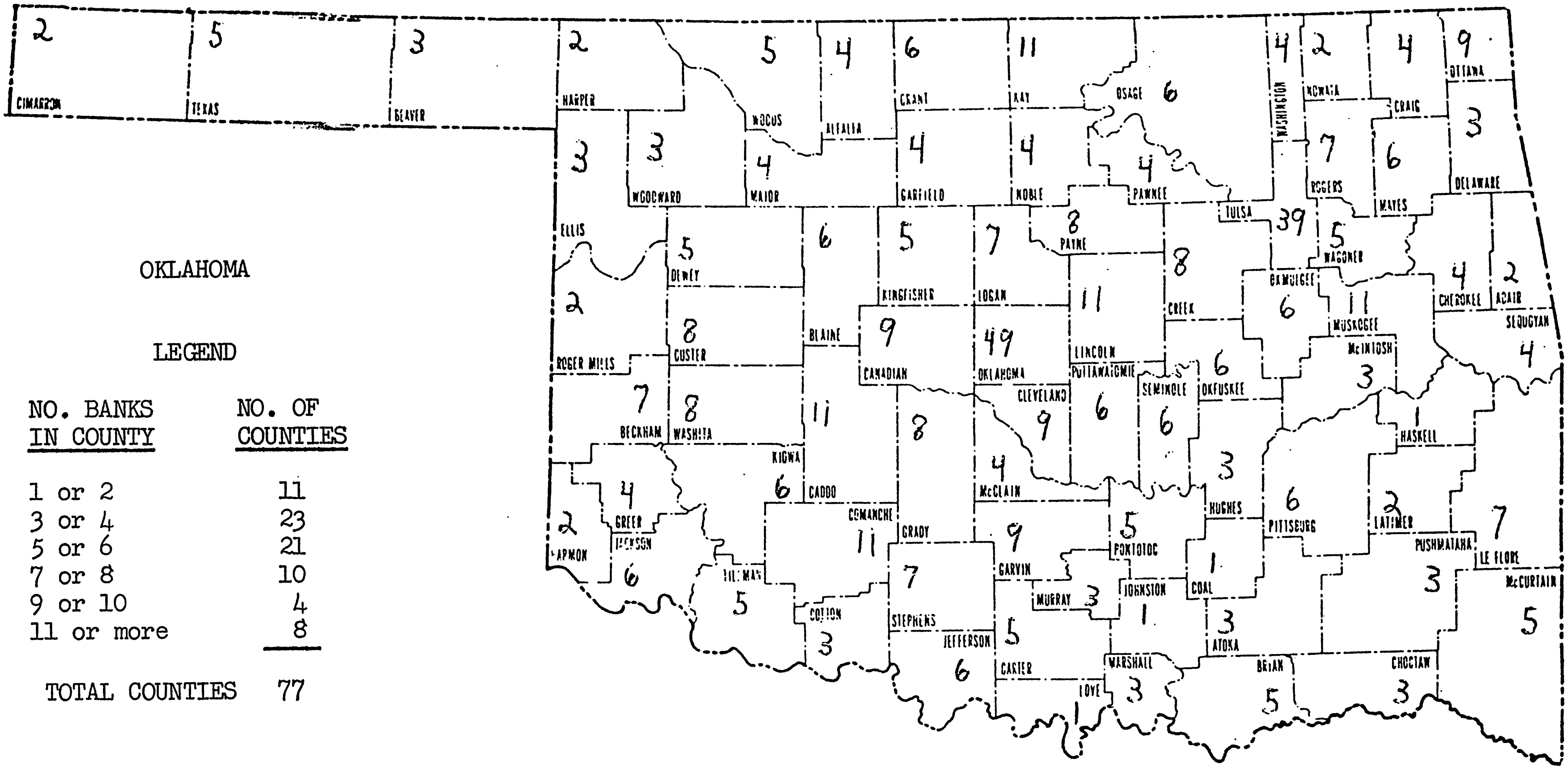


Figure 1.
Geographic Location and Geographic Distribution of Main Banks
(1977)

hold 36 percent of all loans made by banks in Oklahoma. The earnings of these banks have been growing rapidly in recent years. The earnings of two banks increased by over 40 percent from 1977 to 1978 [38].

TABLE 3

Single Bank Holding Companies (1978)

($ in millions)

Bank	Total Deposits	Percent of State Deposits	Cumulative Percent of State Deposits
First-OKC	$1,015.0	7.72	7.72
Liberty-OKC	805.8	6.12	13.84
BOK-Tulsa	728.2	5.53	19.37
First-Tulsa	723.3	5.49	24.86
Fidelity-OKC	368.5	2.80	27.66
Fourth-Tulsa	241.9	1.84	29.50
First-Bartlesville	167.1	1.27	30.77
Utica-Tulsa	198.3	1.51	32.28
F&M-Tulsa	189.2	1.44	33.72

Source: "State's Largest Banks," Tulsa World, February 9, 1979, p. F-1.

Oklahoma Banking Laws and Regulation

Banking laws and regulations have a major impact on banking activity. Laws and regulations are needed to assure that bank operations are performed in a safe manner. The current structure of banking regulation has been established to help prevent massive bank failures. Competition and safety are the primary factors behind banking statutes in Oklahoma.

Oklahoma is currently classified as a unit banking state. Oklahoma statutes effectively limit a bank to one location by not allowing branch banking. The Oklahoma legislature has deemed unit banking to be in the public interest, thus prohibiting branch banking. Any bank in Oklahoma may operate one detached facility, subject to the approval of the Oklahoma

Banking Commission. This detached facility may have one or more teller windows for drive-in or walk-up service or both. The location of the detached facility is limited to being within one thousand feet of the main bank building. Any banking function may be performed at this facility except that of making loans [31]. Currently 175 detached facilities are in service in Oklahoma.

Consumer banking electronic facilities (CBEF's) and point of sale terminals (POS) appear to provide the same services as detached facilities or branch banks. Oklahoma statutes, however, state that the use of CBEF's and POS terminals does not constitute branch banking. Oklahoma statutes state that any bank located within the state of Oklahoma may install, operate, or utilize CBEF's, provided written notice is given to the banking commissioner prior to the commencement of operation of such facility. A CBEF when located other than at a bank's principal office or detached facility must be operated exclusively by bank customers or through assistance of another person provided that person is not directly or indirectly employed by the bank, holding company, or subsidiary thereof. Assistance by an employee of the bank would be considered to be in the business of banking at the CBEF location, thus in violation of Oklahoma branch banking laws [31].

Multi-bank holding companies are also not allowed to operate within the state of Oklahoma. The purpose of the Oklahoma law banning multi-bank holding companies is to maintain competition between banks. Single bank holding companies are allowed in Oklahoma and control the largest banks in the state [31].

Banking regulations in Oklahoma are structured basically the same way as in other states. Commercial banks are regulated by federal and/or state agencies depending on certain criteria. Bank regulators include: the Comptroller of the Currency, the Federal Reserve Board of Governors, the F.D.I.C., and the state banking commission. In 1977 Oklahoma had 193 national banks, 15 member banks, and 268 insured nonmember banks [4].

A Recent Challenge to Unit Banking in Oklahoma

On March 9, 1977, a public hearing was held in Tulsa, Oklahoma to hear arguments concerning an application for permission to establish a branch bank. This application was filed with the Comptroller of the Currency by First National Bank and Trust Company of Okmulgee, Okmulgee, Oklahoma. The proposed location of the branch office was one mile west of the main bank, which is located in Okmulgee's central business district. At this hearing the applicant, the First National Bank of Okmulgee, and the protestants, the State Banking Commission, the Independent Bankers Association, and the State Attorney General's Office, presented arguments for the Comptroller's consideration.

The applicant's primary reason for wanting a branch office was to provide better service to its customers in the western part of the city. The applicant argued that trust companies, saving and loan associations, and credit unions are allowed to have branch offices under Oklahoma law. The Comptroller of the Currency is permitted under federal law to approve a branch for a national bank located within the limits of the city, town, or village in which said association is situated, if such establishment and operation are at the time expressly authorized to state banks by the law of the state in question. "State Bank" is defined to include trust companies, savings banks, or other such corporations or institutions carrying on the banking business under the authority of state laws.

The First National Bank and Trust Company of Okmulgee argued that trust companies, saving and loan associations, and credit unions are engaged in the banking business, especially due to the use of third party payment instruments.

The applicant also pointed out that Oklahoma law authorizes CBET's for use and specifically exempts them from the branching prohibition. Electronic banking devices of national banks, however, have been held to be branches under the McFadden Act. Therefore, the applicant holds that Oklahoma has authorized branch banking as it is perceived under the McFadden Act by authorizing the use of CBEF's.

The protestants argued that Oklahoma has clearly adopted a policy prohibiting branching by commercial banks. Oklahoma law does not authorize trust companies to carry on banking business. Trust companies may only take deposits in a fiduciary capacity and cannot create money as do commercial banks. Since Oklahoma law clearly prohibits branching by commercial banks, the protestants argued that the Comptroller is constrained by federal law from approving the application.

Except for the question of law, this application would have been approved as a matter of course under the Comptroller's Policy Guidelines. The applicant has sound management with earnings slightly better than banks of similar size. The establishment of a branch office is within its financial capability. There is no doubt that a branch office would provide added services and added convenience to the applicant's customers. Approval or disapproval of the application was therefore based on the legal issue raised by the protestants.

The Comptroller of the Currency stated in his opinion, following the public hearing, that the better legal arguments favor the applicant's position. The Comptroller recognized that the Oklahoma Banking Commission could not approve a similar application for a state commercial bank under current state statutes. The Comptroller decided to withhold the decision on the application until after the close of the next legislative session. This was done to allow the Oklahoma legislature to enact branch banking proposals pending in the state legislature [16].

In late 1978 the Comptroller of the Currency granted the national bank branch application to the First National Bank and Trust Company of Okmulgee. This Okmulgee bank opened and operated a full service branch office, located about one mile west of the main bank location. After three days of operation, the branch office was closed when an injunction was granted by United States Judge Fred Daugherty. The Oklahoma Bank Commissioner's office and the Independent Bankers Association of Oklahoma filed for the injunction contending that the Comptroller of the Currency exceeded his authority in granting a branch bank application to the First National Bank of Okmulgee [24].

Recent Proposals for Change in Oklahoma Banking Structure

Most Oklahoma bankers agree that some form of extended facility legislation would be favorable to the industry letting commercial banks compete more favorably with saving and loan associations. Many communities in Oklahoma are growing rapidly in areas outside the old central business districts where most commercial banks are located. Oklahoma's present banking laws restrict banks from adequately and conveniently serving their customers in the new growth areas. Three basic forms of extended facilities exist: (1) statewide branch banking, (2) limited branch banking, and (3) multi-bank holding companies [40]. The Oklahoma legislature is currently considering legislation to change the Oklahoma banking structure.

In early 1979 the Oklahoma Senate's Banking Committee reviewed a bill which would allow branching and multi-bank holding companies. Senate Bill #48 was introduced by Senator Lee Cate (Democrat-Norman). This bill, as originally written, would allow a bank to own other banks provided that the acquiring bank could not hold more than 15 percent of the deposits held by all Oklahoma banks. It would also allow one or two branches within the headquarter bank's county depending upon the size of the headquarter bank's city [24]. This bill was amended, reducing the maximum deposit size to 12 percent of the state's total deposits and also allowing multi-bank holding companies to operate only in counties with 30,000 or more population. Based on current population estimates, only about 25 counties would be eligible to have multi-bank holding companies [30].

The Oklahoma Bankers Association (OBA) conducted a poll of its members in regard to Senate Bill #48. Of the 368 responding banks, 158 banks favored the bill and 207 banks opposed the bill. The banks in favor of the bill collectively held 66.5 percent of total deposits, while banks opposing the bill held 33.25 percent of total state deposits. Due to the negative response by voting banks, the OBA did not endorse Senate Bill #48 [27] (Refer to Table 4).

TABLE 4

OBA Membership Poll

	# of Banks Voting	% of Banks Voting	Deposits Held (in billions)	% of Total State Deposits
Yes	158	42.9%	$ 7.490	66.50%
No	207	56.3	3.745	33.25
No Opinion	3	.8	.028	.25
Total Voting	368	100.0	11.263	100.00
Not Voting	95	N/A	1.598	N/A

Source: The Oklahoma Banker, February 1979, p. 5.

A president of a Tulsa bank recently stated, "I feel the banking structure in Oklahoma is going to be changed one way or another through the intervention of the United States Comptroller's office or through action of the legislature." House Speaker Dan Draper of Stillwater indicated there is little chance that the 1979 legislature will pass a branch banking bill. As mentioned earlier, the branching issue is under litigation in United States District Court in Oklahoma City. Draper believes if the Comptroller is upheld by the federal courts, the state legislature would pass legislation for the benefit of state chartered banks [24].

CHAPTER IV

RESEARCH METHODOLOGY

Introduction

In order to determine the possible effects of a change in banking structure upon Oklahoma banking, the effects of such change upon two other states (Iowa and Arkansas) was examined. Both of these states have changed their banking structure from unit banking to limited area branching in recent years. The results of an analysis of Iowa and Arkansas was used as a basis for developing conclusions concerning the possible effects of structural change upon Oklahoma banking.

Branch banking legislation was enacted in Iowa during 1972. Iowa statutes allow branches to be established in the home office county and in counties contiguous to it, but only in unincorporated areas in which no bank or banking office is already located. The number of branches which may be established varies with the population of the area [28]. Branch banking legislation, enacted in Arkansas in 1973, restricts branches to the home office county. Branches may be established in the home office provided the facility is located more than 300 feet from the main banking office. Branches may also be established in other towns with populations of at least 250 people provided no other bank has a home office located in the town [8].

The Comparability of Oklahoma, Arkansas, and Iowa

Economic and Demographic Characteristics

Banking activity in any region is influenced by the economic and demographic characteristics of the region of which population, income, and industry are key characteristics which influence banking activity. Because the comparisons in this study will be made using aggregate FDIC data, it is important for the state or states used possess economic and demographic characteristics similar to Oklahoma. Although four states, New Hampshire, Wisconsin, Iowa, and Arkansas, have changed their banking structure since 1960 from unit banking to a limited area branching structure, only Iowa and Arkansas appear to be similar to Oklahoma. An examination of state population, income, and industry will establish if either or both of these states are suitable for comparison of their banking structures with that of Oklahoma.

Population

The population growth of Oklahoma, Arkansas, and Iowa has historically been slower than the national average. From 1960 to 1975 the growth rate of Oklahoma increased annually at an average rate of 1.08 percent, while the growth rates of Arkansas and Iowa averaged 1.19 percent and 0.254 percent, respectively. The national population growth rate averaged 1.89 percent during this 15-year period. The growth rate of these states followed a different pattern in relation to the national average between 1970 and 1976. Oklahoma and Arkansas exceeded the national average (0.9 percent) with average growth rates of 1.3 percent and 1.5 percent, respectively. The growth rate of Iowa during this period was 0.2 percent annually, well below the national average. The low growth rate of Iowa by itself should not affect the comparability of the states considered. However, the low growth rate may be associated with other economic or demographic characteristics.

Population estimates and related characteristics are reported on a regular basis by the United States Bureau of the Census. Data compiled by the Bureau of the Census often has a time lag of over one year before publication. Recent population reports are compiled with a time lag of approximately six months by marketing research statisticians. Population data and related characteristics for 1970 and 1978 are shown in Table 5.

TABLE 5

Population and Related Characteristics

Item	U.S.	OK	AR	IA
(1970)				
Population (000)	203,806	2,567	1,932	2,832
% of U.S. pop.	N/A	1.26%	0.95%	1.39%
Pop./Sq. mi.	57.5	37.2	37	50.5
Urban	73.3%	55.2%	38.2%	36.6%
Rural	26.7%	44.8%	61.8%	63.4%
(1978)				
Population (000)	219,768	2,927	2,195	2,915
% of U.S. pop.	N/A	1.33%	1.00%	1.32%
Pop./Sq. mi.	62.1	42.6	42.3	52.1
Urban	72.7%	55.2%	38.6%	36.9%
Rural	27.3%	44.8%	61.4%	63.1%

Source: Sales and Marketing Management, Bill Publication, July 23, 1979 and "Statistical Abstract of the United States," United States Bureau of the Census, 1977.

Population data for 1970 shows that Iowa, Oklahoma, and Arkansas represented 1.39 percent, 1.26 percent, and 0.95 percent, respectively, of the total United States population. By 1978 the populations of Oklahoma and Arkansas, as a percent of the total United States population, had increased to 1.33 percent and 1.00 percent, respectively, while the population of Iowa had decreased to 1.32 percent. These changes are significant because they show that the states considered are becoming more comparable in this respect. In 1978 the population (in thousands) of Oklahoma, Arkansas, and Iowa was 2,927; 2,195; and 2,915, respectively.

Although the preceeding characteristics of the population are important, the density of population is more decisive in determining the comparability of these states. The average population per square mile in the United States increased by 8 percent during the 1970-1978 period. In Oklahoma and Arkansas the population per square mile increased by over 14 percent during this eight year period, while the population per square mile in Iowa increased by only 3.14 percent. By 1978 the population per square mile in Oklahoma, Arkansas, and Iowa was 42.6, 42.3, and 52.1, respectively.

The significance of this comparison is questionable because as density increases, a smaller percentage change can be expected for any given change. The states considered are becoming more similar in regard to density; however, the density of the population in Iowa continues to be somewhat greater than the density in Oklahoma and Arkansas.

Income

Per capita personal income is a commonly used measure of the economic development of an area. Per capita personal income has risen steadily over the past ten years in the United States. Table 6 shows nominal and real per capita personal income for 1970 and 1976. Real per capita personal income in 1970 for Oklahoma, Arkansas, and Iowa was $2,912, $2,475 and $3,225, respectively. Real per capita personal income increased in Oklahoma, Arkansas, and Iowa by 13.9, 20.2, and 17.1 percent during this six-year period. Real per capita personal income in the United States increased by 10.8 percent during this six-year period. These figures indicate that the economic development of Oklahoma, Arkansas, and Iowa is increasing at a rate greater than the national average. Of the states considered, Oklahoma showed the smallest increase during this period. In 1976 real per capita personal income in Oklahoma, Arkansas, and Iowa was $3,318, $2,975, and $3,777, respectively. Although the real per capita personal income in Arkansas is significantly below that of Oklahoma and Iowa, this should not affect the comparability of these states since real per capita personal income in Arkansas has increased at a greater rate in Arkansas than in the other states. If economic development is related to banking activity, then banking structure may have an impact on per capita personal income. It is important to note that per capita personal income is computed by dividing total personal income by total population; therefore, this measurement of economic comparability is dependent on both variables.

TABLE 6
Per Capita Personal Income

	Nominal Per Capita Personal Income (Current Dollars)			Real Per Capita Personal Income* (Constant 1967 Dollars)		
	1970	1976	% Change	1970	1976	% Change
OK	$3,387	$5,657	67.02%	$2,912	$3,318	13.94%
AR	$2,878	$5,073	76.27%	$2,475	$2,975	20.20%
IA	$3,751	$6,439	71.66%	$3,225	$3,777	17.12%
U.S.	$3,966	$6,441	62.41%	$3,410	$3,778	10.79%

*Adjusted using the consumer price index.

Source: "Statistical Abstract of the United States," United States Bureau of the Census, 1977.

Industry

Traditionally, Oklahoma, Arkansas, and Iowa have been more dependent, economically, upon agriculture than the United States economy as a whole. Agriculture represents a major source of income and employment in these states. Following World War II, manufacturing facilities expanded rapidly making manufacturing a material facet of the Oklahoma, Arkansas, and Iowa economies. Today manufacturing represents the largest source of income in Oklahoma, Arkansas, and Iowa.

Oklahoma and Arkansas have been more dependent upon mining[5] than the United States economy as a whole for many years. Petroleum and natural gas have been the major components of the mining sectors in these states. Although Iowa lacks the oil and natural gas reserves found in Oklahoma and Arkansas, other valuable minerals are extracted in Iowa including cement, stone, and bituminous coal. Thus, the lack of hydrocarbon reserves in Iowa does not significantly affect the comparability of the states considered. These states appear to be sufficiently similar in regard to key industries to be comparable in this study.

Conclusions

Oklahoma, Arkansas, and Iowa have traditionally been agricultural in nature; however, manufacturing has become the major source of income in these states in recent years. Although Iowa has not been dependent upon

[5]Mining refers to the extraction of minerals including hydrocarbons (oil and natural gas).

oil and natural gas in its mining sector like Oklahoma and Arkansas, other minerals have made mining an important facet of the Iowa economy. The economic development of these states has increased at a rate greater than the national average, based on per capita personal income. The population per square mile of the states considered ranks below the national average and are becoming more similar in this respect. Even though there are differences as one would expect, the similarities appear to outweigh the differences.

Based on the foregoing examination of the economic and demographic characteristics of Oklahoma, Arkansas, and Iowa, both Arkansas and Iowa appear to be suitable for comparison of their banking structures with that of Oklahoma.

Source of Data

Data compiled by the Federal Deposit Insurance Corporation (F.D.I.C.) will be used to evaluate the effects of a change in banking structure upon Arkansas and Iowa banking for ultimate comparison with Oklahoma. The F.D.I.C. publications from which data will be taken in descending order of importance include: (1) Bank Operating Statistics, (2) Summary of Deposits in All Commercial and Mutual Savings Banks, (3) Operating Commercial Banks, and (4) Annual Report of the F.D.I.C. The choice of using F.D.I.C. data as a basis for analysis is influenced by two significant factors. Data published by the F.D.I.C. is collected and analyzed on a uniform basis for all states and thus avoids the difficulties that would be required to put state data on a comparable basis. Secondly, this data includes a majority of the banks which would have a significant affect on banking activity; conversely those banks not included in F.D.I.C. data are for the most part small, rural, state banks having little or no influence on statewide banking activity.

Comparative Analysis

General Procedure

Banking data for Oklahoma, Arkansas, and Iowa was examined over the 1967-1977 time period. This time frame includes banking activity before the passage of branch banking statutes in Iowa (1972) and Arkansas (1973) as a basis for comparison of branch banking with unit banking activity following the passage of these laws. Oklahoma banking data was compared with Arkansas and Iowa banking data as a means of differentiating change related to normal economic fluctuations from change associated with structural differences; (i.e., branch banking vs unit banking).

The hypothesized advantages and disadvantages of branch banking discussed in Chapter II were used as the premises for comparative analysis. The disadvantage which suggests that branch banking harms small unit banks must be eliminated from the premises since aggregate data cannot be used to adequately examine the effects of branch banking on small unit banks. The remaining premises provide five categories for comparison: bank office availability, concentration, allocation of credit, operating efficiency, and prices of services. Statewide and major banking market data were analyzed in each of the five categories.

The Federal Deposit Insurance Corporation has divided Oklahoma, Arkansas and Iowa (as well as other states) into economic areas consisting of groups of contiguous counties. Major banking markets in each state were identified from these economic areas based upon a high level of average assets per bank. These major banking markets, as well as each state considered as a market area will be used as areas for comparison in this study.

Comparison Categories

Using the time frame and market areas previously defined, the five specific categories (bank office availability, concentration, allocation of credit, operating efficiency, and prices of services) were analyzed. Each category employed specific criteria which will be explained below.

Bank Office Availability

Bank office availability was analyzed on a per capita basis by examining the number of commercial banks and banking offices. Bank office distribution by county was also used in determining the effects of branch banking upon bank office availability. The changes in these data will be examined over the 1967-1977 time frame.

Concentration

Concentration of banking was analyzed by examining the concentration of total state deposits in the largest banks on the state-wide level. The concentration of total deposits in major banking markets was also analyzed. Within the major banking markets, concentration ratios for the five largest commercial banks were calculated for selected years.

Allocation of Credit

Loan to deposit ratios (l/d) were examined in order to determine the effects of structural change upon allocation of credit. On the statewide level l/d ratios were calculated according to bank size and the type of loan. For the major banking markets, l/d ratios were calculated based on the type of loan. Loan to deposit ratios were calculated using total loans and total deposits for both statewide and major banking market areas.

Operating Efficiency

The ratio of total operating expense to total assets was employed as a measure of operating efficiency. At the statewide level, expense to asset ratios were calculated according to bank size. Expense to asset ratios in the major banking markets were calculated for only the total number of banks within the market area.

Prices of Services

Three criteria were utilized to determine possible effects upon prices of services. On the statewide level, each of the criteria was applied according to bank size. The three criteria include service charges to total deposits, ratio of interest paid on deposits to total deposits, and average return on loans. For major banking markets these ratios were based upon total banks within the market area.

CHAPTER V

RESULTS

Major Banking Markets

The Federal Deposit Insurance Corporation has divided Oklahoma and Iowa into twelve economic areas while Arkansas has been divided into nine economic areas. The average asset level for each economic area has been calculated on a per bank basis for the 1967 to 1977 time period (Refer to Table 7). Based upon these calculations, three economic areas in Iowa, three in Arkansas and two economic areas in Oklahoma have been identified as major banking markets. The major banking markets identified include: in Iowa areas 7, 9, and 10; in Arkansas areas 4, 5, and 7; and in Oklahoma areas 11 and 12 (Refer to Figure 2 for the geographic location of these areas).

In Iowa area 9 includes two counties, Polk and Warren, with Des Moines being the largest city in the area. Over the 1967-1977 time period the average asset level[6] for a bank in this area was $66,053, the highest average asset level of any banking market identified. The other banking markets in Iowa, areas 10 and 7 had average asset levels of $38,503 and $31,594, respectively. Area 10 is a single county area, Scott county, with Davenport as the major city. Area 7 is also a one county area, Woodbury county, with Sioux City as the major city.

Arkansas area 4 is composed of ten counties, Garland, Hot Spring, Montgomery, Perry, Pike, Polk, Pulaski, Saline, Scott, and Sevier, with Little Rock being the largest city in the area. An average bank in area 4

[6]All asset levels in thousands.

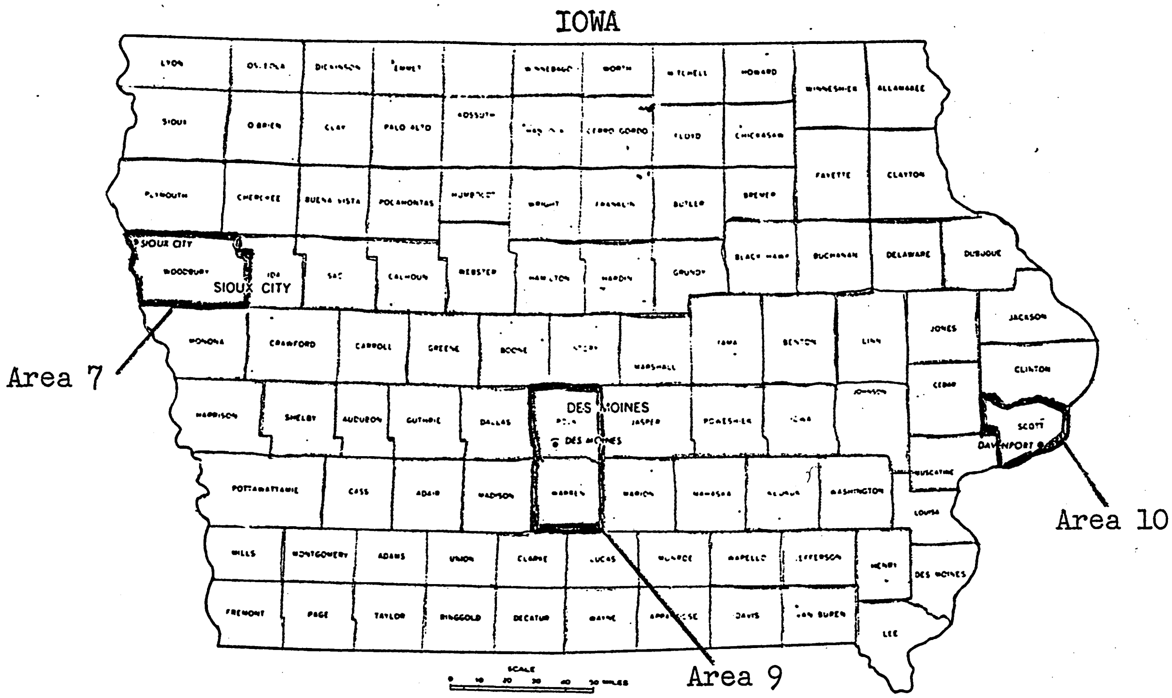
TABLE 7

Averate Total Assets
Per Bank
(1967-1977)

Market Area	Iowa	Arkansas	Oklahoma
1	$ 9,482	$19,144	$ 8,946
2	11,412	14,306	11,167
3	12,559	11,569	16,806
4	10,465	51,363*	8,715
5	10,251	22,177*	11,230
6	19,747	15,381	10,692
7	31,594*	19,537*	13,673
8	22,541	12,410	11,740
9	66,053*	17,537	11,729
10	38,503*	NA	11,939
11	30,380	NA	51,029*
12	28,303	NA	51,502*

* Identified as major banking market

Source: Bank Operating Statistics, F.D.I.C., 1967-1977.



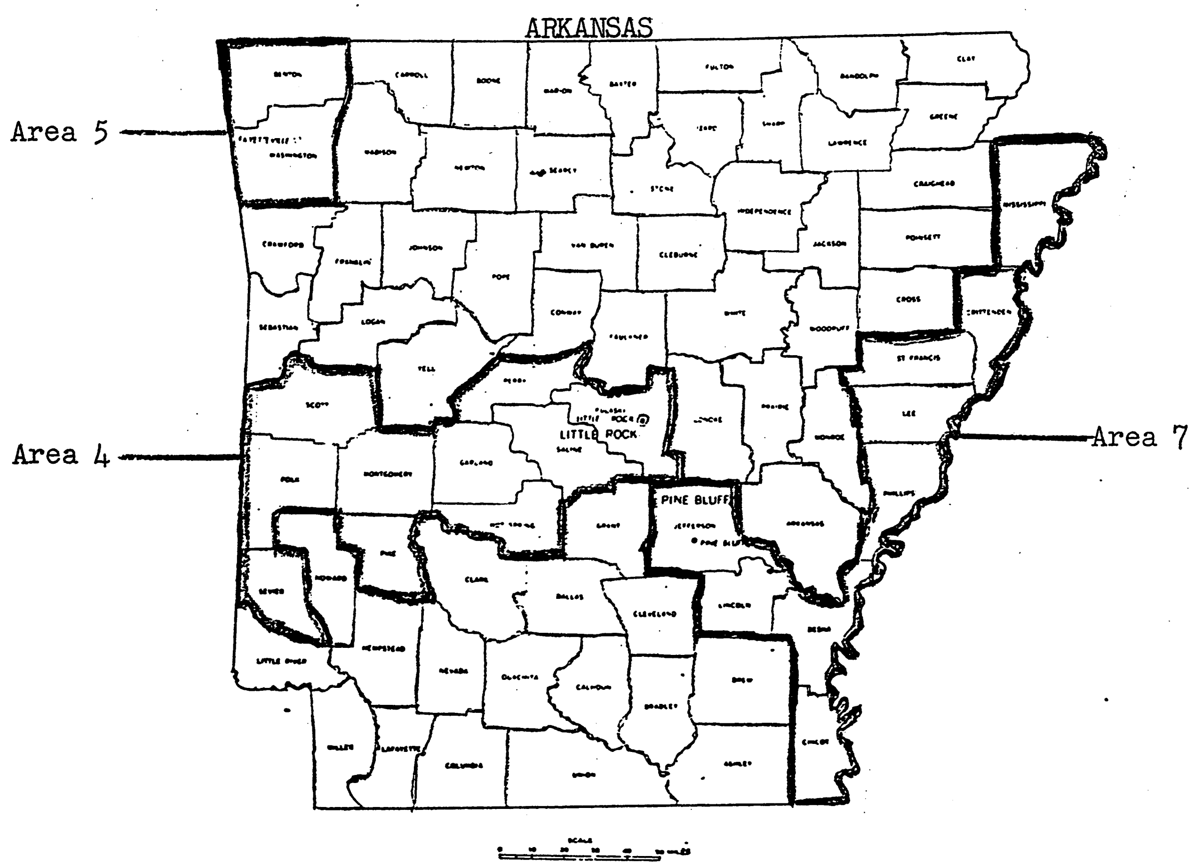


Figure 2.
Major Banking Markets

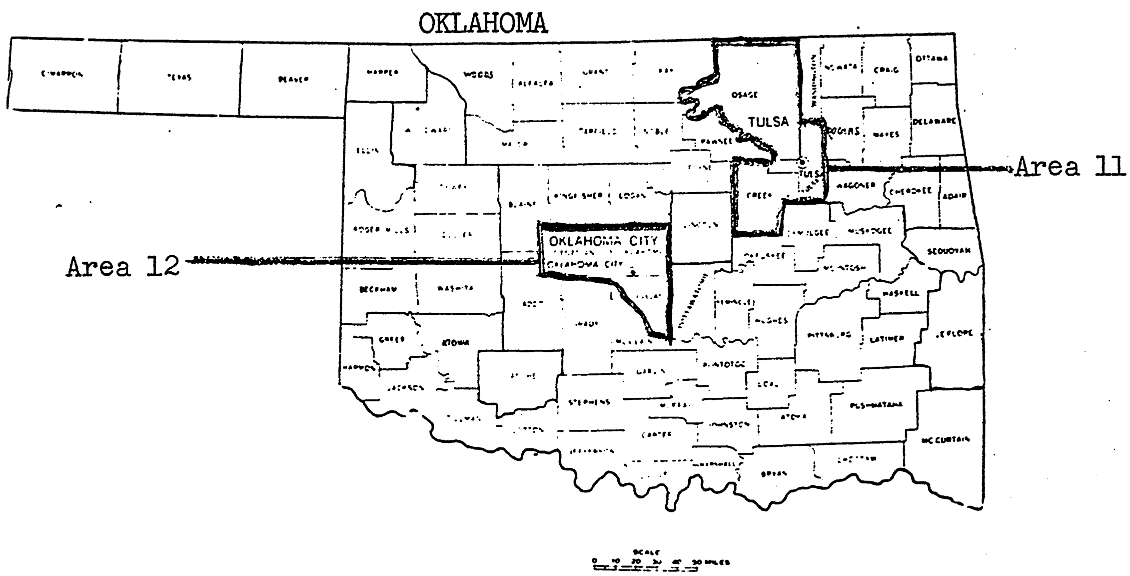


Figure 2.
Major Banking Markets
(Continued)

had total assets of $51,363 during the 1967-1977 time frame. Fayetteville is the largest city in area 5 which is composed of two counties, Benton and Washington. The average asset level in this area was $22,177 during the period. Area 7 consists of nine counties including: Chicot, Crittenden, Desha, Jefferson, Lee, Lincoln, Mississippi, Phillips, and St. Francis. Pine Bluff is the largest city in area 7. The average asset level in area 7 was $19,537 during the 1967-1977 period.

The two major banking markets identified in Oklahoma, areas 11 and 12, had average asset levels of $51,029 and $51,502, respectively. Area 11 is a three-county area including: Creek, Osage, and Tulsa counties, with Tulsa being the largest city in the market. Area 12 also includes three counties, Canadian, Cleveland, and Oklahoma counties, with Oklahoma City as the largest city in the area.

Only two major banking markets were identified in Oklahoma based upon average asset level per bank within the economic areas as defined by the F.D.I.C. The two major banking markets identified in Oklahoma are comparable to the markets identified in Arkansas and Iowa. Because one of the purposes of this study is to predict the effects of branch banking upon major banking markets in Oklahoma, the most prominent markets in Oklahoma were chosen.

Analysis of Iowa

Bank Office Availability

Banks and Banking Offices

Over the 1967 to 1977 time period the number of banks in Iowa decreased by 3.11 percent, but the number of banking offices increased by 23.98 percent. Table 8 shows the number of banks and banking offices in the states

TABLE 8

Banks and Banking
Offices
(1967-1977)

Year	Iowa Banks	Iowa Offices	Arkansas Banks	Arkansas Offices	Oklahoma Banks	Oklahoma Offices
1967	674	934	248	508	422	468
1968	673	955	248	530	424	479
1969	658	956	246	544	425	483
1970	658	976	248	566	433	493
1971	658	987	251	580	435	506
1972	661	1,006	251	596	436	520
1973	661	1,030	254	623	447	538
1974	657	1,042	258	643	455	551
1975	654	1,062	258	666	462	561
1976	652	1,073	257	678	469	573
1977	649	1,158	259	768	476	651

Source: Annual Report of the F.D.I.C., 1967-1977.

examined from 1967 to 1977. The enactment of branching laws appears to have had no affect upon the number of banks in Iowa, however, an affect is evident upon the number of banking offices. Prior to the enactment of branching laws in Iowa from 1967 to 1972, the number of banking offices increased by 7.71 percent. Following the 1972 branching legislation until 1977, the number of banking offices increased by over 15 percent. By the end of 1977, Iowa had 1,158 banking offices.

Population Per Banking Office

Another means of evaluating bank availability is to examine the population per banking office within the state. During the study period the population per banking office in Iowa decreased from the 1967 level of 2990 to the 1977 level of 2486, a decline of 16.86 percent, (see Table 9). This decline, however, was greatest following the enactment of branch bank legislation in 1972. From 1967 to 1972 the population per banking office calculation declined by 4.11 percent compared to the 13.29 percent decline from 1972 to 1977, (Refer to Table 9).

Bank Distribution

The distribution of banks and banking offices by county are presented in Table 10. The distribution of banks by county has not changed substantially for the selected years examined in Iowa. The distribution of banking offices by county, however, has changed. Between 1967 and 1973 the major shift in Iowa banking offices was toward more banking offices. In 1967, 27.27 percent of all Iowa counties had eleven or more banking offices. By 1973 this percentage had increased to 36.36 percent. Following 1973 a decline in the percent of state counties with 6 or less banking offices occurred. All other categories increased from 1973 to 1978. Although most

TABLE 9

Population Per Banking Office
(1967-1977)

Year	Iowa	Arkansas	Oklahoma
1967	2990	5029	5318
1968	2935	4889	5225
1969	2934	4771	5248
1970	2900	4663	5217
1971	2897	4570	5138
1972	2867	4523	5063
1973	2780	4231	4961
1974	2738	3826	4869
1975	2694	3663	4840
1976	2678	3540	4834
1977	2486	3503	4318

Source: "Statistical Abstract of the United States," United States Bureau of the Census, 1967 - 1977 and Bank Operating Statistics, F.D.I.C., 1967 - 1977.

TABLE 10

Bank Distribution

Number of banks in county	Iowa 1967	Iowa 1973	Iowa 1978	Arkansas 1967	Arkansas 1973	Arkansas 1978	Oklahoma 1967	Oklahoma 1973	Oklahoma 1978
	Percentage of total counties								
1 - 2	3.03	2.02	3.03	38.67	37.33	37.33	19.48	19.48	15.58
3 - 4	14.14	16.16	17.17	40.00	38.67	40.00	31.17	25.97	27.27
5 - 6	28.28	28.28	25.25	12.00	13.33	12.00	23.38	27.27	25.97
7 - 8	24.24	23.23	24.24	9.33	8.00	8.00	12.99	14.29	15.58
9 - 10	17.17	18.18	18.18	0.00	1.33	1.33	7.79	7.79	5.19
11*	13.13	12.12	12.12	0.00	1.33	1.33	5.19	5.19	10.39

Number of banking offices in county	Iowa 1967	Iowa 1973	Iowa 1978	Arkansas 1967	Arkansas 1973	Arkansas 1978	Oklahoma 1967	Oklahoma 1973	Oklahoma 1978
	Percentage of total counties								
1 - 2	2.02	0.00	0.00	28.00	8.67	12.00	19.48	16.88	12.99
3 - 4	7.07	7.07	5.05	32.00	34.67	21.33	28.57	20.78	22.08
5 - 6	22.22	18.18	15.15	22.67	14.67	21.33	22.08	24.68	20.78
7 - 8	21.21	22.22	23.23	4.00	12.00	14.67	12.99	15.58	14.29
9 - 10	20.20	16.16	18.18	6.67	6.67	10.67	6.49	9.09	14.29
11*	27.27	36.36	38.38	6.67	13.33	20.00	10.39	12.99	15.58

Source: Operating Commercial Banks, F.D.I.C., 1967, 1973, 1978.

of the banking office distribution change occurred prior to the enactment of branching legislation, the shift toward more banking offices in Iowa counties continued following 1973.

Concentration

Statewide

On the statewide level, concentration of state deposits in the largest banks of each state was computed for the 1972 to 1977 time period. The concentration of state deposits held by the largest bank and the largest ten banks in each state are presented in Table 11. In 1972 the largest bank in Iowa held 4.33 percent of the total state deposits. This percentage decreased to 3.19 percent in 1973 and declined slightly from 1973 to 1977. The concentration ratio for the largest ten banks in Iowa also decreased from 18.02 percent in 1972 to 14.51 percent in 1977. Although concentration ratios prior to the enactment of branching legislation in Iowa were not calculated due to lack of data, these concentration ratios show that concentration on the statewide level declined in Iowa over the examination period.

Major Banking Markets

The concentration of state deposits in the major banking markets previously identified are presented in Table 12. In Iowa the concentration ratios for areas 7, 9, and 10 decresed by 5.64, 7.72, and 4.98 percent, respectively, from 1967 to 1972. Following passage of branching legislation from 1972 to 1977 concentration ratio for areas 7 and 9 decreased by 1.77 and 12.0 percent, respectively, while concentration in area 10 showed a slight increase of 0.63 percent. Based upon these findings, it appears that concentration in Iowa did not increase significantly within major

TABLE 11

Concentration Ratios*
Largest and Ten Largest
Banks Within State
(1972 - 1977)

	72	73	74	75	76	77
Iowa						
Largest Bank	4.33	3.19	-	3.19	3.15	3.15
Ten Largest Banks	18.02	15.37	-	16.06	14.97	14.51
Arkansas						
Largest Bank	5.54	5.70	-	5.67	5.29	5.28
Ten Largest Banks	23.12	23.30	-	23.25	23.31	23.16
Oklahoma						
Largest Bank	7.12	10.32	-	6.67	6.05	6.07
Ten Largest Banks	34.33	32.08	-	32.96	31.14	29.51

* All numbers are percentages.
\- Data not available.

Source: Summary of Deposits in All Commercial and Mutual Savings Banks, F.D.I.C., (1972 - 1977).

TABLE 12

Concentration Ratios*
Market Areas and Bank Size
(1967 - 1977)

	67	68	69	70	71	72	73	74	75	76	77
Iowa											
Area:											
#7	4.79	4.81	4.50	4.64	4.64	4.52	4.50	4.56	4.73	4.57	4.44
#9	14.90	13.95	13.94	14.09	14.41	13.75	12.81	12.52	12.47	12.39	12.10
#10	5.02	4.77	4.58	4.69	4.84	4.77	7.64	4.44	4.45	4.48	4.80
Arkansas											
Area:											
#4	27.35	28.10	28.00	27.26	29.95	26.48	27.36	30.07	27.49	27.51	27.30
#5	6.30	6.32	6.63	6.80	7.02	6.94	7.13	7.93	7.49	7.62	7.66
#7	16.45	15.58	14.83	14.70	14.51	13.42	14.26	15.45	13.52	13.51	13.24
Oklahoma											
Area:											
#11	29.93	27.44	24.14	24.46	25.01	23.94	24.35	24.98	25.36	25.50	24.79
#12	29.43	31.38	30.75	31.73	31.22	31.86	30.70	31.46	30.00	30.14	30.57

Total Assets (in millions)	Iowa 76	Iowa 77	Arkansas 76	Arkansas 77	Oklahoma 76	Oklahoma 77
- 5	1.47	0.99	0.81	0.52	2.25	1.63
5 - 9.9	10.08	8.83	5.89	4.53	6.58	6.21
10 - 99.9	65.58	67.14	65.31	60.95	54.14	53.70
100+	22.87	23.04	27.99	33.73	37.03	38.46

* All numbers are percentages

Source: Bank Operating Statistics, F.D.I.C., 1967 - 1977.

banking markets following the enactment of branching legislation. However, a wide variance was noted between the areas which showed a decline in concentration.

Concentration Within Major Banking Markets

The concentration of market deposits held by the five largest banks within each major banking market have been calculated for the 1972 to 1977 time period. These ratios are presented in Table 13. Concentration decreased in two banking markets in Iowa during the 1972-1977 time period and increased slightly in one banking market. In area 7 concentration increased by 0.74 percent from 82.97 percent in 1972 to 83.58 percent in 1977. In 1972 areas 9 and 10 had concentration ratios of 78.48 and 49.49 percent, respectively. These ratios decreased to 69.78 and 45.51 percent, respectively, in 1977. Although these changes cannot be compared with changes occurring prior to the enactment of branching legislation, it appears that branching did not cause a significant increase in any of the major banking markets.

Bank Size

Although the data needed to calculate ratios based upon bank size was limited, calculations were made for 1976 and 1977. The concentration of state deposits held by banks with total assets (in millions) of 10 - 99.9 in Iowa had the highest concentration ratios for both years. Banks with total assets of less than 5 million had the lowest concentration ratios for these years. Because of the limited nature of these calculations, no conclusions can be made based upon bank size.

Allocation of Credit

Loan to deposit (l/d) ratios were calculated for each state and for

TABLE 13

Concentration Ratios
Five Largest Banks Within
Market Areas
(1972 - 1977)

	72	73	74	75	76	77
Iowa						
Area #7	82.97	83.58	-	83.53	83.67	83.58
#9	78.48	70.41	-	71.98	70.94	69.78
#10	49.49	48.43	-	46.61	46.11	45.51
Arkansas						
Area #4	83.82	82.88	-	80.72	80.51	80.11
#5	-	61.85	-	63.24	61.91	61.43
#7	100.00	100.00	-	100.00	99.98	100.00
Oklahoma						
Area #11	71.12	64.60	-	64.70	63.71	62.01
#12	63.12	60.01	-	57.09	55.31	53.00

* All numbers are percentages.
\- Data not available.

Source: Summary of Deposits in All Commercial and Mutual Savings Banks, F.D.I.C., (1972 - 1977).

the type of loans made over the 1967-1977 time period (Refer to Table 14). A heuristic measure of "banking commitment to the development of an area" is a loan/deposit ratio of 60.0 percent or more. Between 1967 and 1972 the l/d ratios in Iowa increased toward the heuristic measure previously described. In 1972 the l/d ratio reached the 62.2 percent level. Following the enactment of branching legislation in 1972 the l/d ratio for Iowa fell below the 60.0 percent level only once, 59.9 percent in 1976.

Based upon the type of loans made in Iowa, the highest loan/deposit ratios were found for agricultural and real estate loans. This did not change over the study period. It appears that l/d ratios based upon the type of loan vary directly with the l/d ratios based upon state totals.

Major Banking Markets

In Iowa the l/d ratios in the major banking markets increased in all three areas over the 1967-1977 time period. In area 7 the l/d ratio increased from 60.7 in 1967 to 65.1 percent in 1972. Between 1972 and 1977 the l/d ratio for this area continued to increase and reached 69.7 percent in 1977. In areas 9 and 10, the l/d ratios for 1967 were 46.4 and 54.5 percent, respectively. The l/d ratios for these areas increased from 1967 to 1972. Following the enactment of branching legislation in Iowa in 1972, l/d ratios in the major banking markets in Iowa increased to above the 70.0 percent level for 1973 and 1974. In areas 9 and 10 from 1975 to 1977, the l/d ratios in these areas declined, and even dropped below the 60.0 percent level. The examination of l/d ratios for the major banking markets indicates that l/d ratios increased substantially in the short-run following the enactment of branching legislation.

TABLE 14

Loan/Deposit Ratios*
(1967 - 1977)

	67	68	69	70	71	72	73	74	75	76	77
IOWA	55.0	53.6	56.7	58.0	59.5	62.2	65.5	64.4	63.0	59.9	64.8
Commercial	06.7	06.6	07.2	07.6	08.0	08.1	08.2	08.8	08.6	09.1	09.8
Agriculture	27.6	24.5	24.5	25.6	26.7	24.8	25.8	23.1	24.8	26.2	27.5
Real Estate	12.6	12.1	12.3	12.2	11.8	11.9	12.1	12.5	12.8	14.0	16.2
Individual	08.6	08.6	09.1	09.1	09.9	09.9	10.1	09.7	09.7	09.6	10.4
Other	01.7	01.9	03.1	03.7	04.3	07.3	09.0	08.9	05.6	01.0	00.9
Area #7:	60.7	58.7	64.8	62.9	64.8	65.1	72.7	72.3	66.7	69.5	69.7
Commercial	08.8	08.8	10.2	10.4	09.5	08.4	09.4	10.4	11.4	13.4	13.2
Agriculture	29.5	27.9	28.3	27.8	30.9	29.2	30.3	21.7	22.0	28.5	27.3
Real Estate	08.7	08.2	09.2	09.2	08.5	09.1	09.0	09.3	10.0	13.2	15.4
Individual	09.5	09.7	10.3	11.2	11.6	12.2	11.9	11.5	11.0	11.6	11.0
Other	03.6	03.3	03.3	04.2	03.6	05.0	07.1	12.7	05.2	02.9	02.7
Area #9:	46.4	49.9	50.9	52.2	55.5	67.1	74.2	70.4	68.8	55.4	64.6
Commercial	11.1	12.0	12.1	13.6	13.5	16.0	17.8	16.6	14.7	13.2	15.7
Agriculture	05.1	03.4	04.1	03.6	05.8	05.8	06.4	06.5	07.3	06.9	07.9
Real Estate	14.0	14.5	16.0	14.2	14.8	16.6	19.4	18.9	18.0	16.2	20.6
Individual	15.6	15.5	17.4	16.6	17.5	19.2	19.8	18.1	17.8	16.1	17.9
Other	04.2	04.4	04.5	08.7	10.2	12.9	14.3	15.5	11.6	03.0	02.4
Area #10:	54.5	53.5	56.6	53.8	57.0	64.2	74.8	73.6	71.9	55.3	57.9
Commercial	08.7	08.7	24.3	10.3	12.5	12.5	13.9	14.1	15.0	10.6	12.2
Agriculture	12.3	11.6	36.3	12.7	13.5	12.4	14.3	12.8	11.7	09.3	08.8
Real Estate	24.1	24.9	73.7	24.2	23.2	22.4	23.5	25.5	24.8	21.5	22.1
Individual	15.8	14.5	44.1	14.9	16.3	16.9	18.4	18.2	16.8	12.6	13.5
Other	02.7	02.8	17.3	04.2	04.5	05.6	06.4	06.2	07.2	01.4	01.3
ARKANSAS	52.5	53.1	56.1	56.5	57.6	60.0	64.6	64.6	62.7	59.5	63.5
Commercial	12.1	11.6	12.2	13.3	13.4	12.2	12.9	14.2	12.3	13.3	14.2
Agriculture	07.0	06.6	06.5	06.2	06.0	05.8	05.4	07.0	06.6	06.8	07.3
Real Estate	16.3	16.8	16.8	16.2	15.3	15.2	16.8	18.8	17.7	20.2	22.3
Individual	11.8	12.2	12.4	11.9	14.2	15.0	16.6	18.1	16.6	16.5	17.6
Other	02.7	02.8	03.9	05.2	06.7	07.0	10.1	09.6	07.0	02.7	02.2
Area #4:	54.8	55.2	59.1	58.9	58.8	70.1	75.4	73.2	71.7	63.6	69.2
Commercial	10.1	11.4	14.0	16.6	13.7	15.2	16.1	17.4	16.4	15.6	16.0
Agriculture	03.6	03.3	03.0	03.2	03.1	03.6	03.5	03.2	02.8	02.9	02.7
Real Estate	18.1	18.6	18.2	17.4	16.6	19.0	20.0	20.3	20.9	23.3	26.7
Individual	16.4	16.8	17.3	05.5	20.3	23.9	24.0	23.4	22.4	19.3	21.1
Other	03.1	03.7	04.5	02.3	06.0	06.9	10.7	09.0	07.9	02.5	02.7

TABLE 14

Continued
Loan/Deposit Ratios*
(1967 - 1977)

	67	68	69	70	71	72	73	74	75	76	77
Area #5:	54.1	53.6	55.6	54.7	55.5	56.7	60.5	61.9	58.0	61.4	67.2
Commercial	06.2	06.0	07.6	08.1	07.4	07.8	08.4	08.8	09.0	09.5	11.4
Agriculture	09.1	07.9	07.1	08.3	07.9	07.8	07.2	07.0	05.9	05.8	06.6
Real Estate	25.4	25.0	24.5	13.3	22.7	25.2	27.3	27.0	25.7	27.7	30.7
Individual	13.4	12.6	12.5	04.0	14.7	15.0	17.3	17.1	17.6	17.3	17.1
Other	01.5	03.7	04.6	01.2	06.3	05.1	05.3	07.0	03.1	01.0	01.4
Area #7:	52.8	53.5	57.0	59.6	59.3	61.1	63.5	63.4	62.8	55.5	59.4
Commercial	17.9	16.0	16.8	17.3	18.0	16.2	17.3	14.9	14.1	16.7	17.8
Agriculture	09.1	08.5	08.7	06.8	07.4	07.8	05.6	08.2	08.8	07.5	08.7
Real Estate	11.5	11.2	11.6	11.1	10.5	10.3	09.9	10.3	11.1	12.7	14.5
Individual	10.0	11.5	11.8	11.9	13.2	14.2	15.3	16.1	16.5	15.9	16.9
Other	03.9	04.3	05.1	08.5	08.0	10.3	13.1	11.2	10.6	02.8	01.5
OKLAHOMA	51.9	53.6	58.9	59.6	58.6	60.0	63.4	63.6	60.6	55.5	58.6
Commercial	09.5	09.6	10.4	11.0	10.8	11.0	11.4	11.5	12.0	11.7	12.4
Agriculture	15.7	16.1	15.6	15.1	15.9	15.8	16.3	16.2	15.4	14.6	14.4
Real Estate	09.8	09.6	10.0	09.4	09.5	10.0	10.4	10.7	10.3	11.6	13.1
Individual	14.5	14.8	15.7	15.3	17.4	17.6	17.7	17.0	17.1	16.0	17.0
Other	01.7	02.0	05.4	07.5	07.5	08.0	10.0	10.2	07.6	01.6	01.6
Area #11:	54.5	55.8	62.8	62.5	61.1	64.7	66.1	66.5	62.8	58.2	62.2
Commercial	07.0	16.3	17.5	18.0	19.1	20.2	07.6	18.4	19.5	16.7	18.0
Agriculture	19.5	05.4	05.8	06.7	05.6	05.8	22.1	05.7	04.8	04.1	03.4
Real Estate	06.6	10.7	12.6	11.6	11.4	13.0	06.8	13.1	12.3	13.6	15.3
Individual	11.9	23.2	25.3	22.7	24.9	25.2	13.3	23.5	24.0	21.6	21.8
Other	01.3	01.6	02.9	05.7	05.4	05.6	08.3	10.9	06.0	02.1	02.5
Area #12:	50.8	55.0	59.8	60.9	59.0	59.1	65.2	65.5	61.8	53.1	56.5
Commercial	14.5	14.1	15.8	15.1	15.9	16.8	18.0	18.5	17.9	15.9	16.3
Agriculture	05.9	05.6	05.3	04.5	05.7	04.8	06.3	05.4	05.0	04.1	04.1
Real Estate	10.3	09.8	10.5	08.7	09.9	09.8	10.3	10.3	10.2	11.9	13.8
Individual	21.7	21.3	23.3	20.4	24.6	23.7	24.0	22.0	21.6	18.9	20.3
Other	03.0	03.7	06.1	11.2	07.0	07.4	08.9	09.9	08.0	02.3	02.1

* All numbers are percentages

Source: Bank Operating Statistics, F.D.I.C., 1967 - 1977.

Bank Size

Loan to deposit ratios were calculated for banks in each of the states examined according to bank size for 1976 and 1977 (Refer to Table 15). Since the change in l/d ratios for a two-year period cannot be used to evaluate trends, an examination of the 1977 ratios will be used. Banks in Iowa with total assets of less than 5 million had a l/d ratio of less than 60.0 percent in 1977. In all other banking categories in Iowa, the l/d ratios were above the 60.0 percent level. Loan to deposit ratios were highest for agricultural loans for all categories except for banks with total assets of above 100 million. Banks with over 100 million in total assets have higher loan/deposit ratios for real estate and commercial loans than the other banking categories.

Operating Efficiency

The ratios of total operating expense to total assets were calculated for the states examined in order to evaluate operating efficiency. Operating efficiency, measured in this manner, will increase as the expense to total asset ratio decreases. These ratios are presented in Table 16, (expense to total asset ratios will be referred to as ETA ratios in this discussion).

Statewide

The ETA ratios for Iowa increased over the 1967 to 1977 time period. From 1967 to 1972 the ETA ratio for Iowa increased by 25.48 percent from 3.61 to 4.53, respectively. The ETA ratio for Iowa continued to increase from 1972 to 1977. From 1972 to 1977 the ETA ratio for Iowa increased by 29.14 percent. By 1977 the ETA ratio had increased to the 5.85 percent level. The increases in the ETA ratio in Iowa over the examination period

TABLE 15

Loan/Deposit Ratios
By Bank Size*
(1976 - 1977)

Banks With Total Assets (in millions)	Iowa 76	Iowa 77	Arkansas 76	Arkansas 77	Oklahoma 76	Oklahoma 77
-5	52.7	56.1	46.5	51.5	54.4	53.1
Commercial	04.8	04.5	14.6	15.5	07.5	08.0
Agriculture	30.4	31.8	05.9	07.5	19.2	16.6
Real Estate	08.8	10.7	10.1	11.2	09.4	09.3
Individual	07.4	07.9	11.7	11.9	16.6	16.5
Other	01.2	01.2	04.2	05.5	01.6	01.8
5 - 9.9	58.6	62.9	56.0	60.2	55.7	57.8
Commercial	07.3	07.8	13.0	14.0	09.6	09.6
Agriculture	29.7	31.7	07.6	08.4	18.8	19.4
Real Estate	12.0	13.4	17.4	19.4	11.0	11.9
Individual	08.8	09.4	15.3	16.2	15.3	15.7
Other	00.7	00.6	02.7	02.2	01.1	01.2
10 - 99.9	61.4	65.9	57.5	61.0	55.9	58.6
Commercial	10.3	10.9	11.8	12.6	13.7	13.8
Agriculture	24.4	25.6	06.4	06.9	11.6	11.6
Real Estate	15.7	17.7	21.0	22.8	12.6	14.3
Individual	10.2	10.9	16.2	17.2	16.4	17.5
Other	00.9	00.8	02.2	01.6	01.6	01.3
100+	56.5	62.5	65.1	69.3	55.0	58.9
Commercial	15.6	17.2	22.2	23.2	22.7	24.9
Agriculture	05.9	07.0	01.9	02.2	01.8	02.5
Real Estate	17.8	20.8	19.1	21.2	11.5	13.1
Individual	12.9	13.0	17.6	18.9	10.7	11.5
Other	04.5	04.6	04.2	03.8	08.3	06.9

* All numbers are percentages

Source: Bank Operating Statistics, F.D.I.C., 1976 - 1977.

TABLE 16

Expense/Total Asset Ratios*
(1967 - 1977)

	67	68	69	70	71	72	73	74	75	76	77
Iowa	3.61	3.86	4.24	4.52	4.62	4.53	4.84	5.39	5.43	5.64	5.85
Area #7	3.55	3.73	4.22	4.34	4.43	4.43	5.02	5.90	5.62	6.02	6.25
#9	3.29	3.68	3.90	4.10	4.25	4.16	5.43	6.06	5.51	5.59	5.94
#10	3.46	3.87	4.37	4.45	4.41	4.50	5.08	5.74	5.78	5.89	5.81
Arkansas	3.60	3.74	4.26	4.51	4.37	4.38	4.74	5.57	5.61	5.83	5.93
Area #4	3.70	3.78	4.56	4.96	4.44	4.58	5.39	6.49	6.12	6.13	6.37
#5	3.84	3.80	4.30	4.46	4.43	4.30	4.60	5.37	5.61	5.92	6.02
#7	3.48	3.76	4.28	4.44	4.35	4.36	4.49	5.38	5.48	5.66	5.73
Oklahoma	3.41	3.74	4.39	4.32	4.46	4.49	5.17	5.98	5.79	5.74	5.72
Area #11	2.96	3.61	4.58	4.17	4.27	4.41	5.38	6.44	5.98	6.19	5.97
#12	3.52	3.71	4.40	4.32	4.43	4.42	5.43	6.20	6.00	5.37	5.45

Banks With Total Assets (in millions)	Iowa 1976	Iowa 1977	Arkansas 1976	Arkansas 1977	Oklahoma 1976	Oklahoma 1977
- 5	5.49	5.69	5.40	5.31	6.20	6.29
5 - 9.9	5.68	5.89	5.79	6.03	6.14	6.12
10 - 99.9	5.71	5.91	5.80	5.84	6.03	6.08
100+	5.45	5.68	5.93	6.07	5.26	5.18

* All numbers are percentages

Source: Bank Operating Statistics, F.D.I.C., 1967 - 1977.

do not appear to be related to the enactment of branch banking legislation in 1972. Based upon the ETA ratio, operating efficiency does not appear to be affected by the structural change in Iowa.

Major Banking Markets

In the major banking markets of Iowa, the ETA ratios increased over the 1967 to 1977 time period. In areas 7 and 9, the ETA ratios increased by 24.79 and 26.44 percent, respectively, from 1967 to 1972. From 1972 to 1977 the ETA ratios for these areas increased by 41.08 and 42.79 percent. For these two banking markets operating efficiency, based upon ETA ratios, declined following the enactment of branching legislation. In area 10 the ETA ratio increased by 28.94 percent during the 1967-1972 period. A 29.11 percent change occurred during the 1972-1977 period in area 10.

Bank Size

Expense to total asset ratios have been calculated according to bank size (Refer to Table 16). These calculations were limited to the 1976-1977 period. Banks with total assets (in millions) of less than 5 and over 100 have the lowest ETA ratios and appear to be similar. The mid-size categories also appear to be similar with higher ETA ratios for both years. These comparisons suggest that the largest and the smallest banks (by category) in Iowa operated with a better operating efficiency than banks with total assets between 5 and 99.9 million during the 1976-1977 period.

Price of Services

Three criteria including: service charge to total deposit ratio, interest paid to total deposit ratio, and average return on loans, have been calculated to examine the effects of structural change upon prices of services.

Service Charge to Total Deposit Ratio

Statewide

In Iowa the service charge to total deposit ratio, (hereafter referred to as the service charge ratio), declined from 1967 to 1977 (Refer to Table 17). From 1967 to 1972 the service charge ratio decreased by 26.48 percent. During the 1972-1977 time period the service charge ratio declined by 29.03 percent. Based on the comparison of these periods, branch banking did not affect service charges at the statewide level.

Major Banking Markets

In the major banking markets the service charge ratios decreased between 1967 and 1972 with the exception of area 10. Following the enactment of branch banking legislation, the service charge ratios in areas 7, 9, and 10 declined at substantially higher rates. Between 1967 and 1972 the service charge ratios in area 7 and 9 declined by 4.17 and 5.36 percent, respectively, while this ratio increased in area 10 by 1.55 percent. From 1972 to 1977 the service charge ratios in area 7, 9, and 10 declined by 36.96, 15.38, and 57.14 percent, respectively. Based upon this comparison, service charges declined more rapidly in each of the major banking markets in Iowa following the enactment of branch banking enactment.

Bank Size

Service charge ratios also were calculated for Iowa banks based upon bank size for the 1976-1977 period (Refer to Table 17). Service charge ratios for banks with total assets of less than 5 and 5-9.9 million are similar for the 1976-1977 period. These categories appear to have lower

TABLE 17

Service Charge/Total Deposits
(1967 - 1977)

	67	68	69	70	71	72	73	74	75	76	77
Iowa	.253	.236	.233	.222	.207	.186	.161	.148	.137	.127	.132
Area #7	.192	.177	.210	.205	.229	.184	.123	.159	.133	.098	.116
#9	.261	.267	.269	.254	.251	.247	.240	.229	.221	.203	.209
#10	.193	.190	.217	.224	.190	.196	.176	.142	.124	.096	.084
Arkansas	.286	.296	.307	.289	.262	.229	.226	.260	.242	.248	.251
Area #4	.349	.355	.374	.369	.304	.291	.279	.289	.300	.323	.317
#5	.354	.365	.338	.297	.268	.271	.285	.315	.260	.261	.278
#7	.302	.313	.336	.320	.285	.261	.238	.236	.257	.249	.241
Oklahoma	.320	.324	.348	.320	.301	.271	.265	.254	.241	.233	.240
Area #11	.251	.290	.361	.345	.313	.289	.270	.248	.213	.197	.237
#12	.376	.363	.395	.345	.333	.293	.301	.281	.297	.288	.277

Total Assets	Iowa		Arkansas		Oklahoma	
(in millions)	1976	1977	1976	1977	1976	1977
- 5	.092	.101	.237	.256	.286	.298
5 - 9.9	.105	.103	.174	.194	.300	.291
10 - 99.9	.140	.140	.238	.198	.323	.336
100+	.103	.121	.287	.277	.086	.095

Source: Bank Operating Statistics, F.D.I.C., 1967 - 1977.

service charges than the larger bank categories. Banks with total assets between 10 and 99.9 million had the highest service charge ratio during 1976 and 1977. No conclusions can be drawn based upon these data.

Interest Paid to Total Deposits Ratios

Statewide

Interest paid on deposits to total deposit ratios, hereafter referred to as interest paid ratios, were calculated and are presented in Table 18. From 1967 to 1972 the interest paid ratio in Iowa increased by 56.89 percent. Following the enactment of branch banking legislation, from 1972 to 1977 the interest paid ratio in Iowa increased by 45.04 percent. The comparison of these time periods indicate that following enactment of branch banking legislation, higher interest on deposits was paid, however, the rate of increase declined.

Major Banking Markets

Within the major banking markets, the interest paid ratios for areas 7, 9, and 10 increased by 44.10, 48.46, and 40.11 percent, respectively, from 1967 to 1972. Following enactment of branch banking laws from 1972 to 1977, the interest paid ratios for these areas increased by 315.52, 48.19, and 38.82 percent, respectively. Based upon the comparison of these periods, no reliable conclusions can be made concerning the effects of branch banking upon interest paid within major banking markets.

Bank Size

Interest paid ratios based upon bank size in Iowa appear to be higher for banks with total assets between 5 and 99.9 million. Banks within the largest bank category had the lowest interest paid ratios for both years

TABLE 18

Interest Paid/Total Deposits
(1967 - 1977)

	67	68	69	70	71	72	73	74	75	76	77
Iowa	1.67	1.92	2.13	2.33	2.55	2.62	2.80	3.29	3.45	3.62	3.80
Area #7	1.61	1.73	1.89	2.08	2.27	2.32	2.62	3.29	3.15	3.33	9.64
#9	1.30	1.53	1.45	1.51	1.84	1.93	2.23	2.72	2.62	2.65	2.86
#10	1.82	2.14	2.36	2.32	2.51	2.55	3.02	3.49	3.59	3.70	3.54
Arkansas	1.49	1.52	1.68	1.95	2.09	2.07	2.42	3.31	3.14	3.26	3.28
Area #4	1.34	0.25	1.54	1.77	1.70	1.95	2.34	2.94	2.85	2.87	2.94
#5	1.56	0.21	1.64	2.00	2.24	2.23	2.52	3.13	3.40	3.54	3.50
#7	1.48	1.54	1.69	1.92	2.06	2.15	2.32	3.01	3.10	3.15	3.28
Oklahoma	1.49	1.74	1.93	1.89	2.16	2.28	2.74	3.47	3.27	3.15	3.17
Area #11	1.41	1.84	2.06	1.85	2.04	2.30	2.91	3.95	3.34	3.01	3.04
#12	1.69	1.84	2.05	1.82	2.19	2.20	2.82	3.57	3.31	3.06	3.01

Total Assets (in millions)	Iowa		Arkansas		Oklahoma	
	1976	1977	1976	1977	1976	1977
- 5	3.16	3.36	2.79	2.67	2.69	2.70
5 - 9.9	5.13	3.90	3.40	3.31	3.06	3.17
10 - 99.9	4.92	4.01	3.50	3.52	3.43	3.46
100+	3.01	3.17	2.70	2.89	2.79	2.79

Source: Bank Operating Statistics, F.D.I.C., 1967 - 1977.

examined. These observations do not allow conclusions to be drawn based upon bank size categories.

Return on Loans

Statewide

Return on loan data is presented in Table 19 for each state examined. In Iowa the return on loan ratios increased over the 1967-1977 time period. From 1967 to 1972 the return on loan ratio increased by 19.73 percent in Iowa. Following the enactment of branching legislation, from 1972 to 1977 this ratio increased by 18.82 percent. Based upon these changes, conclusions cannot be made in regard to the affects of structural change upon return on loans.

Major Banking Markets

The return on loan ratios for areas 7, 9, and 10 increased by 16.85, 13.71, and 18.89 percent, respectively, from 1967 to 1972. From 1972 to 1977 the return on loan ratios increased by 20.43, 21.41, and 24.97 percent, respectively. For the major banking markets in Iowa, comcparisons indicate that the return on loans ratio increased more rapidly following the enactment of branch banking.

Bank Size

Return on loan ratios for banks with less than 5 million in total assets increased by 19.65 percent from 1967 to 1972 and by 9.88 percent from 1972 to 1977. This comparison indicates that the return on loans for small banks increased at a much slower rate following the passage of branch banking legislation. Slower increases were shown for all bank size categories following the 1972 structural change, however, the smallest banks were affected to the greatest extent.

TABLE 19

Return on Loans
(1967 - 1977)

	67	68	69	70	71	72	73	74	75	76	77
Iowa	6.24	6.89	7.04	7.48	7.53	7.44	7.88	8.58	8.19	8.43	8.84
Area #7	6.41	6.82	7.19	7.94	7.73	7.49	8.10	9.04	8.54	8.59	9.02
#9	6.49	6.92	7.64	8.10	7.48	7.38	8.11	8.91	8.42	8.96	8.96
#10	6.30	6.99	7.24	7.96	7.60	7.49	8.08	8.59	8.45	9.00	9.36
-5	6.26	6.93	6.98	7.40	7.54	7.49	8.03	8.69	8.18	8.22	8.23
5-9.9	6.16	6.77	6.98	7.40	7.48	7.46	7.84	8.61	8.12	8.33	8.46
10-99.9	6.26	6.87	7.24	7.75	7.55	7.42	7.86	8.54	8.25	8.50	8.76
100+	6.19	6.82	7.34	8.07	7.12	6.85	8.23	9.30	8.19	8.65	8.77
Arkansas	6.75	7.26	7.61	7.89	7.65	7.47	8.09	9.06	8.63	8.90	8.98
Area #4	6.48	7.07	7.54	7.66	7.73	7.63	8.25	9.27	8.83	9.14	9.14
#5	6.98	7.48	7.85	8.09	7.96	7.76	8.27	9.04	8.83	9.13	9.27
#7	6.49	7.11	7.66	7.93	7.38	7.28	7.95	9.34	8.45	8.88	8.81
-5	6.88	7.32	7.76	7.90	7.58	7.43	8.21	9.05	8.53	8.81	8.78
5-9.9	6.61	7.36	7.50	7.86	7.77	7.48	8.09	8.90	8.46	8.86	8.78
10-99.9	6.60	7.04	7.58	7.92	7.60	7.48	8.04	9.02	8.72	8.92	9.05
100+	-	6.96	7.82	8.26	7.39	7.14	7.84	9.65	8.36	8.86	8.91
Oklahoma	7.57	8.12	8.26	8.64	8.33	8.15	8.82	9.82	9.42	9.80	9.99
Area #11	7.39	7.96	8.43	8.88	8.74	8.44	9.22	10.40	9.93	9.97	10.33
#12	7.65	8.28	8.44	8.86	8.68	8.54	9.12	10.44	10.09	10.28	10.46
-5	7.81	8.36	8.43	8.90	8.55	8.21	9.03	9.90	9.34	9.69	9.88
5-9.9	7.42	8.00	8.11	8.36	8.15	8.20	8.90	9.91	9.51	9.99	10.15
10-99.9	6.95	7.70	8.01	8.22	8.13	8.09	8.59	9.73	9.54	9.80	9.99
100+	5.97	6.75	7.37	7.02	7.10	6.83	8.24	9.61	8.80	8.76	8.96

- Not Available

Source: Bank Operating Statistics, F.D.I.C., 1967 - 1977.

Analysis of Arkansas

Bank Office Availability

Banks and Banking Offices

From 1967 to 1977, the number of banks in Arkansas increased by 4.44 percent, while the number of banking offices increased by 51.18 percent (Refer to Table 8). The enactment of branching laws appears to have had no affect upon the number of banks in Arkansas, but did affect the number of banking offices. Prior to the enactment of branching laws in Arkansas from 1967 to 1973 the number of banking offices increased by 22.64 percent. Following the 1973 branching legislation until 1977, the number of banking offices increased by 22.64 percent. Following the 1973 branching legislation until 1977, the number of banking offices increased by 23.27 percent. By the end of 1977 Arkansas had 768 banking offices.

Population Per Banking Office

Another measure of bank office availability is to examine the population per banking office within each state. During the study period the population per banking office in Arkansas decreased from 5029 in 1967 to 3503 in 1977 which is a decline of 30.34 percent. This decline, however, was greatest following the enactment of branch banking legislation in 1973. From 1967 to 1973 the population per banking office calculation declined by 15.87 percent compared to the 17.21 percent decline from 1973 to 1977, (Refer to Table 9).

Bank Distribution

The distribution of banks by county has not changed substantially for the selected years examined in Arkansas. The distribution of banking offices by county however has changed (Refer to Table 10). Between 1967 and 1973 the major shift in Arkansas banking offices was toward more banking offices. In 1967, 6.67 percent of all Arkansas counties had eleven or more banking offices. By 1973 this percentage had increased to 13.33 percent. Following 1973, a decline in the percent of counties with 6 or less banking offices occurred. All other categories increased from 1973 to 1978. Although most of the banking office change occurred prior to the enactment of branching legislation, the shift toward more banking offices in Arkansas counties continued following 1973.

Concentration

Statewide

In 1972 the largest bank in Arkansas held 5.54 percent of the total state deposits (Refer to Table 11). This percentage increased to 5.70 percent in 1973 and declined from 1973 to 1977. The concentration ratio for the largest ten banks in Arkansas increased slightly from 23.12 percent in 1972 to 23.16 percent in 1977. Although concentration ratios prior to the enactment of branching legislation in Arkansas were not calculated, these concentration ratios show that concentration on the statewide level showed little change over the examination period.

Major Banking Offices

In Arkansas the concentration ratios for areas 4 and 5 increased by 0.04 and 13.17 percent, respectively, from 1967 to 1973, while the ratio in area 7 declined by 13.31 percent during this period (Refer to Table 12). Following passage of branching legislation, concentration ratios for areas 4 and 7 decreased by 0.22 and 7.15 percent, respectively, while concentration in area 5 showed an increase of 7.43 percent. Based upon these findings, it appears that concentration in Arkansas did not change substantially within major banking markets following the enactment of branching legislation.

Concentration Within Major Banking Markets

Concentration declined in two banking markets in Arkansas during the 1972-1977 time period and remained unchanged in one banking market (Refer to Table 13). In area 7 concentration remained at 100 percent from 1972 until 1977, with the exception of 99.98 percent in 1976. In 1973, areas 4 and 5 had concentration ratios of 82.88 and 61.85 percent, respectively, in 1977. Although these changes have not been compared with changes occurring prior to the enactment of branch banking legislation, it appears that branching did not cause a significant change in any of the major banking markets.

Bank Size

Although the data needed to calculate ratios based upon bank size was limited, calculations have been made for 1976 and 1977. The concentration of state deposits held by banks with total assets (in millions) of 10 - 99.9 in Arkansas had the highest concentration ratios for both years. Banks with total assets of less than 5 million had the lowest concentration ratios for these years. Because of the limited nature of these calculations, no reliable conclusions can be made based upon bank size.

Allocation of Credit

Between 1967 and 1973 the l/d ratios in Arkansas increased toward the heuristic measure of 60.0 percent previously described (Refer to Table 14). In 1972 the l/d ratio for Arkansas reached the 60.0 percent level. Following the enactment of branching legislation in 1973 the l/d ratio for Arkansas fell below the 60.0 percent level only once to 59.5 percent in 1976.

Based upon the type of loans made in Arkansas, the highest l/d ratios were found for real estate and individual loans. This did not change over the study period. It appears that l/d ratios based upon the type of loan vary directly with the l/d ratios based upon state totals.

Major Banking Markets

In Arkansas the l/d ratios in the major banking markets increased in all three areas over the 1967-1977 time period. In area 4 the l/d ratio increased from 54.8 percent in 1967 to 75.4 percent in 1973. Between 1973 and 1977 the l/d ratio for this area decreased and reached 69.2 percent in 1977. In areas 5 and 7 the l/d ratios for these areas increased from 1967 to 1973. Following the enactment of branching legislation in Arkansas in 1973, l/d ratios in areas 4 and 7 declined, while the l/d ratio for area 5 increased substantially. Based upon these comparisons, no reliable conclusions can be made for the affect of branch banking upon the allocation of credit within the major banking markets of Arkansas.

Bank Size

Banks in Arkansas with total assets of less than 5 million had a l/d ratio of 51.5 percent in 1977, (Refer to Table 15). In all other size categories, the l/d ratios were above the 60.0 percent level. Loan to deposit ratios were high for real estate loans for all categories with total assets above $5 million. Banks with over $100 million in total assets have higher l/d ratios for individual and commercial loans than the other banking categories.

Operating Efficiency

Statewide

The expense to total asset (ETA) ratios for Arkansas increased over the

1967-1977 time period. From 1967 to 1973 the ETA ratio for Arkansas increased by 31.67 percent from 3.60 to 4.74, respectively. The ETA ratio for Arkansas continued to increase from 1973 to 1977. From 1973 to 1977 the ETA ratio for Arkansas increased by 25.11 percent. By 1977 the ETA ratio had increased to the 5.93 percent level. The increases in the ETA ratio in Arkansas over the examination period do not appear to be related to the enactment of branch banking legislation in 1973.

Major Banking Markets

In the major banking markets of Arkansas, the ETA ratios increased over the 1967 to 1977 time period. In areas 4, 5, and 7 the ETA ratios increased by 45.68, 19.79, and 16.93 percent, respectively, from 1967 to 1973. From 1973 to 1977 the ETA ratios for these areas increased 18.18, 30.87, and 27.62 percent. For all banking markets in Arkansas operating efficiency, based upon ETA ratios, declined following the enactment of branching legislation.

Bank Size

Banks with total assets (in millions) of less than $5 million had the lowest ETA ratios for both years examined (1976-1977). The ETA ratios for the other categories in Arkansas were similar. A meaningful conclusion cannot be made based upon comparisons of these ratios.

Price of Services

Service Charge to Total Deposit Ratio

Statewide

In Arkansas the service charge to total deposit ratio declined from 1967 to 1977. From 1967 to 1973 the service charge ratio in Arkansas decreased by 20.98 percent, (Refer to Table 17). During the 1973-1977 time period the service charge ratio increased by 11.06 percent. Based upon the comparison of these periods, branch banking appears to adversely affect service charges at the statewide level.

Major Banking Markets

In the major banking markets the service charge ratios decreased between 1967 and 1977. Between 1967 and 1973 the service charge ratios in areas 4, 5, and 7 decreased by 20.06, 19.49, and 21.19 percent, respectively. From 1973 to 1977 the service charge ratios in areas 4 and 7 increased by 13.62 and 1.26 percent, respectively, while this ratio declined in area 5 by 2.46 percent. Based upon this comparison, the effect of branch banking upon service charges within major banking markets cannot be determined.

Bank Size

Service charge ratios for banks with total assets of $5 - 9.9 and $10 - 99.9 million were similar in Arkansas for 1976 and 1977, (Refer to Table 17). These two categories appear to have lower service charges than the other bank categories. Banks with total assets over $100 million had the highest service charge ratio during 1976, while the smallest bank category had the highest ratio in 1977. No reasonable conclusions can be drawn based upon this data.

Interest Paid to Total Deposits Ratios

Statewide

Interest paid on deposits to total deposit ratios are presented in Table 18. From 1967 to 1973 the interest paid ratio in Arkansas increased by 62.42 percent. Following the enactment of branch banking legislation from 1973 to 1977, the interest paid ratio in Arkansas increased by 35.54 percent. The comparison of these time periods indicate that following the enactment of branch banking legislation, higher interest on deposits was paid.

Major Banking Markets

Within the major banking markets, the interest paid ratios for areas 4, 5 and 7 increased by 74.63, 61.54, and 56.76 percent, respectively, from 1967 to 1973. Following enactment of branch banking laws from 1973 to 1977, the interest paid ratios for these areas increased by 25.64, 38.89, and 41.38 percent, respectively. Based upon the comparison of these periods, the effect of branch banking upon the interest paid on deposits within major banking markets is the same as the effect on the statewide level.

Bank Size

Interest paid ratios based upon bank size in Arkansas appear to be higher for banks with total assets between $5 and 99.9 million. Banks within the smallest bank category had the lowest interest paid ratios for both 1976 and 1977. These observations do not allow conclusion to be drawn based upon bank size categories.

<u>Return on Loans</u>

Statewide

Return on loan ratios in Arkansas increased over the 1967-1977 time period. From 1967 to 1973 the return on loan ratio increased by 19.85 percent. Following the enactment of branching legislation, this ratio increased by 11.00 percent. Based upon this comparison, it appears that the return on loans rate increased at a decreasing rate following the enactment of branching legislation.

Major Banking Markets

The return on loan ratios for areas 4, 5 and 7 increased by 27.31, 18.48, and 22.50 percent, respectively, from 1967 to 1973. From 1973 to 1977 the return on loan ratios increased by 10.79, 12.09, and 10.82 percent, respectively. For the major banking markets in Arkansas, comparisons indicate that the return on loans ratio increased less rapidly following the enactment of branch banking.

Bank Size

Return on loan ratios for banks with less than $5 million in total assets increased by 19.33 percent from 1967 to 1973 and by 6.94 percent from 1973 to 1977. This comparison indicates that the return on loans for small banks increased at a much slower rate following the passage of branch banking legislation. Slower increases were shown for the banking categories with $5 to 9.9 or 9.9 to 99.9 million in total assets following the 1973 structural change. However, the smallest banks were affected to the greatest extent.

Comparative Analysis

In order to predict the possible effects of branch banking upon Oklahoma banks, based upon the previous analyses, a comparison of Iowa, Arkansas and Oklahoma data is needed to determine whether the apparent changes in Iowa and Arkansas were related to other economic factors or mainly to banking structure. Comparisons were made on a statewide basis and for the major banking market levels. Bank size will not be analyzed since the available data cannot be used to draw reliable conclusions for the possible effect of bank structure upon bank size.

Bank Office Availability

Population Per Banking Office

Population per banking office data for Iowa, Arkansas and Oklahoma has been graphed for comparative purposes (Refer to Figure 3). As might be expected, the population per banking office of Arkansas and Iowa decreased following the enactment of branch banking legislation. During the 1967-1977 time period, the population per banking office of Oklahoma decreased by 18.8 percent. Although the population per banking office of Oklahoma has been declining for several years, the population per banking office of Oklahoma is considerably higher than that of both Arkansas and Iowa.

Bank Distribution

The distribution of banks and banking offices by county in Oklahoma reveal basically the same changes as the distributions of Iowa and Arkansas (Refer to Table 12). A shift toward more counties with more banking offices occurred in Oklahoma between 1967 and 1978. The distribution of banks and banking offices does not appear to have changed significantly in Iowa or Arkansas following the enactment of branch bank legislation.

Concentration

Statewide

The concentration ratios for the largest bank and the largest ten banks in Oklahoma have declined over the 1972 to 1977 time period. The concentration ratio for the largest bank in Oklahoma declined from 7.12 percent in 1972 to 6.07 percent in 1977. The concentration ratio for the largest ten banks decreased from 34.33 to 29.51 percent from 1972 to 1977. These

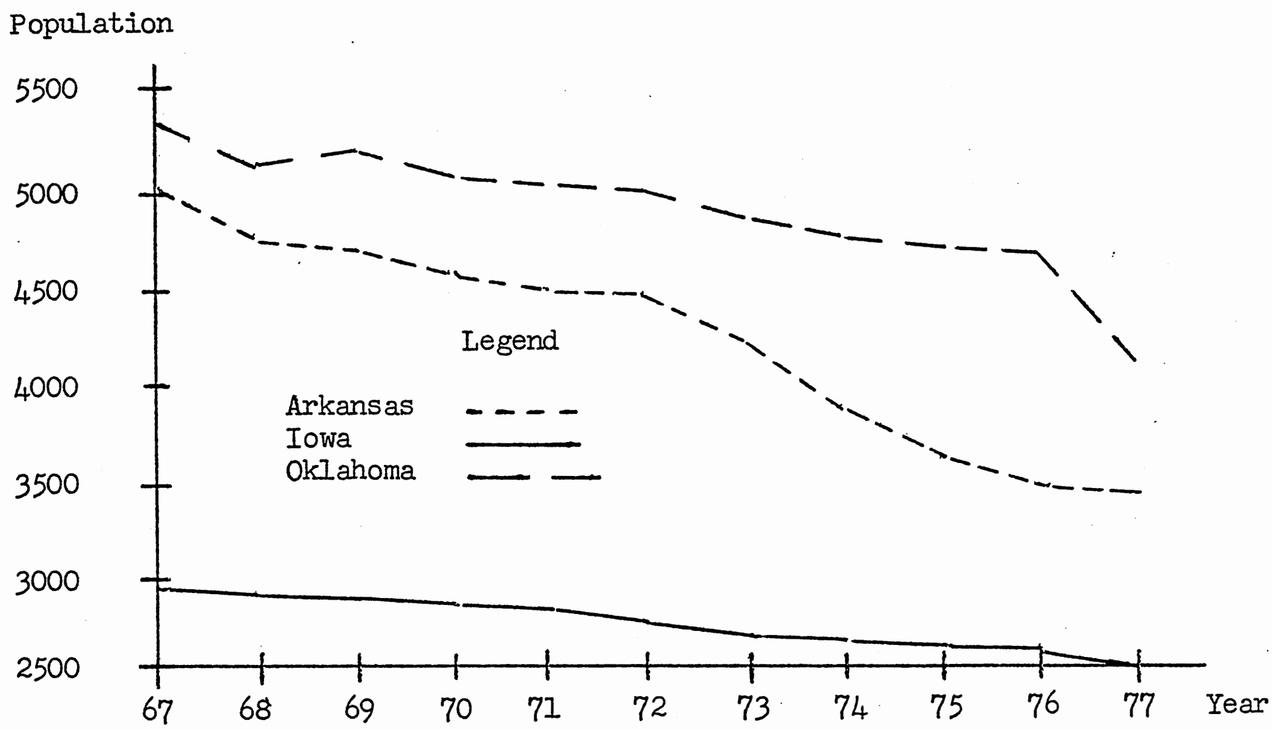


Figure 3. Population Per Banking Office

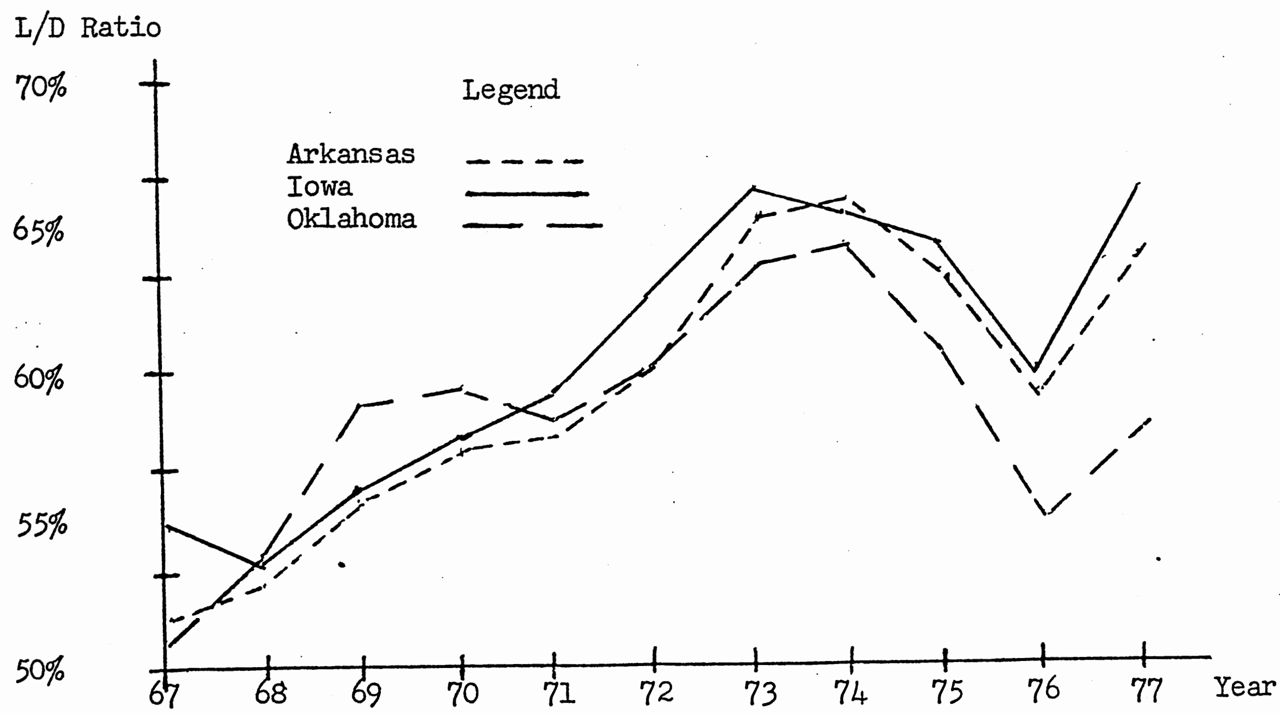


Figure 4. Loan to Deposit Ratios

concentration ratios are higher than the comparable ratios in Iowa and Arkansas. The concentration ratios examined for Arkansas changed little over the examination period, while the ratios for Iowa declined slightly.

Major Banking Markets

The concentration ratios for the major banking markets in Oklahoma did now show a great change over the examination period. In area 11 the concentration ratio declined from 29.93 to 24.79 percent from 1972 to 1977. The ratio in area 12 increased from 29.43 to 30.57 percent over the examination period. These changes appear to be comparable to the changes experienced in Arkansas and Iowa. Although the concentration ratios for Oklahoma were higher over the examination period than the ratios for the major banking markets in both Iowa and Arkansas, it appears that the changes for the states examined were associated with normal economic fluctuations.

Concentration Within Major Banking Markets

The concentration ratios for the major banking markets in Oklahoma declined over the examination period (Refer to Table 13). These changes can be compared to the decreases in both Iowa and Arkansas. This comparison indicates that the decline in concentration ratios in both Arkansas and Iowa do not appear to be related to the change in banking structure.

Allocation of Credit

The loan to deposit ratio for Oklahoma ranges from a low of 51.9 to a high of 63.6 percent over the examination period. The l/d ratios for Arkansas, Iowa and Oklahoma are graphically shown in Figure 4 for ease of comparison. Prior to the enactment of branch banking legislation in Arkansas and Iowa, the l/d ratio in Oklahoma varied from the lowest level to the highest level for ratios between the states examined. Following the passage of branching legislation in Arkansas and Iowa, the l/d ratios of these states have consistently been higher than the l/d ratio of Oklahoma. There has been an increasing divergence between the relative values of the l/d ratios of the branching states and Oklahoma.

Major Banking Markets

The l/d ratios for the major banking markets in Oklahoma varied over the examination period. The ratios in the Oklahoma markets tended to rise with the general economic conditions similar to those in Iowa and Oklahoma. The ratios in Oklahoma banking markets ranged from a low of 50.8 to a high of 66.5 percent over the examination period (Refer to Table 14). Although no reliable conclusions could be drawn based upon the data within Arkansas, it appears that branch banking legislation does have an effect upon the allocation of credit within major banking markets. This conclusion is based upon the fact that l/d ratios in some banking markets in Arkansas and Iowa had l/d ratios of over 70.0 percent following the enactment of branch banking legislation in the respective states.

Operating Efficiency

Statewide

The ratio of total operating expense to total assets for Oklahoma, as well as for the other states examined, has been graphed for ease of comparison (Refer to Figure 5). Based upon this graph, it appears that the operating expense to total asset ratio in Oklahoma followed the same pattern over the examination period as the ratios in the other states examined. Based upon this finding, it appears that operating efficiency is not affected by the banking structure, either limited branching or unit banking.

Major Banking Markets

Over the 1967-1977 time period, the expense to total asset ratios for the major banking markets in Oklahoma increased (Refer to Table 16). This indicated that operating efficiency declined over the examination period. The same finding was found for the major banking markets in Iowa and Arkansas. Based upon this comparison, it appears that the decline in operating efficiency in Iowa and Arkansas was associated with economic factors, not banking structure.

Price of Services

Service Charge to Total Deposit Ratio

Statewide

Service charge to total deposit ratios for the states examined are shown in Figure 6. Over most of the examination period, the service charge ratio of Oklahoma was higher than the ratio of Arkansas. Iowa had the lowest service charge ratio over the entire period. Following the enactment of branch banking legislation in Arkansas, the service charge ratio in Arkansas began to increase, surpassing the Oklahoma ratio in 1974. Although the service charge ratio in Iowa did not appear to be affected by the change in banking structure, it appears that the service charge ratio in Arkansas was adversely affected by the structural change.

Major Banking Markets

The service charge ratios for the major banking markets in Oklahoma declined over the examination period (Refer to Table 17). From 1967 to 1977 the service charge ratio in area 11 declined 5.58 percent, while the ratio in area 12 declined 26.33 percent. These declines may be compared to

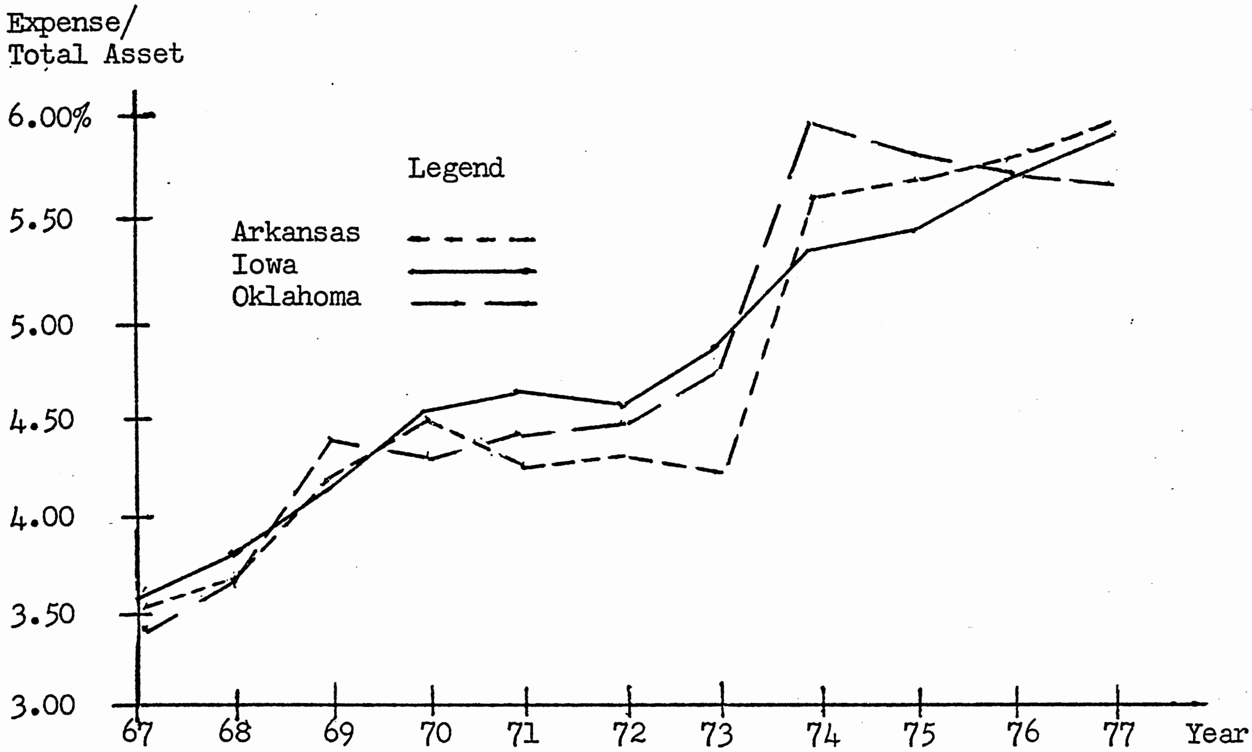


Figure 5. Expense to Total Asset Ratios

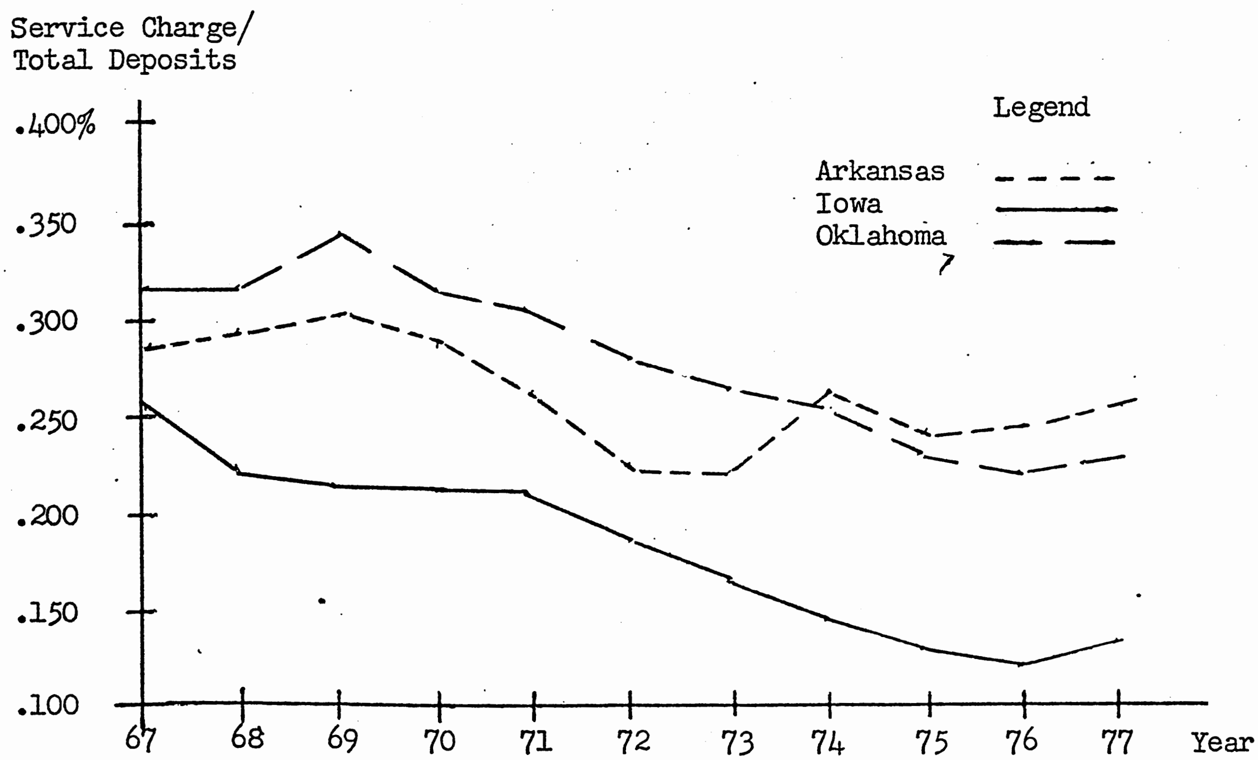


Figure 6. Service Charge to Total Deposit Ratios

similar declines in Iowa and Arkansas during the same period. Service charge ratios for Iowa were generally lower than those in Oklahoma, while the service charge ratios in Arkansas were generally higher. Based upon the previous examination of service charge ratios in Iowa and Arkansas and this comparison, reliable conclusions cannot be made.

Interet Paid to Total Deposit Ratios

Statewide

Interest paid on deposits to total deposit ratios are shown in Figure 7. Over the examination period, the interest paid ratio for Oklahoma increased in the same manner as the ratio in Iowa and Arkansas. No apparent change in this pattern occurred in Iowa or Arkansas following the enactment of branch banking legislation.

Major Banking Markets

The interest paid ratios for the major banking markets in Oklahoma increased over the examination period (Refer to Table 18). These increases were similar to those achieved in Iowa and Arkansas. Based upon this comparison and the fact that no significant changes occurred in either Iowa or Arkansas following enactment of branch bank legislation, it appears that branch banking had no affect upon the interest paid ratio.

Return on Loans

Statewide

The return on loan ratios for Iowa, Arkansas and Oklahoma are shown graphically in Figure 8. The return on loan ratio for Oklahoma has consistently been higher than the ratio of Iowa or Arkansas. Based upon an examination of Figure 8, it appears that factors other than bank structure affect

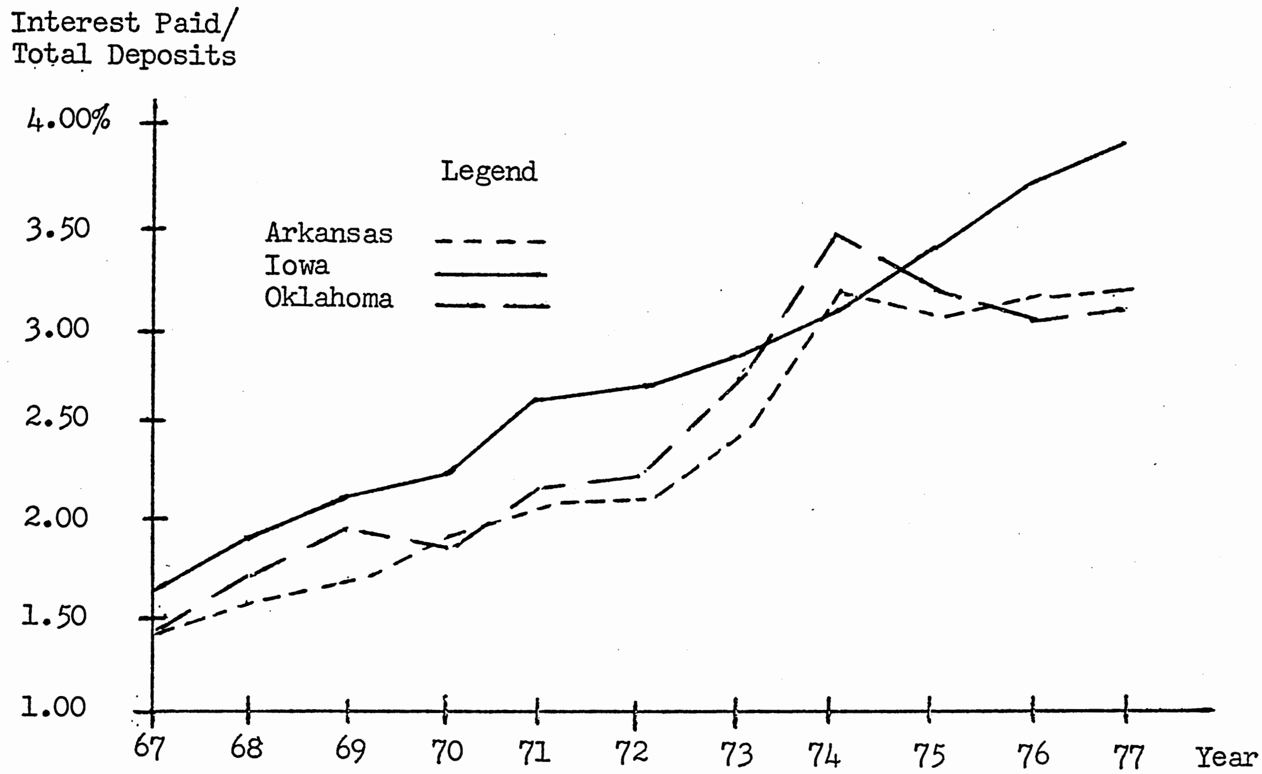


Figure 7. Interest Paid to Total Deposit Ratios

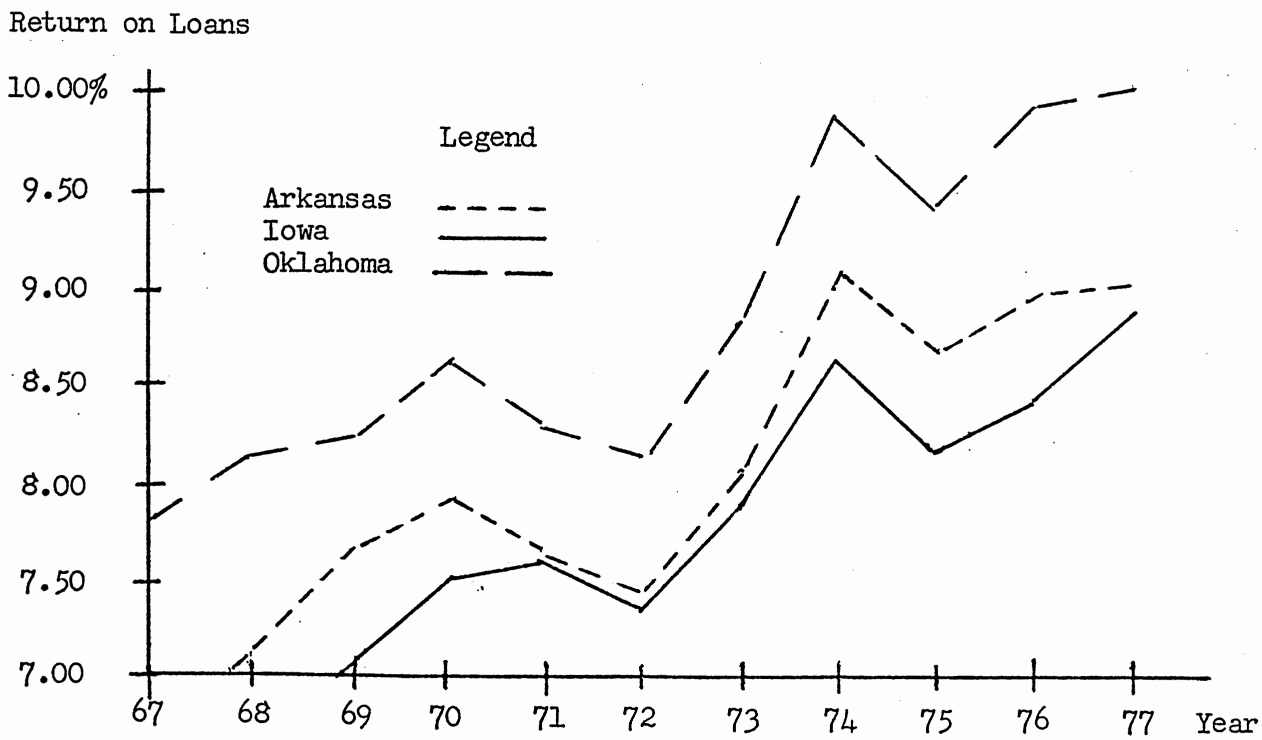


Figure 8. Return on Loan Ratios

the return on loan ratio.

Major Banking Markets

The return on loan ratios for Oklahoma major banking markets appear to follow the same pattern, in regard to Iowa and Arkansas, as the return on loan ratios on the statewide level. The same conclusion must be drawn - factors other than bank structure affect the return on loan ratio.

CHAPTER VI

CONCLUSIONS

The preceeding comparative analysis of banking data from Iowa, Arkansas and Oklahoma permits some conclusions to be drawn concerning the anticipated effects of branch banking legislation upon Oklahoma banks, assuming limited area branch banking legislation were enacted in Oklahoma.

Bank office availability would increase due to the simple expansion of the number of banking offices thru branches. The effect of branch banking upon home office banks remains unclear because Iowa and Arkansas exhibited opposite results.

Better allocation of credit would be expected on the statewide level and within major banking markets. Structural change in Iowa and Arkansas revealed significant increases in loan to deposit ratios: Therefore, the same could possibly occur in Oklahoma. The loan mix in Oklahoma should not be substantially affected by structural change, as none was observed for Iowa or Arkansas.

Based upon the results observed in Arkansas, one other conclusion may be anticipated. Service charge levels may increase in Oklahoma on the statewide level following enactment of branch banking legislation.

The most important conclusion reached is that of all the criteria employed (bank office availability, concentration, allocation of credit, operating efficiency, and prices of services), only bank office availability and allocation of credit appeared to be affected by enactment of limited branch banking legislation.

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