The Case for Branch Banking in Montana

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Research Department Federal Reserve Bank of Minneapolis Ever since Adam Smith published Wealth of Nations in 1776, economists have argued for fewer restrictions on economic activities. Smith argued that individuals, in pursuing their own interests, are led—as if by an invisible hand—to achieve the most good for all; any government interference with individuals pursuing their interests in the marketplace, therefore, was almost certain to be injurious, except, of course, when government was necessary to enforce contracts or prevent monopolistic practices. Following Smith, many economists have argued for free trade amongst countries, for unrestricted entry into economic pursuits, and for a very limited role for government intervention.

Yet, while Adam Smith and his followers provided a strong theoretical case for their position, in many instances it has been difficult to find unambiguous empirical support. Either data have not been available, or isolating the impact of a particular restriction from the many other factors affecting economic activity has been very difficult.

Restricting the type of offices banks can open is clearly a form of government intervention that Adam Smith would have questioned. It prevents willing providers of a service from selling to willing customers, and thus does not achieve the most good for all. In this instance, however, we do not have to rely solely on Smith's argument. There is a considerable amount of empirical evidence that bears on this issue. Many states have permitted some form of branch banking, and their experience has been analyzed extensively.

Although the competitive structure of any industry is a legitimate concern for policymakers, the evidence strongly suggests that the concerns over the impact of branching on bank competition are unwarranted. Furthermore, the evidence supports the position that fewer restrictions are better. It has been found that permitting branching neither drives small unit banks out of business nor reduces the availability of credit to rural communities. On the contrary, under branch banking, small and large banking

systems compete quite vigorously, and on average the availability of credit in rural areas is greater. While branching clearly changes some features of the banking market, it has not led to monopoly pricing, but rather to greater availability of banking services at competitive prices.

The evidence, in short, shows that branch banking has had a positive influence wherever permitted. But will it have similar effects in Montana? Based on the structure of financial institutions and markets in this state, we believe that it will.

I.

Experience With Branch Banking in the United States

Historical Overview of Branching

Branch banking in the United States has grown unevenly. This is partly because the regulation of branching has been left to the states in the Union and partly because of the banking crisis of the 1930s.

The National Banking Act of 1864, which established the system of federally chartered banks, was interpreted to forbid national banks from operating any branches other than ones operated prior to receiving their federal charter. This prohibition was eased by the McFadden Act (1927) and the Banking Act of 1933 to permit branching by national banks, but the states could still prevent it. Branching had to be specifically allowed by state law, and national banks were subject to the same restrictions as state-chartered banks.

There was little branch banking by state-chartered banks before 1900, but in the next 20 years substantial advances were made in states that liberalized their branching laws. In California, for example, several banks located in San Francisco and Los Angeles established major branch systems throughout the state following authorization of statewide branching in 1909.

The branching movement slowed temporarily in the 1920s as opposition to branching stiffened, but concerns over bank safety in the early 1930s led many states to liberalize their laws. Opposition to branching in the 1920s reflected fears of domination by large banking systems such as was believed to be occurring in California. Thus, by 1929 branching was still limited to 20 states (Table 1). The liberalization of state branching laws, however, resumed in the wake of the Great Depression, as state legislators viewed branching networks as a necessary step to insure the safety of the banking system. By 1951, 31 of 48 states had allowed some form of branch banking.

Since then federal deposit insurance has increased the confidence in small banks; and, as a result, branching has been liberalized in only seven more states. A recent study of state branching laws indicates that 21 states and the District of Columbia permit statewide branching and 17 other states permit geographically limited branching—limited mostly to the home office and contiguous counties [24]. This new expansion, however, leaves only 12 states that prohibit branching, and several of these states permit banks to operate a limited number of detached facilities (Table 2). These facilities are similar to branches, except that they are generally restricted as to function and distance from the home office.

The 12 states that prohibit branching—commonly referred to as unit banking states—have a close geographic and economic relationship. All but two of the states are located between the Mississippi River and the Rocky Mountains running from Montana, North Dakota, and Minnesota in the north to Texas in the south. And all of the unit banking states are largely rural, consistent with the fact that opposition to branch banking has its roots in rural America.

Fears About Branching Are Unwarranted

The opposition to branch banking in rural areas is based on fears that branching will increase the cost and reduce the availability of banking services for rural consumers. It is feared

- . that branch banks siphon funds out of rural areas;
- . that branch banks are less efficient than unit banks;
- . that large branch banks drive small unit banks out of business; and
- that branching leads to increased bank concentration.

The experience we have had in the United States with branch banking has allowed researchers to examine the validity of these concerns. Comparing states that allow branching to those that don't, comparing branch banks to unit banks in the same state, and comparing banks before and after they become part of a branching system has

provided fertile ground for economic analysis. The evidence from these studies is quite conclusive: the fears about branching are unwarranted, as branching has proven to be beneficial to consumers.

1. Do Branch Banks Siphon Funds Out of Rural Areas?

One of the most emotional issues surrounding branching is the contention that branches are established mainly to gather deposits from rural towns in order to provide loans to the branch bank's large corporate customers. It is argued that bank credit is essential to the economic development of rural communities, so that this siphoning will lead to depressed economic conditions in these communities.

Proponents of branching disagree. They argue that a branch bank is likely to increase the amount of funds available in rural communities, because its loan portfolio is more geographically dispersed and therefore less risky than that of a unit bank. Thus, it can hold more loans than unit banks per dollar of deposit.

One of the reasons the siphoning issue has persisted is that data revealing the location of bank loans are not available. There are no data showing the geographic location of bank borrowers or where borrowers spend the proceeds of their loans. The indirect evidence on fund flows, however, does not support the siphoning hypothesis. On the contrary, some studies found that funds are more likely to increase in communities served by offices of branch banks.

These studies found that, on average, branch banks loan more funds in the communities in which they are located than do unit banks. For example, studies by Johnston [16] and by Kohn, Carlo, and Kaye [18] found that branch banks have higher loan-to-deposit ratios than do unit banks in California and New York, respectively. And using loan-to-asset ratios instead of loan-to-deposit ratios, Horvitz and Shull [14] found branch banks to have higher ratios than unit banks in either branching states or unit banking states. Although this finding is supportive, it is not conclusive. The higher ratio may simply represent loans to large corporate customers, and hence be consistent with

the siphoning argument. Much stronger evidence, however, comes from the Johnston study of California banks [16], which found that branch banks had higher loan-to-deposit ratios than unit banks, even when the home office was excluded. A similar conclusion was drawn from a study that examined loan portfolios of unit banks before and after acquisition by branch banks [17]. This study found that loan portfolios increased following most acquisitions.

2. Are Branch Banks Less Efficient?

Opponents of branch banking argue that branch banks are less efficient than unit banks. They contend that the costs associated with the difficulties inherent in overseeing a large branch network more than offset any advantage branch banks may have by centralizing certain bank operations such as personnel management, purchasing, and investment portfolio management.

Early studies supported this position, but they suffered from several data deficiencies. In more recent studies which used more extensive data, the results are quite different. It was found that branch banks are likely to be more efficient than unit banks.

Three early studies of bank efficiency concluded that unit banks were more efficient than branch banks. Alhadeff [2], analyzing California banks; Schweiger and McGee [25], analyzing banks that are members of the Federal Reserve System; and Horvitz [13], analyzing all insured commercial banks, based their conclusion on the finding that expense-to-asset ratios were higher for branch banks than for unit banks of the same asset size.

These three studies, however, suffer from two serious methodological problems-problems largely created by inadequate data--which bring their conclusion into question. The first is the assumption that bank output can be adequately represented by one number, total assets. This assumption fails to recognize that banks produce many goods (e.g., various types of loan and deposit services, trust services, etc.) and that the mix of goods may differ for any two banks with identical total assets. The second

problem with these studies is that simply comparing branch and unit banks of the same size fails to recognize the added service of multiple locations provided customers of branch banks. To the customer the total cost of doing banking business consists of the costs of banking services at the office where the services are available, plus the costs of time, trouble, and transportation expense involved in obtaining them.

These methodological problems have been corrected in more recent studies. Using a newly available body of data, researchers have constructed cost functions for a variety of bank services to replace the single cost function of earlier studies. And to account for the difference in customer convenience between single-office unit banks and multiple-office branch banks, researchers have compared a branch bank, not with a unit bank of the same size, but with a collection of unit banks of the same size as the individual offices of branch banks.

Using these more extensive data, studies of the efficiency controversy arrived at conclusions significantly different from the earlier studies. Studies by Mullineaux [22], using commercial banking data from the Boston, New York, and Philadelphia Federal Reserve Bank Districts, and by Longbrake [20], using a wide sample of unit and branch banks, concluded that there were no systematic differences in efficiency between branch and unit banks. Studies by Benston [5] and by Bell and Murphy [3] differed even more from the earlier studies. They concluded that branch banks were more efficient than unit banks because costs of adding branches were offset by the saving from increased size.

3. Do Large Branch Banks Drive Small Unit Banks Out of Business?

The notion that a large company with a large stock of capital can drive its competition out of business by temporarily pricing its goods and services below cost is a time-honored fear of small business. The hypothesis is that a large firm foregoes normal profits in the short run by pricing below cost with the expectation that it will be able to charge monopoly prices and obtain above-normal profits in the long run. The hypothesis

requires that entry costs to a market be high enough so that the large firm is eventually able to recoup its losses from the initial price cutting before other firms enter the market.

The banking industry, however, does not appear to meet this requirement. Economic barriers to entry are very low, so that large banks are not likely to price below cost in order to eventually gain monopoly profits. A study of entry of branch banks into 100 New York towns in which unit banks were already located supports this supposition [19]. It found that unit banks were not driven out when branch banks entered the market. Furthermore, we know that unit banks have competed side by side with branch banks for over 50 years in such states as Vermont, California, and the Carolinas.

Of course, it would not be realistic to assume that every unit bank would survive competition from a new bank, be it a branch of a branch bank or another unit bank. The continued health of the financial system as well as of the economic system generally depends on the constant pruning of inefficient firms.

4. Does Branching Lead to Increased Bank Concentration?

Perhaps the most vocal argument against branch banking is that permitting branching will lead to increased concentration. Although seldom spelled out, the implication of an increase in concentration is a decrease in competition resulting in higher prices and reduced availability of banking services.

Even though the term "concentration" has been a long-time rallying cry for opponents of branching, its significance is questionable. One reason for this is that there is no one measure of concentration that adequately represents the banking structure of a state.

The term "concentration" generally refers to the degree to which the sales or assets of an industry in a particular market are controlled by a few firms. It is usually measured by a "concentration ratio," which refers to the percent of the industry sales or assets in a particular market controlled by the larger firms. An appropriate measure of

concentration, therefore, requires a definition of the market and an identification of the competitors in that market.

The concentration ratio for banking services that opponents of branching use is the ratio of bank deposits in the state controlled by the larger banks. This measure of concentration is obviously based on the assumption that the state is the relevant market and banks the competitors in that market.

This may not be, however, the most relevant definition of either markets or competitors. Banks offer a large number of services to a diversified set of consumers, and it is much more likely that there are a number of markets of differing geographic dimensions. For some services and bank customers the nation may be the relevant market (e.g., for large business loans). For other services and customers the local community may be the relevant market (e.g., individual checking accounts and consumer loans). Moreover, banks compete with many other financial institutions for certain types of banking services (e.g., with savings and loan associations and credit unions for time deposits).

Given the difficulties in defining the appropriate concepts behind a concentration index, it should not be surprising that the evidence on whether or not branching increases concentration is mixed.

Concentration is likely to increase statewide and in metropolitan areas when statewide branching is introduced (Table 3). This is based partly on the fact that statewide branching states have higher concentration ratios (based on the five largest banks in each area) than other states. In addition, states that have changed their branching laws in the past 25 years to permit statewide branching have experienced larger increases in concentration than other states.

In rural towns, however, the introduction of branching is likely to reduce concentration. The study by Horvitz and Shull [14] found that when regional differences between states are taken into account, the average number of commercial banks in nonmetropolitan areas is larger in statewide branching states.

Not only is it unclear whether or not branching leads to higher concentration, but it is also unclear whether it leads to higher prices. The relationship between concentration and prices does not have a strong theoretical grounding. Economic theory tells us what is likely to happen to prices when the market consists of one firm (monopoly) or many firms (perfect competition). The monopoly produces less than the competitive firms and charges a higher price. But theory does not provide an answer as to how many firms are necessary for competition or what the effect on competition is likely to be from changes in the relative size of firms in the market.

The empirical evidence also does not provide answers to this question. Many studies have examined the relationship between changes in concentration and the price of a particular banking service. Interest rates on business loans were examined by Edwards [7], [8], Flechsig [9], Jacobs [15], and Phillips [23]. In general, only a weak positive relationship was found between concentration and business loans. The relationships between demand deposits service charges and concentration and between interest rates on time deposits and concentration were examined by Bell and Murphy [3] and by Edwards [8], respectively. Again, the relationships were found to be positive but weak.

On the supposition that these studies, by focusing on one price, might have underestimated the total impact of concentration on prices and availability of banking services, Heggestad and Mingo [12] examined a spectrum of bank services. Included were interest rates on time deposits and automobile installment loans, monthly charges on checking accounts, availability of overdraft services, and the total number of hours the bank was open each week. The results of this investigation were generally no different than for the other studies. For most of the banking services the study did not reveal a significant relationship between price or availability and concentration. And in those few cases where the relationship was significant, the impact of concentration was quite small.

Branching is Beneficial to Consumers

We have argued that fears about branching are unwarranted--the liberalization of branching will not reduce the availability of credit and increase the prices of bank

services generally. We now go on to argue that branching will benefit consumers. Evidence suggests that branches will provide more offices and more auxiliary services such as trust services, payroll services, special checking accounts, and foreign exchange services than will unit banks.

1. Branching Provides More Banking Offices

On a metropolitan-area basis, the evidence is clear that branch banking results in the provision of more offices. Table 4 shows that in 1974 there were more banking offices located in metropolitan areas (SMSAs) of statewide branching states than of unit banking states. This advantage held not only for all SMSAs, but for various population sizes of SMSAs.

The difference in number of banking offices between branching and unit banking SMSAs appears to be essentially due to differences in branching laws rather than to other factors. The evidence for this is based on a comparison of savings and loan association (SLA) offices in SMSAs having different bank branching laws. Since the late 1960s federal SLAs have been permitted to branch within any state, so the effect of state bank branching laws should not affect the comparison of SLA offices among SMSAs. Table 4 shows that while there are also more SLA offices in branching states than in unit banking states, the difference between the number of SLA offices is much smaller than the difference between the number of bank offices.

In nonmetropolitan areas the evidence shows that branching also provides more banking offices. The study by Horvitz and Shull [14] found that the average number of banking offices per town was larger in statewide branching states than in unit banking states for nine out of ten population-size groups after adjustments were made to eliminate the effect on the number of offices for factors other than population (Table 5).

Much stronger evidence that branching results in more banking offices comes from the experience in states following the liberalization of branching laws. One recent example is Minnesota—a unit banking state—which in 1977 liberalized its branching laws

to permit each bank to open two detached facilities within 25 miles of the bank as long as facilities are not placed in small communities already served by banks, i.e., small community banks are given home office protection.

The data on Minnesota detached facilities show that in the two and one-half years the new law has been in effect, 137 detached facilities have been opened in Minnesota. This represents an 18 percent increase in the number of bank offices in the state. What is surprising in the distribution of new offices in Minnesota is the relatively high proportion located in rural areas. The evidence cited above and the fact that many towns are not available for offices because of home office protection would lead us to expect the bulk of new offices to be located in metropolitan areas. Yet 44 percent of new offices were located in rural towns. And 22 percent of new offices were located in communities which previously had no banking offices.

2. Branching Also Provides a Wider Range of Banking Services

The evidence suggests that branching results in the provision of a wider range of banking services. Weintraub and Jessup [27] examined the provision of a number of services in 1962 by insured commercial banks, among which were revolving credit, trust services, special checking accounts, payroll services, and foreign exchange services. They found that there was little difference between large branch banks and large unit banks. But for banks smaller than \$25 million in deposits, branch banks provided more services. And, of course, large branch banks provided more services than small unit banks. A similar study was made by Kohn [17] for selected banking services in New York State during 1962. He concluded that unit banks made fewer of the services available than did large New York City banks or upstate branch banks.

II.

The Implications of the U.S. Experience for Montana

How applicable is the preceding evidence to the state of Montana? Our view, based on the structure of financial institutions in Montana, is that the conclusion derived from other studies—that fears about branching are unwarranted and that branching will benefit consumers—would hold for Montana.

The Expected Benefits

The structure of financial institutions in Montana exhibits certain characteristics that suggest that permitting branching would benefit consumers.

The first characteristic is the relatively small number of banking offices in Montana. In the metropolitan areas of Montana the two SMSAs-Billings and Great Falls-had 11 and 9 banks, respectively, in June 1978. A comparison to other SMSAs with the same population size (50,000 to 100,000) (Table 4) shows that the average number of offices in Montana SMSAs was about the same as for SMSAs in other unit banking states, but was only one-half as large as in SMSAs of statewide branching states.

Rural areas of Montana also have fewer offices than rural areas of statewide branching states with characteristics similar to Montana's. A comparison of Montana to South Dakota-a branching state that shares Montana's extremely low population density-shows that South Dakota has more offices per town for seven out of nine town-population-size categories (Table 6).

That there is an unmet demand for banking services in Montana is also apparent from the extensive branching by federal SLAs in Montana. Since the late 1960s, when federal branching restrictions were eased for SLAs with federal charters, the 13 SLAs operating in Montana have opened 33 branches in the state.

A Concern

The one characteristic of Montana's financial institution structure which many people use to argue that branching would not be beneficial to the citizens of the state is

the high concentration of bank deposits in two multibank holding companies. First Bank System and Northwest Bancorporation together had 22 bank affiliates controlling 38 percent of total deposits in the state as of June 1979. The concern of these people is that these two organizations, starting with an already high level of concentration, would grow substantially more. Some growth by these organizations is not altogether unrealistic given the evidence cited that the three states which have permitted statewide branching in the past 25 years have experienced increases in statewide concentration.

Although we also are concerned with a potential increase of bank concentration and its possible effect on prices and availability of banking services, we have argued previously that concentration alone is not necessarily a good indication of the competition in banking. Moreover, we see three factors which minimize our concern about Montana's banking industry.

First, Montana's two-banking firm concentration ratio is not high in relationship to other states. Seventeen other states had higher two-bank concentration ratios in 1978 than Montana.

Second, evidence suggests that even a high two-bank concentration ratio does not adversely influence prices and availability of banking services. A 1977 study by the Minneapolis Federal Reserve Bank looked at the prices and availability of banking services in Minnesota, where the statewide two-bank concentration ratio is even higher than in Montana [6]. The study, which in part compared Minnesota to the unit banking states, concluded that Minnesota's prices of banking services were in some cases higher but in other cases lower than unit banking states; and that for many services the availability was greater (Chart 7).

Third, Montana, unlike Minnesota, has a third large banking organization in the state—Western Bancorporation. Although at present it controls less than 5 percent of bank deposits in the state, it represents a potential major competitor for First Bank System and Northwest Bancorporation.

Conclusion

Given the evidence on the impact of branch banking throughout most of the United States, and given the structure of banking in Montana, we conclude that allowing Montana banks to branch would be a boon to both the industry and the customers it serves. We would expect to find more offices and more conveniently located offices. We would also expect to find bank services more generally available and, in particular, a greater amount of credit available in rural areas. Consequently, even though there is always some uncertainty in moving from the status quo, we believe the evidence strongly favors a freer banking environment.

Table 1 Status of State Branching Statutes for Commercial Banks, 1929, 1951, and 1978

	Statewide Branching	Limited Branching	Unit Banking
1929	9	Number of States 11	28
1951	17	14	17
1978	21	17	12

Sources: 1976, Roger S. White, "The Evolution of State Policies on Multi-office Banking from the 1930s to the Present," in Subcommittee on Financial Institutions of the Committee on Banking, Housing, and Urban Affairs of the United States Senate, Compendium of Issues Relating to Branching by Financial Institutions. October, 1976, p. 51.

> 1980, Donald T. Savage and Elinor H. Solomon, "McFadden Act Study Task Force Competitive Issues: Bank Concentration and Prices, Profits and Output Levels," Joint Department of Justice/ Federal Reserve Board Staff Report. 1980, Table 2, pp. 8-9.

Table 2 Commercial Banks and Branches, 1978

<u>State</u>	Number of Commercial Banks	Number of Commercial Banks with Branches or Additional Offices	Number of Commercial Bank Branches	Branches in Head Office City	a/ Branches in Head Office County		Branches In Non- Contiguous Countles
Statewide Branching	States						
Alaska	12	11	109	42	8	33	29
Aricona	28	10	482	126	1.38	141	77
California	244	166	3,878	512	515	759	2,092
Connecticut *	65	5 3	587	211	412	226	42
Delaware '	19	11	147	39	73	48	11
Bistrict of Columbia		13	137	137	ő	0	o
Havail.	11	10	154	55	41	4	54
ĭ doho	24	18	228	27	16	44	141
Haine	43	39	292	69	168	117	23
Horyland	106	81	852	202	202	304	199
Hevada	9	7	130 .	42	23	14	51
Haw Jersey *	184	157	1,530	283	792	396	221
New York *	298	168	3,313	1,599	895	1,046	770
North Carolina	89	72	1,683	231	134	299	1,019
Oregon *	63	36	525	113	78	116	232
Phode Island	17	13	226	62	125	72	35
South Carolina	87	67	659	122	76	80	381
South Dakota *	156	51	149	40	40	31	38
Utah *	68	25	250	41	71	38	100
Vermont	30	22	148	28	48	54	36
Virginia*	263	189	1,292	302	223	382	385
Washington *	103	62	781	272	251	151	226
Limited Branching Sta	ates						
Λlabama	312	164	550	298	217	17	18
Arkansas [*]	262	151	371	235	131	4	ì
Florida	617	325	727	387	336	4	. 0
Ceorgia *	440	241	778	372	260	55	91
Indiana *	406	27 3	1,034	537	498	1	0

Table 2 (continued)

Commercial Banks and Branches, 1978

<u>State</u> Limited Branchi	Number of Commercial Banks ng States (cont	Number of Commercial Banks with Branches or Additional Offices inued)	Number Commercial Bank Branches	a/ Branches in Head Office City	a/Branches in Head Office County	Branches in Contiguous Counties	Branches In Non- Contiguous Countles
lowa	657	271	500	268	170	62	o
Kentucky*	344	209	642	405	233	4	0
Louisiana*	256	184	713	403	298	9	3
Massachusetts	152	130	924	584	773	27	1
Michigan	365	293	1,789	773	674	332	10
l.ississippi*	185	143	633	228	158	114	133
New Hampshire *		53	135	68	86	23	0
New Mexico	87	65	227	147	70	9	1
Chio	482	351	1,938.	784	1,090	64	0
Pennsylvania	379	266	2,424	310	964	1,334	2
l'ennessee	350	252	952	581	357	6	. 8
Wisconsin	633	225	442	142	234	58	8
			•				
Unit Banking St	<u>Ates</u>					•	•
Colorado	394	67	73	63	6	4	0
lllinois *	1,277	325	388	358	27	3	0
Kansas*	617	133	255	244	6	4	1
Mianesota	761	139	176	102	57	16	1
Hissouri	720	315	398	301	95	2	0
Hontana	163	· 22	22	21	0	1	0 .
Nebraska*	459	79	198	194	3	1	0
North Dakota	174	74	115	39	46	29	1
Oklahoma *	485	117	211	198	9	4	0
Texas	1,401	174	183	180	3	0	0
Wast Virginia*	231	56	56	53	3	0	0
Myoming	88	3 ,	2	2	0	O	0

 $[\]stackrel{*}{\underline{a}}$ State has some form of home office protection law. These data include branches of mutual savings banks.

Table 3

Summary of SMSA Concentration Ratios, for Insured Commercial Banks 1966 and 1978 (weighted averages)

SMSAs in:	Largest Bank	Three Largest Banks	Five Largest <u>Banks</u>
Unit Banking States:			
1978	22.5	50.7	61.4
1966	27.1	58.8	68.5
Limited Branching States:			
1978	30.3	62.9	76.5
1966	36.4	72.1	84.6
Statewide Branching States:			
1978	34.9	69.0	81.4
1966	38.9 ~	77.3	89.2

Source: Federal Deposit Insurance Corporation Summary of Deposits 1966 and 1978.

Table 4

Average Number of Financial Offices in Metropolitan Areas

Population of Stan- dard Metropolitan Statistical Area (SMSA)	Statewide Branching States	Limited Branching States	Unit Banking States
		Bank Offices (1974)	_
50,000-100,000	20	16	10
100,000-500,000	54	47	24
500,000-1,000,000	145	131	67
1,000,000 and Over	338	452	211
All SMSAs	112	110	49
		gs and Loan Offices (1	
All SMSAs	25.4	24.8	19.0

Sources: Federal Deposit Insurance Corporation and Federal Home Loan Bank Board.

Table 5

Average Number of Bank Offices
Per Nonmetropolitan Community (1960)

Population Size of Community	Statewide Branch Banking		Unit <u>Banking</u>
Less Than 500	.16	Number of Offices	.09
500-999	.56		.42
1,000-1,999	.71		.65
2,000-2,999	.92		.97
3,000-4,999	1.12		.95
5,000-7,499	1.79		1.54
7,500-9,999	2.28		1.71
10,000-14,999	3.14		2.05
15,000-24,999	3.94		2.55
25,000 And Over	5.98		3.08

Note: The sample of communities used in this table was selected on the basis of a paired methodology. For example, a community in a statewide branching state was only included if a community of the same size in a unit banking state in the same region existed. The regions consisted of New England, Middle Atlantic, Southeast, Middle West-North, Middle West-South, Western Plains, and Far West.

Source: Calculated from data in Table 3 of Horvitz and Shull, "The Impact of Branch Banking on Bank Performance," The National Banking Review, March 1964, pp. 150-51.

Table 6

Average Number of Bank Offices
Per Nonmetropolitan Community
Montana and South Dakota

Population Size Of Community	Montana	South Dakota
Less than 500	.29	.51
500-999	.73	1.07
1,000-1,999	.93	1.26
2,000-2,999	1.90	1.63
3,000-4,999	1.82	1.67
5,000-7,499	1.40	1.67
7,500-9,999	1.25	4.00
10,000-14,999	3.50	5.80
15,000-24,999	4.33	
25,000 And Over	6.00	7.00

Note: Size of town is based on 1970 census data. Number of bank offices are as of June 30, 1978 for banks, and December 31, 1979 for branches.

Sources: U.S. Department of Commerce Bureau of the Census; Federal Reserve Bank of Minneapolis, and Federal Deposit Insurance Corporation.

Prices and Services at Banks in Minneapolis-St. Paul and in Urban Areas of States Which Prohibit Branching and MBHCs¹

(Based on 1973 survey)

	Minneapolis-	Urban Banks
	St. Paul	Restrictive
	Banks	States
PRICES (averages of prices reporte	d)	*
Interest Rates on:		
Savings deposits	4.59%	4.52%
Auto installment loans	9.49	9,36
Service Charges for:		
Checking accounts (monthly)	\$,28	\$1.02
Nonsufficient funds checks (unit)	3,30	2.49
Safety deposit boxes (min, annua	1) 5.60	5.18
SERVICE S		
Availability (% of banks offering)		
Overdraft credit	100%	36%*
Automated 24-hour service	20	18
Conventional mortgages	100	91
Trust services	20	55
Hours Open Weekly (averages)	40.6	34.9
Number of banks in survey	5	22

³ Illinois, Kansas, Nebraska, Oklahoma, and West Virginia; "inthan" areas are standard metropolitan statistical areas.

Source: Board of Governors of the Federal Reserve System.

^{*} Difference is significant at 10% level.

REFERENCES

- [1] The Administrator of National Banks, United States Treasury, Studies in Banking Competition and the Banking Structure, January 1966.
- [2] Alhadeff, David A., Monopoly and Competition in Banking, Berkeley: University of California Press, 1954.
- [3] Bell, Frederick W., and Neil B. Murphy, "The Impact of Market Structure on the Price of a Commercial Bank Service," Review of Economics and Statistics, May 1969, pp. 210-213.
- [4] Benston, George J., "The Optimal Banking Structure," <u>Journal of Bank Research</u>, Winter 1973.
- [5] Benston, George J., "Branch Banking and Economies of Scale," The Journal of Finance, May 1965, pp. 312-331.
- [6] Dahl, David S., Stanley L. Graham, and Arthur J. Rolnick, "Looking for Evidence of Noncompetitive Behavior in Minnesota's Banking Industry," Federal Reserve Bank of Minneapolis Quarterly Review, Fall 1977.
- [7] Edwards, F. R., Concentration and Competition in Commercial Banking: A Statistical Study, Federal Reserve Bank of Boston: Boston, 1964.
- [8] Edwards, F. R., "The Banking Competition Controversy," The National Banking Review, September 1965, pp. 1-34.
- [9] Flechsig, T. G., Banking Market Structure and Performance in Metropolitan Areas, Board of Governors of the Federal Reserve System: Washington, D.C., 1965.
- [10] Gilbert, Gary G., and William Longbrake, "The Effects of Branching by Financial Institutions on Competition, Productive Efficiency and Stability: An Examination of the Evidence," Journal of Bank Research, Part I, Autumn 1973, Part II, Winter 1974.
- [11] Guttentag, Jack M., and Edward S. Herman, "Banking Structure and Performance,"
 New York University Graduate School of Business Administration, Institute of
 Finance, The Bulletin, No. 41/43, February 1967.
- [12] Heggestad, Arnold A., and John J. Mingo, "Prices, Nonprices, and Concentration in Commercial Banking," Journal of Money, Credit and Banking, February 1976, pp. 107-117.
- [13] Horvitz, Paul M., "Economies of Scale in Banking," Private Financial Institutions, Englewood Cliffs, New Jersey, Prentice-Hall, Inc., 1963, pp. 1-54.
- [14] Horvitz, Paul M., and Bernard Shull, "The Impact of Branch Banking on Bank Performance," The National Banking Review, March 1964, pp. 301-341.
- [15] Jacobs, Donald, Business Loan Costs and Bank Market Structure, New York, National Bureau of Economic Research, 1971.

- [16] Johnston, Verle, "Comparative Performance of Unit and Branch Banks," in Proceedings of a Conference on Bank Structure and Competition, Chicago, Federal Reserve Bank of Chicago, 1967.
- [17] Kohn, Ernest, Branch Banking, Bank Mergers, and the Public Interest, New York State Banking Department, January 1964.
- [18] Kohn, Ernest, Carmen J. Carlo, and Bernard Kaye, Meeting Local Credit Needs, New York State Banking Department, 1973.
- [19] Kohn, Ernest, and Carmen J. Carlo, The Competitive Impact of New Branches, New York State Banking Department, December 1969.
- [20] Longbrake, William A., "Productive Efficiency in Commercial Banking: The Impact of Legal Form of Organization and Size," Federal Deposit Insurance Corporation, 1973.
- [21] Mote, Larry R., "The Perennial Issue: Branch Banking," Federal Reserve Bank of Chicago, Business Conditions, February 1974.
- [22] Mullineaux, Donald J., "Branch Versus Unit Banking: An Analysis of Relative Costs," in Changing Pennsylvania's Branching Laws: An Economic Analysis, Technical Papers, Philadelphia, Federal Reserve Bank of Philadelphia, 1973.
- [23] Phillips, Almarin, "Evidence of Concentration in Banking Markets and Interest Rates," Board of Governors of the Federal Reserve System, Federal Reserve Bulletin, June 1965, pp. 916-26.
- [24] Savage, Donald T., and Elinor H. Solomon, "McFadden Act Study Task Force Competitive Issues: Bank Concentration and Prices, Profits, and Output Levels," Joint Department of Justice/Federal Reserve Board of Governors Staff Report.
- [25] Schweiger, Irving, and John S. McGee, "Chicago Banking," <u>Journal of Business</u>, July 1961, pp. 203-366.
- [26] Subcommittee on Financial Institutions of the Committee on Banking, Housing, and Urban Affairs, United States Senate, Compendium of Issues Relating to Branching by Financial Institutions, October 1976.
- [27] Weintraub, Robert, and Paul Jessup, A Study of Selected Banking Services by Bank Size, Structure, and Location, Subcommittee on Domestic Finance of the House Committee on Banking and Currency, Washington, 1964.
- [28] Zorn, Robert E., "The Time is Past for Unit Banking," The Bankers Magazine, January-February 1980, pp. 66-74.