

Bank Stock Ownership and Bank Control: The Evidence from Wisconsin, 1860-1900

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This paper reports on the initial stages of an ongoing study of 19th century Wisconsin bank sources and uses of funds. Data on 19th century Wisconsin state, private, and national bank shareholders, and owners from 1860 through 1900 are used to explore the following questions: (1) Where did the equity capital invested in Wisconsin banks originate and how did this and other shareholder characteristics change over the period? (2) How widely held was the average bank's stock and to what extent were the state's apparently independent unit banks connected via common shareholders, directors, and officers?

Connections between financial institutions and the economic impact of these relationships have been of interest to historians, economists, and politicians for some time. The report of the Pujo Committee [27] reported on relationships between the nation's largest financial institutions. More recently, congressional committees have investigated relationships between financial institutions, including shareholder links, and economists have become interested in bank market structure and individual bank performance.¹ Richard Sylla [11 and 2] recently offered a controversial explanation of the structure of 19th century country banking markets that relies in large part on the impact of the national banking system on bank entry. This paper examines bank ownership patterns in a single state, Wisconsin, between 1860 and 1900 to shed new light on these issues. An examination of the geographical sources of bank capital provides new information on 19th century capital flows within and between regions.² Shareholder data provide information on the importance of non-local control of individual banks and the extent to which these banks were controlled by an individual or small group of dominant shareholders. Relationships between Wisconsin state-chartered banks are identified and the effects of these on local market structure are discussed. Differences between bank types and changes in ownership and control patterns over time are emphasized. Entry into banking was relatively unrestricted in the last half of the 19th century and it is useful to examine the patterns of control that developed in these circumstances.

DATA

Semiannual reports of bank shareholders filed with various state agencies beginning in 1853 provided information on state and private bank shareholders and owners.³ The following was coded for each shareholder for census years 1860-80: census year, bank location, bank type, stockholder name, address and amount of capital stock owned, total bank capital stock, and investor type (individual, institutional, sex, and so on). Because of the large number of shareholders in 1890 and 1900, only out-of-state shareholders or shareholders living outside the bank county and owning stock with a par value of \$500 or more were included in the initial analysis reported here.

National banks were required to submit lists of shareholders to the comptroller annually but these were never printed and the originals have been destroyed.⁴ The comptroller did report summary statistics on national bank shareholders on a state-by-state basis for several years between 1876 and 1897.⁵ These were used to develop information on shareholders in Wisconsin national banks. Information on original national bank shareholders is presently being added to the data set.

FINDINGS

Sources of Bank Capital

The real beginning of banking in Wisconsin dates from the "Free Banking" Law of 1852.⁶ The response to the act was rapid and by 1860 there were 106 state-chartered banks in operation with a nominal capital stock of over \$6.5 million.⁷ Despite some overstatement of the amount of capital actually paid in, the amount invested in banking in a new state is impressive.⁸ Contrary to popular opinion, most of these were not "wildcats" but commercial banks conducting a loan, deposit, and note-issuing business typical of that period.⁹

The most striking feature of Table 1 is the substantial number of shareholders in 1860 who did not reside in Wisconsin. Approximately 48 percent of total shareholders owning over 40 percent of total capital stock were residents of other states. About \$1.5 million or 22.5 percent of total capital stock came from one state, New York, while residents of Connecticut and Vermont contributed \$165,800 and \$126,300 respectively. Illinois residents owned stock valued at \$531,000.¹⁰

Capital was a scarce resource in antebellum Wisconsin and the substantial amounts of capital supplied by out-of-state investors was an unexpected finding. Many resided in states that contributed substantial numbers of immigrants to Wisconsin and these individuals maintained close ties to the old areas through relatives, friends, and business associates. Personal contacts, rather than the development of an impersonal long-term capital

Table 1
WISCONSIN STATE AND PRIVATE BANKS, NUMBER OF SHAREHOLDERS AND AMOUNT OF CAPITAL STOCK

	1860	1870	1880	1890	1900	1910
Shareholders, number	1,215	56	410	n.a.	n.a.	n.a.
Nonresidents	580	2	22			
Percent	47.7	3.6	5.4			
Wisconsin residents	511	54	388			
Percent	52.3	96.4	94.6			
Individuals, percent	95.1	91.1	91.7	94.6 ^a	94.5 ^a	n.a.
Males, percent	85.6	91.1	90.2	n.a.	n.a.	n.a.
Total capital stock	\$6,579,299	\$525,000	\$1,607,756	\$5,792,300	\$7,699,000	\$15,093,000
State banks	6,579,299	525,000	1,607,756	4,509,300	6,588,000	15,093,000
Private banks	n.a.	n.a.	n.a.	1,283,000	1,111,000	--
Nonresidents	2,708,241	13,425	79,650	282,884	451,783	590,847
Percent	41.2	2.6	4.9	4.9	5.9	3.9
Residents	3,651,358	511,575	1,528,106	5,509,416	7,247,217	n.a.
Percent	58.8	97.4	95.1	95.1	94.1	n.a.
Individuals, percent	96.6	95.4	98.9	n.a.	n.a.	n.a.
Males, percent	93.7	95.4	95.6	n.a.	n.a.	n.a.

Source: See Note 3.

^aEstimated.

n.a. Not available.

market, explain the large amount of "foreign" capital invested in Wisconsin state banks in 1860. Investment in a bank established by a relative, friend, or former business associate was a way to reduce risk premiums and information costs normally associated with distant equity investment in a period when few such investments did not require personal involvement.

By 1870 conditions had changed dramatically. The number of state banks had declined from 106 to 14, the number of shareholders from 1,215 to 56, and total capital stock from \$6.5 million to \$525,000. Many of the banks operating in 1860 subsequently liquidated with losses to owners and depositors while others wound up their affairs in more orderly fashion. In addition, approximately 16 converted to national charters in 1864 and 1865.¹¹ Two factors were mainly responsible for these changes. First, the peculiar nature of the state's banking law made state-chartered institutions vulnerable when southern securities, used to secure bank notes, declined in price as the Civil War approached. Second, the establishment of the national banking system and the imposition of the 10 percent tax on state bank notes created an attractive alternative to a state bank charter for both bankers and investors. In 1870 investment in the few remaining state banks by nonresidents had almost disappeared with the two out-of-state shareholders owning stock valued at \$13,425.¹²

In the decades after 1870 state banks made substantial gains, numbering 507 by 1910, but the share of total bank capital controlled by nonresidents never exceeded 6 percent. The figure for 1880 was 4.9 percent, above the 2.6 percent for 1870 but far below the 41.2 percent for 1860. Capital stock figures for 1890 and 1900 include investment in private (unincorporated) banks as well as state-chartered institutions. In 1890, nonresident investors controlled 4.9 percent of stock outstanding and this had risen slightly to 5.9 percent by 1900. By 1910 private banks had been legislated out of existence and most had converted to state charters. Nonresidents owned approximately 3.9 percent of total state bank stock.

For census years 1860 through 1900, it is possible to estimate the share of total bank capital owned by local (same county) residents. In 1860 local residents owned only 37.8 percent of total bank capital stock. In 1870 this had risen to 97.4 percent indicating that Wisconsin state banks were almost completely locally controlled. The importance of local shareholders in state and private banks remained high through 1900, averaging between 86.0 and 90.5 percent. Nonlocal investors were not important contributors of state bank capital in the post-1865 period.

The *Annual Report* of the Comptroller of the Currency reported data on residence and type of national bank shareholder by state for the years 1876, 1886-89, and 1897 (see Note 5). The original lists of individual shareholders have been destroyed

but the reported summary data provide considerable information on national bank shareholdings. Surprisingly, only R. M. Breckenridge [1] in an 1898 article seems to have made extensive use of this. It was hypothesized that nonresident investors would be more important in national as compared with state banks because of supposedly greater safety and greater familiarity to the average investor.

Wisconsin national bank shareholder data are reported in Table 2. In 1876, out-of-state investors made up about 33 percent of total shareholders and owned about 25 percent of total Wisconsin national bank capital stock outstanding. This is substantially higher than the 2.6 and 4.9 percent reported for state banks in 1870 and 1880. Between 1887-89, nonresidents owned between 10.6 and 13.1 percent of outstanding national bank shares and accounted for between 19 and 22 percent of shareholders by number. Total shares owned by nonresidents in these years was below the 24.6 percent reported in 1876 but well above the 4.9 percent of state bank capital stock owned by nonresidents in 1880 and 1890. By 1897 the number of national bank shares owned by nonresidents had declined to 12.2 percent when they accounted for 15.3 percent of the total number of shareholders. These figures suggest that out-of-state investors were important in the early development of the national banking system in Wisconsin; some of these undoubtedly had transferred over from state banks when these converted to national charters in the 1860s. By the 1880s, their relative importance had declined but still remained about twice as important as their role in state banks in the same period.

Beginning in 1887 the *Annual Report* of the comptroller reported shareholder information for country and Milwaukee national banks separately. Between 1887-89, 91 to 93 percent of the outstanding shares of Wisconsin country national banks were owned by residents who constituted between 84 to 88 percent of all shareholders. The importance of nonresident shareholders had increased by 1897 to 12.3 percent of the shares outstanding and 13.2 percent of all shareholders. These figures are not significantly different from those reported for state banks for 1880 through 1900 and indicate that foreign capital did not move into Wisconsin country national or state banks in large amounts during this period.

Nonresident shareholders were more important investors in Milwaukee national banks. Nonresidents owned between 32 and 38 percent of shares outstanding and accounted for between 73 and 76 percent of shareholders by number between 1887-89. This is consistent with the finding that out-of-state investment in state banks in 1860 was heavily concentrated in several large banks in and around Milwaukee. By 1897 the percentage of shares owned by nonresidents had declined from 39 to 12.3 and their relative importance in the number of shareholders fell from 76 to 26

Table 2
 WISCONSIN NATIONAL BANKS'
 SHARES OUTSTANDING AND NUMBER OF SHAREHOLDERS

	1876 ^a	1887	1888	1889	1897
Shares held by					
Country banks	39,000	44,350	47,000	49,250	69,600
Nonresidents	9,594	3,180	3,774	4,263	8,548
Percent	24.6	7.1	8.0	8.7	12.3
Residents	29,406	41,170	43,266	44,987	61,052
Percent	75.4	92.9	92.0	91.3	87.7
Individuals					
Percent	99.9	99.9	99.9	99.9	99.5
Milwaukee banks		6,500	8,500	8,500	32,500
Nonresidents	n.a.	2,134	3,237	3,286	4,202
Percent		32.8	38.1	38.7	12.9
Residents	n.a.	4,366	5,263	5,214	28,198
Percent		67.2	61.9	61.3	87.1
Individuals					
Percent		100.0	100.0	99.9	100.0
Total nonresidents					
Percent	24.6	10.6	12.7	13.1	12.4
Shareholders, number					
Country banks	943	1,203	1,305	1,357	2,526
Nonresidents	318	148	162	217	333
Percent	33.7	12.3	14.4	16.0	13.2
Residents	625	1,055	1,143	1,140	2,193
Percent	66.3	87.7	87.6	84.0	86.8
Milwaukee banks	n.a.	145	144	145	395
Nonresidents		106	104	110	109
Percent		73.1	72.2	75.9	27.6
Residents		39	40	35	286
Percent		26.9	27.8	24.1	72.4
Total nonresidents					
Percent	33.7	18.8	18.4	21.8	15.3

Source: See Note 5.

^aCountry bank figures for 1876 are for all Wisconsin national banks.

percent. This was attributable to the establishment of a large new bank, the Wisconsin National, financed mainly by local funds.

Information on national banks in other states for these years is summarized in Table 3. (Nonresident shareholders are defined as shareholders living in a state other than where a bank is located.) In 1876 nonresidents owned 10.5 percent of all national bank shares, substantially below the 24.6 percent reported for Wisconsin national banks, but by 1887-89 the Wisconsin figure was below the national figure. By 1897 the Wisconsin country national bank figure of 11.2 percent was approximately the same as the national average. Nonresident shareholders in Milwaukee banks were significantly above the national average in the 1880s but about the same by 1897. The percentage of total shareholders who resided outside the state was much higher for all Wisconsin national banks in 1876 than for all national banks but similar in the 1880s and 1897. Milwaukee national bank nonresident shareholders were significantly more important than in all national banks in the 1880s but about the same by 1897.

It is instructive to compare Wisconsin with nearby states. The figures indicate that Wisconsin national banks relied more heavily on external capital than did other midwestern states in the first 20 years of the national banking system. By the 1880s nonresident shareholders controlled a smaller percentage of Wisconsin country national bank shares than they did in both midwest regions. In 1897 Wisconsin country banks stood between the averages of the two regions in relative importance of shares owned by nonresidents. The percentage of Milwaukee national bank shares owned by nonresidents was substantially above the Midwest averages in the 1880s but by 1897 it had moved to about the same relative position. The figures show that shares owned by nonresidents were relatively more important in the newer states of Minnesota, Kansas, and Nebraska than in the older states of Ohio, Indiana, Illinois, and Michigan. Wisconsin ranked with the newer states in 1876 but with the older states by 1897.

In summary, Wisconsin bank capital provided by nonresidents was of substantial importance in 1860 but moved mainly in response to personal contacts and not through a well-organized equity market. In subsequent years, nonresident investment in state (and private) banks was insignificant. Early Wisconsin national banks received about a quarter of their original equity funds from nonresident shareholders and replaced state banks as an outlet for foreign capital. An important part of out-of-state investment throughout the period was directed toward Milwaukee institutions. The relative importance of foreign capital in Milwaukee national banks was substantially above the national and midwest averages in the 1880s but about the same or slightly less in 1897.

Table 3
 NATIONAL BANKS' NONRESIDENT SHAREHOLDINGS AND SHAREHOLDERS
 (Percentage)

	1876	1887	1897
Shares held by			
Nonresidents			
United States	10.5	12.2	13.8
Midwest I ^a	11.2	14.2	16.4
Midwest II ^b	9.7	8.4	10.8
Ohio	6.9	5.7	7.4
Indiana	10.2	8.1	12.2
Illinois	7.2	6.5	7.2
Michigan	15.8	9.4	12.1
Wisconsin	24.6	7.2	12.3
Iowa	7.9	18.9	14.0
Minnesota	18.1	28.7	25.8
Kansas	16.7	26.9	43.6
Nebraska	41.3	18.6	27.8
Missouri	19.4	7.0	13.4
Individuals			
United States	n.a.	90.1	89.9
Midwest I	n.a.	99.1	98.3
Midwest II	n.a.	99.3	98.1
Shareholders			
Nonresidents			
United States	11.7	12.0	15.0
Midwest I	12.5	14.9	19.2
Midwest II	10.9	8.6	10.9

Source: See Note 5.

^aMidwest I: Ohio, Indiana, Illinois, Michigan, Wisconsin, Minnesota, Missouri, Kansas, and Nebraska.

^bMidwest II: Ohio, Indiana, Illinois, Michigan, and Wisconsin.

Shareholder Characteristics

Almost all Wisconsin bank shares outstanding were owned by individuals in the 19th century. Over 90 percent of the number of shareholders in state banks were individuals in the census years 1860-80. Extending the analysis to 1890 and 1900 with limited samples indicates no change in this pattern. It was hypothesized that ownership of state bank shares by other banks, other financial institutions, and nonfinancial businesses would be important but they never owned more than 5 percent of total capital stock and usually substantially less. Legal constraints are probably responsible for this pattern. A casual inspection of the data indicates that well-known businessmen did invest in state banks but as individuals and not through their firms.¹³ The percentage of shares controlled by trustees, guardians, administrators, estates, executors, or heirs was never important and did not increase between 1860 and 1880, contrary to expectations. The comparable figures for Wisconsin national banks are even more striking. Over 99 percent of Wisconsin national bank shares from 1876 to 1897 were owned by natural persons and ownership by corporations and other institutions was almost nil. For all United States national banks, corporations held between 8 to 11 percent of total capital stock outstanding and accounted for 3.1 to 4.4 percent of total shareholders. Both figures are substantially above those for Wisconsin banks and the Midwest regions.¹⁴

Ninety percent or more of state bank shareholders in each year were men and their relative importance in terms of shares owned was even higher. In 1860 average investment per woman shareholder was about \$1,700 compared with \$5,900 for the average male shareholder. The comptroller first reported on women shareholders for 1893-94 when women held 18.9 percent of total national bank capital stock outstanding and 12.4 percent of total nonnational bank capital.¹⁵ The comptroller first reported on women shareholders by state in 1897. Approximately 19 percent of Wisconsin country and 27 percent of Milwaukee national bank shareholders were women and they owned 16.2 and 32.5 percent, respectively, of shares outstanding [18, p. 13]. In 1904 women made up 21.7 percent of Wisconsin national bank shareholders by number and controlled 16.3 percent of total national bank capital stock [19, pp. 16-17 and 86]. This is higher than for state banks at earlier dates and probably reflects the effects of inheritance and the longer life expectancy of women.

Control Patterns Among Wisconsin State Banks 1860-80

In 1860 77 of 106 state banks had five or fewer shareholders and 39 had at least one shareholder who owned 50 percent or more of the outstanding stock.¹⁶ At the other extreme were seven

banks, with between 42 and 124 shareholders, accounting for over 50 percent of all shareholders and about 25 percent of total state bank capital. Roughly 75 percent of out-of-state shareholders owned shares in these seven banks in 1860.¹⁷ The average capital stock of these institutions was \$239,286, the average number of shareholders 93, and average shareholder investment \$2,573; for the remaining 99 banks the average figures were \$49,538, 5.7, and \$8,696, respectively. Ownership of shares by individuals not closely involved in a bank's day-to-day operations was concentrated within these large institutions. Impersonal capital did not flow into Wisconsin state banks in general but into these few large, widely held institutions.

By 1870 only one bank had more than five shareholders and 10 of the 14 banks had three or fewer. The large, widely held banks of 1860 had converted to national charters and state banks remaining in 1870 were generally small, closely held firms. In 1880, 15 of the 31 state banks reported 10 or more shareholders but none reported more than 50 shareholders.

It is difficult to study interbank relationships and this is especially true in examining information on 19th century banks. Data on individual Wisconsin state bank shareholders for 1860-80 were used to study shareholder relationships, particularly those where individual shareholders owned shares in more than one state bank. The analysis was limited to relationships between Wisconsin state banks because information on national bank shareholders, private bank owners, and shareholder interests in non-Wisconsin banks was not available.¹⁸

There are several reasons for expecting that state banks in the period 1860-80 might have been dominated by a few individuals owning shares in several banks. Such arrangements are sometimes hinted at in the historical literature. Second, investors with an interest in one bank might look favorably on investment in additional banks. Third, control of several banks is a possible way to exert monopoly power and earn higher profits. Fourth, if wealth is concentrated in relatively few individuals as it was in 19th-century Wisconsin, bank stock ownership would tend to be concentrated in the hands of a few individuals.¹⁹ Finally, owning shares in two or more banks could be a primitive way to diversify an investment portfolio.

On the other hand, there are some factors working against the establishment of substantial interbank relationships via ownership and management links. First, banking markets were limited geographically and there was a strong tradition favoring local ownership in these geographically limited areas. Second, nonpecuniary income might be attached to ownership and control of local banks. The local banker was (and is) an important individual in the local community and these rewards would be captured only by local investors. Third, some businessmen who invested in banks did so partly to assure a local source of funds and local bank investment complemented these other activities. Investment

in a local bank would be more valuable than owning shares in a nonlocal bank or a nonbank institution. It was hypothesized that the factors favoring substantial multiple holdings would outweigh the negative factors so that a substantial number of cases of multiple ownership and common management would be observed in the period 1860-80 among Wisconsin state banks.

In 1860, 84 shareholders, all individuals, owned shares in two or more Wisconsin state banks; 65 owned shares in two, 17 in three, 2 in four, and none owned shares in more than four banks. These shareholdings amounted to \$2.7 million of the \$6.5 million total state bank capital stock. The shareholdings of these individuals were heavily concentrated in six large banks all with over 40 shareholders; 20 owned shares in one of these six, 30 owned shares in two, and 6 owned shares in three of them. There were 21 shareholders who owned 20 percent or more of the outstanding stock in two banks not included in the above six, and seven individuals who had a similar interest in three such banks. If a bank chain is loosely defined to include cases where from one to three shareholders owned a 20 percent or more interest in two or more closely held banks, there were 12 chains involving a total of 28 separate banks.²⁰ The size of each chain is surprisingly small with none having more than three banks. Only one nonresident was involved so that all but one of the chains were controlled by Wisconsin investors. Ownership of two or more banks in the same county has the potential for substantial monopoly power, but in 1860 only two individuals owned a substantial interest in two banks within the same county.

In 1870 relationships between state banks were almost nonexistent. Only one individual owned shares in two banks, 20 percent in one, and 25 percent in the second.²¹ The pattern was much the same in 1880 when three shareholders owned an interest in more than one state bank but only one of the multiple holdings was significant. An analysis of later years will be undertaken when more data become available. Adding national bank shareholders to the data set will make it possible to determine the number of 1860 state bank shareholders who subsequently invested in national bank stock.

SUMMARY

The major findings can be briefly summarized. In 1860 almost one-half of Wisconsin state bank shareholders owning about 40 percent of total bank capital stock resided outside the state. This surprisingly large amount of "foreign" capital moved primarily in response to personal contacts and not through a well-developed, impersonal capital market. By 1870 and continuing through 1910, out-of-state investment in Wisconsin state banks was almost nonexistent probably reflecting the poor record of state banking in the 1860s, the development of an alternative

bank investment in the form of national banks, and a tradition favoring local bank ownership. Data on national bank shareholders are available for several years beginning in 1876 when about 25 percent of total capital was provided by out-of-state investors. Nonresident shareholding in Wisconsin national banks declined to about 12 percent by 1887 and remained about the same through 1897. Nonresident shareholders were somewhat more important in Milwaukee national banks but they had declined in importance by the end of the period. Throughout, almost all shareholders were individuals with institutional holdings almost nil. Males outnumbered female shareholders although there was an increase in the number and importance of female shareholders over time. State banks tended to be owned by five or fewer shareholders with few banks reporting 20 or more shareholders. Contrary to expectations, bank chains were not important in 1860 and multiple holdings had virtually disappeared by 1870. The structure of local banking markets was not significantly altered by ownership links between individual banks.

The next step will be the addition of information on original national bank shareholders to the data set which will allow for an examination of the movement of investors in state banks to the national system in the post-1863 period and an analysis of links between state and national banks via common shareholders. Developing biographical data on shareholders will enable other characteristics of investors in Wisconsin banks to be studied.

NOTES

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1. [24, 23, and 22]. For a review of the structure-performance literature, see [5]. For a recent review of banking structure, see [7].

2. For an analysis of share ownership in the antebellum textile industry, see [4]. Equity provides a smaller percentage of total funds in banking than in other industries. Major sources of bank funds in the 19th century were deposits and notes issued. Deposits came mainly from the local area and were not considered important in the interstate movement of funds. Capital investment was, therefore, a major means of attracting non-local investment into 19th century banking.

3. The Banking Law of 1852 required that an accurate list of shareholders be kept and filed semiannually with the local registrar of deeds and the state bank comptroller. These original handwritten reports are in Wisconsin State Archives, State Historical Society of Wisconsin, Records of the State Treasurer,

Statements of the Names of Bank Stockholders (Semi-Annual 1853-1902), Series 3/1/176. The information was published, usually annually, in the following: [25, 28, 29, 30, 26, and 27]. The printed reports were used except when lists were missing. A check of the printed lists with the original reports indicated a high degree of correspondence.

4. The original purpose of the annual lists was to enable the comptroller's office to locate shareholders if it became necessary to assess them with the double liability provisions of section 5151 of the revised statutes. The Banking Acts of 1933 and 1935 eliminated this double liability provision [20].

5. [12, 13, 14, 15, 16, and 18]. The figures reported in the 1886 *Report* for Wisconsin appear to be incorrect and have been omitted from all calculations. The total number of shareholders was reported to be 14,250, far below the 39,999 reported in 1876 and the 44,350 reported in 1887.

In addition, the following *Reports* contained much less complete state-by-state information drawn from the stockholder lists: 1901, pp. XVIII-XIX; 1902, pp. 17 and 75; 1903, pp. 15 and 67; 1904, pp. 16-17 and 86; and 1913, pp. 21-23. In general, these reports contain information on the number of shares and shareholders by state. The original report was in response to a congressional resolution.

In the 1897 *Report*, [18, p. XXIX], the comptroller reported that "Prior to 1887 shares were taken at the par value, varying from \$10 to \$200 each, as converted state banks were permitted to reorganize as national banks without change of original divisions of stock; subsequently the shares of every bank were reduced in compiling the returns to a par of \$100 each."

6. Several special charter banks were created beginning in 1836 but the last one had ceased operations by 1842. There were approximately 25 private (unincorporated) banks operating in 1860 but little data on these institutions are available until 1879 when state agencies began reporting on their activities.

7. For a discussion of Wisconsin banking from 1853 through 1914, see [8 and 6].

8. According to Leonard B. Krueger [8, p. 70], the Wisconsin banking law was vague with respect to capital requirements and paid-in provisions. The 1860 figures probably overstate local investment and understate the relative contribution of nonresident investors.

9. There were some wildcat banks. Krueger [8, p. 63] reported that three banks listed in the 1858 state *Report* could not be located. In stressing the importance of "wildcat" banks, Krueger was evidently misled by the low loan to total asset ratios of several new banks.

10. There were no shareholders reported who resided outside the United States. Lee Soltow reported 46 males in Milwaukee County having wealth of more than \$100,000 in 1860. Exactly half were born in New York State and an additional four were born in

Connecticut and Vermont. Of the 46, about 14 owned shares in Wisconsin state banks in 1860 (eight were born in New York State). These holdings were concentrated in the widely held banks in Milwaukee. See [10, p. 32].

11. Changes in Wisconsin banking during the 1860s are described in [9, pp. 187-219; and 8, pp. 75-96].

12. Of the 56 shareholders of 1870, 13 appeared as shareholders in 1860. The remaining 1,202 shareholders of 1860 no longer appeared on the list in 1870.

13. Well-known businessmen who appear on the stockholder lists at various times include P. D. Armour, Phillip Best, Valentine Blatz, J. I. Case, Latham Cornell, J. S. Kimberly, James Ludington, Alexander Mitchell, Guido Pfister, John Plankington, Joseph Schlitz, and Frederick Weyerhaeuser.

14. Ownership of bank stock by the same bank, other banks, trust departments, other financial institutions and nonfinancial corporations was so small in 19th century Wisconsin that examining some issues which have received attention recently is unnecessary. Bank control of nonbank institutions can not be examined until more data are available.

15. [17, p. 13]. "In April, 1893, as a result of an inquiry instituted by this Bureau, reports were received from national banks showing the number and value of shares of stock owned therein by women, the number of women employed, and the amount paid them as compensation by the banks. In June last similar information was submitted by banks incorporated under state authority."

16. Between 1860 and 1880 the largest bank in the state was the Wisconsin Marine and Fire Insurance Company, a state-chartered institution located in Milwaukee. For each year the bank had only two listed shareholders, Alexander Mitchell and David Ferguson.

17. The banks with over fifty shareholders in 1860 included

Farmers and Millers Bank	Milwaukee	124
Racine County Bank	Racine	109
Juneau Bank	Milwaukee	103
State Bank of Wisconsin	Milwaukee	100
Bank of Milwaukee	Milwaukee	96
Central Bank of Wisconsin	Watertown	77.

18. The ongoing study will extend the analysis to national banks. In addition, data on state and private bank shareholders and owners owning shares valued at more than \$1,000 in 1890 have been coded and the analysis will be extended to that year.

19. For evidence on wealthholding in Wisconsin see [10].

20. For a discussion of some of the difficulties in developing information on bank chains, see [3].

21. He was reported as owning the same interests in 1860 along with a one-third interest in another bank not in existence in 1870.

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