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Lynne Doti
Chapman University, ldoti@chapman.edu

Richard Runyon
University of Cambridge

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EFFECT OF REGULATION ON BANKING: CALIFORNIA 1879-1929

Lynne Pierson Doti and Richard Runyon
School of Business and Economics, Chapman University

ABSTRACT

California presented a virtually unregulated banking environment until the first comprehensive banking regulations were passed in 1905. The first regulations, and subsequent changes in 1909, required reserves and paid up capital. Several tests of commonly accepted measures of safety are compared for selected years before and after the regulations. These tests include comparison of bank reserves, paid up capital, bank failures, and real estate loans that resulted in foreclosure. Results of the tests do not clearly demonstrate that the safety of individual banks was enhanced, but do support the conclusion that the safety of the banking system as a whole was enhanced.

Introduction

Various theories of bank performance and structure have been tested using historical data, which has several advantages over contemporary data. Capital markets were more segregated then they are now and, because banks and their close substitutes were subject to less regulation and entry restrictions, they were freer to respond to market forces, a situation which produced a large variety of situations for analysis and comparison.

Researchers still are trying to determine the effect of regulation on the safety of the financial system. The increasing complexity and interdependence of the banking systems of various countries led to the beginnings of international regulation of banks with the Basel agreements of 1988, and further international regulations are forthcoming. However, bank failures continue to be a problem in the United States and other countries, and the recent failure of the international BCCI proved that the increasing size and ease of international transactions may bring even larger problems in banking. The question of the effect of regulation on safety has some urgency.

Money, Credit And Free Banking

With the generally acknowledged importance of money and credit to the performance of the economy, regulation was inevitable. Governments, at all levels, sought control. Since banks are the conduit to the economy for both money and credit, the banking system became a regulated industry. While

probably inevitable, whether this is desirable is an area of controversy. The first modern history of U.S. banking, Bray Hammond's *Banks and Politics in America from the Revolution to the Civil War*, was a case for regulation.[1] Even free market advocate Milton Friedman once stated that money creation and distribution is an industry that requires regulation.[2]

More recently, some economists have developed the theory that banks produce a steadier flow of money and credit without any regulation at all. George Selgin, in *The Theory of Free Banking*, and Lawrence White in *Free Banking in Britain: Theory, Experience and Debate, 1800-1845*, described a free banking system where banks issued distinctive notes and deposit accounts backed by guarantees to pay gold or silver on demand. Banks competed on the basis of acceptability of the payment mechanism, and through longer hours and more convenient locations.[3] *Free Banking: Theory, History, and a Laissez-Faire Model*, by Larry J. Sechrest, suggested that free banking, in the sense of allowing banks to be governed only by the market forces, combined with a system of fractional gold reserves, provides a system which will satisfy the need for a stable flow of money and credit. He suggested that such a system will prevent money from being the cause of economic disturbances, provide a stable economic environment, and offset major disturbances that arise from nonmonetary sources.[4]

Free banking, as defined by Secrest, denotes a market-oriented, decentralized approach to money. The most obvious features of free banking are the absence of any central monetary authority and the issuance of notes as well as deposit accounts by individual private banks.[5] While the term free banking has been used to describe the situation in the United States from 1837 to 1863, in this context the term denotes a situation where banks could be chartered simply by meeting certain requirements, but were, in most states, not free banking situations as defined by Secrest. In fact, this period, by its lack of *national* bank regulation, spawned a variety of banking regulatory environments in the various states. Hugh Rockoff and others have thoroughly studied the results of the freedom of this period.[6]

Lawrence White has done some well noted work on the Scottish banking system as an example of a true free banking environment. There were, from 1765 to 1844, only a few restrictions on bank behavior. The first was unlimited liability for the bank owners. The second was the restriction on notes of value of less than one pound sterling and the requirement that banks redeem notes for specie immediately when due.[7] Sechrest added the possibility that interest rate ceilings were an important restriction, that unlimited liability was a barrier to entry and that ultimately, the Scottish banking system was too closely tied to the Bank of England to respond freely to market forces.

Scotland and the Antebellum United States were examined by Sechrest as situations that compare to his ideal of free banking. There is however, at

least one more. California in the last half of the 19th century conforms very well with the model of free banking.

California Banking

California from 1879 to 1905 presents a case study of a geographically large, economically diverse, rapidly growing economy, with almost no regulation of the banking or financial system.[8] The gold rush of 1848 established gold, traded by weight, as the currency for Californians. In the early years, other money still circulated. Gold miners accepted eastern United States bills for their gold and gave them limited circulation in anticipation of the fact that they would return to the East after their fortune was made.[9] However, the isolation from the United States and the fact that many of the miners were from other countries meant U.S.paper money was heavily discounted, and gold became the currency of choice.

In spite of the preference for gold, banks opened almost immediately in San Francisco and in Sacramento. In 1849, at least six banks operated in San Francisco. Most of the early bankers were exchange dealers, offering certificates of deposit or other types of notes in return for gold. The early banks also offered loans and "borrowed" gold from customers.[10] Notes issued by early banks were denominated for as little as 25 cents--the standard price of a shot of whisky--equivalent to a pinch of gold dust.

Throughout the preregulated period, banking in California differed from its east coast cousins. Competition was fierce. As White predicts would be true for a free banking environment, banks were open long hours, and relocated frequently to remain conveniently close to the center of the business district.[11]

California Free Banking Era

The discovery of gold was almost coincident with the cession of California to the United States, before any legal system or government was established, so laws governing the activities of financial institutions were not the result of careful thought and experience.[12] The first legislation relating to banking, in fact, was the state constitution.

Incorporation of banks was the first hotly debated issue at the constitutional convention of 1849.[13] The majority opinion was that banking activities should be limited to private individuals.[14] The California Constitution, written in haste, was based on the state constitution of Iowa and New York, with concessions to the treaty with Mexico. The part relating to bank activities in the version submitted to the convention was similar to the wording in New York's constitution in prohibiting special legislative

charters.[15] However, there was a very strong group, including the prominent politician William Gwin, which touted the dangers of allowing banks at all. Stirred by personal experience, Gwin and others described the evils of paper money and wildcat banks.[16] But most delegates, while agreeing to the dangers of paper currency, had experienced the disadvantages of gold money and felt the ability to deposit gold and receive paper receipts was an indispensable practice; and, further believed that it was impossible to prevent the formation of banks. The final version of the constitution outlawed paper currency and businesses incorporated as banks, and maintained individual liability for corporate debt.[17]

After a rash of bank failures in 1855, a law was passed to strengthen the injunction against issuing currency. The first offense was a misdemeanor bringing a maximum sentence of three months in jail plus a two thousand dollar fine. The second offense became a felony which could bring up to five years imprisonment.[18] But banking continued to develop, and numerous documents exist from the period that are indistinguishable from bank notes. In 1857, for example, the editor of the *Evening Bulletin* complained that a local restaurant accepted a note on the month-old Brannan Bank "without question."[19] At least one San Francisco bank claims to have incorporated under the general incorporation laws in 1857,[20] and Cross agrees there were several incorporated banks by 1860.[21]

In 1862, savings banks were exempted from the 1850 prohibition against banking firms and specifically allowed to incorporate. In 1864, savings banks with a minimum of $300,000 capital were permitted to carry on commercial activities.[22] After 1862, banks freely incorporated under either the general incorporation laws or the savings bank incorporation law.[23] These incorporation practices played a part in blurring the distinction between commercial and savings banks which is an unusual aspect of California's early banking system. Both types carried term and ordinary deposits and they loaned on similar security.[24] Even the names of the banks often confused the distinction.

The Banking Act of March 1878 was the next attempt to regulate bankers. This act created a Board of Bank Commissioners, required all banks to pay a license fee, file reports, and be examined twice yearly. Only four New England states, Indiana, and Iowa preceded California in the examination requirement.[25] In the 1879 revision of the state constitution the banking sections were dropped. In 1895, the state required that all banking corporations have a minimum capital of $25,000, although it did not have to be in the form of cash.[26] The same year, the California Supreme Court found commercial banks were not forbidden to lend on real estate (a practice they were engaging in extensively).

Banking Regulation in California

The End Of The Free Banking Era In California

The 1878 California Banking Act was suspended in 1903 and quickly replaced with a very similar law which was amended extensively in 1905. The 1905 act initiated a reserve requirement for commercial banks, made bank examination optional for the commissioners, required licenses of private bankers, allowed the state to deposit funds in banks and instituted capital requirements of $25,000 to $200,000, dependent on city size. This last provision was declared unconstitutional and was replaced in 1907 with a statute requiring a minimum of $25,000 capital or ten percent of total liabilities up to $100,000 maximum.[27]

In 1909, the banking law was completely rewritten and the Board of Bank Commissioners was replaced with a State Superintendent of Banks. Capital requirements were increased and made partially dependent upon location. A reserve requirement was initiated and a large number of detailed requirements concerning the asset portfolio were written.[28] Unregulated banking had become a part of California's history.

The National Banking System

While California had a situation very close to Sechrest's free banking model, the nation had firmly rejected free banking with the National Banking Act of 1863. In the period under study the Federal government was chartering banks under the National Banking Act of 1864, while each state chartered its banks under widely divergent laws.

National Banks had minimum capital requirements, note issue restricted by the bank's holdings of government bonds, and limits on their lending, with specific directions about diversification of their asset portfolio. They were not allowed to lend on real estate. The National Bank capital requirement was $50,000 until 1900, when it decreased to $25,000 for some rural areas. Note issue of National Banks was limited by the requirement that the issue could not exceed ninety percent of the par value of bonds deposited with the U.S. Treasury, or the capital stock of the bank. The federal tax of ten percent also discouraged the issue of state bank notes. The prohibition of loans on real estate by national banks formed one of the most characteristic differences between state and national banks, although there are indications that national banks avoided the impact of this restriction.[29] National banks could not loan more than an amount equal to ten percent of its capital stock to any one borrower. Reserve requirements were another method of restricting banking activity. The national banks' graduated system, which based reserves upon location, was duplicated by few states. The national banks required between fifteen and twenty-five percent reserves. National banks were required to

supply reports on their condition annually and were examined by the Comptroller of the Currency.

California banks quickly and decisively turned up their noses at joining the National Banking System. After all, the system explicitly allowed bank notes backed by nothing more solid than U.S. Treasury bonds. Local banks notes, however illegal they may be, were backed by gold coin. Finally, to attract California banks into the system, the first National Gold Banks in the United States were opened in California in 1872, after Congress created notes payable only in gold coin.[30] Ten banks in California were chartered under this provision, but became regular national banks when the laws changed again in 1879. This same resistance to bank notes meant National Banks did not achieve a strong position in California until late in this period. Even by 1900, there were only thirty-five national banks in California.[31]

California As A Free Banking System

Since Sechrest found unlimited liability an impediment to free banking in the case of Scotland, he would also offer that it is a barrier to entry in California, to the extent that early banks were limited in their ability to incorporate until at least 1862. The prohibition against bank notes, which appears to be so strict is mentioned *nowhere* as an inconvenience to the bankers of the state. The volume of obligations that circulated gave rise to the San Francisco Clearinghouse in 1876 and the Los Angeles Clearing house in 1877.[32] There is, however, considerable evidence of the need to maintain public confidence in the banker's products. Even in the 1850s, when rumor threatened a bank's solvency, it was common practice for the bank to call in unrelated prominent citizens for an audit.[33]

The 1895 capital requirement should have been a barrier to entry. However, in 1889 only 11 percent of the banks in the state would not have met the $25,000 minimum, *even* if it were specified as paid in coin.[34] Therefore, it seems that from 1878 to 1905, California was very close to the model of a free banking environment.

Having identified a situation that may serve as a real world example of a free banking system that then turned into a mildly regulated system, we now have an opportunity to determine whether the banking system worked better unregulated or regulated.

Tests Of The Effect Of Regulations

Frequently used measures of safety in the banking system today include adequate capital, adequate reserves and a small number of banks failing. Presumably, if regulation improves safety of the system, capital of banks will

rise, reserves will increase, fewer bad loans will be a part of the bank portfolio, and less failures will occur. Other factors may affect these factors, however. If regulation is perceived to increase the safety of the banking system, in fact it will. If bank runs are less frequent, banks would not need to have high capital or high reserves. For example, post-FDIC reserves and capital are far lower than the figures encountered in the early years used for this study. The capital ratio for all U.S. banks today is less than 10 percent, and would be much less than that without the regulators' insistence of high minimum capital ratios.[35] However, given the difficulty of gathering data for tests, these common measures of safety are used to determine whether safety increased after California's banking system went from an essentially free banking environment to a regulated environment.

Data On California Banking

The only information available on banks for the free banking period in California is the Board of Bank Commissioners' reports, which includes data on all incorporated and some private commercial and savings banks. Not anticipating the future statistical analysis of these reports, the Board put little emphasis on consistency. After the Board of Bank Commissioners was authorized to examine the state banks in 1878, they published balance sheets that had been provided individually by the banks. Throughout most of the free banking period, there were two statements per year, one of which was reviewed by the Board (it is not always clear which one). Mostly the dates of the reports are December 31 or January 1 and July or August. The reports for 1881, 1892, 1898, and 1901-1904 were never published.

Due to these inconsistencies and difficulty of gathering data, the tests are run with a sample taken at five year intervals before and after the regulation is in place. This conveniently avoids dealing with most of the missing data, while using a pattern that includes years the census data was gathered. Since 1904 is not available, however, 1905 was substituted. While the law was changed in 1905, a lag is assumed before new regulations had an effect. The laws were changed further in 1907, and in 1909 were entirely rewritten. 1910 is used as the first year of the regulated environment The summer date is used for each year, since all the master spreadsheets prepared by the commissioners are available. This data is mostly July or August for the pre-regulation years and June after regulation. The switch of months may bias the results, since California was primarily an agricultural state during the entire period 1878 to 1929, and the pattern of harvest and planting may have affected the tests.

These tests may have been affected by other factors. The state grew rapidly throughout the late 19th and early 20th century, in wealth and in

population. The number of banks in the state increased rapidly also, from 496 banks in 1905 to 678 in 1910.[36] Most of the growth in the 1905 to 1910 period was in the southern part of the state. Because of the rapid changes of the period, a large number, in fact, most, of the banks open in 1910 were new banks.

Capital Ratio Test

One currently used measure of the safety of the banking system is the amount of capital as a ratio of assets in a bank. If regulation made banks stronger, one symptom should be an increase in the capital ratio. The laws passed in 1905-1909 included a minimum capital paid in (coin or legal tender) of $25,000 for all banks, and required larger capital--up to $200,000--for larger banks.[37]

The individual ratios for all the banks in existence in 1905 were compared with the ratios of all the banks in existence in 1910, using t-test for difference in mean. Results appear in Table 1. The mean ratio shows a *decrease* from almost 30 percent to 23 percent, significant at the 90 percent level of confidence. This result does not conform to increased safety of the banks. To learn more of the possible causes for this result, the capital of individual banks that were in existence both in 1905 and in 1910 was compared. Their capital ratios were lower than the average for all banks in 1905, and declined less between 1905 and 1910. Therefore, the large number of new banks and the fast growth of southern California may have been the source of lower capital held by banks.

Table 1

Capital Ratio

Capital/asset ratio	1905	1910	significant difference
For all banks	29.6%	22.6%	yes
For same banks	24.0%	22.5%	no

From Table 2, it appears that the capital ratio was decreasing from 1879 to 1924. No sharp decrease occurs between 1905 and 1910.

Table 2

Capital Ratio Test

Year	Total Capital ($)	Total Assets($)	Ratio (%)
	BEFORE REGULATION		
1879	48.182,242.11	126.154,788.20	38.19
1884	46,623,194.99	149.871,640.03	31.10
1889	63,773,018.60	215,450,686.83	29.60
1894	74,712,213.90	264,733,280.50	28.22
1899	50.678,042.22	297,356,526.39	17.04
1905	86,028,747.42	510,943,513.26	16.83
	AFTER REGULATION		
1910	88,302,441.08	560,192,077.56	15.76
1914	94,034,528.05	706,794,715.30	13.30
1919	107,391,841.66	1,121,669,176.52	09.57
1924	197,544,925.64	2,216,087,260.76	08.91

Reserves

If capital was systematically declining, perhaps the reserves on hand were increased by the reserve requirement initiated in 1905. Only commercial banks were affected by the 1905 requirement of a 15 to 20 percent reserve (again, depending on location).[38] Up to one-half of the reserves could be kept on deposit at another bank, so reserves here include cash on hand and due from other banks. In fact, the requirement of reserves should increase the reserve ratio, ceteris paribis, because, presumably, these required reserves were no longer available to the bank to tide the bank over a run.

Again the ratios for all the banks in existence in 1905 were compared with the banks in existence in 1910. As shown in Table 3, there were declines in the reserve ratio from 25 percent to 18.5 percent. The comparison showed a difference in the mean ratios of reserves to assets significant at the 90 percent level. With banks that existed before and after the changes in regulation, the reserve ratio declined from 20 percent to 19 percent, a decline for the 215 banks that is not significant at the 90 percent level of confidence.

Table 3

Reserve Ratios

Paid in reserves/assets	1905	1910	significant at 90%
For all banks	24.8%	18.5%	yes
For same banks	20.2%	19.0%	no

The reserve ratio declines also seem to be part of a long run trend, as shown in Table 4.

Table 4

Reserve Ratio Test

	Total Reserves($)	Total Assets($)	Reserve Ratio(%)
		BEFORE REGULATION	
1879	24,302,901.73	126,154,788.20	19.26
1884	19,980,028.35	149,871,640.03	13.33
1889	30,981,728.33	215,450,686.83	14.38
1894	41,180,256.87	264,733,280.50	15.55
1899	47,330,502.46	297,356,526.39	15.91
1905	82,350,656.55	510,943,513.26	16.11
		AFTER REGULATION	
1910	77,890,708.29	560,192,077.56	13.90
1914	94,983,516.79	706,794,715.30	13.43
1919	162,778,998.36	1,121,669,176.52	14.51
1924	279,966,565.61	2,216,087,260.76	12.63
1929	191,228,923.48	1,730,987,456.33	11.04

Again it appears that a long run decrease in the reserve ratio is occurring, and that it is hard to make a case that the change in law which inaugurated reserve requirements caused a systemic increase in reserves.

Other Real Estate Owned

Modern bankers know the term OREO well, and it does not give rise to thoughts of milk. OREO refers to "other real estate owned"--other than the bank premises. It is a real indicator of the problems California bankers have because of the heavy lending for real estate. Weather has always been one of the state's strongest resources. For the early years good weather brought expansion of farm land; later it brought tourists, and always it brought new settlers who wanted land. California commercial and savings banks both always had a large proportion of real estate mortgages in their portfolio. When the mortgages in the portfolios turn to actual real estate owned because of defaults on those mortgages, banks are in trouble. To see if the proportion of real estate owned fell after regulation, that part of the balance sheet is

compared to total assets of the commercial and savings banks. Comparison of individual bank's ratios for 1905 and 1910 yields the same results. There is a decrease in the ratio of other real estate owned between banks in 1905 and in 1910 that is significant at the 90 percent level of confidence. To see if this is also part of a long run trend, several years of ratios were calculated. The results are shown in Table 5.

Table 5

Other Real Estate Owned

	OREO	**Total Assets**	**OREO Ratio**
		BEFORE REGULATION	
1879	4,851,216.47	126,154,788.20	3.84
1884	5,217,056.46	149,871,640.03	3.48
1889	3,569,608.12	215,450,686.83	1.65
1894	5,240,724.67	264,733,280.50	1.98
1899	17,689,042.12	297,356,526.39	5.94
1905	9,931,165.56	510,943,513.26	1.94
		AFTER REGULATION	
1910	4,479,965.48	560,192,077.56	0.80
1914	4,598,114.92	706,794,715.30	0.65
1919	8,535,904.79	1,069,043,893.77	0.79
1924	9,708,904.94	2,295,478,468.49	0.42
1929	6,659,295.29	1,730,987,456.33	0.38

It appears that the regulations have had an effect. Banks are either more careful in their lending on real estate, or foreclosures decreased for other reasons. The latter possibility cannot be dismissed, since this later period corresponds with very rapid growth of the state.

Failure Test

Perhaps the new regulatory environment inspired public confidence in the banking system which resulted in less loss through bank failure. To test this, the assets of the banks that were being liquidated at the reporting time were compared with the total assets of the banks reporting. The results are

shown in Table 6.

Table 6

Assets of Failed Banks/Total Assets of All Banks

Year	Failed Banks' Assets($)	Total Bank Assets ($)	Failed Asset Ratio(%)
		BEFORE REGULATION	
1879	No Bank Failures Reported	0	
1884	3,711,543.88	149,874,750.03	2.47
1889	792,215.85	246,511,972.41	0.32
1894	8,312,606.17	294,561,657.21	2.82
1899	1,646,473.25	302,415,454.84	0.54
1905	2,189,593.33	454,347,183.24	0.48
		AFTER REGULATION	
1910	1,530,739.08	568,014,739.37	0.26
1914	1,234,779.89	745,221,699.08	0.16
1919	838,708.14	1,079,294,216.63	0.07
1924	186,120.10	2,309,196,826.04	0

This test yields some visible results that seem to indicate that regulation reduced the amount of assets affected by bank failure. After regulation, the assets of banks in liquidation fell dramatically, while the assets of the state's banking system grew rapidly. Unfortunately, confidence in the results are marred by the change in format of the report on banks in liquidation in 1929, and the frightening rate of bank failures that commenced in the following year.

Conclusions

Neither the reserves of banks nor the paid in capital of banks appear to have increased when California went from an essentially free banking environment to a conventionally regulated environment, even though the regulations specifically addressed these two issues of safety. The evidence does not support the contention that regulation will strengthen the banks. Yet two other measures of safety of the system indicate that regulation may have strengthened the system as a whole. The amount of assets in banks being liquidated and the amount of real estate owned by banks both dropped significantly after regulation. There are several possible reasons for the inconsistent results. Most obviously, the banking measures are taken in

isolation from the other factors in the economy. All four of the test results are consistent with overall strengthening of the California economy. Banks in a healthy, growing economy do not need large amounts of capital or reserves, and have opportunities to invest the funds profitably. Bank failure and real estate foreclosure would also decrease if the economy experienced improvement over the period studied. While there is considerable evidence to suggest that the economy grew in this period, there is little hard data available to incorporate into the tests.

While the regulations on capital and reserves did nothing to increase the banks' ratios and make them individually safer, the regulations may have improved public confidence in the banking system and reduced the failure rate. This, however, would not have improved the "Other real estate owned" category. It seems more likely that all the test results are reflecting a rapidly improving economy in California over this time period.

Notes

1. Bray Hammond, *Banks and Politics in America from the Revolution to the Civil War* (Princeton, N.J.: Princeton University Press, 1957).

2. Friedman, Milton, "The Role of Monetary Policy," *American Economic Review*, 58(March 1968), 12-14.

3. George A. Selgin, *The Theory of Free Banking: Money Supply under Competitive Note Issue* (Totowa, NJ: Rowman and Littlefield, 1988); David Glasner, *Free Banking and Monetary Reform* (London: Cambridge University Press 1989); Lawrence White, *Free Banking in Britain: Theory, Experience, and Debate, 1800-1845* (New York: Cambridge University Press, 1984).

4. Larry J. Sechrest, *Free Banking: Theory, History, and a Laissez-Faire Model* (Westport, CT: Quorum Books, 1993), 68; Milton Friedman, "The Role of Monetary Policy," 14.

5. Sechrest, *Free Banking*, 3.

6. Hugh Rockoff, *The Free Banking Era: A Reexamination* (New York: Arno Press, 1975).

7. White, *Free Banking in Britain*, 137-141.

8. For a more complete history of banking in California, see Lynne Pierson Doti and Larry Schweikart, *California Bankers 1848-1993* (Needham Heights, MA: Ginn Press, 1994).

9. Leroy Armstrong and J. O. Denny, *Financial California: An Historical Review of the Beginnings and Progress of Banking in the State* (San Francisco: The Coast Banker Publishing Co., 1916), 15.

10. Ira Cross, *Financing an Empire: Banking in California* (Chicago and San Francisco: S. J. Clarke Publishing Co., 1927), 40.

11. White, *Free Banking in Britain*, 7-9.

12. Military rule established after the cession continued until California was accepted for statehood in 1850.

13. David Alan Johnson, *Founding the Far West: California, Oregon and Nevada, 1840-1890* (Berkeley: University of California Press, 1992), 122.

14. Armstrong and Denny, *Financial California*, 18.

15. Ibid., 82.

16. Johnson, *Founding the Far West*, 123.

17. Walter Bean, *California, An Interpretive History* (New York and San Francisco: McGraw-Hill, 1968), 200.

18. Ibid., 76.

19. Reva Scott, *Samuel Brannan and the Golden Fleece: A Biography*, (New York: The Macmillan Company, 1944), 377.

20. Ben[jamin] Wright, *Banking in California 1849-1910* (New York: Arno Press, 1980), 102.

21. Cross, *Financing an Empire*, 152. Armstrong and Denny, *Financial California*, 77, says the 1850 prohibition of banking was void by 1864.

22. Armstrong and Denny, *Financial California*, 19.

23. Ibid., 22.

24. John Jay Knox, *A History of Banking in the United States* (New York: Augustus M. Kelley, 1969), 850, says there was little difference between the two. The Board of Bank Commissioners makes the distinction based only upon the incorporation laws. If the bank was incorporated under the 1862 Savings Bank Act, it was classified as a savings bank. Otherwise, it was a commercial bank. Examination of bank names and data in their reports confirms the similarity of the two types.

25. Armstrong and Denny, *Financial California*, 23.

26. George Barnett, *State Banks and Trust Companies Since the Passage of the National Bank Act* (National Monetary Commission, vol II., S. document no. 659, 61st Congress, 3rd session, 1911), 37, claims there were not many banks where the capital was less than $25,000.

27. Cross, *Financing an Empire*, 676.

28. Ibid., 719-728.

29. Richard Keehn and G. Smiley, "Mortgage Lending by National Banks, 1890-1914," presented at the Western Economic Association meetings, San Francisco, California, June, 1976.

30. Knox, *A History of Banking in the United States*, 845. Also see 112. Ira Cross, *Financing an Empire*, 97, states his opinion that Californians were reluctant to accept any type of paper currency until the first World War.

31. Wright, *Banking in California*, 90-93, gives details of the number in each year.

32. Pierson Doti and Schweikart, *California Bankers*, 61-62.

33. Ibid., 23.

34. Lynne Pierson Doti, *Banking in an Unregulated Environment: California*

1878-1905 (New York and London: Garland Publishing, 1995), 107.

35. The current U.S. requirement is an overall minimum of 5 percent, but the calculation of minimum capital is based on a weighted average of assets which must be capitalized at 8 percent.

36. Pierson Doti and Schweikart, *California Bankers*, 229.

37. Lynne Pierson Doti, "Nationwide Branching: Some Lessons from California," *Essays in Economic and Business History*, 9(1991), 145.

38. Cross, *Financing an Empire*, 673-4.