working paper 07 23R

The National Banking System: A Brief History

by Bruce Champ

FEDERAL RESERVE BANK OF CLEVELAND

Working Paper 07-23R May 2011*

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During the period of the National Banking System (1863–1913), national banks could issue bank notes backed by holdings of eligible U.S. government securities. This paper presents an overview of the legal and financial history of this period. It begins with the reasons the National Banking System was created. It also examines the rules of operation for national banks as established by the National Banking Act and its subsequent revisions. Furthermore, the paper serves as a brief financial history of the period, examining the various forces that shaped the environment in which national banks operated.

This paper represents a preliminary chapter from a forthcoming monograph on the period of the National Banking System. Other chapters of the monograph appear in the Federal Reserve Bank of Cleveland's working paper series as working paper 07-19R and working paper 07-22R.

Key words: bank notes, National Banking System, national banks, banking panics.

JEL codes: E42, E43, G21, N21.

*Originally posted December 2007. First revision posted September 2010.

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Chapter 1

Financial and Legal History

The founding of the National Banking System in 1863 represented an important milestone in the creation of the financial infrastructure of the United States economy. Although many of the features of this system were unique, other aspects of the system remain in effect to this day.[1]

This chapter provides a summary of the important legislation that impacted national banks during the National Banking System. The emphasis will be on those aspects of the legislation that had important influence on national bank behavior.[2] The chapter also discusses the financial history of the period, with emphasis on the impact of this history on national banks, and how national banks played an important role in the history itself.

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[1]This chapter was revised February 28, 2011.

[2]This history is a synthesis of the material found in Hepburn (1915), Sumner (1874), Timberlake (1978), Sprague (1910), Cagan (1963, 1965), Smith (1776), 1963, and Huntington & Mawhinney (1910).

For those interested in the precise details of the legislation governing national bank operations, see Huntington & Mawhinney (1910). This authoritative source contains the exact text of the laws governing banking, coinage, and finance that were passed by the U.S. Congress from 1778 to the time of its publication.

Appendix A presents a concise summary of the legislation related to national bank operations.

1.1 Reasons for Establishing the National Banking System

Before embarking on a detailed financial and legal history of the period of the National Banking System, a summary of the main reasons for the passage of the National Banking Acts is in order. Briefly, the main reasons for establishment of the National Banking System were:

- The creation of a uniform currency and;
- The need for an effective means of Civil War financing.

The need for a uniform currency, one that would have an identical nominal value despite its geographic location in the United States, was well recognized practically from the country's inception.

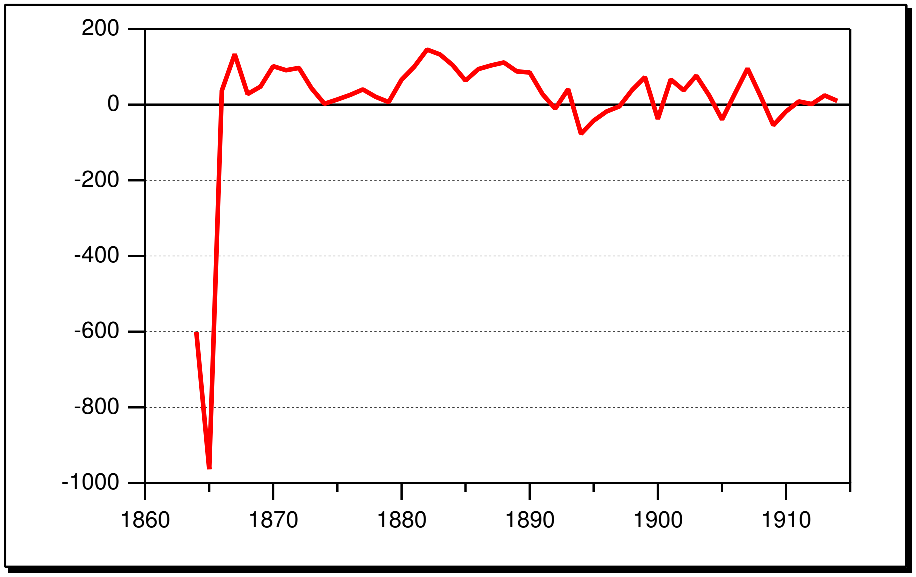
1.2 The Beginnings of the Civil War

With the outbreak of war in April 1861, the common belief was that the Civil War would be of short duration. It was commonly believed that the superior industrial and technological (such as the vast network of telegraphs and railroads) strength of the North would lead to a quick victory over the predominantly agricultural South. On the other hand, the North underestimated the South's will to fight and their knowledge of their own territory.

Nonetheless, expenditures related to the war effort quickly mounted and required the attention of the United States Congress. The U.S. government budget quickly swung into a deficit position.

Looking at Figure 1.1, there are two things to note. First, the large budgetary deficits during the Ciivil War. Secondly, the surpluses that appeared after the war

Figure 1.1: U.S. Government Budget, 1864–1914 (millions of dollars)



Source: Historical Statistics of the United States, Table Ea584-58.

ended and became quite large during the 1880s. That is an important matter. I'll refer to that in later in this chapter and other chapters.

In response to the need for wartime financing, a special session of Congress passed the Act of July 17, 1861. This act authorized the issuance of $250 million in either 6% 20-year bonds, 7.30% 3-year Treasury notes, 3.65% one-year notes, or non interest-bearing notes redeemable on demand.

In December 1861, all banks and the government suspended specie payment, an action which was looked upon as natural preparation for war in a country with a gold standard as the monetary regime.

1.2.1 Wartime financing and the Legal Tender Acts

As the war continued and escalated during 1861 and 1862, the need for increased funds prompted passage of the Legal Tender Act of February 25, 1862. This act provided for the issuance of $150 million in U.S. notes, dubbed "greenbacks,"[3] which were deemed "lawful money" by the establishing act. The lawful money feature implied that these notes receivable at par for all debts to the government. The legal tender status also implied they had to be accepted for any contract that stipulated repayment in US dollars.[4]

Legal tender notes were also convertible into 6% 5-20-year bonds. In this act was a provision for the reissuance of the legal tender notes by the Treasury upon redemption as well as for the outright issuance of $500 million of the 6% 5-20 bonds.

As with the Act of 1861, the Legal Tender Act appears to have been considered as a temporary measure, which was to serve solely as a means of financing the Civil War. As Secretary of the Treasury Hugh McCullough wrote in December 1865, "the present legal-tender acts...ought not to remain in force one day longer than shall be necessary to enable the people to prepare for a return to the Constitutional Currency."[5]

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[3] This nickname is attributable to the obverse of the legal tender notes, which was printed in the green color familiar to all who have used U.S. currency to this day. The green ink was used as an anti-counterfeiting device

[4] As an interesting bit of historical trivia, Salmon P. Chase, when he was Secretary of the Treasury, promoted the passage of the Legal Tender Acts. Later, when Chase was a Supreme Court Justice, he was a judge in the case *Hepburn v. Griswold* (75 U.S. 603), 1870, which declared certain parts of the legal tender acts to be unconstitutional. When the legal tender decision was reversed after the appointment of new judges, in 1871 and 1872 (Legal Tender Cases, 79 U.S. 457), Chase prepared an able dissenting opinion.

[5] *Annual Report* of the Secretary of the Treasury (1865, p. 4).

1.3 The National Banking Acts of 1863 and 1864

The original National Banking Act was passed on February 25, 1863. This law was found to contain many defects and was later amended in 1864. The amended act will be discussed in detail below.

In a somewhat feeble attempt to force the replacement of state bank notes with national bank notes and to encourage the conversion of state banks to national banks, the 1863 law imposed a 2% tax on state notes. In 1863, $238.7 million in state bank notes were outstanding. This 2% tax was a factor in reducing this amount to $179.2 million a year later. CHECK THESE NUMBERS AGAINST WARREN'S???

The amended version of the National Banking Act became law on June 3, 1864. This version, although subsequently amended frequently, outlined the general environment in which national banks operated. For this reason, a detailed description of the Act of 1864 should prove fruitful.

1.3.1 Capital requirements

Under the National Banking Act of 1864, any number of persons greater than or equal to five could form a "national banking association." Each banking association was subject to minimum capital requirements dependent on the population of the locale in which the bank was to be situated.[6] One-half of this capital requirement was to be paid in cash before commencing business (so-called "paid-in capital") and the rest could be paid in monthly installments.

[6] The details of these capital requirements are presented in Appendix A.

1.3.2 Note issuance

After satisfying these capital requirements, a bank could then issue circulation according to the following rules. Banks were required to deposit with the Treasury United States government registered bonds bearing interest in coupons of 5% or more to the amount of at least one-third of its capital (not less than $30,000).[7] This deposit would then serve as backing for bank notes which could be issued up to an amount of 90% of the market value of the bonds deposited (not to exceed 90% of par), but not to exceed the bank's capital.[8]

Initially, national bank notes could be issued in denominations of one to one thousand dollars. However, only one-sixth of the bank notes outstanding could be in denominations of less than five dollars; after the resumption of specie payments only denominations greater than or equal to five dollars were to be allowed.[9]

[7]The Act of July 12, 1870, explicitly eliminated the requirement that the bonds bear interest of 5% or more. After that date, bonds deposited with the Treasury could be "of any description of bonds of the U.S. bearing interest in cash." The bonds had to be registered bonds, but coupon bonds could be converted to registered bonds at any point in time.

[8]Since eligible bonds typically displayed market prices in excess of par during the period, the par valuation constraint was normally binding.

[9]Although the original intent was to restrict denominations to five dollars and more with the resumption of specie payments by the U.S. government, it would end up taking somewhat longer to achieve the resumption goal. It is important to note that the average *weekly* wage of a laborer was $5. (*Historical Statistics of the United States*, Table Ba4568-4574) The idea of having a fairly large minimum denomination was the idea of Adam Smith. According to Smith (1776),

> If bankers are restrained from issuing any circulating bank notes, or notes payable to the bearer, for less than a certain sum; and if they are subjected to the obligation of an immediate and unconditional payment of such bank notes as soon as presented, their trade may, with safety to the public, be rendered in all other respects perfectly free. The late multiplication of banking companies in both parts of the united kingdom, an event by which many people have been much alarmed, instead of diminishing, increases the security of the public. It obliges all of them to be more circumspect in their conduct, and, by not extending their currency beyond its due proportion to their cash, to guard themselves against those malicious runs, which the rivalship of so many competitors is always ready to bring upon them. It restrains the circulation of each particular company within a narrower circle, and reduces their circulating notes to a smaller number. By dividing the whole circulation into a greater number of parts, the failure of any one company, an accident which, in the course of things, must sometimes happen, becomes of less consequence to the public. This free competition, too, obliges all bankers to be more liberal in their dealings with their customers, lest their rivals

Specie payments resumed on January 1, 1879. The rechartering act of 1880 required all bank notes to be redeemed. New plates were then issued, but only in denominations of five dollars or more. The original act undoubtedly allowed the issuance of national bank notes in one and twos due to the disappearance of small-denomination coin during the Civil War. National bank notes were redeemable in lawful money and were receivable for all public debts except the payment of customs duties. In addition, the U.S. government could use national bank notes for all payments except for interest on the public debt and the redemption of U.S. notes. National banks were to receive each other's notes at par but were not required to pay out notes of banks that failed to redeem their own notes on demand.

Initially, the volume of national bank notes was limited to $300 million.

1.3.3 Reserve requirements

National banks had to hold reserves against their deposits. The National Banking Act organized the reserve system into three distinct tiers. The top tier consisted of banks located in central reserve cities. New York City was the only central reserve city specified in the original act. Chicago and St. Louis became central reserve cities in 1887. The middle tier of banks were deemed reserve city banks. Eighteen reserve cities were established by the original act.[10] The number of reserve cities increased

> should carry them away. In general, if any branch of trade, or any division of labour, be advantageous to the public, the freer and more general the competition, it will always be the more so.

[10]The original reserve cities were Saint Louis, Louisville, Chicago, Detroit, Milwaukee, New Orleans, Cincinnati, Cleveland, Pittsburgh, Baltimore, Philadelphia, Boston, Albany, Leavenworth, San Francisco, Washington City (present day Washington, DC). The 1864 act also specified that Charleston and Richmond "may be added to the list of [reserve] cities. . . whenever, in the opinion of the Comptroller of the Currency, the condition of the Southern States will warrant it."

over time to a total of 47 by the end of the period.[11] The bottom tier consisted of the remaining banks, called country banks.

Reserve requirements depended on the tier in which the bank resided. Central reserve city banks and reserve city banks were required to hold 25% reserves against deposits.[12] Reserve city banks could hold half of their reserves as deposits in a central reserve city bank. Reserve requirements for country banks were 15% of deposits. Country banks could hold three-fifths of their reserves as deposits in reserve city banks or central reserve city banks.

The redemption of national bank notes was to take place at the designated reserve agencies. In addition, certain banks were designated as depositories of public money. Such banks were required to hold U.S. government bonds as "satisfactory security" for governmental deposits.

The structure of reserve requirements came under criticism during the period and was viewed by many as another of the defects of the National Banking System. This view, most clearly expressed by Sprague (1910), focused on the "pyramiding of reserves" that this structure allowed and promoted. It was common for banks in reserve and central reserve cities to pay 2% interest on bankers' balances, the deposits of banks that occupied a lower tier. Hence, a significant fraction of reserves tended to accumulate in banks located in the reserve and central reserve cities, with a large proportion of bankers' balances concentrating in New York City where those deposits were lent in the form of call loans. In Sprague's view, this placed the reserve city banks in a precarious situation. Sprague states

[11] After 1887, a city of a certain population became eligible to become a central reserve city or reserve city. Designation as a central reserve city or as a reserve city required approval by 3/4 of the national banks operating in the city and by the Comptroller of the Currency. Only cities with a population of 200,000 were eligible to become central reserve cities. For reserve cities, the minimum population was 50,000.

[12] The original act also specified reserve requirements on note issue. This requirement was eliminated by the Act of June 20, 1874, which established the 5% redemption fund.

> It is clear, then, that with this situation in New York an emergency would cause serious disturbance if it should lead to the withdrawal of any considerable amount by the outside banks [reserve and country banks]. . . . Every year furnished ample evidence that the outside banks had a strong preference for reducing their balances with agents rather than their own cash reserves when their depositors resorted to them for even very moderate supplies of money. (Sprague, 1910, pp. 18–19)

1.3.4 Taxes on national banks

Interest on bank loans was regulated. A tax of 0.5% was imposed on national bank note circulation as well as a tax of 0.25% on capital and deposits. Note issuance was apportioned to the states according to population, bank capital, resources, and other factors.[13]

1.4 The Early Years 1864–1881

By the end of 1864, 638 national banks had been chartered with total capital exceeding $135 million. Circulation of national bank notes was $67 million. DOUBLE CHECK THESE NUMBERS WITH CHAPTER 2 NUMBERS??? However, state bank notes still circulated in large numbers despite the existence of the two-percent tax on their circulation; and, apparently, state banks had no trouble redeeming their notes in greenbacks. This dual system of coexistent state and national bank notes was deemed to be undesirable—a major reason for enacting the National Banking Act was to provide a uniform currency. Consequently, on March 3, 1865, a 10% tax on state bank notes was imposed. This tax quickly led to the disappearance of the state bank

[13] Half of the circulation was to be apportioned according to population; the remainder according to existing bank capital, resources, and "business" of each state. The apportionment of circulation was undoubtedly a concession to those outside the financial centers. Many acts of this period placed checks on the powers given to New York financial establishments. This was due to the Populist Movement that began in the 1880s. This is reminiscent of the "Wall Street vs. Main Street argument" during the campaigns of the 2008 presidential elections.

note. In 1865 circulation of state notes stood at $143 million. By 1866 this number was $20 million and by 1867, $4 million. The Act of March 3, 1865, also set limits on each national bank's circulation as a percentage of its paid-in capital.[14]

Concern began to develop throughout 1866 regarding legal tender notes. These notes were interest-bearing and banks held large quantities of them to satisfy reserve requirements. These legal tender notes matured in 1867 and fears arose that their retirement would lead to a strong contraction of the currency. Therefore, on March 2, 1867, an act was passed authorizing the issuance of $50 million in 3% temporary loan certificates. These certificates were payable on demand and served as legal reserves for the national banks. The authorization was extended by an additional $25 million by the Act of July 25, 1868. Also, in February of 1868, Congress suspended the retirement of greenbacks, a process which had been transpiring since late 1865; the quantity was fixed at $347 million, a figure that remains today. Many of these actions during 1867 and 1868 were to facilitate moves toward resumption of specie payment.

By the year 1868, national bank notes in circulation amounted to over $290 million, a figure which was approaching the $300 million limit established by the National Banking Act. Concern developed over the consequences of reaching this fixed upper bound. As a temporary measure, on February 10, 1869, an act was passed which allowed no new national banks to be formed unless currently existing banks failed.

However, outcries over an "inelasticity" of the currency still were heard, and, in response, the Act of July 12, 1870, was enacted. This act increased the maximum circulation of national bank notes by $54 million, to $354 million. As noted above, the National Banking Act provided for apportionment of national bank note circulation between states. The Act of July 12, 1870, also provided for a reapportionment of cir-

[14] See Huntington & Mawhinney (1910, p. 364). YOU SHOULD PROBABLY INCLUDE THE EXACT SPECIFICATION HERE RATHER THAN REFER TO M&H

culation, removing bank notes from states with more than their share and reassigning this circulation to states with less than their share. Eastern and Middle states were declared to have an excess of $80 million and Southern states were deficient by some $57 million. In addition, the act provided for the issuance of gold notes.[15]

1.5 The Crisis of 1873

This section describes the National Banking first crisis, the Crisis of 1873. According to Sprague:

> The crisis of 1873 was preceded by four years of general economic activity, which was by no means confined to the United States. In agriculture, manufactures, and transportation, much real progress was made, but, as subsequent events proved, the pace was more rapid than was consistent with healthy development. As in 1857, the most serious weakness was disclosed in connection with railroad building. Bonds often sold at a heavy discount had provided the means for building many roads which were in advance of any considerable population, and whose traffic proved insufficient to meet fixed charges. (Sprague, 1910, p. 1)

Clearly, Sprague is placing blame on too rapid progress with insufficient demand. He also places some of the blame on the railroad companies. Sprague also wrote:

> And of the failures which did occur hardly any involved serious loss to creditors. There was, indeed, at the beginning of the crisis evidence of momentary loss of confidence in the banks, but this was primarily due to the disasters which had taken place in other branches of business, particularly among the railroads and the private bankers and brokers who dealt in their securities. There is, however, one method of estimating the measure of responsibility which rests upon the banks for the creation of crisis

[15]It is also interesting to note other measures that were introduced but defeated during the 1870 Congressional session. Among the proposals defeated during the debate on the above act were to:

1. repeal the 10% tax on state bank notes,
2. fix maximum discount rates at 7%,
3. prohibit payment of interest on deposits,
4. remove interest payments on bonds while on deposit with the Treasury as backing for bank notes, and;
5. substitute U.S. notes for national bank notes.

These proposals illustrate the wide variety of sentiments concerning banking prevalent during the late 1800s.

> conditions. If the expansion of loans has been unusually rapid in the years just before a crisis, it must have contributed to the creation of the unhealthy situation. (Sprague, 1910, p. 2–3) During the next few years, national bank note circulation continued to climb from nearly $292 million in 1869 to almost $339 million in 1873. However, in this period, the nation encountered its first financial crisis under the National Banking System. (Sprague, 1910, pp. 2–3)

As was typical during the early fall months, September 1872 saw heavy withdrawals of currency for crop-moving purposes and the subsequent loan contractions this caused. However, during 1872, these withdrawals appeared more severe than in previous years. By the end of September, the U.S. government entered the picture in an attempt to remedy this pressure by selling gold and buying bonds ($5 million of each). Apparently, this did temporarily relieve the situation.

However, during March and April of 1873, interior banks withdrew funds from banks in the East, primarily those in New York City. Again, this action was typical year-to-year; however, it was their large magnitudes which were unusual. This precipitated a large contraction of loans by New York City banks. Toward the end of April currency flowed back eastward, somewhat relieving the situation. The true crisis began in September 1873, beginning with the failures of numerous brokerage firms. This resulted in a closing of the stock exchange for a period of ten days. Note and specie reserves of national banks fell "by $14 million or 50% in four weeks, and deposits declined by $50 million, or 28%, in the same period", according to Timberlake (1978).[16]

1.5.1 The currency premium

During the Crisis of 1873, a currency premium arose. In other words, bank customers were willing to pay more than one dollar's worth of deposits to receive a dollar in currency. According to Sprague,

[16]Timberlake (1978, p. 105).

> The rumor that this action was under discussion by the clearing-house authorities is said to have caused the premium to appear on Wednesday, but the first quotation which found its way into the daily journals was for Thursday, September 25, when the premium was reported as $\frac{1}{2}$ to $3\frac{1}{2}$%. Sprague (1910, p. 27)

Banks began at this time to issue clearinghouse loan certificates, devices to settle interbank balances. These certificates had first been used during the crisis of 1857. This action eased the situation by making the reserves of all banks available to any threatened bank. As a further measure, the U.S. government reissued $26 million in greenbacks. These combined actions helped the National Banking System survive its first crisis.

1.5.2 The Crime of '73

The 1870s through the mid-1890s was the period of silver agitation in the United States. Silver agitation was in response to the passage of the Act of February 12, 1873, often referred to as the "Crime of '73." This law discontinued coinage of the standard silver dollar.[17] Except for a minor amount of subsidiary coin, silver had not been in circulation since 1836 due to the fact that the market price of silver exceeded its mint price since that year. Hence, on the surface, the passage of this act seemed innocuous and, in fact, was not strongly debated in Congress.[18] It was not until after its enactment that the act became a "crime."

Shortly after the Act of 1873's passage came significant finds of silver in the Comstock Lode of Nevada. The market price of silver began to fall, substantially enough that resumption of silver coinage looked like a good idea to silver producers, and the Act of 1873 looked more and more like a crime to them. Silver proponents

[17] An engaging discussion of the Crime of '73 and the debate over silver appears in Friedman (1992, Chapter 3).

[18] The act passed by a vote of 110 to 13 in the U.S. House of Representatives and 36 to 14 in the U.S. Senate.

lobbied strongly for the free coinage of silver at the 1836 mint price. During the late 1870s they began to have some successes, beginning with the Bland-Allison Act in 1878.

1.5.3 The Five-Percent Bank Note Redemption Fund

Possibly as a response to the 1873 crisis, an act was passed by Congress on June 20, 1874. According to *The New York Times*:

> Washington, July 3.–The Controller [*sic*] of the Currency reports the following reduction of circulation under the acts of June 20, 1875, to July 1, 1876. $18,995,036: total amount of legal-tender notes deposited in the Treasury for the purpose of retiring national bank circulation from June 20, 1874, to July 1, 1876, including $3,813,675 balance on deposit, $60,357,308; amount of national bank circulation actually redeemed and retired to July 1, 1876, leaving legal-tender notes deposited with the Treasury, $26,909,332. The decrease of legal-tender notes under the act of Jan. 1875, to July 1, 1876, was $12, 227,716. The amount of national bank notes received from the engravers for the replenishing the worn-out notes of national banks from June 30, 1874, to July 1, 1876, was $272,376,523. The amount received from the engravers during the fiscal year ending June 30, 1876, was $112,232,625. The amount of new currency issued was $90,730,565. The total amount of mutilated currency received and destroyed from the Controller [*sic*] of the the Currency and destroyed from June 30,1874, to July 1, 1876, was $238,398,022, and the amount received during the fiscal year ending June 30 was $106,473,199. (*The New York Times*, Published July 4, 1876.)

This act stipulated that in lieu of the required reserve of lawful money for the redemption of national bank notes, lawful money to the extent of 5% of bank notes outstanding was to be deposited with the Treasury. This 5% amount counted to fulfilling the reserve requirement on deposits; reserve requirements on bank note circulation were abolished.

With passage of this law, redemption of national bank notes would be through the Treasury instead of through reserve agents. Banks could deposit with the Treasury lawful money for the reduction or retirement of their bank notes and receive the bonds which were held as security.[19] Included in this act was a $382 million limit on U.S. notes (greenbacks) and a further reapportionment of national bank notes among states. Also, the costs of redeeming bank notes were now to be borne by the national banks. A free banking amendment was defeated during the debate.

1.5.4 Repeal of limits on national bank notes outstanding

During 1874, concern still prevailed concerning possible inelasticities of the currency. National bank notes were limited to a total circulation of $354 million by the Act of 1870, and in 1874 the outstanding circulation stood at $340 million. Partially in response to this, on January 14, 1875, the Specie Resumption Law was passed which repealed all limits on the volume of national bank notes. This law explicitly eliminated the continual problem of bank note reapportionment.

It also provided for the retirement of legal tender notes to an amount of 80% of new national bank notes issued until the quantity of greenbacks reached $300 million. At that time over $350 million in greenbacks were in circulation. Specie payment

[19] Before passage of the Act of June 20, 1874, national banks were required to notify the Treasury of an intent to retire currency and quantify the amount of the reduction. The banks did not receive the bonds which served as backing until the Treasury received the specified number of bank notes to be retired.

on legal tender notes in excess of the $300 million was resumed and beginning on January 1, 1879, redemption in coin would resume on all U.S. legal tender notes.[20] The act also authorized the formation of a gold reserve established through the sale of bonds and use of surplus revenues by the Treasury.

1.5.5 Silver Purchase and Coinage Act of 1878

Few major laws concerning banking were passed during the next few years through 1877. National bank note circulation fluctuated between $320 and $350 million during the period from 1875 through 1878. February 1878 saw passage of the Silver Purchase and Coinage Law which introduced silver certificates and silver dollars. This resulted from intense political pressures for the use of silver. Silver prices had fallen due to major finds in Nevada and reduced demands. Free silver forces were nonetheless unhappy with the law since it did not provide for unlimited coinage. By 1881, $29.3 million in silver dollars and $39.1 million in silver certificates were in circulation.

In May of 1878, the further retirement of greenbacks was prohibited; the quantity was then fixed at $346.7 million. This posted another victory for the pro-greenback forces in the seesaw battle with their opponents. At this time there was strong sentiment against national banks, and both measures were seen as acts to inhibit national bank note issuance. In fact, in 1878, a bill was introduced in Congress that would have totally replaced national bank note circulation by greenbacks.

In January 1879, the exchange at par of 4% bonds for the 6% 5-20's began (see Table B-6), and in February 1879, the Treasury began to issue, in exchange for lawful money, certificates of deposit bearing interest at 4%. These certificates were convertible at any time into 4% bonds. During the summer of 1881, $538 million of

[20] For an excellent description of the process of specie resumption, see Timberlake (1978, pp. 112–113).

5 and 6% bonds were extended at 3.5% interest, redeemable "at the pleasure of the government."

In addition, during 1879, extensive debates evolved as to exactly what constituted "lawful money." On one side of the debate were those who contended that lawful money consisted of legal tender notes and, on the other side, legal tender notes and metal coins. THIS DOESN'T SOUND RIGHT. SHOULDN'T IT BE METAL COINS VERSUS LEGAL TENDER NOTES AND METAL COINS??? This was merely a continuation of a debate that had begun with the passage of the original Legal Tender Act. The resolution of this debate was important for national banks since the 5% redemption fund, established in 1874 (see Section 1.5.3), required the deposit of lawful money with the Treasury.

1.6 Extension of the National Bank Charters

In a move to extend the charter of existing national banks for an additional twenty years, the Act of July 12, 1882, was passed. This act also limited the number of national bank notes which could be retired to three million dollars per month, except when particular classes of bonds which were held as security for circulation were called. Further, any national bank which retired any portion of its circulation could not then increase its circulation for a period of six months. The total amount of notes issued by any bank as a percent of its paid-in capital stock was lowered from 100% to 90%. In addition, the act authorized the exchange of an equal amount of 3% bonds for outstanding 3.5% bonds. These new bonds were also callable on demand by the government.

1.6.1 The emergence of government surpluses

Earlier in the period of the National Banking System, the U.S. government found itself in a deficit budgetary position mainly due to the Civil War. These deficits were large, representing XXXX??? of GNP. Figure 1.1 illustrates the budgetary position of the U.S. government from 1864 to 1914.

However, during the early 1880s surpluses began to appear and the outstanding government debt was being retired. In that this debt provided backing for national bank notes, concern developed. In fact, Treasury Secretary Chase stated

> If the public debt is to be paid hereafter as rapidly as during the past three years, all of the interest-bearing bonds will soon be surrendered and canceled, and there is danger that the bank circulation will be so rapidly retired as to cause a contraction of the currency. . . . (*Annual Report* of the Secretary of the Treasury, 1882, p. 40)

See Figure 1.1, on page 3, for the federal government budget surpluses that were quite large during the 1880s. Friedman and Schwartz observe that in "1877-1879, the Treasury refunded about half the average outstanding interest-bearing debt. . . ." (Friedman & Schwartz, 1963, p. 82)

1.6.2 The minor crisis of 1884

In May of 1884, a minor crisis hit the financial community. There were numerous reports of suspensions of payment, among those being suspensions by two large banks. As was typical, the crisis was attributed to undue expansion of loans induced by speculation in securities. Again, banks issued clearinghouse loan certificates to settle debit balances between banks, an action which, as in 1873, eased the situation.

Relatively few changes or major disturbances occurred in the period from 1885-1889. During this period, national bank note circulation fell year to year until in 1889 it was \$207.2 million. Friedman and Schwartz attribute this to the "use of the surplus to retire the debt," as noted above.[21] This matter is discussed more extensively in Chapter X.

Pro-silver forces won another victory on July 15, 1890, with the passage of the Sherman Silver Purchase Act. This act provided for the Treasury to purchase 4.5 million ounces of silver per month, a flow that was approximately twice that authorized by the Silver Purchase and Coinage Law of 1878. Payment was to be made in a new currency, the Treasury notes of 1890, which was deemed legal tender and redeemable in gold or silver.

1.6.3 The Panic of 1893

During 1891 and 1892, two major sources of uncertainty plagued the financial community. Gold had been flowing out of the Treasury and out of the country and gold reserves were falling dangerously low. In fact, by 1893, gold reserves fell below \$100 million, a situation which made the redemption of legal tender notes increasingly difficult. The public began to become extremely apprehensive as to whether the gold standard could be maintained. Also, during this period, serious attempts were made in Congress to restore state bank notes, actions which added further uncertainty, especially for national banks.

In response to the large gold outflow, on November 1, 1893, following a request by President Cleveland, the silver purchasing section of the Sherman Silver Purchase Act of 1890 was repealed.

The year 1893 also found the banking system experiencing another financial crisis. Sprague (1910), in his analysis, identifies three stages of the crisis. In the first stage,

[21] Friedman & Schwartz (1963, p. 132)

the disturbance was largely confined to New York City and was marked by declining stock market prices and the contraction of loans. The loan contraction generally improved the position of most New York banks. However, in the second stage, reserves of New York banks fell by $40 million, mainly due to withdrawal of funds by depositors in the West and South. Some New York banks even had reserves fall below the legal requirement on deposits. In response, about $100 million in clearinghouse loan certificates were issued. In the third stage, beginning with banks located in New York, banks across the country partially suspended payment. Sprague writes, "As soon as all banks made use of that medium [clearinghouse loan certificates], the suspension of the banks which had large numbers of correspondents became inevitable."[22] During August of 1893, when suspensions abounded, currency sold at a premium CHECK ON HOW BIG THE PREMIUM WAS?????.

By 1894, the crisis seemed to have passed. However, gold reserves by that time were less than $42 million. President Cleveland, under authority of the Legal Tender Act, contracted to purchase $65.2 million of gold by the sale of $62.3 million of 4% 30-year coin bonds (the so-called 4s of 1925) at a price of $104.496. After this transaction, the gold reserve stood at $107 million in June of 1894.

The arguments over silver continued. Opponents of silver suggested an asset-backed currency with complete backing by the U.S. government. In fact, Treasury Secretary Carlisle proposed a plan that would

> Repeal all laws requiring, or authorizing, the deposit of U.S. bonds as security for circulation. [It would] permit national banks to issue notes up to an amount not exceeding 75% of their paid-up and unimpaired capital, but require each bank before receiving notes to deposit a guarantee fund consisting of legal tender notes, including Treasury notes of 1890, to the amount of 30% upon the circulating notes applied for.... [And] repeal the provisions of the reorganization act of July 12, 1882, imposing limitations upon the reduction and increase of national bank circulation. The Secretary of the Treasury may, in his discretion, use any surplus revenue of the United States in

[22] Sprague (1910, p. 182).

> the redemption and retirement of U.S. legal tender notes, but such redemptions shall not in the aggregate exceed an amount equal to 70% of the additional circulation taken out by national and state banks. . . .[23]

YOU MIGHT WANT TO MAKE REFERENCE TO THE BALTIMORE PLAN, ETC. In addition, Carlisle proposed abolition of legal reserve requirements. Carlisle claimed that his proposal would provide a more elastic currency and would lead to a gradual retirement of legal tender notes.

In 1896, the free-silver Presidential candidate William Jennings Bryan was defeated. To some extent, this may have reduced the uncertainty with regard to which standard, gold or silver, the U.S. government would pursue. During 1896, world gold production and prices both increased rapidly. In June of 1898, the Treasury issued $200 million of 3% bonds (the 3s of 1908) to finance the Spanish-American War.

1.7 Marked Expansion (1900–1913)

This section discusses the last decade of the national bank era before the Federal Reserve act was passed in 1913.

1.7.1 The Gold Standard Act of 1900

The turmoil of silver agitation came to a complete end on March 14, 1900, with passage of the Gold Standard Act. The act was also an attempt to make national bank note circulation more elastic. Specifically, the Gold Standard Act set a dollar equal to 25.8 grains of gold. All other forms of currency were to be maintained at parity with this value. A reserve fund of $150 million in gold was established. If the

[23] *Annual Report* of the Secretary of the Treasury (1894, pp. LXXVI–LXXVIII).

fund subsequently fell below $100 million, the Treasury was authorized to sell 3% (or less in annual percentage) bonds payable in gold at the pleasure of the government.

The Gold Standard Act also provided for the issuance of silver certificates and the retirement of the Treasury notes of 1890. The Treasury was authorized to receive any 5% bonds (the 5's of 1904), any bonds payable July 1, 1907 (the 4s of 1907), and any 3% bonds payable on August 1, 1908 (the 3's of 1908), and to issue in exchange an equal amount of 2% bonds which were to be payable at the pleasure of the government after 30 years (the 2s of 1930). However, the outstanding bonds were to be received at a valuation not greater than the present value which would yield 2.5% per year. The difference between the par value of the new bonds and the computed present value was to be paid in lawful money.

The Gold Standard Act also changed the rule regarding the deposit of bonds as backing. Upon depositing any U.S. bond with the Treasury, a national bank would receive bank notes equal to 100% of the par or market value, whichever was less, of the bonds deposited. The total value of the notes issued by any bank could not exceed the bank's paid-in capital. A semiannual tax of 0.25% on a bank's average number of notes outstanding was imposed. However, this tax only applied to notes which used the new 2% bonds (the 2s of 1930 or any subsequent 2% issue) as security; all circulation based on bonds with coupon rates greater than 2% were still subject to the old semiannual tax rate of 0.5%. This differential tax treatment quickly accomplished its purpose of placing the new 2% bonds as banks substituted the 2s of 1930 for their other bonds.

During the late 1800s and early 1900s, the power of the Treasury in financial matter increased immensely, much to the dismay of many. Secretaries of the Treasury proposed extensive changes in the banking system and implemented many of their own suggestions. For example, in 1901, Treasury Secretary Gage, dissatisfied with the lack of cohesion among banks, especially during crises, wrote, "Can not the principle of federation be applied under which the banks as individual units, preserving their independence of action in local relationship, may yet be united in a great central institution?"[24] It is interesting to note the organizational resemblance between Gage's ideal and that of the Federal Reserve System which would not come into existence for another twelve years.

Treasury influence continued to grow when in 1902 Leslie Shaw became Treasury Secretary under appointment by Theodore Roosevelt. He pledged to increase Treasury deposits with national banks and proceeded to fulfill that pledge. By law, national banks were required to hold "U.S. bonds and otherwise" as collateral on these public deposits. As Timberlake notes, this increase in Treasury deposits "increased demand for the given stock of government securities, raised security prices, and tended to diminish national bank note circulation."[25] Aware of this problem, Shaw allowed state and municipal bonds to be held at 75% of face value to be used as collateral for Treasury deposits, thus freeing U.S. bonds for use as security for circulation.

Shaw also used Treasury policies as an instrument to expand and contract circulation on a seasonal basis. For example, in the fall of 1902, $70 million of government debt was repurchased at 137% of par as a means to bolster insufficient legal reserves of banks. Shaw's policies drew numerous criticisms claiming that he was meddling in business affairs, and that he showed favoritism with respect to which banks received public deposits. However, Shaw, despite these criticisms, continued his policies.

In 1907, George Cortelyou assumed the position of Secretary of the Treasury. He followed Shaw's policies, but it is questionable whether his seasonal Treasury deposits

[24] *Annual Report* of the Secretary of the Treasury (1901, p. 77).
[25] Timberlake (1978, pp. 176–77).

with banks were as well-timed as those of Shaw, as is evidenced by the crisis that developed in that year (see below). On March 4, 1907, an act was passed which provided for the issuance of gold certificates when the reserve fund of gold bullion was greater than $100 million.

1.7.2 The Panic of 1907

The late 1890s and early 1900s saw the growth of several large trust companies. This presented the possibility of large withdrawals from New York banks, not only by interior banks, but also by the trust companies which held large deposits in these banks. Beginning in October 1907 a number of the largest trust companies experienced runs by depositors. Banks then, in turn, were confronted by withdrawals by trust companies and individual depositors. In fact, some banks experienced such large withdrawals that they were forced to suspend payments. For some reason, at this time, the issuance of clearinghouse loan certificates was delayed. Quickly, alarm over the circumstances spread to other parts of the country. As mentioned before, during previous crises currency had sold at a premium. Expectations of this reoccurring compounded the problem as many depositors withdrew currency for speculative reasons. And, in fact, during the 1907 crisis premiums on currency ran as high as four percent. CHECK???? Sprague attributes the massive suspensions that followed to the failure to issue clearinghouse loan certificates at the beginning of the crisis.[26] By late 1907 almost all banks had suspended payment. The crisis of 1907 was by far the worst that the National Banking System had experienced. According to Moen and Tallman, the Panic of 1907 prompted serious talk about the formation of a central bank.

[26] Sprague (1910, pp. 270–72).

According to Moen and Tallman (2003),

> Our chapter on the call loan market in New York City plays a central role in illustrating the key reason, in our thesis, for why the movement for the establishment of a central bank in the United States took hold only after the panic of 1907. The inherent flaws of the existing United States financial system provided fertile ground for complaint and the call loan market wasnt easy target for a variety of critics and reformers. In the aftermath of the panic, critics voiced a common concern centered on the lack of liquidity in the call loan market during financial crisis. Such complaints were non-controversial– the market for loans "the demandable on call" and collateralized by stock equitywho is unable to maintain liquidity in both the securities and the payment system during the mots severe crises. Then why did it take several colossal failures (1873, 1893, in particular) before the reform movement took hold after the panic of 1907? Moen & Tallman (2003, p. 1)

1.7.3 The Aldrich-Vreeland Act of 1908

In response to the 1907 crisis, Congress passed the Aldrich-Vreeland Act of 1908 which, in effect, established an "emergency currency" which would hopefully avert future crises. Specifically, this act stated that national banks "having unimpaired capital and a surplus of not less than 20%, not less than ten in number, having an aggregate capital and surplus of at least five million dollars, may form voluntary associations to be called national currency associations."[27]

Those allowed could use securities designated by the Secretary of the Treasury, including commercial paper, as a basis for circulation, issuing up to 75% of the cash value of these securities in currency. State, city, town, country, or other municipal bonds also qualified as basis for circulation and notes could then be issued on these securities up to 90% of their market value. Other national banks could apply to the Comptroller of the Currency for authority to issue notes secured by bonds other than U.S. bonds. The Comptroller would then transfer this application to the Secretary of the Treasury who, upon ascertaining whether business conditions in the locality of

[27] Huntington & Mawhinney (1910, p. 32).

the bank required additional circulation, may grant permission. These other banks which received permission could issue circulation up to 90% of the par value of the securities deposited. The act also limited the total additional emergency circulation to $500 million. The 5% redemption fund also applied to this circulation and the notes were to be apportioned throughout the country. Circulation secured by other than U.S. bonds was subject to a tax of 5% per year for the first month, and an additional 1% per year for each succeeding month, up to 10% per year. It was this clause which shows that the act was intended to provide for emergency circulation during the time of a crisis. The tax was designed to hasten the retirement of the newly-issued notes as the crisis waned.

The features of the Aldrich-Vreeland Act were only tested once before the act's expiration on June 30, 1915. This occurred with the outbreak of World War I. The closing of the stock exchange on July 31, 1914, precipitated large withdrawals of currency by country banks from city banks. As soon as bank runs began, emergency circulation was issued. By late November, over $400 million in emergency currency had been issued. As Friedman and Schwartz state, "To judge by that one episode, the Aldrich-Vreeland Act provided an effective device for solving a threatened interconvertibility crisis without monetary contraction or widespread bank failures."[28]

During the remaining period of the National Banking System, numerous proposals to reform the banking system were discussed. These discussions had actually been taking place since the mid-1890s with the presentation of the so-called Baltimore Plan by the American Bankers Association. Of course, the proposals culminated with the passage of the Federal Reserve Act on December 23, 1913. This marked the end of the National Banking System.

[28] Friedman & Schwartz (1963, pp. 172).

Conclusion

This chapter has presented a financial and legal history of the period of the National Banking System. The purpose of the National Banking was twofold, First, one of the purposes was a means to finance the Civil War by requiring national banks to hold US government bonds as backing for their bank notes. Second, its intent was to provide a uniform currency, where the nominal value was the same across the country, which until then was an elusive goal. We have seen that national banks could issue their own bank notes. We have also been introduced to many of the laws pertaining to national banks and their issuance of notes. We have also learned about how a government can provide regulation of a banking system.

The next chapter will examine the relevant empirical data from the national banking era, pointing out some of the puzzle that the data reveal.

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