A Quick History of Paper Money

Michael F. Sproul
Working Paper #815
University of California, Los Angeles
Bunche 8283
Los Angeles, CA 90095-1477
November 15, 2001
msproul@csun.edu

JEL Codes: E51, E52, E58, N11

Abstract

This paper explains the history of paper money in the context of the backing theory of money. I briefly examine French playing card money, American colonial paper money, the Mississippi bubble, the assignats, the Restriction period of the Bank of England, the American Free Banking era, and the Greenback period. In each case, I contend that the paper money in question was backed by the assets of the money-issuing entity, and that the money's value was determined by that backing. In several cases, the backing consisted of the taxing ability of a government. For example, a government that had previously demanded 1 ounce of silver from a taxpayer might announce that henceforth it will accept either 1 ounce of silver or 6 paper shillings issued by the government. As long as the government is able to collect the ounce of silver, the 6 paper shillings are backed just as effectively as if the government had held an ounce of silver against the 6 paper shillings.

Card Money

The first government-issued paper money in the western world was circulated by the French Military in Canada, in 1685. The military payroll from France had been delayed, and the intendant, Jacques Dumuelles, paid soldiers with quarter sections of playing cards (denominated in livres). Each card was an IOU promising to pay a stated number of livres in coins when (and if) the coins arrived. The card money circulated in spite of the French Crown's attempts to suppress it, and was generally acknowledged to have stimulated business. The initial experiment was successful enough that many subsequent issues were made into the 1750's.

The following hypothetical balance sheet will help explain the nature of the card money. It is assumed that 1000 soldiers were each owed 30 livres, and 30,000 livres were in transit from France.

Figure 1: Balance sheet of the French military:

ASSETS	LIABILITIES	
1) 30,000 livres (coins) in transit	30,000 livres wages payable	
2)	+10,000 livres paper cards -10,000 livres wages payable	
3)	+5,000 livres paper cards -5,000 livres wages payable	

In line 1 of figure 1, we see that 30,000 livres of "wages payable" are backed by 30,000 livres of coins in transit. It is as if the soldiers each have 30 livres "on deposit" with the payroll office. Unfortunately, livres on deposit would be difficult to spend with local merchants, since merchants would have trouble verifying the credit of any given soldier. With soldiers unable to buy, and merchants unable to sell, the local economy would have experienced a recession. This seems to have been the case in fact.

In line 2 we see that the issue of paper cards simply replaced one liability (wages payable) with another (paper livres). After the issue of paper in line 2, the claims against the military still total 30,000 livres (10,000 livres paper plus 20,000 livres of wages payable). The issue of the 10,000 paper livres would have stimulated the local economy, since the paper livres were easier to spend than livres on deposit.

The 10,000 livres of paper might have been enough for soldiers to buy all they wanted of local merchants, and in that case they would have asked for only 10,000 paper livres. But suppose the soldiers needed another 5,000 livres to buy the things they wanted. They would then apply to the payroll office to convert another 5,000 livres on deposit into 5,000 livres of paper (line 3). The payroll office might issue the new paper livres and it might not. If the payroll office followed the "soft money" philosophy, it would issue the paper livres in the belief that it would stimulate the economy. If it followed the "hard money" philosophy, it would refuse to issue the paper livres in the belief that the issue would be inflationary--more money would be chasing the same amount of goods.

In this case the hard money view is incorrect. The issue of paper livres cannot be inflationary, since the issue of paper in line 3 is accompanied by an equal reduction of wages payable. In the end, there are always 30,000 livres (in paper or on deposit) laying claim to 30,000 livres in coin, so each livre (paper or deposit) must be worth one livre in coin. The only way that inflation could occur is if (1) the total number of livres on the liability side exceeded the 30,000 livres in coin on the asset side, (perhaps because of an overissue of paper livres) or (2) the payroll office had less than 30,000 livres in coin. For example, if the coin shipment from France ultimately totaled only 15,000 livres in coin, then each paper or deposit livre would be worth only half of a livre in coin.

The soft money view is favored in this example. The soldiers would not have asked for the issue of 5,000 paper livres in line 3 if they had not wanted to spend that much, and if the payroll office had refused them, the economy would have returned to the recessionary situation of soldiers being unable to buy and

merchants unable to sell. Given that the issue of paper livres would not be inflationary, the payroll office should issue as much as the soldiers are entitled to receive in wages.

The argument in favor of soft money can be taken a step further in figure 2. Lines 1-3 duplicate figure 1. In line 4, we suppose that someone asks the payroll office to issue another 2,000 livres of paper, while offering a government bond worth 2,000 livres in exchange.

Figure 2

ASSETS	LIABILITIES	
1) 30,000 livres (coins) in transit	30,000 livres wages payable	
2)	+10,000 livres paper cards -10,000 livres wages payable	
3)	+5,000 livres paper cards -5,000 livres wages payable	
4) Government bond worth 2,000 livres (in coin)	+2,000 livres paper cards	

If the 2,000 paper livres in line 4 are issued, then total liabilities rise to 32,000 livres, while assets also rise to 32,000 livres. Since backing has moved in step with the issue of money, the value of the paper livres is unaffected by the new issue of paper. To verify this it is only necessary to note that the government bond can be sold for 2,000 livres in coin, at which point there would be a total of 32,000 livres (paper and deposit) laying claim to 32,000 livres in coin.

At this point it is useful to distinguish between three money policies that the French military might have pursued: (1) tight money, (2) easy money, and (3) neutral money. A neutral money policy is one in which paper money is issued to anyone who offers equally valued assets in exchange. The money issue in line 4, for example, was issued on neutral terms because 2,000 paper livres were issued in exchange for bonds worth 2,000 livres in coin. Had the payroll office demanded that the bonds be worth more than 2,000 livres, or if the payroll office had refused to issue the full 2,000 livres requested, then money policy would be tight. Conversely, if the payroll office had issued the 2,000 paper livres in exchange for bonds worth less than 2,000 livres, money policy would be easy. Finally, there is a mixed case in which the payroll office might announce a policy of issuing 2,000 paper livres in exchange for bonds worth less than 2,000 livres, but then rations credit by refusing to issue as many paper livres as people want at the stated price.

A neutral money policy will automatically make backing move in step with the supply of money, thus ensuring that the value of paper livres will be stable. It will also allow the money supply to rise and fall according to the desires of the public; in busy periods the public will request--and receive--additional paper livres on loan, while in slack periods loans will be paid back, thus returning paper livres to the payroll office. (This feature of a neutral money policy is what was meant by an "elastic currency" in the Federal Reserve Act of 1913.) A neutral money policy is thus anti-recessionary, without being inflationary.

An easy money policy would be inflationary. For example, if the 2000 paper livres of line 4 were issued in exchange for an IOU worth only 1900 livres, the value of each paper livre would fall to 31,900/32,000=.997 livres in coin. The policy is unlikely to be recessionary, as long as the payroll office does not restrict the issue of paper livres. However, with the payroll office issuing 2000 paper livres in exchange for IOU's worth only 1900 livres, public demand for the paper livres will be enormous, and the issue of paper livres will outrun the assets of the payroll office, leading to inflation. In this case the payroll office will probably ration the issue of paper livres. This is the "mixed case" mentioned above. The mixed policy would be inflationary, since paper livres would be issued for inadequate security. At the same time, the restriction on the issue of paper livres could leave the public without enough paper money to conduct its business, thus tending toward recession.

An example of a tight money policy would be if the payroll office demanded an IOU worth 2,100 livres in exchange for the 2,000 paper livres of line 4. The public would want few paper livres at this rate, and the

resulting restriction of the money supply would be recessionary. The policy would not be inflationary, since there would be no tendency for money to outrun assets. In fact, if the public actually wanted paper livres badly enough to pay in the 2,100 livre IOU in exchange for only 2,000 paper livres, the effect would be deflation, as assets would outrun money issue.

Currency of the American Colonies

In 1690, five years after the issue of playing card money, the Massachusetts Bay colony became the first colony to issue paper shillings, in order to pay the expenses of a failed military expedition to Canada in King William's war. The paper shillings were declared acceptable for taxes, as is evident from their inscription:

"This Indented Bill of Twenty shillings due from the Massachusetts Colony to the Possessor shall be in Value equal to Money and shall be Accordingly Accepted by the Treasurer, and Receivers subordinate to him in all Publick Payments, and for any stock at any time in the Treasury Boston in New England Decemr 10th 1690." (Newman, 1967, p. 124.)

The other colonies began their own issues of paper money between 1703-1713, most often to pay military expenses. Cotton Mather described the usefulness of the paper money, and the importance of tax backing, as follows:

"Had the government been so settled, that there had not been any doubt of any obstruction, or diversion to be given to the prosecution of the tax-act, by a total change of affairs, then depending at White-Hall, 'tis very certain that the bills of credit had been better than so much ready silver; yea, the invention had been of more use to the New Englanders, than if all their copper mines had been opened, or the mountains of Peru had been removed into these parts of America. The Massachusetts bills of credit had been like bank bills of Venice, where, though there were not, perhaps, a ducat of money in the bank, yet the bills were esteemed more than twenty per cent. better than money among the body of the people, in all their dealings. But many people being afraid that the government would in half a year be so overturned as to convert their bills of credit altogether into waste paper, the credit of them was thereby very much impaired; and they who first received them could make them yield little more than fourteen or sixteen shillings in the pound; . . ." (Mather, p. 191.)

Colonial currency was typically issued and backed in two ways: (1) Bills were printed and spent by the colony, with a promise that the colony would collect sufficient future taxes to retire the bills. (2) Bills were lent by colonial land banks. Customers would pledge land or other collateral and loan repayments would retire the bills. All colonies rated their bills in terms of commodities, specie, and most frequently, the Spanish dollar, or piece of eight.

"By 1690 every colony had created a special currency of its own, called "current lawful money of the province." This currency consisted of foreign coins (principally Spanish pieces of eight) which were valued by provincial law in terms of shillings...When bills of credit appeared, the colonial legislatures intended that such paper should be equal to current lawful money. A certain number of shillings in bills of credit were supposed to represent an ounce of silver, Mexico, pillar, or Seville, as valued by law. Although the earliest colonial acts authorizing the issue of paper did not define bills of credit as current lawful money, it was uniformly provided that such bills should be receivable as such in all public payments [e.g., taxes]." (Nettels, 1934, pp. 256-57.)(See also Brock, 1975, p. 386.)

Thus, if New York had a tax claim of 8 shillings against a colonist, and if silver were legally rated at 8s./oz., then the tax collector, who had always demanded 1 ounce of silver before the introduction of paper money, would thereafter accept either 1 ounce of silver or 8 shillings. Real backing would thus be established even if no colonial office existed where a colonist could bring 8 New York shillings and receive an ounce of silver in return.

While the issue of new money often stimulated trade by alleviating the perennial money shortage of the colonies, the retiring of money just as often led to a return of money shortages, and to recession.

"The retirement of a large proportion of the circulating medium through annual taxation, regularly produced a stringency from which the legislature sought relief through postponement of the retirements. If the bills were not called in according to the terms of the acts of issue, public faith in them would lessen, if called in there would be a disturbance of the currency. On these points there was a permanent disagreement between the governor and the representatives, discussions concerning which reveal themselves in 1715 and traces of which are frequently found after that date." (Davis, 1910.)

The nature of American colonial currency can be clarified with the hypothetical balance sheet in Figure 3.

Figure 3: Balance Sheet of Massachusetts

	Assets	<u>Liabilities</u>
1)	20,000 shillings taxes collectible	20,000 shillings (net worth)
2)		+5,000 paper shillings -5,000 shillings net worth
3)	IOU's worth 12,000 shillings (backed by land)	12,000 paper shillings lent on land
4)	-3,000 shillings (taxes collectible)	-3,000 shillings (taxes paid)

In line 1, the colony is assumed to have a total taxing ability of 20,000 shillings. Assuming it has no claims against it, the colony would have a net worth of 20,000 shillings. In line 2, the colony prints and spends 5,000 paper shillings, presumably for military expenses. This creates a 5,000 shilling claim against the colony, and thereby reduces the colony's net worth by 5,000 shillings, to 15,000 shillings. Note that the colony can safely issue up to 20,000 paper shillings. If it exceeded that amount, then the colony's liabilities would exceed its taxing ability, and the paper shillings would depreciate. For example, if the colony had printed and spent 30,000 paper shillings, the value of each shilling would have fallen to 20,000/30,000=.67 shillings in coin.

Line 3 illustrates the second method of issuing paper shillings, which was to lend them to colonists who wanted to buy land, the land being used as collateral for the loan. Where loans were made at low interest rates, or loan repayments were not diligently enforced, the value of the paper shillings would tend to depreciate from a loss of backing. Furthermore, when loans were made on easy terms, the demand for loans would be high and the supply of paper shillings would grow rapidly. As with card money, an easy money policy would be inflationary, while a tight money policy (refusal to lend, or lending only at high interest rates) would be recessionary. And as with card money, a neutral money policy avoids both pitfalls. For example, if colonists request loans of 12,000 shillings, and if the loan office makes the loans in exchange for IOU's worth 12,000 shillings, then not only is the public's desire for currency satisfied, but backing increases in step with money issue and inflation is avoided.

Line 4 of figure 3 illustrates the effect of notes being retired thru taxation. As 3,000 paper shillings are paid in to the tax collector and destroyed, the money supply falls by 3,000 while taxes collectible falls by 3,000. As the above passage quoted from Davis suggests, this reduction in the money supply would be recessionary. Had the notes been re-issued, either on loan or to pay government expenses, and had adequate backing been maintained, then recession could have been prevented without risking inflation. But adequate backing was not always maintained. Colonies often allowed spending to outrun taxing ability; loan offices often lent on too-easy terms, and the result was inflation. In response, hard money factions within the legislature would restrict money issue, and recession would result.

According to the backing theory of money, inflation would result when the quantity of paper shillings

outran its backing. According to the quantity theory of money, inflation would have resulted from the fact that more money was chasing the same amount of goods. Economists are divided in their support of the backing theory versus the quantity theory. Those who favor the backing theory point to several episodes where the quantity of paper money grew by several hundred percent with no change in prices. Those favoring the quantity theory counter that as the quantity of paper money increased, other forms of money (coin, commodity money, etc.) left the circulation, so that the total quantity of money had not changed. Data are too sparse to test these competing theories, but three points favor the backing theory: (1) Government-issued paper money was patterned after privately-issued IOU's that had enjoyed a limited circulation as money. Since these private IOU's were clearly backed by the credit of the people who issued them, it stands to reason that government-issued IOU's were backed by the credit of the colony that issued them. (2) If paper money acquired value because of a limitation of quantity, and not because of backing, then a money-issuing colony earns a free lunch: It can simply print money and spend it without recognizing the money as its liability. This free lunch would attract issuers of rival monies, and the resulting proliferation of monies would, on quantity theory principles, reduce the value of all paper monies to zero. (3) The backing theory does not rely on the "sticky prices" theory. The classical version of the quantity theory holds that as the money supply rises or falls, prices rise or fall in proportion, so that the public's real purchasing power is unchanged. This is at odds with the fact that real output tends to rise and fall as the money supply rises and falls. Quantity theorists explain this by asserting that prices are sticky--that they are slow to react to changes in the money supply. Because of this, they claim, an increase in the money supply will (temporarily) increase real purchasing power and thus stimulate output, and a decrease in the money supply will decrease purchasing power and reduce output. The trouble with the sticky prices theory is that it implies that people are consistently slow to change prices. Nobody would claim that prices on a commodities exchange are slow to react to news, so why should we believe that the prices of ordinary goods are slow to react to changes in the money supply? The backing theory does not have this difficulty, since it implies that as the money supply rises of falls, the amount of backing rises or falls in proportion. and prices do not change. Thus the backing theory implies that when the supply of money if artificailly restricted, real spending power is reduced and a recession results, while if the supply of money is allowed to rise to the level desired by the public, real spending power rises and output is stimulated.

John Law and the Mississippi Bubble (Adapted from www.src.uchicago.edu/cours/229/john_law.html)

John Law (1671-1729) was a Scotsman, son of a goldsmith. Little is known of his early life: he shows up a young man in London living the life of a dandy, he kills a man in a duel in 1694, is sentenced to death for it, and escapes from a London prison under mysterious circumstances.

From 1701 to 1715 he is known to have traveled around Europe, engaging in two main activities: earning a living as a professional gambler (holding gambling tables), and writing on economics and particularly on various schemes to replace metallic money with bank-issued currency.

In 1715, France was in dire financial straits. Law won the trust of the French government in 1715-16, and was allowed to establish a conventional note-issuing bank (the Banque General) in 1716. The following year he founded a trading company ultimately known as the Indies Company. The Company grew by a series of mergers and acquisitions into a gigantic conglomerate that controlled most of tax collection, all of overseas trade, whose shares had replaced the public debt, and whose notes were sole legal tender; the Company, merged with the bank, was controlled by Law, who also became finance minister. In 1720, the "Système" (as the conglomerate and its underlying principles were known) collapsed as the share price fell, notes were demonetized, and an effective repudiation of the debt took place. It took several years to clean up the mess, while Law, ruined, ended his life a gambler in Venice.

The fall of Law's company led to spectacular inflation and financial collapse. The fall of the company's stock is easily explained as a result of disappointing profits (particularly from the company's landholdings in Mississippi) coupled with extravagant spending. The inflation of the paper money issued by Law's bank is best explained in the same way: As long as the bank had sufficient assets to back its paper money, the paper money held its value. When the assets fell in value, or when paper money was printed and spent without acquiring additional assets, the value of the paper money would fall in proportion to the loss of backing.

The Assignats (Adapted from www.encyclopedia.com/printablenew/40623.html)

The assignats were a paper currency issued during the French revolution. To redeem the huge public debt and to counterbalance the growing deficit, the revolutionary constituent assembly issued (Dec., 1789) treasury notes, called assignats, to the amount of 400 million livres at 5% interest. They were issued over the strong objections of many members of the National Assembly, who still remembered the disastrous inflation caused by John Law's bank in 1720. The notes were intended as short-term obligations pending the sale of confiscated crown and church land. They were made legal tender in Apr., 1790, and subsequent issues bore no interest. French citizens could use the notes to buy the confiscated lands, and the notes paid into the treasury were to be destroyed. The currency rapidly became inflated for two reasons: (1) As the government sold off the lands, the backing for the notes was reduced, and (2) Notes paid into the Treasury were usually not destroyed, but spent. Furthermore, financial demands on the government induced it to print and spend enormous quantities of new bills without acquiring any new backing. By early 1796 the assignats in circulation amounted to less than 1% of their original value; their value did not even cover the cost of printing them. Mandats territoriaux [land notes], adopted in 1796 as a new currency also based on confiscated lands, were also soon depreciated. Inflation stopped only when all paper currency was demonetized and redeemed at the rate of 3,000 livres in assignats or 100 francs in land notes to one franc in gold. On May 21, 1797, all unredeemed assignats were declared void.

The Bank of England and the Restriction Period (Adapted from www.csun.edu/~hceco008/critique.htm)

From its founding in 1694, the Bank of England issued paper bank notes based on gold. In 1796, the notes were convertible into gold at approximately 4 pounds to the ounce. A large outflow of gold in that year forced the bank to suspend convertibility on February 26, 1797. Convertibility was not fully restored for 24 years. An inflation that occurred subsequent to the suspension of convertibility was the subject of the 'Bullionist' controversy. Bullionism was the name given to Adam Smith's doctrine that paper money would maintain its value if its quantity were made to correspond to the quantity of coin (bullion) that the paper had displaced from circulation. Charles Bosanquet had argued for the 'Antibullionist' proposition that the Bank of England could not have been the cause of the inflation, since that bank only issued its money in exchange for good security:

...(inflation will result whether) the issue be gold from a mine or paper from a government bank. All this I distinctly admit, but in all this statement, there is not a single point of analogy to the issues of the Bank of England.

The principle on which the Bank issues its notes is that of loan. Every note is issued at the requisition of some party, who becomes indebted to the Bank for its amount, and gives security to return this note, or another of equal value... (Bosanquet, 1810, pp. 52-53.)

The 'Bullionist' (quantity theory) explanation was championed by Ricardo, who held that money-issuing banks had increased the quantity of money:

Let us suppose all the countries of Europe to carry on their circulation by means of the precious metals, and that each were at the same moment to establish a Bank on the same principles as the Bank of England--Could they, or could they not, each add to the metallic circulation a certain portion of paper? and could they not permanently maintain that paper in circulation? If they could, the question is at an end, an addition might then be made to a circulation already sufficient, without occasioning the notes to return to the Bank in payment of bills due. If it is said they could not, then I appeal to experience, and ask for some explanation of the manner in which bank notes were originally called into existence, and how they are permanently kept in circulation. (Ricardo, 1811, p. 117.)

In this statement, Ricardo convincingly showed that banks are able to increase the quantity of money. Being imbued with the quantity theory, he considered this as satisfactory proof that banks cause inflation. But the connection between money and inflation should have been the very point under examination. On backing theory principles, an increase in the money supply, accompanied by an equal increase in bank

assets, will have no effect on prices. But Ricardo ignored bank assets, and did not consider the reasonable proposition that the pound had fallen because the Bank of England's assets (mainly British government bonds) had fallen in value. Unfortunately, Bosanquet and his fellow Antibullionists also failed to consider this explanation, and instead pointed, unconvincingly, to crop failures and military expenditures as the cause of inflation.

Ricardo held that during the Restriction period the pound was a true fiat money, whose value was determined by its quantity. ("...depreciation may arise from the abundance of the notes alone, however great might be the funds of those who were the issuers of them." (Ricardo, 1811, p. 114.)) His mistake was in confusing backing with convertibility. On February 27, the day after the suspension of convertibility, the Bank of England's ratio of outstanding notes to assets cannot have been much different from the day before. Thus the backing theory implies that the pound would be stable, as for a time it was (Table 1 (Cannan, 1969, p. xliii)). Ricardo, however, asserted that all that was necessary for an inconvertible currency to have value was a limitation of its quantity. This leads to the doubtful proposition that the forces determining the value of the pound changed completely on February 26. Before that date, convertibility would have forced the pound to be worth its backing. Afterwards, the value of the pound was supposedly determined by the number in circulation. Ricardo made this assertion in spite of the fact that the suspension of convertibility was temporary, and in spite of the fact that the Bank of England continued to hold backing for the pound throughout the Restriction period.

Table 1. British Price Index (1782=100)

Year	Price	Year	Price	
1792	93	1807	132	
1793	99	1808	149	
1794	98	1809	161	
1795	117	1810	164	
1796	125	1811	147	
1797	110	1812	148	
1798	118	1813	149	
1799	130	1814	153	
1800	141	1815	132	
1801	153	1816	109	
1802	119	1817	120	
1803	128	1818	135	
1804	122	1819	117	
1805	136	1821	106	
1806	133	1821	94	

The backing theory implies that the pound's value was determined by backing both before and after the suspension of convertibility; that it was backing that mattered during normal business hours when the notes were convertible, that it was backing that mattered during the nights and weekends when the notes were temporarily inconvertible, and that it was still backing that mattered during the longer suspensions of convertibility such as the period from 1797-1821.

The American Free Banking Era (Adapted from www.minnbankcenter.org/frnotes.htm)

State Bank notes flourished during the Free Banking Era (1837-1863). During these years, there was no federal regulation of banking, an experiment that met with mixed success. In some areas State Bank notes were relatively safe and exchanged close to par or face value. But in other areas, depreciated and fraudulent currency was common. Special publications known as bank note reporters and counterfeit detectors sprang up to help people learn the value of various notes and determine which were good. However, even some of

these publications had a poor reputation and many contemporary writers and latter-day historians were critical of them.

One historian describes a merchant trying to determine if a bill was good after checking in one of the publications described above. "He scrutinized the worn and dirty scrap for two or three minutes, regarding it as more probably 'good' if it was worn and dirty than if it was clean, because those features were proof of long and successful circulation. He turned it up to the light and looked through it, because it was the custom of the banks to file the notes on slender pins which made holes through them. If there were many such holes the note had been often in bank and its genuiness was ratified."

State Bank notes, however, did not originate with the Free Banking Era. They had been in circulation since shortly after the end of the Revolutionary War, and were first issued following the opening of the first bank in this country in 1782. But, until 1836, much of the paper currency in circulation consisted of issues of the two U. S. banks established by Congress, the First Bank of the United States (1791-1811) and the Second Bank of the United States (1816-1836).

It was after the closing of the Second Bank in 1836 that the United States entered the Free Banking Era and State Bank notes became the chief form of paper currency. This era came at a time when widespread bank failures caused the public to turn against banking and bankers. Objecting to the monopolistic organization of banks under special charters, the people demanded that banking be operated as free enterprise, subject to special government regulation. By 1860, the banking business was conducted by more than 1,500 state banks.

The Free Banking Era was also the era of wildcat banking and wildcat bank notes. Wildcat banks would open in a town or other accessible area, where they would receive deposits and issue notes. They would then move to mountainous or other inaccessible regions (where the wildcats lived) making it difficult or impossible for people to redeem their notes.

The National Bank Act of 1863 provided for a uniform national currency and resulted in the elimination of State Bank paper through taxation. A 2 percent tax was levied on State Bank notes in 1862, a tax that was increased to 10 percent in 1866. At this latter rate, there was no more profit in the issue of State Bank notes. The National Banking Act also provided Nationally chartered banks with the right to issue bank notes, on the condition that for every \$100 of notes issued, they deposited \$110 worth of government bonds with the federal government.

Greenback Dollars (Adapted from www.minnbankcenter.org/frnotes.htm)

In 1862, under the exigencies of the Civil War, the U.S. government first issued legal tender notes (popularly called greenbacks) that were placed on a par with notes backed by specie. As with American colonial currencies, they were backed by their acceptability for taxes. By the end of the war such notes were outstanding to the amount of more than \$450 million. They had been issued as temporary, and in accordance with the Funding Act of 1866 Secretary of State Hugh McCulloch began retiring them. The hard times of 1867 caused many, especially among Western debtor farmers, to demand that the currency be inflated rather than contracted, and Congress suspended the retirement. (This followed a universal pattern with paper money: As paper money is withdrawn from circulation, the resulting monetary stringency creates a recession.) George H. Pendleton advanced the so-called Ohio Idea, recommending that all government bonds not specifying payment in specie should be paid in greenbacks. John Sherman, more conservative, was nevertheless willing to let the greenbacks stay in circulation on a redemption basis. The question was warmly debated in 1869 and was ended by a compromise, which left greenbacks to the amount of \$356 million in circulation. The law creating them was declared constitutional in the later Legal Tender cases and the matter rested until the Panic of 1873. The hard-hit agrarians then wanted to inflate the currency with more greenbacks. An inflation bill passed Congress in 1874, but so intense was conservative opposition that President Grant reversed his former position and vetoed the bill. Although the Greenback party worked hard to oppose them, the conservatives triumphed in Jan., 1875, with the Resumption Act,

which fixed Jan. 1, 1879, as the date for redeeming the greenbacks in specie. The Secretary of the Treasury accumulated a gold reserve of \$100 million, and confidence in the government was so great that few greenbacks were presented for surrender in 1879. Congress provided in 1878 that the greenbacks then outstanding (\$346,681,000) remain a permanent part of the nation's currency.

References

Bosanquet, Charles, Practical Observations on the Report of the Bullion Committee, London: Printed for J. M. Richardson, 1810.

Brock, Leslie V. The Currency of the American Colonies, 1700-1764: A Study in Colonial Finance and Imperial Relations. New York: Arno, 1975.

Cannan, Edwin (Editor), The Paper Pound of 1797-1821: A Reprint of The Bullion Report, 1925. Reprinted by Augustus M. Kelley, New York: 1966.

Davis, Andrew McFarland, Colonial Currency Reprints, 1682-1751, Reprinted New York, Agustus M. Kelley, 1970.

Mather's Magnalia, -- Hartford Reprint, vol. 1, p. 191

Nettels, Curtis P., *The Money Supply of the American Colonies Before 1720*, 1934. Reprinted by Augustus M. Kelley, New York: 1964.

Newman, Eric P., The Early Paper Money of America, Whitman Publishing, Racine, Wisconsin, 1967.

Ricardo, David, Economic Essays, 1811. Reprinted by G. Bell and Sons, Ltd., London: 1926.