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A historical approach to a unitary type of United States paper currency

Roger Perry Schad

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A HISTORICAL APPROACH TO A UNITARY TYPE OF
UNITED STATES PAPER CURRENCY

A Thesis

Submitted to the Faculty of the School
of Business Administration of the
University of Richmond

In Partial Fulfillment
of the Requirements for the Degree
Master of Science in Business Administration

by

Roger Perry Schad

January 1961

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PREFACE

The monetary forms in use in the United States today consist of (1) demand deposits of commercial banks; (2) several different types of paper currency; and (3) metallic coins. Each of these three major types of money have some distinct and separate functions not readily performed by the others, and consequently they have established important and quasi-independent roles in our monetary structure as it has evolved over the decades.

The currency component of our money supply, however, consists of three distinctly different types in current use plus several types which are in process of retirement. Why do we have three different types of paper currency in circulation in the United States today? Does each of these different types serve some separate function which the others cannot readily perform? Would economy and efficiency in the handling of our monetary system be improved if there were only one type of currency in use?

It was in seeking the answers to these questions that the subject matter for this study was chosen. Why not have just one type of United States paper currency instead of the three types currently being issued? This thesis attempts to provide an affirmative answer to this question through a historical approach to an analysis of our paper currency system. This being done, an approach to establishing a single currency form will be discussed.

The various types of paper currency which have been issued in the United States over the years will be traced into existence with particular emphasis on the reasons for their issuance. The various functions of paper money will be discussed and related to the currencies currently in use. The purposes of our current types of paper currency will be analyzed with respect to their relationship with our central banking system.

This study will attempt to show that our present currency system has resulted partly from political pressures and emergency wartime measures and not from any scientifically developed system or study. As this great country grew, so did its paper currency, more often than not by trial and error.

Since any significant change in such a complex currency system as we have in the United States today involves numerous technical problems, a basis for changing from a multi-to a single-currency system will be discussed. There are two separate agencies of original issue for our currency, the U. S. Treasury Department and the Federal Reserve System. In addition, the specie backing behind the currency issues of these two agencies is different, that for the principal Treasury issue being silver and that for the Federal Reserve issue being gold. If we remove the currency issued by one of these agencies from our circulation, the problems of the disposition of the specie reserve and of the effects of doing this on the sectors of the economy which produce and utilize the metal which serves as this reserve must be solved.

While the author takes full responsibility for the views expressed in this thesis, he extends his appreciation to Dr. R. Pierce Lumpkin, economist for E. G. Webb and Company; Dr. Herman P. Thomas, professor

of economics, University of Richmond; and Mr. Richard C. Chewning, faculty member, University of Richmond for their help and guidance in the preparation of this thesis.

R. P. S.

January 10, 1961

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CHAPTER I

UNITED STATES PAPER MONEY

Perhaps the most indispensable of all the economic tools which we use today is money. While money has been a crucial factor in the financial and economic growth of the American economy, what we have today is not a scientifically developed system but consists of past emergency actions, measures taken to cater to special interests and the like.

Tradition, political fear, monetary superstition, inertia or just plain lack of knowledge of an economy's monetary needs on the part of the public resulted in the creation of certain kinds of money and their continued existence even though their original issuance may have later been recognized as a mistake. Special interests that profited from the creation of or continuance of certain forms of money have exerted enough political influence to prevent the retirement of such money.

TYPES OF PAPER CURRENCY OUTSTANDING¹

Federal Reserve Notes. Introduced with the inauguration of the Federal Reserve System in 1914. Are a liability of both the issuing Federal Reserve Bank and the Treasury.

Silver Certificates. First introduced into our currency system in 1878. They are a liability of the Treasury and are backed 100 per cent by silver which has a monetary value in excess of its market value.

United States Notes. The United States Note is an extension, beginning in 1878, of the Civil War greenbacks issued first in 1862. These notes are a liability of the Treasury and share with certain other currencies a collateral of approximately \$156 million dollars

¹Leland J. Pritchard, Money and Banking (Boston: Houghton Mifflin Company, 1958), p. 30.

of gold held by the Treasury.

National Bank Notes. These notes began with the inauguration of the National Banking System in 1863. They were liabilities of the issuing national banks and were collateralized 100 per cent by certain issues of United States Bonds. The Banking Act of 1935 discontinued this type of paper money and the Treasury assumed liability for all notes in circulation. These notes are being redeemed when turned in to the banking system.

Federal Reserve Bank Notes. The notes were first issued in 1916 to replace silver certificates which had to be withdrawn from circulation at that time. In 1933, and again from November 1942 to December 1943, they were issued as emergency currency. They were issued as liabilities of the Reserve Banks, collateralized by Reserve Bank holdings of federal obligations of an equal amount. After each of these periods of issuance the notes were gradually retired, and since the Act of 1945, no more of this type of currency may be issued.

Gold Certificates. Issued by the Treasury in 1863 and discontinued for public issuance by the Gold Reserve Act of 1934. Collateralized 100 per cent by gold coin or bullion reserves held by the Treasury. The only gold certificates being issued by the Treasury are to the Federal Reserve Banks as collateral for their note issues.

Treasury Notes of 1890. Originally a type of silver-backed currency provided for by the Sherman Silver Purchase Act of 1890. They have been in the process of retirement since 1893 and are a liability of the Treasury, collateralized by a 200 per cent reserve of gold and silver.

Of the various types of paper money described, the first three are the only types now being issued. The remaining four types will still be found in circulation but on a decreasing basis with the passage of each year, for as these types of currency find their way into the banking system, they are removed from further circulation and destroyed.

The types of paper money still circulating serve as a reminder in some instances of the trial and error development of our currency. One may well ask the questions: Why have three different types of paper

currency? What purposes do they serve? Should not the multiple types of paper money now issued be replaced with a single type?

In order to answer these questions it becomes necessary first to define money and its functions or services in a broad sense, then to narrow this down to the qualities and characteristics of a paper currency which will fit or serve the functions or services required. Having done this, it then becomes necessary to examine the various kinds and types of currency in circulation to see if they can stand up to the qualities and characteristics deemed necessary.

The approach to this problem will be carried out by a historical review of the evolution of paper currency in this country. It is felt that to analyze and appraise the functions and purposes served by our present currency forms, it is necessary to review the history of money in the United States.

CHAPTER II

WHAT IS MONEY?

It is very difficult to state precisely what money is. This difficulty arises primarily from the fact that the concept of money is frequently confused with the concept of wealth.

"Wealth" is generally thought of as physical things, goods and services which contribute to our everyday health, welfare and happiness. "Money" is that particular tool or commodity by which the market value of wealth is measured.

Money may be defined in terms of the functions it serves. Based on this, money, we may say, is what is used: (1) as the medium of exchange; (2) as the measure of value; (3) as the store of value; and (4) as the standard of debts (or deferred payments).¹

One of the important functions which money performs is that of mediating exchanges. This is to say that the producers exchange their goods or services for money and then exchange the money for other goods or services. Money, in this sense, is a go-between or, as is conventionally said, a medium of exchange.

If we define money in terms of its function as a medium of exchange, we shall probably come closest to indicating the ultimate importance of a monetary system in modern economic life. However, it is also true that in our type of economy, most goods and services are produced for the market and hence are subject to market valuations in terms of money.

¹Lawrence W. Anderson and others, Money and Banking (New York: Pitman Publishing Corporation, 1957), p. 6.

That is to say, one good or service is compared in value to another good or service on the basis of money prices. This price mechanism, working through the forces of demand and supply, serves to determine to whom goods and services shall be allocated. Thus we must recognize that money serves, as well, as a measure (or common denominator) of value.

In addition to its functions as a medium of exchange and as a measure of value, it is both a store of value and a standard of deferred payments. When sellers exchange their goods and services for money, they are in a position either to exchange this money immediately for other goods and services or to hold it for spending at a later time. The holding of cash balances constitutes the store-of-value function. Expressed as a standard of deferred payments, money enables contractual arrangements whereby the debtor can obtain present purchasing power by accurately defining the means of repayment.

Thus far money has been defined in terms of its functions. In a much more limited sense, money may be defined as any article which is widely accepted in exchange for goods and services.² Demand deposits are thought of by many people to be money, and to a large extent demand deposits do serve most of the functions of money. As long as demand deposits are freely convertible into money, they can be regarded as a substitute equivalent of money. Basically its acceptance is predicated on the assumption that demand deposits can be converted into United States money on demand and without equivocation. For the purpose of this study,

²R. Pierce Lusk, Readings on Money (Richmond: Federal Reserve Bank, 1957), p. 5.

only the currency portion of the total money supply is under review.

Metallic coins have never presented the problem in our concept of money that paper money has. Basically this is because the coin itself since 1853 has contained metal of less value as a commodity than the value of the coin. The struggle in the United States since the Subsidiary Coinage Act of 1853 has not been the establishing of a metallic form of money, but one of paper currency.

Leading writers in the field of money and banking have consistently agreed that money has certain necessary qualities. It should be acceptable, conveniently divisible, provide units of uniform value, be sufficiently plentiful to meet the needs of trade, and be portable, durable, economical, difficult to counterfeit and stable in value.⁵

Of all these qualities, the first of acceptability is perhaps the most important one single quality. If the medium is not acceptable to the people, then regardless of its other qualities or attributes, it cannot serve successfully as money. The one important ingredient in making money acceptable is widespread faith in the issuing authority.

That our money is conveniently divisible in accounting terms we owe to the efforts of Alexander Hamilton, first Secretary of the Treasury, who along with other enlightened leaders of his day, was responsible for the Coinage Act of 1792 which based our money on the decimal system rather than the British duodecimal system. Being based on the decimal system, it is thus very easy to make calculations in terms of fractions of our unit of account.

⁵Pritchard, op. cit., p. 26.

It is very important that the various units of a money system have uniform value, that is, that they circulate at their par or face value. A great deal of confusion, waste, and loss results when currency circulates at varying discounts. It was not until 1865 that we were able to achieve a currency having uniform value throughout. In a later chapter the vicissitudes experienced by our economy during the period when much of the money circulated at varying discounts, if at all, will be discussed.

A satisfactory currency system should provide at all times a circulation adequate to the needs of a normally growing economy. Yet an adequate supply of the medium of exchange has long been a weakness in the history of our money system. More than one of the financial crises which this country has passed through has been the result of an inadequate supply of money, which in the earlier days of this country consisted almost entirely of currency and coin. Conversely, too great a supply has its problems and economic implications. Our currency system today is in effect a "managed" system, designed to provide an adequate supply and to expand or contract currency in circulation as the need may be.

The next three qualities are related to one another largely by the fact that the people of the country, collectively, determine the relative portions of their money which they will hold in paper money and metallic money. That the money they hold is desirable in an easily portable form is evidenced by the fact that over 80 per cent of currency and coin in circulation is held in the form of paper currency. Paper currency, while the least durable form, is cheaper to maintain and has many other advantages over metallic money.

The problem of counterfeiting currency, at one time a severe problem in the history of paper currency, has been curtailed to the point that it is not a severe economic threat affecting public acceptability. A number of steps have been taken and continue to be taken to discourage counterfeiting of currency. Engraving processes and type of paper and ink used are rigidly controlled and elaborate. There is a constant checking to discover counterfeit money and an intense effort is made to find the guilty, with severe penalties given to those caught.

Earlier four functions of money were outlined: a medium of exchange, a measure of value, a store of value, and a standard of deferred payments. How well can these functions be performed when the value of money is changing? No one of these ends can be served well by money which fluctuates violently in value. A money which changes slowly in value can serve adequately as a medium of exchange and as a measure of value; but if the change is all in one direction, the store-of-value and the standard-of-deferred-payments functions are undermined.

In order to function as a medium of exchange, money must be a measure of value acceptable to sellers. That is, it must be a common denominator to which the value of all goods can and will be reduced. Given original acceptability, as long as the value of money retains some semblance of stability, sellers will freely accept it. If, however, inflation runs rampant, sellers will be less eager to accept money in payment for goods. During such an extreme inflation sellers fear that money will decline in value to an appreciable extent before it can be respent. Conversely, when money is appreciating rapidly, buyers will be reluctant to part with money and sellers will be anxious to part with

goods. However, under conditions of a gradual appreciation or depreciation in value, money will tend to retain its acceptability; consequently, it can serve as a medium of exchange and a measure of value almost as well as if prices were not changing. The function of money is to store a constant purchasing power, not an increasing or decreasing value. Money cannot serve as well as a standard of deferred payments if the value it represents changes during the life of the contract.

Economists think of the value of money as being inversely related to the average price level. Thus, some prices may be increasing while others are decreasing; but if the average of prices remains constant, the value of money is said to be stable.

Necessity, trial and error, and evolution have enabled us to define our money in terms of functions and have showed us the qualities it must possess. Had the functions and qualities been specifically defined and established early in our history, then maybe the story of paper currency in the United States would have been less chaotic and the paper currency in circulation limited to just one kind instead of the variety present today.

CHAPTER III

COLONIAL ERA

The personnel who composed the original settlers of this country consisted to a large degree of those who fled from less desirable conditions at home. Usually they were poor in terms of wealth and brought very little money with them. Though their demands for trade were meager, from the outset the supply of money to fill this demand was one of their hardships. Barter was resorted to but proved very difficult in the absence of a standard currency. Necessity decrees unusual solutions and out of necessity the early colonists adopted primitive forms of money. Fish, corn, and animal pelts were commonly used as money and records found of court fines imposed by Massachusetts indicate that the fines were payable in grain.¹ Tobacco and cotton were also used, as were the warehouse receipts of these commodities. Indian wampum, made from shells in the form of beads also served as money. As a matter of fact, Massachusetts in 1643 made it legal tender for any sum not exceeding 40 shillings.² It must be remembered that during this period the English Pound was the accepted measure of value. By 1661 the legal tender status of wampum was cancelled by Massachusetts.

Paper currency as we know it was unknown in this era, though experimentation was beginning along this line in Europe. What available

¹A. Barton Hepburn, A History of Currency in the United States (New York: The Macmillan Company, 1915), p. 2.

²Ibid. p. 5.

money there was usually took the form of coins, predominantly English, though as trade overseas increased, so did the quantity of Spanish, French and Mexican coins in circulation increase. The scarcity of coins continued more or less until the American Revolution, due largely to the balance of trade remaining heavily in favor of the mother country.

The English government did not permit the colonies to produce coin. Moreover, since 1696 exportation of specie from England was forbidden by English legislation.³ In 1652 Massachusetts proceeded on its own initiative to establish a mint for coining silver pieces, but in 1684 King Charles II ordered the mint closed on the grounds that it violated the royal prerogative of coinage.⁴

The history of early colonization shows that a constant struggle went on between the American Colonies and the British Government over matters of economic policy and money. The English policies required the colonies to serve exclusively the motherland. For this purpose they had to be kept as far as possible in a state of agriculture. The colonies wanted to issue their own money and develop steel furnaces and rolling mills to develop the new country. The colonies felt that until they could issue their own money, they could not develop economically.

Paper money or currency got its start in the United States when Massachusetts issued in 1690 printed "bills of credit" in order to con-

³Arthur Nussbaum, A History of the Dollar (New York: Columbia University Press, 1957), p. 7.

⁴Ibid.

tribute to the financing of King William's war against the French colonies. The "bills of credit" read as follows:

No. 5 Sh

This Indented Bill of Five 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 public payments and for any stock at any time in the Treasury.

New England, February the Third, 1690. By order of the General Court. (There follow the colony's seal and handwritten signatures of the three members of the "committee.")⁵

Issued in limited amounts, they proved a sound substitute for coin and as early as 1692 they were made legal tender.

In short order the remaining colonies made use of paper money issues, all possessing the same general characteristics and all being the direct promise to pay of the issuing colony. By law this type of currency was usually made legal tender and severe penalties were imposed for refusal to sell goods or receive payment in this paper money at par. As it ever is in new countries, capital was urgently needed for various purposes and the easiest way to raise it seemed to be to borrow from the future by emitting bills for the future to pay. The freedom of creating bills of credit led to grave inflationary abuses. Over issues and violation of promises made to the holders became common. The bills were issued against securities, against personal loans with the prerequisite of mortgages on land and sometimes against the pledges of commodities. The period of redemption of the bills was sometimes extended, by the

⁵Ibid, p. 14.

issuer, unilaterally, the stated maximum of issuance exceeded, and the collection of taxes securing the redemption omitted.⁶ The inflationary trend continued and the degree of depreciation of the various issues differed widely according to the colonies, the most extreme case being that in Rhode Island in 1740 when one issue circulated at 4 per cent of its Sterling parity. It must be remembered that the value attached to each issue was in pounds sterling as the colonies were still considered a part of the British empire. The depreciation of the various colonial issues continued well into the era of the Continental Congress and its attempt to force by law acceptance of these issues at par was to no avail. This fact is significant in that it shows how powerless the fiat issues of a government are to reverse economic law.

This experience should have cleared up the idea that the government can impart intrinsic value by its mere fiat and thus make the fiat paper money of the government the equal of a commodity or representative type of money. That this happened again with the issuance of Continental currency may be attributed to the fact that at the time of its issuance there were three kinds of paper currency: that issued by the newly created states, that issued by the Continental Congress, and that issued by the States and Congress jointly. The lesson learned from the issues of colonial bills did not have sufficient time to be recognized and analyzed before the establishment of the Continental Congress.

In summary of this era, one of a formative period, oppressive

⁶Ibid, p. 19.

debt, disorganized business and depreciated currency presented grave economic conditions, but it must be remembered that the greater and graver problem of creating an independent nation based on the consent of the governed was first to be solved. Lack of knowledge and understanding of banking functions and purposes coupled with political instability and influence highlighted the trials of establishing a banking system and issuing currency. Valuable lessons were learned, though not always remembered or heeded in additional attempts at establishing a currency system.

Every one of the colonies had at one time or another made use of note issues and in some cases issues were made by private banking concerns. The issues were made to obviate raising revenue by taxation and to supply circulating medium. No adequate provision was made for the redemption of the notes issued and depreciation followed. This proved equally true where the currency was given legal tender status. When an issue had depreciated to such extent that it was thoroughly discredited, it would be redeemed at a percentage of its par value in a new issue put forth with solemn pledges for its redemption, which new issue underwent in turn a like depreciation. Issue succeeded issue until depreciation was so great and the country so flooded with currency that further issues ceased to be an available resource.

In retrospect we can say that there were three main causes for the issuance of colonial currency: (1) war expenses; (2) demand for capital; (3) ordinary expenses of government. There were other pretexts, one of the most common being the replacement of old and worn bills,

which somehow always left a margin over for general expenses.

The Colonial currency was composed of several different kinds; (1) interest bearing, not legal tender; (2) interest bearing, legal tender for the principal and sometimes the interest; (3) non-interest bearing, legal tender for all purposes; (4) non-interest bearing, legal tender for future but not for past debts; (5) non-interest bearing, not legal tender between private persons, but receivable for all public dues.

CHAPTER IV

PRE-CIVIL WAR ERA

The Revolutionary War changed the currency question materially. In 1775 the Continental Congress was established at Philadelphia, and shortly thereafter the colonies advanced to the dignity of states. The Congress was no more than an assemblage of diplomatic delegations, and delegations not authorized to obligate their principals, the colonies. The Continental Congress was therefore unable to raise taxes or impose any other levies. The colonies even declined to contribute to the treasury of the Congress. The colonies had no money in their treasuries, no factories which could manufacture arms or munitions and the British Navy not only endangered their commerce, but practically closed to them the ports of the world. The colonies had no borrowing credit abroad and the nation was a hope as yet without tangible evidence. Never was a war against such a great nation undertaken under more discouraging circumstances. Foremost among the mazy questions facing the new republic was that of how to finance the war. Regardless of the recent experience of the colonies and their issues of paper money and its sad depreciation, there seemed no other resource left to the Continental Congress, and therefore they authorized the issuance of Continental currency.

The "Continental bills" or, briefly, the " Continentals," as these bills of credit came to be known, were based upon a Congressional resolution which pledged the faith of all the confederated states for the redemption of the bills. Moreover, it was provided that the states

should carry out the redemption between 1779 and 1782 in amounts corresponding to their population--assurances of little legal or practical value.¹

That these bills would suffer the same fate of the colonial issues soon became apparent, and by 1777 their depreciation had reached such proportions that Congress appealed to all states to make the Continentals legal tender. The states were asked to call in their own money in order to appreciate the "Continentals." In 1776, Congress had even authorized a lottery as a means of raising money, but it did not succeed, as people would not pay coin for a chance to draw Continental dollars.² In 1780 Congress decided to admit the breakdown of its currency. The value of the Continentals faded entirely and on the 31st of May, 1781, by Act of Congress, Continental bills ceased to circulate as money, and provision was made for refunding them.³ Stories have been told about barbers who papered the walls of their shops with the Continentals. The phrase "not worth a Continental" became a synonym for utter worthlessness.

In 1778 the Articles of Confederation were adopted, giving to Congress coordinate power with the states to emit bills of credit, but no power to levy taxes. The sad experience with the previous kinds of currency was not reflected in the new constitution which was adopted and went into effect in 1789. The constitution as adopted brought little

¹Ibid., p. 35.

²A. Barton Hepburn, A History of Currency in the United States (New York: The Macmillan Company, 1915), p. 15.

³Ibid., p. 17.

progress in the monetary field due to its general incompleteness and weakness regarding monetary matters. This was destined to become a source of serious trouble.

In Section 8 (5) of the fundamental Article I of the Constitution, the power of Congress to coin money and regulate the value thereof, as well as the value of foreign coin, is reasserted. In Section 10 (1) the states were now forbidden to coin money or, more important, to emit bills of credit.

The desirability of having the coinage of money regulated by the central government was recognized, and that power was given exclusively to Congress in the Constitution. This insured uniformity of coins throughout the nation, but it seems strange that there should not have been an equal desire to have the paper currency regulated by the same authority, especially in view of the then recent experience with paper currency.

This matter having been left in doubt in the organic law, political exigencies controlled the question and the creation and regulation of paper currency was left for years to the different states. The failure to appreciate and adopt a national system of paper currency can only be explained by the jealous desire on the part of the states to minimize the powers of the Federal government.⁴

Late in 1790, Alexander Hamilton submitted his plan for the establishment of a Bank of the United States, similar in its constitution to the Bank of England. In his report to Congress supporting his con-

⁴Ibid., p. 30.

victions and reasons for the establishment of such an institution, he devoted a large part of the report on the functions of banks as he felt that there was a lack of knowledge on that subject. His statements on rudimentary banking principals and purpose would probably sound very dull and elementary if read in the light of our knowledge today, yet the primitive conditions existing then demanded such an exposition.

In comparing a government currency with a bank currency he said:

"Among other material differences between a paper currency issued by the mere authority of government and one issued by a bank, payable in coin, is this; that in the first case there is no standard to which an appeal can be made as to the quantity which will only satisfy or which will surcharge the circulation; in the last that standard results from the demand. If more should be issued than is necessary it will return upon the bank. Its emissions, as elsewhere intimated, must always be in a compound ratio to the fund and the demand, whence it is evident that there is a limitation in the nature of the thing; while the discretion of the government is the only measure of the extent of the emissions by its own authority."⁵

Hamilton went on to show that state banks could not serve the government as well as a federal corporation, being unable to furnish adequate security for public moneys.

The bill was passed by Congress and approved by President Washington in 1791 in substantially the same form presented by Hamilton despite great political objections on the grounds that it was unconstitutional.

The charter of the bank was an exclusive one for twenty years, and the bank began business in Philadelphia, branches eventually being opened in New York, Boston, Baltimore, Washington, Norfolk, Charleston,

⁵Ibid., p. 76.

Savannah and New Orleans. No reports on the Bank's condition seem to have been required by the Treasury, and only two reports are known to exist.⁶

The importance of the First Bank of the United States was twofold: (1) it furnished a considerable share of the country's circulating medium for a period of twenty years; (2) it forced other banks to maintain redemption of their notes, thereby aiding in the maintenance of a currency of more or less uniform value throughout the country.

Under conservative management it accumulated enough specie to cover its note issue almost 100 per cent and for its own protection it promptly presented for redemption all notes of other banks deposited with it, thus forcing the state banks to maintain more strict standards of liquidity. By 1811 the question of the Bank's existence became a political issue and Congress allowed its charter to expire. The period covered by the two decades in which the Bank existed was one of prosperity for the country. Natural advantages and the energies of the people had much to do with this, but certainly some of the credit must be attributed to a period of improved faith and stability in our currency.

The history of currency for the quarter-century following the expiration of the First Bank of the United States is divisible into three periods: (1) the disorganized condition of the currency during and following the War of 1812 and the struggle for its reformation; (2) a period of sound currency under regulation of the Second Bank of the United

⁶Ibid., p. 83.

States; and (3) renewal of war against the Bank resulting in failure to renew its charter and the breaking up and downfall of the currency system again.

The second war with Great Britain began in 1812 and as predicted by Hamilton, the State banks proved unequal to the task of financing the war. Much of their capital was fictitious, many having been organized on the unsubstantial basis of the promises-to-pay of the subscribers to capital stock. Adequate legal restrictions were wanting in most of the states and notes were issued with ease and without regard to capital or specie holdings.

Not since the days of Continental currency had this country such a bad circulating medium as from 1812 to 1819. It was composed of a relatively small amount of notes of sound banks, an almost equally large amount of counterfeits, and a mass of notes issued by unsound banks, corporations and even tradesmen, the value of which could rarely be known from one day to another. The range of the discounts on the various state issues during these years was from 1 3/4 per cent to 23 per cent, depending to a large extent on the locality.⁷ The location of many banks was practically unknown, and many of them had failed.

Congress in 1812 was compelled to issue "Treasury Notes" to cover short-term loans, and, in all, five separate issues were authorized during the war. At first all notes were interest-bearing, but later the \$5 notes did not bear interest. The notes were not made legal tender.

⁷Ibid., p. 89.

The war came to an end in 1815, but the disorganized condition of the currency required attention and President Madison gave special attention to the subject in his message to Congress that year. Many of those in Congress who had aided in defeating the renewal of the charter of the First Bank of the United States began to see the error of that decision. The financial support required by the government, and the necessity of ensuring the security of the note circulation proved too strong for the opposition, and the Second Bank of the United States was chartered in 1816.⁸

The first task confronting the Bank was to substitute order for chaos in the currency by persuading the state banks to resume specie payment. But these institutions found the traffic in paper money too profitable to be willing to give it up without a struggle. Another problem was that during the first year or so of its life the Bank was badly managed. In spite of the scarcity of specie and the overabundance of currency, the Bank sought to increase its note circulation. In 1819 a new president took office and immediately introduced stringent banking practices. The imperfect coordination of the volume of currency to the needs of the country was a result of the chaotic method of note issue and the lack of a centralized control. What each separate bank had to sell was notes and deposits and it sold as much of these as it could until the inevitable repercussion on its specie reserve was felt. When it saw its reserves approaching the danger point, it contracted its loans sharply,

⁸Herman Angell, The Story of Money (New York: Frederick A. Stokes Company, 1929), p. 280.

called in notes, loans and mortgages to put it in a more liquid position. The outcome was that business was kept in a state of constant oscillation between two extremes. The banks got all the blame and none of the credit, no matter what happened. On the upgrade they were blamed for rising prices and on the downgrade they were blamed for scarcity of money.

In spite of this, the evidence appears to be conclusive that the Second Bank of the United States was a powerful institution and of useful service to the government. It suppressed worthless bank issues, provided a reliable currency and protected American interests in international trade relations.⁹ But as was the fate of the First Bank of the United States, public opinion and politics doomed the chances for a renewal of the Bank's charter, and it expired in 1836. With the end of the Bank there went the best means which could be devised at that time for furnishing the people of the United States with a sound currency. Unfortunately it became involved in politics and those who could not use the Bank for their own ends determined to destroy it. No thoroughly effective substitute was provided for eighty years.

With the end of the Second Bank of the United States, the government transferred its funds to the State banks. This stimulated the development of State banks and the country again entered a period of inflationary finance. Notes of a particular bank might be accepted at par in one part of the country while in another they were rejected completely. The banks regarded it as something of a grievance when their

⁹Ibid., p. 292.

notes were presented for redemption in specie. In order to evade redemption, banks were often set up in unheard of, out-of-the-way places to which there was little likelihood that their notes would find their way back, once issued. This practice gave rise to the term "wildcat" banks. "Saddlebag" banks was another term of reproach, signifying that the bank's notes were carried about the country in saddlebags, to be exchanged with landowners for their personal notes.¹⁰

This period was one of extraordinary economic development for the country as a whole. The cardinal point of expansion was land settlement and speculation, these being encouraged by a lenient credit policy on the part of the government. Many banks had been organized to make loans to purchasers of government lands, and many mortgages had been made on these lands at inflated values. Prices were rising, and a great deal of speculation in government lands was going on, with the result that the government suffered severe losses from accepting worthless notes and bank failures. To protect the government against further losses, and for political reasons, President Jackson issued his famous "specie circular" of 1836, ordering the government land agents to accept only specie in payment for government lands. This circular pricked the bubble of inflation, and resulted in the panic of 1837 and the suspension of specie payments by all State banks. With the suspension of payments, none of the State banks remained eligible as a depository for the government, and even worse, the government funds on deposit with these banks were made unavailable.

¹⁰Ibid., p. 289.

Thus the fiscal machinery of the government came to a standstill.

This disastrous experience with State banks led to the establishment of the Independent Treasury System, under which the Treasury operated exclusively on a specie basis, and acted as its own bank in the collection and disbursement of revenues. In 1840 the Independent Treasury was approved by the President; however, the next year the Whigs came into power and repealed the act. In 1846 the Democrats came into power and from that date until 1861 the government did its own banking through an Independent Treasury. The dominant political party was still unwilling to admit that some control over the issue of notes was necessary, and continued to maintain that the public interest was best served by leaving to the banks themselves the regulation of note issue. The actual working of the currency system in the various states was often a perpetration of fraud and disaster upon the people, but under a strict interpretation of the Constitution, Congress had no power to intervene. It required a Civil War and the establishment of a National Banking Act to abolish the evils of the State bank currency system.

Banking conditions for this pre-Civil War era may be summarized as follows: (1) 1812-1816, interval between First and Second Bank of the United States. Period of State bank currency inflation, suspension, disasters involving enormous losses; (2) 1817-1836, Second Bank of the United States. At first unsettled conditions as to currency and business, then sound paper currency by reason of the Second Bank of the United States enforcing redemption of State bank notes. During the last years of the Second Bank's existence, unsettled conditions due to political

power exerted enough pressure to prevent renewal of its charter; (3) 1837-1846, inflation, suspension, and losses measured by the hundred millions, withdrawal of government funds from the banks with the declared hope of preventing undue expansion of bank-note issues; (4) 1847-1860, banking becoming more conservative. Deposits counting more and note-issues less as a means of extending bank credit. Note-issues, however, unrestrained and entailing enormous losses upon the people. Failure of Subtreasury to restrain or control banking methods and with interfering with business by withdrawing from the channels of trade, and locking up, funds which should have been current.

CHAPTER V

CIVIL WAR, UNITED STATES NOTES AND THE NATIONAL BANK ACT

When the administration of President Lincoln took office it found the national finances in a bad way. The Treasury was practically empty, custom receipts had fallen off, the public credit was shaken and an additional burden was imposed by the war between the states. The administration did not feel itself able to impose severe taxes on the people to finance the war and resorted to borrowing three out of every four dollars it spent.

In December 1861, banks all over the country suspended specie payment. Bank notes began to depreciate fast and the Federal government was confronted with the necessity of providing another and better currency. With this purpose in mind, Congress passed in February 1862, the Legal Tender Act, authorizing the issuance of a new type of public money, United States Notes, colloquially called "Greenbacks."

These notes were unsupported by specie, were non-interest bearing and were to be "lawful money" and legal tender for all debts, public and private, except customs duties and interest on the public debt, both of which were to be payable in coin. They were made convertible into six per cent, twenty-year bonds redeemable after five years and receivable at par. Much opposition was caused by the clause which provided for payment of interest on these bonds in coin.

The Act did not specify how or when the notes were payable, nor was any other provision, except the convertibility into bonds, made for

their eventual retirement. The power to reissue them when received into the Treasury contemplated their continuous circulation until Congress directed otherwise. The faces of the notes bore the simple statement that "The United States will pay to the bearer _____ dollars." These United States demand notes are generally considered to be the first paper money of the United States.¹

The new paper money raised technical and artistic problems. In the past, bank notes, including those of the Bank of the United States and the small Treasury notes of 1815, were essentially devised as commercial instruments. Now a new approach was taken, following the example of foreign paper money. Obverse and reverse were fully covered by vignettes, not only showing the amounts of the notes and certifying the issuing authority but also appealing to the sentiment of the people. The prevailing colors were black, white and green, whereas in the earlier issues only black and white were employed. The United States notes are outstanding in that they have continued as a part of the American monetary system from the time of the Civil War to our own day. This does not imply that they have continued as an essential part of our monetary system. The "greenbacks" were not supported by any collateral, specie or otherwise, but were simply based on the credit of the Federal Government. The total authorized amount of these notes to be issued was set at \$450 million.

It was obvious from the moment the war started that the currency situation was badly in need of reform. Jacksonian democracy had destroyed

¹Arthur Nussbaum, A History of the Dollar (New York: Columbia University Press, 1957), p. 107.

the Bank of the United States and at that time there were 7,000 kinds of paper notes in circulation, not to mention 5,000 counterfeit issues.² It was the emergency of the war that gave the sound-money people a chance to put an end to the horrible confusion. Secretary of the Treasury Chase seemed to have become converted to a National Bank scheme and early in 1861 he recommended it to Congress. As would be expected, the chief opposition to the measure came from the State banks. In spite of their opposition, however, the National Banking Act, as it later became known, was passed in 1863. The Act of 1863 was inadequate as defects in the law were revealed, and it was extensively amended in 1864.

The new law provided for "free banking." By meeting the general requirements of the Act, anyone could get a charter and engage in the business of banking. A new office, the Comptroller of the Currency, was set up in the Treasury Department to review charter applications and to administer all laws relating to National banks. Charters were first granted for twenty years, later this was extended to ninety-nine years, and under the McFadden Act of 1927, charters were made indeterminate as to duration.

To protect the holders of national bank notes, Congress left no stone unturned. In fact, as subsequent events attested, it turned several unnecessary stones. Congress wanted to be certain that the country would have a bank-note issue that would circulate at par and would always

²Norman Angell, The Story of Money (New York: Frederick A. Stokes Company, 1929), p. 294.

be fully redeemable. To this end the Act provided that: (1) National bank notes could be issued only against United States bonds deposited with the Comptroller of the Currency, the amount of the notes not to exceed 90 per cent of the par value or market value of the bonds at the time of purchase, whichever was smaller. Later the market price feature was dropped and National banks were allowed to issue notes up to 100 per cent of the par value; (2) Issuing banks were required to maintain a redemption fund with the Comptroller at least equal to 5 per cent of their outstanding notes; (3) No bank could issue notes in an amount exceeding its paid-in capital; (4) A legal reserve amounting to 15 or 25 per cent was required to be held against notes, the former for "country banks" and the latter for reserve city banks; (5) Each National bank was required to accept the notes of all other National banks at par; (6) The total circulation of notes of all banks was limited to \$300 million. This limitation was removed in 1874; (7) In case a bank refused or was unable to redeem its notes, the Comptroller might sell the pledged bonds and use the proceeds to pay the note holders. Actually this provision meant little in practice since note holders soon began to realize that the credit standing of the notes was not attached to that of the issuing bank. When a bank failed, therefore, it was not the note holders who presented notes for redemption, but rather these notes were finally gathered in by the banks in the course of their operations and presented to the Treasury for cancellation against bonds held.

Of all the provisions listed above to protect the note holder, only the first and the last were necessary. As long as the notes were backed

100 per cent by obligations of the United States government and the bonds were held in trust by the Treasury, the notes had the credit standing of the government.

Notes might be in denominations from \$1 to \$1,000 and were to bear on their face a certification that bonds of the United State were held by the Treasury to secure them, the name of the bank, and signatures of its officers. They were made redeemable on demand in "lawful money," receivable for all public dues except customs and for all payments by the United States except interest on the public dept and redemption of national currency.

Seventeen Reserve cities were designated by the National Banking Act. Periodic examinations, full and verified quarterly reports and monthly reports of the principal asset and liability items were required of all National banks. Provision was made for the conversion of State banks into the national system. National banks might be designated by the Secretary of the Treasury as government depositories for all revenues except customs, such deposits to be secured to the satisfaction of the Secretary "by government bonds and otherwise." Congress reserved the right at any time to amend or repeal the Act.

By the end of 1864 there were 638 National banks. The State banks experienced little difficulty in redeeming their notes in greenbacks and constantly maintained a very large volume in circulation. Under the laws of many states, bank notes were issued against the credit or general assets of the banks and where a deposit of security was required, it was easier or more profitable to comply with the state laws than to deposit United States bonds as required by the National Bank Act. The amount of notes

which might be issued was less restricted under the state laws and altogether banking under the state systems was more profitable. On March 3, 1865, a revenue law imposed a tax of 10 per cent upon state bank notes paid out by any bank, National or State, and also provided that State banks with their branches might come into the national system and retain their branches. In 1866 the 10 per cent tax was extended to state bank notes used in payment by anyone. This legislation very soon caused the disappearance of all such notes and was a powerful factor in inducing State banks to reorganize under the national system. At the end of 1866 there were 1582 National banks.³

The one fixed purpose of the Secretary of the Treasury was to supplant the onerous, costly, and insecure State bank circulation by a safe, efficient National bank circulation secured by government bonds and further protected by a lawful money reserve against both circulation and deposits. Had the Secretary supported State banks the country would have been flooded, as before, with an irredeemable currency varying in value from good to worthless. Fully appreciating the danger of a redundant issue of United States notes, Secretary Chase endeavored to limit the volume, but conditions forced him to issue more and more in the face of depreciation. He did so, doubting their legality, and hoping and believing that the National bank circulation when created would take their place. Later on as Chief Justice he pronounced the legal tender notes he had issued unconstitutional,⁴ however his decision was reversed the following year by the Supreme Court when it reconsidered the case.

³A. Barton Hepburn, A History of Currency in the United States (New York: The Macmillan Company, 1915), p. 311.

⁴Ibid., p. 202.

Though the Civil War ended in 1865, the expenses of the government did not become normal until some years later. Secretary of the Treasury McCulloch directed special attention to the currency portion of the public debt, urging an ultimate repeal of legal tender acts. The United States notes were a convenient form of money and a non-interest bearing loan, hence their retention was urged on the double ground of convenience and economy. To this the Secretary opposed, first, the extra-constitutional exercise of power warranted only by war; second, the breach of faith involved in failure to redeem; third, the evil effects which would follow the continuance of the inflated currency.⁵ He warned Congress against a continuance of the policy of an inconvertible currency, predicting that, unless remedied, the question would become a political one. How right he was.

A considerable number of public men were inclined to regard the war debt as only partially obligatory upon the nation, owing to the fact that depreciated currency had been received for the greater part of it, and urged that payment in coin commanding a high premium should not be insisted upon. They doubtless had in mind the fact that Congress redeemed the "Continental currency" at a discount of 100 to 1.

Secretary McCulloch had actually begun the retirement of greenbacks and the Act of 1866 authorized him to fund all notes into bonds or sell bonds to retire notes, provided the total debt was not increased. In his report for 1866, Secretary McCulloch showed that he had reduced

⁵Ibid., p. 206.

the greenback circulation by \$43 million and that there was outstanding at that time \$390,195,785.⁶ At that time the Treasury had a substantial balance built up and Secretary McCulloch was criticised for holding so large a balance in the Treasury which might have been used in great measure to save interest. In defense, he pointed out the necessity for keeping the Treasury strong in order to maintain the stability of the irredeemable currency, regarding this end much more important to the people than saving interest. His purpose was to hold a reserve against these note issues precisely as a bank would.

A very substantial sentiment had by 1867 manifested itself against the retirement of legal tender notes, against the National banks, and favorable to paying the public debt in greenbacks. The word "contraction" was made to appear to the masses as signifying a monstrous power which would not unlikely rob them of their daily bread. Crop failures, high prices, speculation, and resulting business troubles gave strength and numbers to the movement. The greenbacks were regarded as the means of curing the evils which in fact they caused. In 1868 Congress passed an act prohibiting further reduction of the greenbacks. Political parties changed and Grant was made President in 1869. His first action was to call Congress in extra session at once and an act was passed declaring it to be the purpose of the United States to pay its notes and bonds in coin or the equivalent, solemnly pledging the faith of the nation to such payment, and "to make provision at the earliest practical period for

⁶Ibid., p. 208.

redemption of United States notes."

This declaration no doubt served its purpose but, so far as the redemption of greenbacks was concerned, it was not acted upon for nearly six years, and not actually made effective until nearly ten years thereafter. The volume of greenbacks remained practically undisturbed at \$356 million for nearly five years, and then the amount was not reduced, but increased.⁷ This was the interpretation given the declaration's "earliest practical period" to which the faith of the nation was pledged.

The legal tender notes were treated as if they had "come to stay," their ultimate retirement in total was no longer considered and the newly given pledge of Congress was not referred to. One circumstance should be noted. Although the Act of 1866 provided that greenbacks were to be retired and cancelled, and there had been destroyed some \$77 million, reducing the volume to \$356 million, it was urged that since the maximum issue authorized by the Act of 1864 had been fixed at \$400 million, and the Act had not been repealed, then the difference between that sum and the existing amount was a reserve available to the Treasury. By 1872 the second decision of the Supreme Court (reversing the former decision) was published early in the year, and declared the legal tender notes constitutional. This same year a small amount of the reserves of the United States notes were issued.

In 1873 a sharp stringency in money manifested itself and a panic began spreading over the country. Since the government was the creator

⁷Ibid., p. 214.

and regulator of the country's currency, the Treasury was appealed to for relief. The relief was a further issuance of greenbacks from the reserve to the amount of \$29 million. In 1874 a bill was passed limiting the maximum amount of greenbacks to \$382 million. Congressional elections in 1877 changed the balance of power to a more sound financial party and that year a bill was passed for the redemption of greenbacks. Thus the authors of the legal tender acts, nearly a decade after the disappearance of the only justification for these acts, and after repeated violation of pledges, finally provided for convertibility of notes into coin at a fixed date. The Specie Resumption Act did not permit the retirement of the greenbacks below \$300 million and was cleverly silent upon the question of re-issue within the limit, but obviously the intent was to retain the currency in use.

The history of this decade is but a repetition of the experience of every nation with fiat money. The first step taken, the rest follows easily--inflation, delusion of the people, breach of faith, disaster. Had the nation been actually impoverished so that recuperation was long and tedious, some excuse might be found in such conditions. But the nation was rich enough to reduce its debts by \$650 million during the period.⁸ The use of one-third that amount in retiring the legal tender debt would probably have brought about specie payments by 1870, and the application of two-thirds would have extinguished it altogether. The political leaders were "opportunists," bent upon retention of power, and

⁸Ibid., p. 223.

willing in order to accomplish this purpose to delude the people with false notions of wealth engendered by such a currency. The people thought they wanted more currency; what they needed was more capital. The leaders seemed incapable of meeting and solving the problem thus presented and it was much easier to placate the people with more or less inflation than to devise legislation which would actually bring relief. It is interesting to note that the surplus gold received from customs which was sold by the government at a premium from 1866 to 1876 exceeded \$500 million.⁹ The last Act effecting the greenbacks came in 1878 and suspended the cancellation of redeemed United States notes, and directing their re-issue. The volume of notes then was \$346,681,016.¹⁰ The first and perhaps greatest error committed in our financial legislation, after the issue of the legal tender notes, was the repeal of the law permitting them to be funded into bonds. This closed the door to their retirement and left them as a permanent feature in our currency system.

During the Civil War, greenbacks were used by the government to finance the war. The Confederacy had its paper currency and problems. Treasury notes were issued not only by the Confederacy but by its states and municipalities. Strangely enough, while the Confederacy's notes were not legal tender, the state notes were made so by state legislatures, even though the Confederate Constitution had adopted provision that states could not make anything but gold and silver legal tender.

⁹Ibid., p. 224.

¹⁰Ibid., p. 223.

In addition, there was no bar to the issuance of bank notes. In fact, the banks at first were in an advantageous position because they had gold from pre-wartime reserves; in the course of the war these reserves, however, were exchanged chiefly for Confederate bonds or simply confiscated by the Confederate government.

Counterfeiting flourished as never before and strange phenomena were to be found, such as a Confederate issue of monetary notes in 1861 which promised payment after ratification of the peace with the North.¹¹ The issuance of paper money, to a much greater extent than in the North, was the means of war financing. Heavy inflation of the Confederate dollar developed soon and after 1864 took on a pernicious character. After the war was ended the Confederate dollar had lost all its value and no "honorable burial ever took place." It was the worse case of inflation in American history.

The grave problems of the Reconstruction with which the United States was confronted after the war have often been described. In the monetary field the main question was presented by the debts contracted in Confederate dollars. Declaring them entirely worthless would have been another blow to the paralyzed Southern economy, though it would have been easy to justify such a ruling juridically. However, the Supreme Court held that contracts made in terms of Confederate dollars could not per se be regarded as made in aid to the insurrection; the Court deemed

¹¹Arthur Husebaum, A History of the Dollar (New York: Columbia University Press, 1957), p. 124.

them valid, that is, the debtor had to pay in United States dollars the actual value of Confederate dollars as it existed at the place and time of contracting.¹²

¹²Ibid., p. 126.

CHAPTER VI

SILVER CERTIFICATES

Historically, Silver Certificates have to be traced into existence through the battle of the silver interests and silver coinage.

Congress made a general revision of the coinage laws in the Act of February 1873. No change was made in the gold coins, but all silver coinage was altered. The new law made no mention of the silver dollar. This probably was only a recognition of the fact that the coin had practically disappeared from the consciousness of the people. While some silver dollars had been minted in every year since 1858, their coin value had been below their bullion value ever since the adoption of the mint ratio of 16 to 1, and they had not circulated. In fact, they had been an insignificant part of our money since President Jefferson's action in 1806. Meanwhile, the price of silver began to fall in the world markets. There was a tremendous increase in production in the far Western States; at the same time important European powers were adopting the gold standard, so the demand for silver fell off. The inflationists, defeated in their attempts to get more greenbacks, were now joined by the owners of the silver mines who were anxious to stimulate the demand for their product and thus raise its price. These combined forces started a terrific agitation for cheap silver money which dominated American political life for the next quarter century. Through their agitation, the Act of 1873 became known as the "Crime of '73."

The silver forces won their first victory in the Specie Resumption Act of 1875. This Act directed the Treasury to redeem greenbacks at par in gold after January 1, 1879. It also ordered that subsidiary silver coins be minted as rapidly as practicable and paid out in redemption of fractional paper currency. However, the Secretary of the Treasury interpreted the mandatory provision as only applying to coinage of silver and not paying it out. This legislation, coupled with a steady decline in the value of silver, restored the country's stock of subsidiary coins. While this meant a considerable increase in the monetary use of silver, its actual boon to the silver interests was less than expected, because the continued decline in silver led to an influx of old American silver coins that had been driven out of the country by Civil War inflation and had been in use in South America for some fifteen years.

The Bland-Allison Act of 1878 was a more substantial victory for the silver interests. It ordered the Secretary of the Treasury to purchase not less than two million dollars nor more than four million dollars worth of silver each month and to coin it into dollars. The new dollars were made full legal tender. The Act also provided that silver certificates in denominations not lower than \$10 might be issued against silver dollars deposited in the Treasury.¹ The silver advocates in Congress were by no means satisfied with the Bland-Allison law and during the summer of 1878 the subject was again agitated in the political field.

In his report for 1880, Secretary of the Treasury Sherman stated

¹Major B. Foster, et al, Money and Banking (New Jersey: Prentice Hall, Incorporated, 1956), p. 48.

that the amount of silver was already in excess of demand; popular objection to the dollars rose from their bulk and their known deficiency in value; less than \$26 million were in use out of nearly \$73 million coined and less than \$20 million were floated by representative certificates, thus leaving \$27 million idle in the treasury--almost a year's coinage.² The bullion value of the dollars was about 88½ cents. President Hayes forcibly urged the suspension of coinage in his message for 1880. It was demonstrated that the coinage law of 1878 would not raise the commercial value of silver, and indeed its price had fallen. He also recommended increasing the amount of silver in the dollar.

In 1882, Folger, now Secretary of the Treasury, had been able to put into circulation only about one million silver dollars, and the silver certificates in use were less than the year before, so that practically the entire purchase of silver for the year, some \$27 million dollars, was idle in the Treasury, having displaced gold or legal tenders to that extent.

The silver advocates persisted in the belief that the Treasury was not only indifferent in getting silver into circulation, but were inclined to the opinion that obstacles were actually placed in the way. They advocated that if the Treasury would only pay out more silver and less gold, the gold reserve would not be endangered and their cause would be helped.

McCulloch, then Secretary of the Treasury, replied frankly, demon-

²A. Barton Hepburn, A History of Currency in the United States (New York: The Macmillan Company, 1915), p. 290.

strating not only that both dollars and certificates were paid out as largely as possible, but showing that both forms returned to the Treasury in the revenues as fast as and sometimes in greater volume than he disbursed them. Forty per cent of the customs revenue was now paid in silver certificates; the gold currency was preferred and was very largely withheld in payment of taxes and duties; the silver issue had reached the saturation point.

Yet upon this showing, the House refused to suspend the further coinage of dollars, so the Treasury was compelled to pay out current money and increase its supply of those forms which were not current. The country barely escaped going on a silver basis.⁵

In 1886 Congress again called upon the Secretary of the Treasury, then Manning, for a full report as to its actions respecting silver. He stated that there had been no disparagement of any form of money by the Treasury; each citizen was paid in his own choice of currencies on hand. He had by much labor increased the circulation of silver dollars by \$11½ million dollars. He pointed out that silver certificates, if issued beyond the actual needs, would necessarily flow back into the Treasury, and silver dollars would not circulate if one and two dollar notes were furnished.

He went on to state that the interest bearing debt subject to call amounted to \$174 million, but to force silver out for this would precipitate the silver bases. He showed that the gold reserves were down to

⁵Ibid., p. 294.

\$148 million; that 40 per cent of the customs revenue was now paid in silver certificates; that gold currency and coin was preferred and was largely withheld in payment of taxes and duties. He further stated that the silver issue had reached the saturation point. On the other hand, there was \$246 million of debt in the shape of legal tender notes, the payment of which had been pledged in 1869, but which under the Act of 1878 he was compelled to re-issue. These he pointed out could be replaced by silver certificates if the country desired to remain bimetallic. Free coinage, or the continuation of the limited coinage would bring silver monometallism, under which all the surplus silver of Europe would ultimately come here for gold. Until coinage was discontinued, it was useless to talk of bimetallism.⁴

The sole action taken by Congress was to authorize issuance of silver certificates in the denominations of \$1, \$2, and \$5. These certificates gradually began taking the place of greenbacks.

President-elect Harrison in his political campaign had promised to "do something" for silver. Silver had now fallen so that the quantity in the dollar was worth about 72 cents in bullion value. In 1890 the Sherman Silver Purchase Act was passed, sometimes called the "Sherman law," which provided for a compulsory purchase, by means of an issue of legal tender Treasury notes, of $4\frac{1}{2}$ million ounces of pure silver. Dollars were to be coined for one year and thereafter only as required for redemption of notes, which were made redeemable in gold or silver dollars

⁴Ibid., p. 296.

at the option of the government. The measure as passed was obviously not as safe or conservative as planned. Thus "something was done for silver." The Act was a bald subsidy to the silver interests.⁵ The Act left the country on the so-called "limping" standard, with one leg of gold and the other of fiat silver. The Act did contain the so-called "parity" clause, a declaration that it was the established policy of the United States to maintain the two metals at a parity with each other.

During the thirty-nine and a half months this Act was in force, the Treasury issued nearly 156 million dollars of the Treasury notes of 1890 and acquired enough bullion to coin over 225 million silver dollars. However, only a little more than 36 million dollars were coined. The Treasury adopted the policy of redeeming the Treasury notes in gold. With \$156 million of Treasury notes added to an already redundant currency, the people began to show a preference for gold. An increasing percentage of tax payments consisted of Treasury notes, greenbacks and silver instead of gold. Treasury notes, paid out in buying silver, were returned for redemption in gold; when the Treasury re-issued the notes to pay current expenses, the notes were again returned for gold. Nothing could stop this endless chain so long as the Treasury continued to issue notes in payment for silver.

In the spring of 1893, the Treasury's gold reserve against the greenbacks fell below the presumed minimum of 100 million dollars. Confidence was shaken and foreigners began to sell American securities.

⁵Major E. Foster, et al, Money and Banking (New Jersey: Prentice-Hall, Incorporated, 1956), p. 50.

India stopped free coinage of silver and the price of the metal fell from 82 cents to 67 cents an ounce. A money panic followed and a special session of Congress repealed the Sherman Act on October 30, 1893. Despite these body blows, the supporters of silver did not quit. Bimetallism was the principal issue in the Presidential campaign of 1896.

Silver lost the election in 1896 and though still determined to gain support for their interests, political and economic events prevented them from any further active action for quite a while.

The silver issue was revived under the New Deal. In the Presidential proclamation of December 1933, under the broad powers granted him by the Thomas Amendment, President Roosevelt directed the mints to buy all the domestically produced silver, whose amount was seen to grow, at the rate of 64½ cents an ounce, as contrasted with the world market price of about 45 cents.⁶ This rate equaled one half of \$1.29, the statutory evaluation of silver in its monetary use. The deduction of 50 per cent was justified officially as "seigniorage," a strange explanation, since seigniorage in modern times has always meant the deduction of a very small percentage covering the minting expenses of the government and perhaps a moderate fee. The real point was the continuing of the large profit for the silver producers.

The economic strain upon the farmers at this time led to the renewal of bimetallic-inflationist agitation, of which the silver producers were natural supporters. As a result, Congress passed in 1934

⁶Arthur Hays Sulzberger, A History of the Dollar (New York: Columbia University Press, 1967), p. 192.

the Silver Purchase Act authorizing the President to order free coinage of silver dollars at a rate chosen by him, thereby creating real bimetallism. The President never made use of this power, still Congress had established a new policy according to which the proportion of silver to gold in the monetary stocks of the United States should be increased; the ultimate objective was to have one quarter of the monetary value of the stocks in silver.

On the whole, this country's economy was little affected by the Silver Purchase Act and the ups and downs in the price of silver which it caused. All in all, the new bimetallistic eruption had led to a complete anticlimax. The objective to have one quarter of the monetary value of the stocks in silver remained on the statute books, and the American silver producers received extra profits from the government as before, but despite some unrelenting counterpropaganda, silver was now definitely eliminated as a possible basis of the monetary system.

The revival of bimetallism during the New Deal period must be explained to a large extent by a peculiarity of the American constitutional system. In the Senate, definitely the more powerful part of Congress, the leading silver states--Idaho, Utah, Montana, Arizona, Nevada and Colorado--had twelve representatives, that is, six times as many as New York state, which then had four times as many inhabitants as the six states combined. Since nearly all of the senators concerned were Democrats, at that time the majority party, their disproportionate power

was further enhanced. Here monetary history illustrates a striking weakness of American political life.⁷

This is further evidenced by an act passed in 1946 which made it mandatory for the Secretary of the Treasury to buy all domestically mined silver offered each year at a price of 90.5 cents per fine ounce whether or not he deems it to be in the public interest.

⁷Ibid., p. 196.

CHAPTER VII

GOLD CERTIFICATES AND THE END OF NATIONAL BANK CURRENCY

The history of gold certificates has been very little investigated and therefore information concerning them is relatively scarce. The Act of 1863 authorized borrowing of \$300 million for the current year and \$600 million for the following year. As to the forms of the obligations, the Secretary of the Treasury was given wide discretion, as the circumstances required. One of the forms was the issue of gold certificates for coin and bullion. Thus did gold certificates come into being. From then until 1882 not much was heard about them, nor was much use made of them. The Act of 1882 again provided for the issue of gold certificates, making them receivable for all public dues and available for bank reserves.

In 1899 an act was passed, resuming the issuance of gold certificates, to continue unless the gold stock of reserves should fall below \$100 million. This had happened in 1878 and the issuance of gold certificates had been halted until the Act of 1899. Gold certificates were used more extensively from 1900 on until their issuance and circulation was halted by the Emergency Banking Act of 1933. From March of that year on no gold bullion, gold coins or gold certificates were legally allowed to circulate as a currency medium. This was done to protect the American gold reserves and in effect put the United States on a modified gold standard, the dollar was still defined in gold, but gold itself was used only for settlement of international payments and

as a reserve for Federal Reserve Bank currency.

The Gold Reserve Act of 1934 further clarified the gold question. The foundation of a new monetary system was laid down in the Act as follows:

1. Title to all gold coin and bullion held by the Reserve Banks was transferred to the United States.
2. Further coinage of gold was forbidden, except for foreign countries.
3. No gold coin or currency (gold certificates) would thereafter be paid out or delivered by the United States except to the extent permitted by regulations issued by the Secretary of the Treasury.
4. Redemption was to be made only in gold bullion equivalent of the currency surrendered in keeping with these regulations.

The result of all these changes was to give the United States a highly restricted, international, executive gold bullion standard.¹

As to why gold certificates were not issued to any great extent, it must be remembered that during their life there were a variety of other forms of paper currency which were preferred. United States notes were already in existence when gold certificates were authorized, and the government preferred to issue the fiat notes rather than use its gold stock. At the time of their authorization, the National Banking Act had just been passed and another form of paper currency came into being-- National bank notes. Then, too, the silver interests were promoting the issuance of silver certificates, and with the advent of the Federal Reserve System came still another form of currency--Federal Reserve notes.

¹Major E. Foster, et al, Money and Banking (New Jersey: Prentice-Hall, Incorporated, 1956), p. 66.

Perhaps it could best be summed up by saying that amidst the various forms of currency already in existence, the gold certificates could not successfully compete, though it was the strongest paper currency offered, being backed fully by gold. But as has been brought out, politics preferred other types of currency regardless of whether they were as good or not. The preference of the people seemed to indicate that they preferred the gold itself in the form of coins or bullion rather than a certificate redeemable in gold.

The beginning of the end of National Bank currency can be attributed to several related events. The most powerful factor was the government issuing silver certificates at the rate of \$ million dollars worth a month.² The Treasury was using all its power to force them into circulation in order to prevent going on a silver basis. The crusade in favor of free coinage of silver monopolized the attention and sympathy of Congress to such an extent that it continually refused to permit banks to issue their currency to the par of the bonds, notwithstanding the fact that the bonds commanded a premium of nearly 80 per cent. It could well be said that during this period (1878-1890) the National banks were a neglected factor in the currency affairs of the country, the government seemingly having assumed the province of furnishing circulation media. In 1884 a financial crisis, limited to New York area, developed. The banks under the rigid currency laws were powerless to afford relief. They could not buy bonds required to be deposited as security for currency

²A. Barton Hepburn, A History of Currency in the United States (New York: The Macmillan Company, 1918), p. 154.

to be issued without investing more money in such bonds than they would receive as circulation in return. Had they borrowed the bonds it would have required about forty-five days after depositing them before the currency could be prepared for delivery.

In 1889 Benjamin Harrison became President, but the new administration secured no more attention for its recommendations relative to bank currency than did its predecessor. The all-absorbing, crucial question was how to placate the silver advocates and still remain on a gold basis. The National Banking System, designed to give the people a permanent paper currency, lacked the necessary support even in the ranks of those who had created it. Only by the most strenuous efforts was the system able to survive the political attacks on one hand and the conditions of a decreasing volume and enhancing prices of bonds, producing diminution of profits on the other. Moreover, the introduction of the two forms of silver paper (certificates and Treasury notes of 1890) materially lessened the demand for bank notes.

In 1907 a severe break in the price of listed securities in the Spring made only too apparent the impending crash which came in the fall of that year. The National Banks were unable to do anything to relieve the financial panic. Congress in 1908 passed a law providing for emergency currency. The same Act created the National Monetary Commission and was designed to safeguard the situation until a comprehensive law could be passed. In one of the most comprehensive studies ever made, the Monetary Commission compiled thirty-eight volumes in their exhaustive study of banking, currency and credit. A part of their study was the

essential defects of the banking and currency system of the United States.

Pertinent among the defects mentioned were the following:⁵

1. The absolute rigidity of our currency. A bank in order to issue currency must invest more money in government bonds than it is permitted to issue in currency, thereby impairing, rather than increasing its power to aid commerce and trade.

2. There is no redemption of National bank notes as they wear out and become unfit to circulate, except at the three offices set forth in the Act.

3. The system lacks cohesiveness, there being no provision for cooperation among the banks in it. Under ordinary conditions this is not so much felt by the banks individually, but under strained financial conditions, when each bank is thrown on its own resources and must in self protection act independently of the rest, the lack of a system under which all could cooperate through a common policy of action becomes keenly felt.

4. The requirement that the banks must individually control their own portion of the legal reserve money of the country, without being provided with proper means for protection or replenishment of their legal reserves, is unscientific and economically wasteful.

5. An unsound system of reserves under which in periods of anxiety it becomes necessary in the protection and maintenance of individual reserves for each bank in the national system to contend against every other bank.

6. The use of so much of the legal reserve money of the country in actual circulation for ordinary business purposes is another economic waste. No provision is made for the use of any substitute for legal reserve money as a circulating medium other than the National bank notes secured by government bonds, which are as inflexible in their volume and therefore as irresponsive to the fluctuating commercial needs for them as the legal reserve money itself. The gold certificates now in circulation, being merely warehouse receipts for an equal amount of gold in the government treasury, form the most conspicuous example of this economic waste.

7. The lack of elasticity in the circulation, all forms of our present circulating medium being rigidly fixed in amount. The necessities of commerce for a circulating medium are arbitrarily met

⁵Ibid., pp. 397-398.

with a fixed amount of it, which does not respond in its volume to the fluctuating demands.

8. The restriction of the use by the banks of their legal reserves and the prohibition of their lending power in the presence of unusual demands upon them without means of protecting their reserves by the use of any satisfactory substitute therefor, or of replenishing them through adequate rediscounting facilities, which would enable them to convert their available assets into cash or legal reserves.

9. The independent treasury system, under which the government acts as partial custodian of its own funds, resulting in irregular withdrawals of money from the bank reserves and from circulation and materially interfering with the even tenor of general business.

These are by no means the complete defects mentioned, but are generally considered to be the most pertinent ones. Perhaps equally as important was the opinion rendered in answer to the question if the Treasury Department could and should furnish the country with a safe currency. In essence the answer given was: It is possible for the Treasury Department to furnish the country with a safe currency. It would be very difficult, if not impossible, to make that currency elastic, in the sense of contracting and expanding according to the needs of the public. The experience of commercial nations is that results can be better accomplished by the creation of a privately owned central organization dominated and controlled by the government, as for instance the Imperial Bank of Germany or the Bank of France. It serves to take the matter out of politics.

The great danger is that if borrowers go direct to the Treasury, politics would become an all-important and dominating influence. Our government experienced great difficulty in retiring the greenbacks in gold as presented although their total amounted to less than \$350 million. Four bond issues during one administration became necessary to obtain

gold for that purpose. If the amount of Treasury notes outstanding were to be multiplied by seven or eight, the responsibility resting upon the government would be still greater. We cannot have any credit in the country better than that of the government under which we live, and it is for the interest of all to protect that credit against all possible danger. Our own experience for the past fifty years, in fact ever since the creation of our government, as well as the experience of other nations, militate against this general proposition. The policy of the government has been to protect itself against maturing liabilities, by making even its future obligations payable on or after a fixed date at its pleasure.

With the passage of the Federal Reserve Act on December 23, 1913, came the end of National Bank currency, but not the end of the National Banks.

CHAPTER VIII

THE FEDERAL RESERVE SYSTEM

The Democratic party, which took over the control of Congress in 1913, would have nothing to do with the Republican-appointed National Monetary Commission or its works. Instead, the Banking and Currency Committee of the House of Representatives engaged experts and proceeded to frame a bill of its own. The outcome was the Federal Reserve Act.¹

The findings of the National Monetary Commission had made its imprint and had some influence on the new committee, but because of political necessities within the party, the Act, as finally passed, constituted a compromise between a central bank and a system of local bankers' banks.

The Federal Reserve Act provided for the establishment of twelve regional banks, the "Federal Reserve Banks" to be headed by a Federal Reserve Board in Washington. The Board was to consist of the Secretary of the Treasury, the Comptroller of the Currency, and five other members to be appointed by the President. All the National banks had to join the Federal Reserve Bank of their district; State banks were permitted to do so if they elected or desired to join. The member banks, National or State, had to subscribe to the capital stock of the district bank in which they were located. The Federal Reserve Banks themselves were authorized to issue a new type of money, Federal Reserve notes. The

¹Major E. Foster, et al, Money and Banking (New Jersey: Prentice-Hall, Incorporated, 1956), p. 101.

notes were to be a direct obligation of the United States government, in addition to the liability of the issuing bank, on whose assets they would have a first and paramount lien. They were to be endowed with public receivability and to be engraved by the Comptroller of the Currency. Issued in denominations of \$5, \$10, \$20, \$50, \$100, \$500, \$1,000, \$5,000, and \$10,000, they were designed to replace gradually the National bank notes; the government bonds required as security for the National bank notes were to be withdrawn gradually.

The new notes were to be secured fully by commercial or other qualified paper acquired by the district banks through rediscounting. It made feasible the automatic adaptation of available currency to the changing needs of the national economy. In addition to the commercial paper, a reserve of not less than 40 per cent in gold (or under a later amendment, in gold certificates) was required from each district bank.

The simplicity of this currency device was somewhat disturbed by the fact that still another type of note was authorized to be issued by the Federal Reserve banks, namely, Federal Reserve Bank notes. They were supposed to make it easier for the National banks to get rid of bonds serving as security for their own notes. For this purpose the Federal Reserve Banks were authorized to buy such bonds from their member banks and to issue on the basis of these bonds, without any gold or further securities, Federal Reserve Bank notes, at the par nominal value of the bonds. By virtue of amendments to the Act, Federal Reserve Bank notes were also circulated to a limited extent during World War I, the depression of 1929 and World War II as emergency currency. An amendment in

1945 provided for the withdrawal of Federal Reserve Bank notes, thereby simplifying the monetary system somewhat.

A danger to the monetary system resulted from the stock market crash in 1929 and the resulting depression. The threat consisted first in the shrinking of commercial paper eligible for the issuance of Federal Reserve notes; more and more the notes had to be backed by gold. Since the demand for currency was increasing due to the growing distrust in investment, the Glass-Steagall Act passed under the Hoover administration in 1932 authorized the Federal Reserve Banks to use--for one year--government bonds instead of commercial paper as collateral for their notes. The 40 per cent gold reserve was maintained.

On March 9, 1933, Congress adopted an Emergency Banking Act which among other things authorized; (1) the issuance of Federal Reserve Bank notes up to 90 per cent of the value of eligible commercial paper acquired by the Federal Reserve Banks (hence the issuance of an emergency currency); (2) the Secretary of the Treasury to require from every person the delivery of gold coin, gold bullion, and gold certificates for an "equivalent" amount of money; (3) the regulation, by license or otherwise, of the entire banking business of the nation.²

The entire Federal Reserve Board was remodeled by the Banking Act of 1935, which replaced the former "Federal Reserve Board" by the "Board of Governors," whose members were to be appointed by the President, with the consent of Senate, for fourteen year terms. The regulative power of

²Arthur Nussbaum, A History of the Dollar (New York: Columbia University Press, 1957), P. 174.

the Board of Governors was considerably broadened beyond that wielded by the old Board. As a result, the Federal Reserve System received more legal authority than that held by the European central banks; however, the Federal Reserve System has continued to have no power over state banks who are not members of the System.

This Act also had some innovations of a technical monetary character. Legal tender quality was given to the Federal Reserve notes. Other changes were related to the reserves and securities underlying the issuance of notes. First of all, there was no longer any security in gold bullion or coin owing to the transfer of all gold to the Treasury. While the 40 per cent minimum rate of "gold" reserves was maintained, the gold metal was replaced under the Gold Reserve Act by "Gold Certificates"; but these certificates are completely different from the "yellowbacks" of old. They are no longer money and do not circulate among the public. They are issued exclusively in large denominations and are to be held by the Federal Reserve Banks which do not have even a formal legal claim to the metal; the Secretary of the Treasury has to redeem the certificates only at such times and in such amounts as in his judgment are necessary to maintain the purchasing power of the dollar.³

Another change in the collateral securities of the notes had already been brought about for one year by the Glass-Steagall Act, namely the use of government bonds instead of commercial paper. This provision was renewed at this time and became permanent in 1945.

³Ibid., p. 197.

An amendment to the Federal Reserve Act in 1945 reduced the minimum of gold reserves to 25 per cent, permitting the rest of the collateral to be covered by qualified commercial paper or government securities. The amendment further provided for the withdrawal of Federal Reserve Bank notes. Finally it cancelled the long outdated presidential power to issue greenbacks up to the amount of \$3 billion.

The Federal Reserve System was to "cure" the evils and defects of the old National Banking system and to provide this country with a safe, working, elastic currency geared to meet our economic demands.

CHAPTER IX

SUMMARY AND CONCLUSIONS

United States Notes

Historically it has been shown that United States Notes were issued on a strictly fiat basis, beginning in 1862, to help the government finance the Civil War. That it was originally the intent of Congress to retire these notes as soon as possible is historical fact, but subsequent Congresses have not demonstrated this intent. It is also a historical fact of the political issue made of them for more than a decade after the end of the Civil War. United States notes were issued against no security except the credit of the government. It was not until 1900 that an act was passed establishing a \$150 million dollar gold fund for redemption which provided for a reserve for these notes. In 1878 an Act was passed that terminated their retirement and the amount then outstanding (approximately \$320 million) has remained in our monetary system.

With the passage of the Federal Reserve Act, the Federal Reserve System was set up as the money authority with the responsibility for issuance of currency and reserves as needed to fulfill the needs of the economy as seen in the light of the objectives of a sound credit structure. While several different currencies can be handled mechanically by the Federal Reserve System, it is more consistent with the Central Banking principle to give the Central Bank complete responsibility for the monetary structure.

United States notes do not conform to the principles of currency issuance which now exist as a result of the establishment of a Central Banking System and its currency; that is, the issuance of United States notes is limited by law to a fixed amount instead of by a gold reserve and they are not a liability of the Central Bank which was set up as the monetary authority.

This type of currency was issued as an emergency currency and should have been withdrawn as soon as possible after the emergency was over. United States notes do not contribute anything to the management of our present monetary system, in fact they contribute to the complexity of the system. United States notes are currently being issued in the two and five dollar denominations, and they enjoy a monopoly on the two dollar denomination. Mechanically the Federal Reserve System can handle United States notes, but it is inconsistent with a central banking system charged with the responsibility of currency issuance, that the money authority can not issue its own two dollar notes and has to handle and issue a type of currency which is not its liability.

United States notes in circulation in the year ending June 1969 totaled approximately \$316 million and represented only 1.1% of the total currency in circulation. If the Treasury were to apply the \$150 million in gold it is holding as a reserve against these notes and the outstanding Treasury notes of 1890 toward the redemption and elimination of these notes, there would remain but approximately \$170 million worth of these notes, payment for which the Treasury could absorb without great difficulty.

There is an aspect of savings to the Treasury in that the cost of engraving, paper, printing, distribution and redemption of these notes

are currently an expense of the government. Notes issued by the Federal Reserve System are an expense of the System and not of the government,¹ therefore elimination of United States notes would result in direct savings to the government.

The Federal Reserve System could easily replace the United States notes with its own currency. The System already issues its own five dollar denomination note and the Federal Reserve Act could be amended by Congress to permit the Federal Reserve Banks to issue one and two dollar denomination notes. The issuance of \$316 million more of Federal Reserve notes would not tax the assets of the System, for the Treasury would sell the gold reserve of \$150 million to the Federal Reserve System to pay for the United States notes as mentioned earlier. With the Reserve Banks' fractional reserve system, the addition of \$150 million of gold reserve would allow it to issue up to \$600 million more of its own notes, almost double the amount of United States notes it would have to replace.

In summary, it has been shown:

1. United States notes do not conform to the principles of currency issuance which now exists as a result of the establishment of the Federal Reserve System.
2. United States notes are inflexible in nature and make the management of our currency system more complex.
3. United States notes have been subject to political manipulation rather than economic or financial need.
4. Elimination of this type of currency would simplify the currency and be a direct savings to the government.

¹Federal Reserve Act, Section 16, Paragraph 11.

It is therefore recommended that this type of currency be eliminated from our currency system.

Silver Certificates

Silver has been "the" political metal in the United States since 1875. No less than four acts have been passed with regard to the purchase of silver. The Act of 1918, which might have afforded an opportunity to get rid of part or all of this currency, was so manipulated as to prevent in the long run any of this type of currency being done away with. The Act of 1934 has resulted, within fifteen years of its enactment, in the acquisition of the fantastic amount of over 100,000 tons of silver, the only use for which was to provide backing for approximately two billion dollars in silver certificates. The existence of silver certificates as a part of our monetary system has been assured by the succession of silver acts, all of which have been designed for, or at least had the effect of, reducing the supply of silver on the open market and artificially increasing the demand for silver by expanding its use as money, the domestic and world use of silver for other purposes being so small in comparison to its annual production as to prevent any appreciable demand for this metal at the current price. This practice gives unjust enrichment to the silver producers at the expense of the rest of the economy of the United States.

It is false to claim that the silver certificate is necessary in order to provide us with an adequate volume of paper money. Standing on its own, silver certificates are not an elastic type of currency. Elasticity has to do with the basis for issuance of currency, not the backing. The basis of issuance of silver certificates is that the

Treasury can put into circulation only as much in certificates as it holds in bullion. It is not issued on a fractional reserve basis as are Federal Reserve notes. Silver certificates are a type of credit currency and are unlike gold certificates, which were a representative type of currency. Silver is purchased at 90.5 cents an ounce and issued as silver certificates on the basis of \$1.29 an ounce. Should the price of silver reach \$1.29 an ounce, then silver would be a true representative currency. Representative currency is dependent upon the amount of actual bullion in existence and therefore cannot expand beyond the physical supply available. History and experience with just a commodity or representative type currency has proved that this type of currency has been inadequate to meet the demands for an expanding volume of currency beyond the physical supply available. It was this very reason that brought about the need for an elastic currency system and was one of the original purposes of the Federal Reserve System. If, standing on its own, representative currency and the credit currency, silver certificates, were unable to provide this country with an adequate volume of currency, and a new type of currency had to be found to do the job, then why should the currency that failed be kept as a part of our currency structure? Other types of currency have failed and have been eliminated from the currency structure. Gold certificates, Treasury notes of 1890 and National Bank notes have all been eliminated; why not United States notes and silver certificates?

It is spurious to claim that the silver bullion provides stability and safety to our paper money. In the first place, only a relatively small part of our paper money is backed by silver (approximately \$2 billion out of \$30 billion), and in the second place silver obtained by the

Treasury costs more than the price at which it can be obtained in the world market. At the present time the Treasury will buy and sell its silver at the price of 90.5 cents an ounce. This is a support price and keeps the market price from fluctuating very far from this level.

It has been pointed out by the silver advocates that Treasury purchases of silver cost the government nothing, in fact, the transaction yields the government a profit due to the large seigniorage. But it must be remembered that a profit for the government is not necessarily a profit for the economy. Had silver been left alone to develop its own uses commercially, it might have been better off. Historically it might have held true that silver was only good as a form of money and that its commercial use was almost worthless before the discovery of electricity and the development of electronics, airplanes, rockets and the camera. With these discoveries and developments have come demands for certain types of metals best suited for their conductivity, strength and weight. Silver as a metal is one of the best metals available on all three of these qualities. Yet due to its price, as the development in these fields progressed, it was too expensive to even be considered and substitutes were found. Had silver been available at more reasonable prices its commercial use may have developed enough to raise the demand for and thus the price of silver. Certainly our economy would be better off with a natural demand for silver rather than an artificial "support." Besides, the profit motive should not be the basis upon which currency is issued.

Another interesting fact is that approximately two-thirds of the silver certificates in circulation are of the one dollar denomination. In January of 1959, the one dollar bills in circulation totaled \$1,407,757,045.

the rest of the silver certificates being in the denominations of five and ten dollars. No denominations over the ten dollar certificate have been issued, but authorization is in effect to permit issuance of twenty and one hundred dollar certificates. United States notes are issued in denominations of two and five dollar notes. Thus silver certificates have been given a monopoly on the one dollar denomination and United States notes on the two dollar denomination. It is possible in the five dollar denomination to have either a silver certificate, United State note or a Federal Reserve note.

The basis for the assignment of particular denominations rests solely on conveniency and economy and there is no substantial reason why Federal Reserve notes cannot be issued in any of the denominations.

The United States is the only great government or country with three forms of paper currency in use. It has a fiat issue, United States notes; is on a modified gold standard, yet issues some of its currency backed exclusively by silver; has a central banking system with a currency issuing authority which is not being fully utilized; its currency accounts for only 91% of the currency in circulation. It would certainly be logical to simplify our currency system to conform to the stated objectives and advantages of a central banking system.

The foregoing leads to the conclusion that silver certificates should be eliminated from our currency system and that the Treasury should stop buying silver for currency purposes and confine its purchases of silver to meet the needs of coinage. The elimination of silver certificates would not only simplify the currency structure and be more consistent

with a monetary structure built around a central bank, but it would also, once and for all, remove this portion of the monetary structure from political influence.

The elimination of silver certificates immediately brings about two problems; first, the redemption of the silver certificates, and secondly, how will the Treasury dispose of its stock of silver bullion?

The Federal Reserve System can handle the redemption of the silver certificates for the Treasury by reversing the process whereby the certificates were issued by it in the first place. To better understand this process, a few simple "T" accounts will be used showing the relationship between the Treasury and the Federal Reserve Banks.

Treasury Department	
Cash:	Silver Certificates
Silver Bullion	B [✓]
	C ₂ ⁻
	A [✓]
	B ⁻
	C ₃ [✓]
Deposit with F. R. Bank	
	A ⁻
	B [✓]
	C ₂ ⁻
Pledged Silver	
	B [✓]
	C ₃ ⁻

Federal Reserve Bank	
Cash:	Deposit-Treasury
Silver Certificates	A ⁻
	B [✓]
	C ₁ [✓]
	C ₂ ⁻
	-Member Banks
	A [✓]
	C ₁ [✓]

A = Treasury purchase of silver bullion
 B = Issuance of Silver Certificates
 C = Redemption of Silver Certificates

When the Treasury purchases silver bullion, it will pay for it by a check drawn against its deposit balance at a Federal Reserve Bank. Thus in transaction "A" it is shown that the Treasury will receive the asset, silver bullion, and increase its cash asset. The check in payment of the silver bullion will find its way to a Federal Reserve Bank through a commercial bank. This will have the effect of increasing the member banks deposit with the Federal Reserve Bank, and the check will then be charged to the Treasury's deposit with the Federal Reserve Bank, thus reducing this deposit balance.

Transaction "B" shows that when the Treasury issues silver certificates, the certificates become a liability of the Treasury. The Treasury will in effect sell the certificates to the Federal Reserve Bank, thus increasing the cash assets of the Bank. The Federal Reserve Bank will pay for the certificates by crediting the Treasury's deposit balance with the Bank. This will increase the liability of the Federal Reserve Bank and in effect increase the assets of the Treasury. When the Treasury issues the certificates, it pledges the bullion necessary to cover the certificates. This reduces the asset, silver bullion, in the general account and increases the "Pledged" account.

When the Federal Reserve Bank redeems the silver certificates, transaction "C" occurs. The process would start with C₁, when the Federal Reserve Bank receives silver certificates for deposit to the reserve account of a member bank. The asset, cash, of the Federal Reserve Bank will be increased, and the member banks deposit account will be increased. As the Federal Reserve Bank redeems the silver certificates with the Treasury Department by destroying the certificates, transaction C₂ occurs.

The asset, cash, of the Federal Reserve Bank is reduced by the amount of notes destroyed, and this amount is charged against the Treasury's deposit account, reducing this account. As the Treasury reduces its asset, deposit with the Federal Reserve Bank, it will reduce its liability, silver certificates outstanding. As the silver certificates are destroyed, then the Treasury will be able to release the silver bullion pledged against the certificates. When all the certificates are redeemed, then as transaction C₃ shows, the pledged silver will then be eliminated and the Treasury will again have the silver bullion as an asset in its general account.

The net effect when all the silver certificates have been received and destroyed by the Federal Reserve System is that the Treasury will be holding the silver bullion as an asset or stockpile of silver and its account with the Federal Reserve System will have been reduced by the total amount of certificates destroyed, approximately two billion dollars.

The Treasury will then be faced with the problem of rebuilding its deposit account as silver certificates are redeemed and of disposing of the silver bullion to repay whatever source of funds is used for this purpose. It is most likely that the necessary funds would have to be raised in the capital markets. The debt issued for this purpose should be repaid as the silver bullion is disposed of. It is realized that the Treasury could not "dump" the bullion on the market as this would drive the price of silver down. It has been the government's policy to stockpile other material, such as copper, wheat, corn, etc., so there is no reason why it cannot carry the silver bullion as a stockpile and dispose

of it whenever it can do so without loss. This appears all the more practical in view of the recent world silver market prices. During the first week in January 1961, the price of futures in silver rose to 92 7/8 per ounce in London.² London silver brokers Mocatta and Goldsmid said, "Those who take a longer view are inclined to foresee a deficiency of silver." They pointed out that consumption of silver in industry and coinage is far outrunning mine production, and London silver merchants are convinced that short supplies will soon send silver prices upward.

The free market price of silver began to climb and finally inched past the Treasury purchase price of 90.5 cents an ounce in 1956. In the past two years the price has been high enough to permit the Treasury to begin to unload its huge supply. Last year (1960) the Treasury was able to sell off nearly 20 million ounces and had to buy only one million ounces from U. S. silver producers, since they were able to get a higher price in the free market.

The United States still has 122 million ounces in its free silver vaults--over and above its vast monetary reserves. Although the Treasury dips into the silver stock for some 40 million ounces for new coins each year, the Treasury can always stop selling silver if its stock drops dangerously low. The Treasury has said that special circumstances have recently affected both supply and demand. Mining strikes have cut production, and demand has been increased by such factors as France's creation of the new "heavy franc." So far France has taken 40 million ounces toward coining the new franc, with 20 million ounces more to be delivered.

²Time, Volume LXXVII, No. 3, January 13, 1961.

Now that the free market price has risen above the official price, the Silver Purchase Act of 1934 provisions have backfired. Where once the Treasury kept the price artificially high by buying at 90.5 cents an ounce, now the Treasury is in effect keeping the price artificially low, since it sells at nearly the same price.

The Silver interests no longer seem to want to persuade Congress to raise the official price again in view of the growing number of new industrial silver users. It is estimated that industry and jewelers use about 100 million ounces of silver a year. The result is a silver stalemate that makes it possible for the first time in years to free silver from politics. If the Treasury were required to buy silver only for its coinage needs, the silver market would become a free market.

In view of these developments in silver, it appears that the Treasury can successfully dispose of its silver stock without loss in the future.

In briefly summing up what has been presented, it has been shown:

1. The Treasury's issuance of silver certificates is inconsistent with the principle of a central monetary authority which is charged with the responsibility of maintaining proper currency issuance and credit control.

2. There is an inflation potential in the Treasury's issuance of silver certificates in that in addition to putting its currency in circulation, the process also increases the Treasury's demand deposits with the Federal Reserve System, thus enabling the Treasury to spend more.

3. The "Silver" aspect of currency issuance has been greatly influenced by political manipulation, and not by any scientifically or financial-economic need.

4. The redemption and elimination of silver certificates can be handled smoothly through the Federal Reserve System.

5. The Treasury can dispose of its stock of silver bullion in the future without suffering any loss.

6. Economically, the silver producers will be better off with a free market for silver, than the current supported market, which in the past several years has had the effect of keeping the price of silver down.

It is strongly recommended that silver certificates be eliminated from our currency system and replaced by the currency of our central banking authority. This would once and for all remove this portion of the monetary structure from political influence.

Federal Reserve Notes

The Federal Reserve note is our most important type of currency, representing in dollar volume, as Table II shows, approximately 91% of all currency in circulation today. For a paper currency to serve as an adequate medium of circulation it has been stated that there should be an adequate supply to meet the current economic needs. History has pointed out the adverse effects of both too much or too little a supply of money can have in our economy. It has been demonstrated earlier that standing on their own merit, neither United States notes nor silver certificates are an elastic type of currency. Had they been able to serve this function adequately, then there would have been no need for a central banking system such as the Federal Reserve System. That our present system operates successfully though two of its components are inelastic in nature can be attributed to the ability of the Federal Reserve System to contract or expand its issues. It must be recognized that if the total currency outstanding remains constant and the public demands more of its circulating media in the one and two dollar denominations, then silver certificates and United States notes increase in circulation at the expense of Federal Reserve notes, for these types of currency have a monopoly on those denominations. But should the economy of the country demand that the total currency outstanding increase several billion, as was the case in the war years, then the expanding currency had to be supplied by Federal Reserve notes. It has been mentioned that of the approximately 2 billion dollars worth of silver certificates outstanding, over \$1 billion is in the one dollar denomination. What would happen

if the public started demanding more of its circulating media in this denomination to say around 4 or 5 billion dollars. Could this demand be met by silver certificates? The answer would be no, as the Treasury does not have that much silver bullion to issue certificates against. Should this happen, then in all probability the Federal Reserve System would be called upon to meet the demand.

The elasticity of Federal Reserve notes is highlighted by Table III. From this table it has been evident that in the past twenty years, as the total currency in circulation has either increased or decreased, a corresponding increase or decrease has taken place with respect to Federal Reserve notes. That Federal Reserve notes have increased slightly more than the corresponding increase in total notes in circulation can be explained by the fact that there is a decrease taking place in the gold certificates, Federal Reserve Bank notes and National bank notes. As these types of paper currency are retired, the Federal Reserve notes are taking their place. It appears logical to assume then, barring an economic depression, that Federal Reserve notes will continue to increase in percentage as a part of our total currency.

In proposing that United States notes and silver certificates be eliminated from our currency system, it becomes necessary to change the Federal Reserve Act to allow the Federal Reserve System to issue notes in the one and two dollar denomination. Further changes may be needed if in assuming the issuance of these denominations the gold certificate reserve ratio of 25 per cent should be approached or passed (that is, falls below the 25 per cent).

It was noted that the gold certificate requirement was reduced from 40 to 25 per cent in June, 1945, in order to meet a shortage of gold certificates which became pronounced by the end of World War II. This raises a significant question. If the gold certificate reserve can be reduced to 25 per cent, why not to 10 per cent, or 5 per cent, or zero? In other words, is there any validity to the requirement that Federal Reserve notes be backed by minimum amounts of gold certificates?

Various arguments are advanced in favor of such a requirement. It is said that it gives people more confidence in their money and that the volume of notes, being tied to a gold base, cannot be overissued. Neither of these arguments will bear close scrutiny. In the first place, all of our currency has been domestically inconvertible into monetary gold since 1933. The confidential, fiduciary nature of the Federal Reserve note which had existed until that time lost its meaning when gold was nationalized. Minimum gold balances therefore lost any significance they may have had as a factor affecting the acceptability of the notes as a medium of exchange. Their acceptability is now tied in the popular mind to the credit of the United States government, and, while monetary gold stocks may influence the public's judgment in this respect, it is obviously redundant to tie the Federal Reserve note or any other type of currency, to an inaccessible gold reserve in order to preserve its usefulness as money.

The second argument, that the notes will be overissued if not related to a gold or gold certificate base is patently false. Currency gets into circulation through the commercial banks. It is always necessary

for the public to give up one type of money (deposits) in order to obtain another type (currency). Consequently, an expansion of the public's holdings of Federal Reserve notes always causes an equal decrease in another type of money.

Collateral requirements do not now and should not put an effective ceiling on the volume of notes issued. If the monetary authorities become concerned with inflationary developments, they need only to curb the source, namely the excessive growth of the money supply through the expansion of bank credit to finance government or private deficits. The banks (and through them the public) can only acquire Federal Reserve notes through the cashing of deposits at the Federal Reserve Banks. If inflationary forces are predominant the monetary authorities can, as they now do, restrict the rate at which Reserve Bank credit is being created--and thus restrict new demand deposits and bank reserves. Or, on the other hand, they may bring about a contraction in Reserve Bank credit and in demand deposits and bank reserves.

This conceivably could be the answer should the gold certificate reserve of 25 per cent prevent the Federal Reserve System from meeting the increased demands for a larger volume of currency.

One question which has been brought up at various times is: Why not have the U. S. Treasury issue all currency (a single Treasury currency) as is done in England? The Federal Reserve System could remain as the issuing agency, purchasing the currency from the Treasury by a credit to the Treasurer's account as is done now with silver certificates.

It should be remembered that one of the original purposes of establishing the Federal Reserve System was to separate the monetary structure from political influences. Under such an arrangement above the government could issue "printing press" or fiat money at will to pay for its expenditures and abuses would follow. History has demonstrated that more than one government has done this when the monetary structure and issuance has been left to its discretion. There is a lot to be said for keeping the government (meaning that element influenced by political considerations) out of the monetary system. It has proven too easy to manipulate.

In conclusion to this study, it is recommended that United States Notes and silver certificates be eliminated from our currency system, their place being assumed by Federal Reserve notes for:

1. This would be a logical extension of the principal of a central banking authority.
2. The currency structure would then be on the same basis as the banking system's reserve structure.
3. The currency structure would then have complete elasticity of issuance.
4. The management of the currency system would be greatly simplified.
5. This would remove this portion of the monetary structure from politics.

BIBLIOGRAPHY

BIBLIOGRAPHY

- Anderson, Lawrence W., et al. Money and Banking. New York: Pittman Publishing Corporation, 1957. 688 pp.
- Angell, Norman. The Story of Money. New York: Frederick A. Stokes Company, 1929. 411 pp.
- Bloomfield, Arthur I. Monetary Policy Under the International Gold Standard: 1880-1914. New York: Federal Reserve Bank, 1959.
- Dwinell, Olive Cushing. The Story of Our Money. Boston: Meador Publishing Company, 1946. 208 pp.
- Foster, Major B., et al. Money and Banking. New Jersey: Prentice-Hall, Incorporated, 1956. 633 pp.
- Hepburn, A. Barton. A History of Currency in the United States. New York: The Macmillan Company, 1916. 552 pp.
- Lumpkin, R. Pierce. Readings on Money. Richmond: Federal Reserve Bank, 1957.
- Maddon, Carl H. The Money Side of "The Street." New York: Federal Reserve Bank, 1959.
- McCaleb, Walter F. How Much is a \$. San Antonio: The Naylor Company, 1959. 128 pp.
- Nussbaum, Arthur. A History of the Dollar. New York: Columbia University Press, 1957. 308 pp.
- Pritchard, Leland J. Money and Banking. Boston: Houghton Mifflin Company, 1958. 783 pp.
- Banking Studies. Board of Governors of the Federal Reserve System. Baltimore: Waverly Press, Incorporated, 1941.
- The Federal Reserve System: Purposes and Functions. Washington: Board of Governors of the Federal Reserve System, 1954.
- Investigation of the Financial Condition of the United States. United States Senate, Committee on Finance, 85th Congress, 2d Session. Washington: Government Printing Office, 1958.
- Information Respecting United States Bonds, Paper Currency and Coin, Production of Precious Metals. United States Treasury Department. Washington: Government Printing Office, 1915.

Know Your Money. United States Secret Service. Washington: Superintendent of Documents, U. S. Government Printing Office, 1959.

Coins and Currency. New York: Federal Reserve Bank, 1959.

Fundamental Facts About United States Currency. Atlanta: Federal Reserve Bank, 1959.

An Introduction to the History of Coinage and Currency in the United States. St. Louis: Federal Reserve Bank, 1953.

Annual Report of the Secretary of the Treasury of the United States. Washington: United States Government Printing Office, 1890-1960.

Federal Reserve Act. Washington: Board of Governors of the Federal Reserve System, 1959.

APPENDIX

TABLE I

VARIOUS TYPES OF UNITED STATES PAPER CURRENCY IN CIRCULATION
FROM 1890 TO 1959 EXPRESSED IN THOUSANDS OF DOLLARS¹

Year Ending June	Gold Certificates	Silver Certificates	Treasury Notes of 1890	United States Notes	Federal Reserve Notes	Federal Reserve Bank Notes	National Bank Notes	Total Paper Currency in Circulation
1959	31,046	\$2,154,916	\$ 1,142	\$316,166	\$27,028,617	\$110,051	\$ 57,335	\$29,699,323
1958	31,797	2,199,532	1,142	316,851	26,341,854	120,225	59,411	29,070,812
1957	32,541	2,161,589	1,142	321,148	26,329,345	132,566	61,745	29,040,078
1956	33,483	2,148,369	1,142	317,643	26,055,247	146,629	64,239	28,766,752
1955	34,466	2,169,726	1,142	319,064	25,817,775	162,573	66,810	28,371,556
1954	35,481	2,135,016	1,142	320,224	25,384,606	180,277	70,005	28,126,751
1953	36,596	2,121,511	1,143	317,702	25,608,669	200,054	73,403	28,359,078
1952	37,855	2,087,811	1,145	318,330	24,605,158	220,584	77,364	27,348,247
1951	39,070	2,092,174	1,145	318,173	23,456,018	243,261	81,202	26,231,043
1950	40,772	2,177,251	1,145	320,781	22,760,285	273,788	86,438	25,660,510
1949	42,665	2,060,852	1,145	318,688	23,209,437	308,821	92,524	26,034,132
1948	45,158	2,060,869	1,146	321,485	23,600,323	353,499	99,235	26,481,715
1947	47,794	2,060,728	1,147	320,403	23,999,004	406,260	106,429	26,941,765
1946	50,223	2,025,178	1,149	316,743	23,973,006	464,315	113,943	26,944,562
1945	52,084	1,660,689	1,150	322,587	22,867,459	527,001	120,012	25,540,982
1944	53,964	1,587,691	1,154	322,293	18,750,201	597,030	125,837	21,438,220
1943	56,909	1,648,571	1,155	322,343	13,746,612	584,162	132,130	16,491,882
1942	59,399	1,754,255	1,158	316,886	9,310,135	18,717	139,131	11,599,681
1941	62,872	1,713,508	1,161	299,514	6,684,209	20,268	150,460	8,931,992
1940	66,793	1,581,662	1,163	247,887	5,163,284	22,373	165,155	7,248,317
1939	71,930	1,453,673	1,166	265,962	4,483,552	25,593	186,480	6,468,256
1938	78,500	1,230,156	1,169	262,155	4,114,338	30,118	217,441	5,933,877
1937	88,116	1,078,071	1,172	281,459	4,168,780	37,616	268,862	5,924,076
1936	100,771	954,592	1,177	278,190	4,002,216	51,954	366,105	5,755,005
1935	117,167	701,474	1,182	285,417	3,222,913	81,470	704,263	5,113,886
1934	149,740	401,456	1,189	279,608	3,068,404	141,645	901,872	4,943,914
1933	265,487	360,699	1,186	268,809	3,060,793	125,845	919,614	5,002,433
1932	716,683	352,605	1,222	289,076	2,780,229	2,746	700,894	4,842,455
1931	996,510	377,149	1,240	299,427	1,708,429	2,929	648,363	4,034,047
1930	994,841	386,915	1,260	288,389	1,402,066	3,206	650,779	3,727,456

1929	\$ 934,994	\$ 387,073	\$1,283	\$262,188	\$1,692,721	\$ 3,616	\$652,812	\$ 3,934,687
1928	1,019,149	384,577	1,304	298,438	1,626,433	4,029	650,212	3,984,142
1927	1,007,075	375,798	1,327	292,206	1,702,843	4,606	650,057	4,033,911
1926	1,057,871	377,741	1,356	294,916	1,679,407	5,453	651,477	4,067,721
1925	1,004,823	382,780	1,387	282,578	1,636,108	6,921	681,709	3,996,306
1924	801,381	364,414	1,423	297,790	1,843,106	10,066	733,836	4,052,016
1923	386,456	364,258	1,460	302,749	2,234,660	19,969	711,076	4,020,628
1922	173,342	265,335	1,510	292,343	2,138,715	71,868	727,681	3,670,794
1921	200,582	158,843	1,576	259,170	2,599,698	129,942	721,421	4,071,132
1920	259,007	97,606	1,656	278,144	3,064,742	185,431	689,608	4,576,194
1919	327,552	163,445	1,745	274,119	2,450,278	155,014	639,472	4,011,625
1918	511,190	370,349	1,851	291,859	1,698,190	10,970	691,407	3,575,816
1917	1,082,926	468,365	1,970	311,595	606,756	3,702	690,635	3,065,949
1916	1,050,268	476,279	2,098	328,227	149,152	1,683	716,204	2,723,909
1915	821,869	463,147	2,245	309,796	70,810	-	782,120	2,449,987
1914	1,026,149	478,602	2,428	337,846	-	-	715,180	2,560,205
1913	1,003,998	469,129	2,657	337,215	-	-	715,754	2,528,753
1912	943,436	469,224	2,916	337,697	-	-	706,142	2,458,415
1911	930,368	453,544	3,237	338,989	-	-	687,701	2,413,839
1910	802,754	478,697	3,663	334,788	-	-	683,660	2,303,462
1909	815,005	477,717	4,203	340,118	-	-	665,539	2,302,582
1908	782,977	465,278	4,964	339,396	-	-	631,648	2,224,263
1907	600,072	470,211	5,976	342,270	-	-	589,242	2,007,771
1906	516,562	471,520	7,337	335,940	-	-	548,001	1,879,360
1905	485,211	454,865	9,272	332,421	-	-	480,029	1,761,798
1904	465,655	461,139	12,902	333,769	-	-	433,028	1,708,483
1903	377,269	454,733	19,077	334,249	-	-	399,997	1,585,315
1902	306,399	446,558	29,803	334,292	-	-	345,477	1,462,529
1901	245,716	429,641	47,540	332,468	-	-	345,127	1,400,492
1900	200,555	408,499	75,247	316,614	-	-	300,162	1,301,077
1899	32,656	401,869	92,606	310,547	-	-	237,833	1,075,511
1898	35,821	390,659	98,668	286,572	-	-	223,130	1,034,847
1897	37,286	358,336	83,901	248,584	-	-	226,411	954,522
1896	42,321	331,260	95,217	225,451	-	-	215,332	909,581
1895	48,382	319,732	115,978	265,109	-	-	207,048	956,250
1894	66,344	327,094	134,862	268,772	-	-	200,754	997,826
1893	92,970	326,489	140,662	320,876	-	-	174,731	1,055,728
1892	141,235	326,881	98,052	311,815	-	-	167,307	1,045,290
1891	120,850	307,364	40,461	323,714	-	-	161,922	954,313
1890	131,380	297,210	-	323,047	-	-	181,597	933,034

¹Outside banks and Treasury Department. Source: Annual Reports of the Secretary of the Treasury from 1890 to 1959.

TABLE II

VARIOUS TYPES OF UNITED STATES PAPER CURRENCY IN CIRCULATION FROM 1890 TO 1959¹
EXPRESSED AS PERCENTAGES OF TOTAL AMOUNT OF CURRENCY IN CIRCULATION EACH YEAR

Year Ending June	Gold Certificates	Silver Certificates	Treasury Notes of 1890	United States Notes	Federal Reserve Notes	Federal Reserve Bank Notes	National Bank Notes	Total Paper Currency in Circulation
1959	0.1%	7.3%	-	1.1%	91.0%	0.4%	0.2%	100%
1958	0.1	7.6	-	1.1	90.8	0.4	0.2	100
1957	0.1	7.4	-	1.1	90.7	0.5	0.2	100
1956	0.1	7.5	-	1.1	90.6	0.5	0.2	100
1955	0.1	7.6	-	1.1	90.3	0.6	0.2	100
1954	0.1	7.6	-	1.1	90.3	0.6	0.2	100
1953	0.1	7.4	-	1.1	90.3	0.7	0.3	100
1952	0.1	7.6	-	1.2	90.0	0.8	0.3	100
1951	0.1	8.0	-	1.2	89.4	0.9	0.3	100
1950	0.2	8.5	-	1.2	88.7	1.1	0.3	100
1949	0.2	7.9	-	1.2	89.2	1.2	0.4	100
1948	0.2	7.8	-	1.2	89.1	1.3	0.4	100
1947	0.2	7.6	-	1.2	89.1	1.5	0.4	100
1946	0.2	7.5	-	1.2	89.0	1.7	0.4	100
1945	0.2	6.5	-	1.3	89.5	2.1	0.5	100
1944	0.3	7.4	-	1.5	87.5	2.8	0.6	100
1943	0.3	10.0	-	2.0	83.4	3.5	0.8	100
1942	0.5	15.1	-	2.7	80.3	0.2	1.2	100
1941	0.7	19.2	-	3.3	74.8	0.2	1.7	100
1940	0.9	21.8	-	3.4	71.2	0.3	2.3	100
1939	1.1	22.4	-	4.1	69.1	0.4	2.9	100
1938	1.3	20.7	-	4.4	69.3	0.5	3.7	100
1937	1.5	18.2	-	4.8	70.4	0.6	4.5	100
1936	1.8	17.6	-	4.8	69.5	0.9	6.4	100
1935	2.3	13.6	-	5.6	63.0	1.6	13.8	100
1934	3.0	8.1	-	5.7	62.1	2.9	18.2	100
1933	5.3	7.2	-	5.4	61.2	2.5	18.4	100
1932	14.8	7.3	-	6.0	57.4	0.1	14.5	100
1931	24.7	9.3	-	7.4	42.4	0.1	16.1	100
1930	26.7	10.4	-	7.7	37.6	0.1	17.5	100

1929	23.8%	9.8%	-	6.7%	43.0%	0.1%	16.6%	100%
1928	25.6	9.7	-	7.5	40.8	0.1	16.3	100
1927	25.0	9.3	-	7.2	42.2	0.1	16.1	100
1926	26.0	9.3	-	7.3	41.3	0.1	16.0	100
1925	25.1	9.6	-	7.1	40.9	0.2	17.1	100
1924	19.8	9.0	-	7.3	45.5	0.2	18.1	100
1923	9.6	9.1	-	7.5	55.6	0.5	17.7	100
1922	4.7	7.2	-	8.0	58.3	2.0	19.8	100
1921	4.9	3.9	-	6.4	63.9	3.2	17.7	100
1920	5.7	2.1	-	6.1	67.0	4.1	15.1	100
1919	8.2	4.1	-	6.8	61.1	3.9	15.9	100
1918	14.3	10.4	0.1	8.2	47.5	0.3	19.3	100
1917	35.3	15.3	0.1	10.2	16.5	0.1	22.5	100
1916	38.6	17.5	0.1	12.0	5.5	0.1	26.3	100
1915	33.5	18.9	0.1	12.6	2.9	-	31.9	100
1914	40.1	18.7	0.1	13.2	-	-	27.9	100
1913	39.7	18.6	0.1	13.3	-	-	28.3	100
1912	38.4	19.1	0.1	13.7	-	-	28.7	100
1911	38.5	18.8	0.1	14.0	-	-	28.5	100
1910	34.8	20.8	0.2	14.5	-	-	29.7	100
1909	35.4	20.7	0.2	14.8	-	-	28.9	100
1908	35.2	20.9	0.2	15.3	-	-	28.4	100
1907	29.9	23.4	0.3	17.0	-	-	29.3	100
1906	27.5	25.1	0.4	17.9	-	-	29.2	100
1905	27.5	25.8	0.5	18.9	-	-	27.2	100
1904	27.3	27.0	0.8	19.6	-	-	25.4	100
1903	23.8	28.7	1.2	21.1	-	-	25.2	100
1902	20.9	30.5	2.0	22.9	-	-	23.6	100
1901	17.4	30.7	3.4	23.7	-	-	24.6	100
1900	15.4	31.4	5.8	24.3	-	-	23.1	100
1899	3.0	37.4	8.6	28.9	-	-	22.1	100
1898	3.5	37.8	9.5	27.7	-	-	21.6	100
1897	3.9	37.5	8.8	26.0	-	-	23.7	100
1896	4.7	36.4	10.5	24.8	-	-	23.7	100
1895	5.1	33.4	12.1	27.7	-	-	21.7	100
1894	6.6	32.8	13.5	26.9	-	-	20.1	100
1893	8.8	30.9	13.3	30.4	-	-	16.6	100
1892	13.5	31.3	9.4	29.8	-	-	16.0	100
1891	12.7	32.2	4.2	33.9	-	-	17.0	100
1890	14.1	31.8	-	34.6	-	-	19.4	100

¹Outside Banks and Treasury Department. Source: Conversion of Table I to percentages.

TABLE III

PERCENTAGE OF INCREASE OR DECREASE EACH YEAR OF SILVER CERTIFICATES, FEDERAL RESERVE NOTES AND TOTAL CURRENCY IN CIRCULATION AS COMPARED WITH THE PREVIOUS YEAR FOR THE YEARS 1940 TO 1959 AND ITS EFFECT EACH YEAR EXPRESSED AS A PERCENTAGE INCREASE OR DECREASE OF THE TOTAL CURRENCY IN CIRCULATION.

Year Ending June	Silver Certificates		Federal Reserve Notes		Total Currency in Circulation
	% of Increase or Decrease each Year	% of Increase or Decrease of Total Currency in Circulation	% of Increase or Decrease each Year	% of Increase or Decrease of Total Currency in Circulation	
1959	- 0.2	- 0.3	/ 2.6	/ 0.4	/ 2.2
1958	/ 1.8	/ 0.2	-	- 0.1	/ 0.1
1957	/ 0.6	- 0.1	/ 1.1	/ 0.1	/ 1.0
1956	- 1.0	- 0.1	/ 1.7	/ 0.3	/ 1.4
1955	/ 1.6	-	/ 0.9	-	/ 0.9
1954	/ 0.6	/ 0.2	- 0.9	-	- 0.9
1953	/ 1.6	- 0.2	/ 4.1	/ 0.3	/ 3.7
1952	- 0.2	- 0.4	/ 4.9	/ 0.6	/ 4.3
1951	- 3.9	- 0.5	/ 3.1	/ 0.7	/ 2.2
1950	/ 5.6	/ 0.6	- 1.9	- 0.5	- 1.5
1949	-	/ 0.1	- 1.7	/ 0.1	- 1.7
1948	-	/ 0.2	- 1.7	-	- 1.7
1947	/ 1.8	/ 0.1	/ 0.1	/ 0.1	- 0.1
1946	/ 22.7	/ 1.0	/ 4.8	- 0.5	/ 5.5
1945	/ 4.0	- 0.9	/ 22.0	/ 2.0	/ 19.2
1944	- 3.7	- 2.6	/ 36.4	/ 4.1	/ 30.0
1943	- 6.0	- 5.1	/ 47.7	/ 3.1	/ 42.2
1942	/ 2.4	- 4.1	/ 39.3	/ 5.5	/ 29.9
1941	/ 8.3	- 2.6	/ 29.5	/ 3.6	/ 23.2
1940	/ 8.4	- 0.6	/ 15.2	/ 2.1	/ 11.7

NOTE: This table should be read as follows: In year 1953 Silver Certificates increased in amount circulating by 1.6%, but decreased as a percentage of total currency in circulation by 0.2%, while Federal Reserve notes increased in amount in circulation by 4.1% which was a 0.3% gain in total currency in circulation.