

The Federal Reserve System

Its Purposes And Functions



As Originally Published, Washington, D.C., 1939,

By the Board of Governors of the Federal Reserve System at the time [Marriner Eccles was Chairman](#)

With Comments by

S. W. ADAMS

Monetary Analyst

TABLE OF CONTENTS

.

[DEDICATED TO](#)

•

THE CONSTITUTION OF THE UNITED STATES

•

Publisher's Forward

•

Foreword

•

CHAPTER I A General Outline of the Federal Reserve System

•

CHAPTER II The Service Functions of the Federal Reserve Banks

•

CHAPTER III The Function of Bank Reserves

•

CHAPTER IV The Expansion and Contraction of Bank Reserves

•

CHAPTER V The Composition of Bank Reserves

•

CHAPTER VI Reserves of the Individual Bank

•

CHAPTER VII Federal Reserve Powers and Limitations

•

CHAPTER VIII Member Bank Reserves and Related Items

•

CHAPTER IX What the Twelve Federal Reserve Banks Own

•

CHAPTER X Federal Reserve Bank Earnings

•

CHAPTER XI Margin Requirements

•

CHAPTER XII Summary

•

THE END OF REPRINT STORY

•

Appendix to The Federal Reserve Book

•

GLOSSARY

A Reprint of a Suppressed Public Document

Published by OMNI PUBLICATIONS

UNITED STATES OF AMERICA

WASHINGTON: 1939

A REPRINT OF

THE FEDERAL RESERVE SYSTEM Its Purposes and Functions

with

COMMENTS BY S. W. ADAMS

THE AUTHOR OF

THE LEGALIZED CRIME OF BANKING

with

A CONSTITUTIONAL SOLUTION

**PLEASE NOTE: ALL HYPERLINK REFERENCE DOCUMENTS
AVAILABLE ON REQUEST FROM cadman777@earthlink.net**

DEDICATED TO

The hundreds of millions of the men and women who have been the victims of this Legalized Crime of Banking the men and women, and their descendants, who have toiled unceasingly with their heads and/or hands in doing the tremendous labor required to carry on the business of these United States of America not the Moon! The earth!

The Author

Copyright May 1, 1958

Available From:

EMISSARY PUBLICATIONS

9205 SE Clackamas Rd., #1776
Clackamas, Oregon 97015

Phone/Fax: (503) 824-2050
editor@midnight-emissary.com

FREE CATALOG: We specialize in Books, Tapes &
Videos on Globalism, Economics, History and Politics.

THE CONSTITUTION OF THE UNITED STATES

WE the People of The United States, in order To Form a More Perfect Union, Establish justice, Insure Domestic Tranquillity, Provide for the Common Defense, Promote The General Welfare, and Secure The Blessings of Liberty to Ourselves and Our Posterity, Do Ordain and Establish This Constitution for

THE UNITED STATES OF AMERICA

I, as a citizen of The United States of America, Promise that I will read often The Constitution of the United States of America, and repeat its Preamble in memory daily, before taking any serious step, and Pledge my goods, my sacred honor, and my life to support and defend The Constitution of the United States of America.

THE CONSTITUTION'S MOST IMPORTANT POWER

Article I, Sections 8 and 10:

The Congress shall have power to coin money, regulate the value thereof and of foreign coin, and fix the standard of weights and measures.

And the Constitution no where gave Congress the power to re-delegate this great power, yet Congress has delegated this power to private corporations.

Publisher's Forward

I am herewith reprinting verbatim the Federal Reserve book, first printed in 1939: **THE FEDERAL RESERVE SYSTEM Its Purposes and Functions.**

This book was printed and published under and by the authority of the Board of Governors of the Reserve System a board of seven members appointed by the President and confirmed by the Senate, for terms of 14 years.

I am doing this because when Mr. Eccles, the then chairman of the Board, retired, the Board had discovered that the book had made banking so simple that the masses could understand it and that was intolerable money must be kept a mystery. The few who got hold of the book began to ask why Congress should surrender a delegated Constitutional power to private corporations who used it for private gain.

They began to ask: "Why should the people give to bankers U.S. Bonds, and pay an annual interest on these bonds, that they might use their own credit? Why should the Government have to borrow its own money (use its own credit) when forced to use more revenues than current taxes afforded?"

Our bonded indebtedness in 1913, at the time the first Reserve Act was passed was less than \$10 billion dollars! In 1939 it had jumped to over \$45 billion.

So in 1939, 1940 and 1941 there was such a demand for this revealing book, that the Board made five printings. The Board had come to realize the great danger to their money power gained and exercised through the Reserve Act of 1913, promptly stopped the distribution of this book, and had it rewritten, completely omitting or obscuring the damaging statements.

Finding that additional copies could not be had, I decided, after 15 years of waiting and trying to get additional copies, to reprint the book myself.

In this introductory statement I want to make a few quotes from it, then piece them together, to show you that the whole mechanics of money, shorn of the mystery bankers weave about it, are so simple that a high school student can understand it; at the same time I want to reveal the tremendous theft bankers have gotten away with since 1913. Not only have they consistently and coldly robbed our Government and its people, year in and year out, but during the Reserve System's control of our national economy, the last 44 years, bankers planned and staged one of the most destructive panics the Nation has ever suffered, and provoked a World War that cost the people around \$300 billion, and thousands of lives of our young men.

This being admitted, I am sure that you would like to understand how private banking corporations can exercise such destructive powers and they like wars because their profits pile up in mountainous volumes.

The first crime committed by Congress and it is wholly and solely responsible for this tragic thing was when it passed the first Reserve Act, December 23, 1913. This Act not only gave the private banking corporations the absolute ownership and control of our Nation's credit, but it gave them the power to CREATE money, bank deposits.

The Act gave the Board of Governors the power to write a check against no funds: (See [this page](#), this book) "Federal Reserve Bank credit . . . under the law has a limited and special use as a source of member bank reserve funds. It is itself a form of money authorized for special purposes, convertible into other forms of money, convertible therefrom, readily controllable as to amount . . . Federal Reserve Bank credit does not consist of funds that the Reserve authorities GET somewhere to lend but **constitute funds that they are empowered to CREATE**. The process of creation is one of giving the promises of the Federal Reserve Bank in the form of reserve deposits."

So there you have the first step in the "creation" of bank deposits.

On [this page](#), we find that they have the power to increase or decrease the supply of reserve funds, therefore they are in a position to exercise considerable influence (power) over the amount of credit, in the aggregate, that banks may be in a position to extend (to Customers).

On [this page](#), we read, "The aggregate deposits in the banking system as a whole (and you must always think of them as a whole) represent funds lent by banks or paid by banks for securities, notes, mortgages, and other forms of investment obligations;" and [this page](#), "Loans and purchases of securities by the Federal Reserve authorities are one of the important sources of member bank reserves; member bank reserves in turn are the basis of member bank credit that is, of the loans and investments of member banks. And member bank credit is a source of bank deposits transferable by check wherewith business men and other persons make the bulk of their monetary payments."

Then on [this page](#), "Federal Reserve Bank credit and member bank credit are not the equivalent of each other, dollar for dollar accordingly the \$100,000,000 of Reserve Bank credit obtained by the sale of securities to the Reserve Bank would increase their reserves sufficiently to enable them to expand their credit (make loans and buy securities) by \$500, 000,000!"

That covers the whole of the essential steps in providing the people with money, the keeping of their deposits, cashing and clearing their checks. That's not the whole of the business of the Federal Reserve Banks they dabble in stock market gambling, in fact they are the [croupiers](#) who spin the wheels and call the turns, but it covers the machinery the Constitution delegated to Congress "The Congress shall have the power to . . . coin money, regulate the value thereof, and of foreign coin, and fix the standard of weights and measures."

Let's take each step of this creative power the Reserve Banks have over the volume of money:

1. The Reserve authorities buy corporation stock in the open (stock) market. It gives **a check against no funds** for the securities.
2. The seller of the securities deposits the check the Reserve authorities gave him with his home bank. He gets deposit credits.
3. The commercial bank sends the check to its Reserve Bank; the Reserve Bank gives the commercial bank credit dollar for dollar in its reserve fund.
4. The commercial bank multiplies its new reserves by five, and arrives at its new bank credit.
5. The bank lends these bank credits to eager customers, and the banker gives them deposit slips showing that the bank has added to their deposit account the face of the loan.

That's all, gentle reader or are you bristling with anger by this time?

But, let's make the picture concrete:

Suppose the Reserve authorities write a check for \$20,000,000 General Motors stock. General Motors deposits the check in the Morgan City National Bank, and gets \$20,000,000 in deposits to its credit. The City National bank sends the check across the street to its Reserve Bank, and the Reserve Bank gives the City National bank credit in its reserve fund for \$20,000,000. Then the City National bank multiplies its new \$20,000,000 deposits by 7 and finds that the Reserve Bank has graciously complimented it with \$140,000,000 bank credits which were actual money to the bank, for it could go out and buy anything under the sun with them; or make loans to their customers to the amount of \$140 million.

That was a right handsome compliment, gift, don't you think?

Suppose City National Bank loaned all of that \$140 millions; adding that to the \$20 million General Motors got, would increase our volume of money \$160 million and that is why you are being paid for your goods and services with a 20 cent dollar.

Did you get the sleightofhand, mysterious trick? The Reserve authorities wrote a check for \$20 million, this increased the money supply \$20 million; then the bank loaned \$140 million, which added \$140 million more, or a total of \$160 million, growing out of this sale of \$20 million corporation stock?

We have with our publisher, The Meador Publishing Company, 324 Newbury St., Boston 15, Massachusetts, our manuscript on the "**The Legalized Crime of Banking**," which you doubtless will want to read. It will be off the press soon. It not only makes plain the crime of banking, but it suggests a way out, a solution that would forever take our Nation out of the borrowing class, and make it truly the master of its money and credit. It would eliminate all U.S. Bonds, and good times and bad times could not be planned at the will of the money changers.

Now let me recite the biggest crime of all. Banks promote wars because they are astoundingly profitable to bankers. World War II cost us over \$280 billion. The Reserve Banks bought every bond, and paid for them by giving the Government deposit credits on their books. This increased our money \$560 billion \$280 billion in U.S. Bonds, a gift to the bankers, and \$280 billion deposits to the credit of the Government.

As the Government checked these deposits out to the people in payment for their goods and services, these checks cleared through the Reserve Banks, adding \$280 billion to their reserve funds. The commercial banks multiplied these funds by five, and found that they had the staggering sum of \$1 trillion 400 billion bank credit to use just as you use your own bank deposits. Adding this we find that the World War II increased our National debt \$280 billion, added \$280 billion new deposits in the one act. Then the \$280 billion reserve fund increased bank credits to \$1,400 billion and all of that became the property of bankers, except the \$280 billion deposits the Government got when it surrender the bonds to the banks.

Let's not forget that the total amount of bank credit the member banks may lend or pay for securities is an arbitrary amount, which the Reserve authorities may any time increase or decrease at their own will. They may buy corporation stock at any time, without consulting any bank, and when they, do bank credits increase seven to thirteen times amount of stock bought.

In other words, that the Government might use \$280 billion of its own credit, it made a present of \$1,680 billion in bonds and bank credit to the bankers.

And remember these \$280 billion in U.S. Bonds, and the \$1 trillion 400 billion bank credits cost the bankers not one thin dime.

And who is to blame? Congress and only Congress, because the Constitution no where gave it the authority to re-delegate its power to "coin money, regulate the value thereof, and of foreign coin."

Had the Congress kept control of the Nation's money and credit, when World War II faced us, Congress would have ordered the Treasury to give the Government deposit credits on the books of the Treasury, and checked from there.

Then there would have been no U.S. Bonds, and the bankers would not have come out of the war \$1 trillion 680 billion richer!

Think of our paying private banking corporations \$1 trillion 680 billion just for the privilege of using a checking account of only \$280 billion!

But, you say of course they never used that bank credit it's too much. That may be true, but if a man has \$100,000 deposit credits on the books of the bank, and never spends more than \$25,000, we say he had \$100,000 to spend. Whether they use the total bank credits or not has nothing to do with the fact that they had that total amount of bank credits to use if they wanted to. To them it was the same as the deposits are to you.

Now, let's quote Sir Josiah Stamp at the time he was president of the Bank of England, president of the English Railway System, his directorates filled several pages of Whose Who. He said in Austin, in the late 20s,

"Banking was conceived in iniquity and born in sin The bankers own the world. Take it away from them, but leave them the power to create money and control credit, with a flick of the pen they will create enough money to buy it back again Take this power away from bankers and all great fortunes like mine (he was the second richest man in Great Britain) will disappear, and they ought to disappear, for this would then be a happier and a better world to live in. My sons should not object. They are well educated, and should be willing to take their places in the business world and forge their own fortunes."

Get absurdity of this: The Nation, with its wealth and manpower their know-how valued at \$500 billion, gives to the Federal Reserve authorities, with a capital and surplus of \$350 million, to borrow \$280 billion! The rich man borrowing from the pauper? Sure; and how absurd.

Sir Josiah was speaking for every person in America. He was speaking to you.

S. W. ADAMS

October 31, 1957.
Austin, Texas

{ This Format

Note, we are using a different format. which enables us to compress two pages of the original book on one page of this reprint. We have at bottom of each column the page number that appeared on same page of the book. We have done this that we might use same index, so you may find subject you are looking for by turning to column with the indicated number under it.

We have left the pictures of the eleven Reserve Banks out, [including -ed.] reproducing only the Washington Reserve Bank that we might utilize the space for comments, which you will find [instead of "enclosed in parentheses," formatted as footnotes -ed.], in 9 point type. We have used a skinny 11 point type for space reasons, and such portions of the book as we think you should study carefully we have set in italics. We have separated our comments from the main text with rules, and placed each comment at the bottom of its own page. We have reproduced the map and charts; so we hope you may get the full picture of the "Legalized Crime of Banking" Congress has made possible through the passage of the 1913 Reserve! Act. The Reserve System has cheated the people out of the \$272 billion outstanding in bonds, and an annual interest of \$10 billion the interest is more than the total national debt before the Reserve Act was passed in 1913.



Foreword

This book is intended primarily for students, bankers, business men, and others who desire an authoritative statement of the purposes and functions of the Federal Reserve System. It is neither a primer, nor is it an exhaustive treatise. The aim has been to have it cover the middle ground between those extremes and to make it clear and readable without neglect of essentials.

The Federal Reserve System is 25 years old this year. Its operations have become a factor of greatest importance in American economic life. While they chiefly concern banks and the Government, their effects extend into all forms of economic activity and are felt indirectly by everyone.

It is desirable, therefore, that the Federal Reserve System be as fully understood as possible by the public in whose interest it was established and in whose interest it is administered. [2]

The text of the book has been prepared by Bray Hammond and the staff of the Board of Governors of the Federal Reserve System.

*The Board of Governors of
The Federal Reserve System*

Washington, D.C.
May 1, 1939.

CHAPTER I

A General Outline of the Federal Reserve System

The Federal Reserve System comprises the Board of Governors, the Federal Open Market Committee, the Federal Advisory Council, and the member banks; the System's functions lie in the field of money, credit, and banking.

The Federal Reserve System was organized in 1914. As now constituted, the System comprises the following:

1. The Board of Governors.
2. The twelve Reserve Banks.
3. The Federal Open Market Committee.
4. The Federal Advisory Council.
5. The member banks (14,537).

Responsibility for the Federal Reserve policy and decisions rests on the first three of the above. In some matters the law puts primary responsibility on the Board, in some on the Reserve Banks, and in some on the Committee, though in practice there is close coordination of action. Accordingly, for the sake of simplicity, the term "Federal Reserve authorities" is frequently used when it is unnecessary to indicate which of the three is responsible for action or to what extent the responsibility is shared.

1. The Board of Governors is composed of seven members. Their appointments are made by the President of the United States and confirmed by the Senate. Members are appointed for terms of fourteen years, so arranged that one term expires every two years. The Board's responsibilities lie in the field of money and banking. Their object in a broad sense is to maintain sound banking conditions and an adequate supply of credit at reasonable cost for use in commerce, industry, and agriculture. The Board supervises the operations of the twelve Federal Reserve Banks. Its offices are in Washington, D.C.

2. Each Federal Reserve Bank serves a district comprising several states or parts of states. The Federal Reserve districts, and the location of the Federal Reserve Banks and their branches are shown on preceding map. [not available -ed.] They are as follows:

- District No. 1.
 - Federal Reserve Bank of Boston.
- District No. 2.
 - Federal Reserve Bank of N. Y.
 - Branch at Buffalo, N. Y.
- District No. 3.
 - Federal Reserve Bank of Phila.
- District No. 4.
- District No. 8.
 - Federal Reserve Bank of St. Louis
 - Branches: Little Rock, Arkansas
 - Louisville, Kentucky
 - Memphis, Tennessee
- District No. 9
 - Federal Reserve Bank, Minneapolis
 - Branch at Helena, Montana
- District No. 10.
 - Federal Reserve Bank, Kansas City
 - Branches: Denver, Colorado

- Federal Reserve Bank of Cleveland
 - Branches: Cincinnati, Ohio.
 - Pittsburgh, Penna.
 - Oklahoma City, Okla.
 - Omaha, Nebraska
-
- District No. 5.
 - Federal Reserve Bank of Richmond
 - Branches: Baltimore, Maryland.
 - Charlotte, N. C.
 - District No. 11.
 - Federal Reserve Bank of Dallas
 - Branches: El Paso, Texas
 - Houston, Texas
 - San Antonio, Texas
-
- District No. 6.
 - Federal Reserve Bank of Atlanta
 - Branches: Birmingham, Ala.
 - Jacksonville, Florida
 - Nashville, Tennessee
 - New Orleans, Louisiana
 - Agency at Savannah, Georgia
 - District No. 12.
 - Federal Reserve Bank, San Francisco
 - Branches: Los Angeles, Calif.
 - Portland, Oregon
 - Salt Lake City, Utah
 - Seattle, Washington
-
- District No. 7.
 - Federal Reserve Bank of Chicago
 - Branch: Detroit, Michigan

Each of the twelve Federal Reserve Banks is a corporation, organized and operated in the public service. The Federal Reserve Banks differ essentially from privately managed banks in that they are not operated for profit, and their stockholders, which are the member banks, do, not have the powers and privileges that customarily belong to stockholders of privately managed corporations.

Each Federal Reserve Bank has nine directors, three of whom are known as class A directors, three as Class B directors, and three as Class C directors. These nine directors are not chosen the way directors of business corporations are usually chosen. Class A and Class B directors are elected by member banks, one director of each class being elected by small banks, one each by banks of medium size, and one of each class by large banks. The three Class A directors may be bankers. The three Class B directors must be actively engaged in the district in commerce, agriculture, or some other industrial pursuit, and must not be officers, directors, or employees of any bank. The three Class C directors are designated by the Board of Governors of the Federal Reserve System. They must not be officers, directors, employees, or stockholders of any bank. One of them is designated by the Board of Governors as chairman of the Reserve Bank's board of directors.

Under this arrangement, business men other than bankers constitute a majority of the directors of each Reserve Bank. The directors are responsible for the conduct of the affairs of the Reserve Bank, subject to the supervision of the Board of Governors. They choose the Reserve Bank officers, but the law requires that their choice of president and of the first vicepresident be approved by the Board of Governors. The salaries of all officers and employees are also subject to the approval of the Board of Governors. Each branch of a Federal Reserve Bank has its own board of directors, a majority of whom are selected by the Reserve Bank the remainder by the Board of Governors. These conditions with which the law circumscribes the selection of Reserve Bank directors and the management of the Reserve Banks, indicate the public nature of the Reserve Banks.

Decentralization is an important characteristic of the Federal Reserve System. Each Reserve Bank and each branch office is a regional and local institution as well as a part of a nationwide system. Its officers and employees are residents of the district, and its transactions are with regional and local banks. It gives effective representation to the views and interests of the particular region to which it belongs and at the same time helps to administer nationwide policies.

The Federal Reserve Banks derive an income from their operations which has been sufficient to cover expenses, to pay dividends limited to 6 percent per annum, cumulative, to pay a substantial amount to the United States Treasury, and to make additions to our surplus. This surplus, if the Federal Reserve Banks were to be liquidated, would belong to the United States Government.

3. The Federal Open Market Committee comprises the seven members of the Board of Governors and five representatives of the Federal Reserve Banks. The committee directs the open market operations of the Federal Reserve Banks, that is, the purchases and sales of United States Government securities and other obligations in the open market. The purpose of these operations is to maintain a basis for bank credit ample to meet the business needs of the country.

4. The Federal Advisory Council consists of twelve members, one selected annually by each Federal Reserve Bank through its board of directors. The Council meets in Washington at least four times a year. It confers with the Board of Governors on general business conditions and makes recommendations regarding the affairs of the Federal Reserve System. Its recommendations are purely advisory.

5. Member banks include all national banks in the continental United States, and such State banks and trust companies as apply for membership, meet the requirements, and are admitted. On December 31, 1938, the membership comprised 5,224 National banks and 1,114 State banks. There were over 8,000 other State banks and trust companies (exclusive of mutual savings banks) that did not belong to the System; these were mostly small banks, their aggregate deposits being about 17 percent of the total deposits of all commercial banks.

Each member bank, as required by law, holds stock, equal to 3 percent of its own capital and surplus, acquired directly from the Federal Reserve Bank; it can not be sold, transferred, or [hypothesized](#), and can be disposed of only by being surrendered to the Federal Reserve Bank.

Each member bank also is required to maintain its legal reserves on deposit with the Federal Reserve Bank of its district. These legal reserves are proportionate to the member bank's own deposit, the proportion varying according to the location of the member bank and the character of its deposits. Higher reserves are required against demand deposits than against time deposits, and banks in large cities, generally speaking, are subject to higher reserve requirements than banks in smaller cities and rural regions. *No interest is paid on these reserves.*

Member banks may and do maintain reserves in excess of requirements, On December 31, 1939, their reserve balances amounted in the aggregate to about nine billion dollars, of which about three million were excess reserves.

The Monetary and Credit Functions of the Federal Reserve System

The monetary and credit functions of the Federal Reserve System mean much more than merely the issuance of paper currency and coin. *Currency is actually used for only a small part of the country's total volume of payments, the greater part being effected by the use of bank checks.* Whenever business is so active that additional means of payment are required, the additional amounts may, to some extent, be called for in the form of currency, in which event the Federal Reserve Banks have facilities for finishing promptly all that is required. Or the addition may be wanted in the form of bank deposits transferable by check, in which event member banks lend the required amounts. In case member banks have any difficulty making the loans that are asked for, because their own funds are made inadequate, it is possible for them to borrow additional funds from their Federal Reserve Bank and possible for *the Federal Reserve authorities on their own initiative to supply additional funds through open market purchases of securities.*

Before the establishment of the Federal Reserve System, the banks maintained the reserves required to be held against their deposits partly in the form of cash in their vaults and partly in the form of deposits in other banks. In general, banks in smaller cities and rural regions maintained the bulk of their reserve balances with banks in larger cities. A very large volume of these reserve balances was maintained in New York City and Chicago. These two cities and St. Louis were designated as central reserve cities, and National banks therein had to maintain all their legal reserves in the form of cash in their own vaults.

Under these circumstances, when banks throughout the country needed to draw down their reserve balances, the demand necessarily converged on a few banks situated in the financial centers. In ordinary times the demand was not excessive, for while some country banks would be drawing-down their balances, others would be building theirs up. Now and then, however, the demand became widespread and intense. Banks all over the country would call on the Chicago and New York banks for currency, which the city banks were to supply and charge to the reserve balances of the country banks. In such circumstances, it might be difficult for the city banks to meet this demand, because the currency constituted their own reserves and there was no source on which they could rely for additional reserve funds. The efforts of these banks to protect their reserves frequently involved the sale of securities and the refusal to make loans and renewals, with the result that securities prices would fall, interest rates would rise, borrowing would become difficult, and loans would have to be liquidated.

Panics and crises like this were apt to occur every few years, and in 1907 there was one of unusual severity. Congress appointed a National Monetary Commission shortly thereafter for the purpose of determining what should be done. There was active and thorough consideration of the question for several years, and though Congress greatly modified the plan recommended by the Commission, it eventually adopted legislation embodying the results of the study both by the Commission and other authorities inside and outside of Congress. This legislation is the Federal Reserve Act. It became law December 23, 1913. [4]

The Federal Reserve Act directed that the Federal Reserve Banks be established, required that reserves of member banks be deposited with the Federal Reserve Banks; it empowered Federal Reserve authorities to discount paper for the member banks, to engage in open market operations, and to issue Federal Reserve rates.

The member banks use the reserve accounts that they maintain with the Federal Reserve Banks in very much the same way that a bank depositor uses his checking account. On the one hand they may deposit in the reserve accounts the checks on the other banks from their customers: and on the other hand, they may draw on the reserve accounts for various purposes, especially to procure currency and to pay the checks drawn against them by their customers and deposited in other banks.

The volume of reserves required by law is much greater, ordinarily, than these uses would make necessary. The reason for this is that the required reserves have an additional purpose: they are the means through which the Federal Reserve authorities influence the lending and investing activities of banks. As long as a bank has reserves in excess of requirements, it is in a position to enlarge its extensions of credit, assuming a demand. As long as it is without reserves in excess of requirements, it is not in a position to enlarge its extensions of credit and may be impelled to borrow additional funds. Since the Federal Reserve authorities have the power to increase or decrease the supply of reserve funds and within limits to increase or decrease reserve requirements, they are able to exercise considerable influence over the amount of credit, in the aggregate, that banks may be in a position to extend.

These functions of the Federal Reserve authorities are sometimes called "central banking" functions. Practically every modern country has an institution for the performance of such functions. In Canada, it is the Bank of Canada; in England, it is the Bank of England; in France, it is the Bank of France. In the United States, however, there are twelve Federal Reserve Banks embraced in a regional system, and the coordination of their activities is effected through the Board of Governors in Washington.

The duties of the reserve authorities fall into two main groups. One group includes duties which relate primarily to the maintenance of monetary and credit conditions favorable to sound business activities in all fields agriculture, industrial, commercial. They call for policy decisions from time to time rather than routine activity. They involve lending to member banks, open market operations, fixing reserve requirements, establishing discount rates and issuance of regulations relating to these other functions.

The other group includes duties which relate primarily to the maintenance of regular services for the member banks of the Federal Reserve System, the United States Government, and the public. *These services are principally the following: holding member bank reserve balances; furnishing currency for circulation; facilitating the clearance and collection of checks; supervising member banks, and obtaining reports of condition from them; acting as financial agents, custodians, and depositories for the United States Government.*

These regular services engage by far the greater part of the time and attention of the officers and employees of the twelve Federal Reserve Banks. They will be described with more detail in the chapter immediately following. In later chapters the monetary and credit functions of the Federal Reserve authorities will be discussed. [\[6\]](#)

CHAPTER II

The Service Functions of the Federal Reserve Banks

The twelve Federal Reserve Banks hold the legal reserves of member banks, furnish currency for circulation, facilitate the collection and clearance of checks, exercise supervisory duties with respect to member banks, and are fiscal agents of the United States Government.

One of the primary functions of the Federal Reserve Banks is to hold the legal reserves of member banks. The member banks do not normally let these reserves lie idle awaiting an emergency but keep them in active use. This usually entails a heavy amount of continuous work for the Federal Reserve Banks: furnishing the member banks coin and paper money of all denominations; receiving and sorting deposits of currency; and receiving, sorting, collecting and clearing checks.

Furnishing Currency for Circulation

On December 31, 1938, the amount of United States money in circulation that is, the amount of currency outside the vaults of the Treasury and the Federal Reserve Banks was \$6,856,000,000. It was made up of the following classes:

Reserve Notes	\$4,405,000,000
Treasury Currency:	
Silver certificates	\$1,339,000,000
Silver dollars	\$42,000,000
Subsidiary silver	\$357,000,000
Minor or coin	\$151,000,000
U.S. Notes	\$257,000,000

Currency in Process of Retirement:

National bank notes	\$201,000,000
Gold certificates [7]	\$75,000,000
Reserve Bank Notes [8]	\$28,000,000
Treasury notes of 1890.	\$1,000,000
	<hr/>
	\$6,856,000,000

Federal Reserve notes are liabilities of the Federal Reserve Banks.

They are a prior lien on the assets of the Federal Reserve Banks and are specifically secured by the pledge of collateral of at least equal amount. *They are obligations of the United States Government.* As of December 31, 1938, the collateral pledged by the Federal Reserve Banks against the Federal Reserve Notes in circulation comprised \$4,888,000,000 of gold certificates (new form) and \$3,000,000 of promissory notes and other obligations discounted by the Federal Reserve Banks, or \$4,891,000,000 in all.

Treasury currency comprising silver certificates, silver dollars, subsidiary silver, minor coin and United States notes, is issued by the Treasury itself, but it is placed in circulation for the most part through the Federal Reserve Banks.

The kinds of currency in process of retirement, comprising national bank notes, gold certificates (old form), Federal Reserve Bank notes, and Treasury notes of 1890 are being replaced by other types of currency mainly Federal Reserve notes and silver certificates. Their retirement does not mean that the amount of money in circulation is being reduced but that fewer kinds of money are now being issued.

All of the kinds of currency listed above are legal tender for all debts, public and private, public charges, taxes, duties and dues.

All United States paper currency is printed at the Bureau of Engraving and Printing at Washington, D.C., and all United States coins are made at the Philadelphia, Denver, and San Francisco mints. The Bureau of Engraving and printing and the mints are operated by the United States Treasury. Federal Reserve notes are printed by the Bureau at the expense of the Federal Reserve Banks.

The total amount of paper money and coin in circulation which as indicated above, is about \$6,856,000,000 fluctuates relatively little. The new currency being constantly produced by the Bureau of Engraving and Printing and by the mints for the most part merely takes the place of old currency that has been soiled, mutilated, or worn so that it is no longer fit to use.

How Currency Is Distributed

There are two principal ways by which an individual gets paper money and coin. Either he draws it out of his Bank and has it charged to his account; or he is paid for his labor, his services, or his merchandise with money that has been drawn out of a bank by someone else.

Practically all money, therefore, passes into and out of banks at one time or another. There are times when banks are called on to pay out more cash than they receive and there are times when they receive more than they pay out. The demand varies from season to season, from place to place, and from bank to bank. A heavy demand for currency at Christmas time is practically universal. In agricultural regions there is a heavy demand for cash when crops are being harvested; in cities there is a heavy demand for cash at certain times in the summer, particularly around the Fourth of July and Labor Day, when people withdraw money for their vacations. Moreover, the demand varies for different kinds of cash. Some communities use more coin than others and less paper money, and some use more of certain denominations than others do.

In accordance with this demand, banks provide themselves with the amount and kinds of cash that the people of their communities want. Member banks depend upon the Federal Reserve Banks for replenishment of their supply ordering what they require and having it charged to their reserve accounts. Non-member banks generally get their supplies from member banks.

The twelve Federal Reserve Banks in turn keep a large stock of paper currency and coin on hand to meet this demand. This includes both Federal Reserve notes, which are their own liabilities, and coin, silver certificates, and United States notes, which they obtain from the Treasury, giving the Treasury credit in its checking account for the amount obtained.

Until the Federal Reserve Banks were established in 1914, the means of furnishing currency for circulation were unsatisfactory. A gap existed between the Treasury and the banking system, and demand for increased circulation could not always be met promptly. This was the case in the panic of 1907, and as already indicated, the experience of that year was one of the things that led to formation of the Federal Reserve system.

The currency mechanism provided under the Federal Reserve Act has worked satisfactorily money moves into and out of circulation automatically, in response to increase or decrease in the public demand. The Treasury, the twelve Federal Reserve Banks, and the thousands of local banks throughout the country form a system of distribution that reaches the community, that enables cash bills and coins to be furnished promptly where it is needed, and that also enables surplus cash to be retired from circulation at times when the public demand subsides. [9]

Collections, Clearances, and Transfers of Funds

Currency and coin are indispensable, yet they are used only for the smaller transactions of presentday economic life. A hundred years ago they were used much more generally. Use of bank deposits has increased to such an extent that payments made by check are now many times greater than payments made with currency and coin.

The use of checks is facilitated by the service of the Federal Reserve Banks in clearing and collecting them through the reserve accounts of member banks. For example, suppose that a

manufacturer in Hartford, Connecticut, sells \$1,000 worth of electrical equipment to a dealer in Sacramento, California, and receives in payment a check on a bank in Sacramento. The check is an order on the Sacramento bank to pay the Hartford manufacturer \$1,000. Obviously, the Hartford manufacturer does not want to make a trip to California to collect \$1,000 in cash, nor does he want to pay postage and insurance on a shipment of currency. He does not ordinarily want cash at all. What he wants is to have \$1,000 placed to his credit in his checking account. Accordingly he deposits the check in his Hartford bank. The Hartford bank does not require cash for the check: it wants credit in its reserve account at the Federal Reserve Bank of Boston. Accordingly, it sends the check to the Federal Reserve Bank of Boston. The Federal Reserve Bank of Boston sends it to the Federal Reserve Bank of San Francisco. The Federal Reserve Bank of San Francisco sends it to the bank in Sacramento. The bank in Sacramento charges the check to the account of the depositor who wrote it, and either remits the amount to the Federal Reserve Bank of San Francisco or authorizes the San Francisco Reserve Bank to charge the amount to its reserve account. The Federal Reserve bank of Boston in turn credits the account of the Hartford bank. Thus the check effects the transfer through the Federal Reserve Banks of \$1,000 of deposit credit from the checking account of the dealer in Sacramento to the checking account of the manufacturer in Hartford. [10]

Even though a bank is not a member of the Federal Reserve System, it may nevertheless arrange to maintain with the Federal Reserve Bank what is called a "clearing balance." Checks drawn on other banks which are received by the nonmember bank and forwarded by it to the Reserve Bank may be credited to this clearing balance, and checks drawn against the nonmember bank and deposited in other banks may be paid with funds from the balance.

Checks which are collected and cleared through the Federal Reserve banks must be paid in full by the banks on which they are drawn, without deduction of a fee charge. That is, they must be paid "at par." The Federal Reserve Banks have greatly shortened and simplified the process of clearing and collecting checks. By doing so, they have improved the means by which goods and services are paid for and by which monetary obligations are settled: they have also reduced the cost to the public of making payments and transferring funds. The Federal Reserve Banks also handle other items for collection besides checks, such as drafts, promissory notes, and bond coupons.

In order to make transfers and payments as promptly and efficiently as possible, the twelve Federal Reserve Banks maintain a fund in Washington called the Interdistrict Settlement Fund, in which each Reserve Bank has a share. Through this fund money is constantly being transferred by telegraphic order from the account of one Reserve Bank to that of another. Many millions of dollars of transfers and payments are made every day, including large transfers for member banks and for the United States Treasury.

The relative importance of currency and of checks is indicated roughly by the following figures: in the year 1938 the twelve Federal Reserve Banks handled about five billion separate pieces of coin and paper money, the total value of which was \$9,000,000,000. In the same period they handled a billion checks, the value of which was \$232, 000,000,000. In other words, the number of pieces of coin and paper money was five times as great as the number of checks, but the

monetary value of the checks was over twentyfive times as great as the amount of currency and coin.

Supervisory Functions

According to the preamble to the Federal Reserve Act, one of the purposes of the Act was "to establish a more effective supervision of banking in the United States." However, specific duties of supervision are entrusted by law to other agencies as well as to the Federal Reserve authorities. The examination and supervision of all national banks, which comprise the majority of banks belonging to the Federal Reserve System, are conducted by the Comptroller of the Currency. Examination reports made by his examiners as the condition of banks are available to the proper Reserve authorities. The other banks which belong to the system all of them State banks are supervised by State authorities and examined by them with the cooperation of the Federal Reserve Banks. Information is available to Reserve authorities not only from the reports of examiners but also from periodic reports of conditions submitted by the member banks themselves. Banks that are not members of the Federal Reserve System, but have deposit insurance in the Federal Insurance Corporation, are examined by the Corporation and by State authorities. Each of the Federal Reserve Banks has an examining staff for the examination of banks in its district. The Federal Reserve Banks themselves are examined by the examining staff which the Board of Governors in Washington maintains.

Among other supervisory powers exercised by the Federal Reserve authorities, the most important are:

1. The power to fix the maximum rate of interest which member banks may pay upon time and savings deposit. The main purpose of this power is to prevent banks from paying such high rates, in competition for deposits, as to weaken their condition.

2. The power to take disciplinary action, including the following: to remove officers and directors of member banks after citation in the case of national banks by the Comptroller of the Currency, and in the case of State member banks by the Federal Reserve Agent for continued violation of banking law or for continued unsafe or unsound banking practices; and to suspend member banks from recourse to the credit facilities of the Federal Reserve System if it is found that they are making undue use of bank credit for speculation in securities, real estate, or commodities.

3. The power to grant permits to national banks to exercise trust powers.

4. The power to grant permission to holding companies so that they may vote stock of member banks controlled by them. Such companies are usually corporations which own all or a majority of the stock of one or more member banks.

5. The power to grant permits to member banks to establish branches in foreign countries. Under this authority seven large banks situated in New York, Boston, and San Francisco maintain foreign branches, about a hundred in all, situated in twentythree different countries.

Fiscal Agency Functions

The twelve Federal Reserve Banks carry the principal checking accounts of the United States Treasury, handle much of the work entailed in issuing and redeeming Government obligations, and performing numerous other important fiscal duties of the United States Government.

The Government has an enormous amount of banking business to do. It is continuously receiving funds in all parts of the United States and spending them in all parts. Its receipts come normally from taxpayers and purchasers of Government securities and are deposited in the Federal Reserve Banks to the credit of the Treasury. Its funds are disbursed by check, and these checks are paid by the Federal Reserve Banks and charged to the Treasury's account.

The Federal Reserve Banks also perform important services for the Treasury in connection with the public debt. When a new issue of Government securities is sold by the Treasury, the Reserve Banks receive the applications of banks, dealers, and others who wish to buy, make allotments of securities in accordance with instructions from the Treasury, deliver the securities to the purchasers, receive payment for them, and credit the amount received to the Treasury's checking account. The Reserve Banks also redeem securities as they mature, making exchanges of denominations or kinds, handle transfers and conversions, pay interest coupons, and do a number of other things involved in servicing the Government debt. They issue and redeem United States savings bonds and upon request hold them in safekeeping for the owners. For the convenience of the Treasury and also for the convenience of investors in Government securities, it is necessary that there be facilities in various parts of the country to handle such transactions, and the Federal Reserve Banks furnish these facilities. Since the Federal Reserve authorities are constantly in touch with the money and investment markets, the Treasury follows the practice of consulting them for their advice as to terms and conditions that will affect the sale and the refunding of Government obligations.

In connection with the lending and other financial activities of such Governmental agencies as the Reconstruction Finance Corporation, and the Commodity Credit Corporation, and the Home Owner's Loan Corporation, the Federal Reserve Banks act as custodians of collateral and securities. This not only involves safekeeping but disbursement of funds upon receipt of proper documents and maintenance of accurate records of large quantities of securities, warehouse

receipts for commodities, and other valuable papers which are constantly in process of being received, transferred and returned, as loans are granted, as partial payments are made and as maturing obligations are paid off or renewed.

The Federal Reserve Banks are reimbursed by the United States Treasury and other Government agencies for much of the expense incurred in the performance of fiscal agency functions.

Because of its situation in one of the principal financial centers of the world, the Federal Reserve Bank of New York acts as the agent of the United States Treasury in the foreign exchange operations of the Treasury's Stabilizing Fund. The Federal Reserve Bank of New York also has occasion to receive deposits of foreign central banks and to perform certain incidental services as correspondent of such banks. The Board of Governors exercises special supervision over all relations and transactions of Federal Reserve Banks with foreign banks. Such relationships are confined almost wholly to the Federal Reserve Bank of New York, which in these matters generally acts as agent for the other Federal Reserve Banks. [\[11\]](#)

The service functions that have been described absorb the attention and time of the greater part of the Federal Reserve personnel. The fiscal agency and related activities alone occupy the full time of about 2,500 employees out of a total of about 11,000. These functions differ greatly in this respect from the task of determining and administering monetary and credit policy. Decisions as to discount rates, reserve requirements, and open market operations may need to be made by the Reserve authorities only occasionally. Yet, though they may take, on the whole, less time than functions that must be performed daily through the year, they may have more far reaching effects upon the country's economic life. [\[12\]](#)

CHAPTER III

The Function of Bank Reserves [\[13\]](#)

The amount of reserves held in relation to legal requirements is a controlling factor in the lending policy of banks.

The [aggregate deposits](#) in the banking system represent mainly funds lent by banks or paid by banks for securities, mortgages, and other forms of investment obligations. It may seem that it ought to be the other way around that bank loans and investments would be derived from bank deposits instead of bank deposits being derived from loans and investments: and it is true that deposits would not grow out of loans if currency were used by the public for monetary payments to the exclusion of bank deposits transferable by check. But as it is, the public in general prefers to have its monetary funds including what it borrows on deposit in banks rather than in the form of currency in its own possession. The result of this preference is that the proceeds of loans go on deposit to be disbursed by check, and aggregate deposits are increased.

Suppose, for example, that a man borrows \$1,000 from a bank and took his loan in currency. The bank would have \$1,000 less currency than before and in its place a promissory note for \$1,000. Its deposits would remain untouched and unchanged. But suppose that the borrower, preferring not to take currency, asked for \$1,000 deposit credit instead. In that case the bank's currency would remain unchanged it would have the promissory note and it would have \$1,000 more deposits on its books. The loan instead of decreasing the bank's cash holdings would have increased its deposits.

Or suppose that the bank purchases a \$1,000 Government bond from one of its customers. The customer does not want payment in currency. He wants payment in deposit credit. Accordingly, the bank acquires a \$1,000 bond and its deposits increase by \$1,000. The bank's currency is not involved in the transaction and remains what it was. [\[14\]](#)

It does not follow that bank deposits can be enlarged without limit by increased bank loans and investments. When banks give deposit credit to their customers, they assume an obligation to pay the customers' checks. Consequently, they must have funds on hand for the purpose; though ordinarily the amount need not be more than a fraction of the total deposit liability.

How much it must be depends largely on circumstances. But its amount relative to deposit liabilities limits the ability of banks to lend and to invest.

The fact that banks can not increase their loans and investments unless adequate funds are available to them makes bank reserves of key importance. Upon the adequacy of reserves hinges the power of banks to expand loans and investments and therewith to expand deposits. Upon reserves also hinges the power of the Federal Reserve authorities to influence the credit policy of the member banks.

Bank reserves need to be understood from both the operating and the legal point of view. From the operating point of view, they may be described as that portion of a bank's assets which the bank has not lent or invested but holds in cash or other forms readily available for use. In the early years of banking, reserves consisted of gold and other coin kept by each bank in its own chests; later on, reserves included also the funds which a bank might keep on deposit with another bank usually with a larger one situated in an important financial center. The more conservative a banker was the larger and more liquid the reserves he was inclined to maintain. Such reserves usually meant a sacrifice of income, but they also meant protection in time of emergency.

Although sound banking practice called for the maintenance of adequate reserves, there were banks that failed to observe sound banking practices. Consequently, about a hundred years ago, legislatures began to adopt legal standards, which might require, for example, that a bank's reserves be not less than 10 percent of its note and deposit liabilities. But, while a legal requirement made certain that reserves be maintained, it also might interfere with their availability, since occasions would arise when a bank could not make the necessary use of its reserves without reducing them below the legal minimum. Just at a time when it was especially desirable, in the public interest, for banks to lend, they might be impelled to stop lending in order to avoid depleting the reserves which the law required them to maintain. Accordingly, it became

clear after long and painful experience that to require reserves to be maintained in certain volume was not enough there should also be means whereby banks could obtain additional reserve funds when needed.

This need was met by the establishment of the Federal Reserve Banks and the organization of the Federal Reserve System; member banks were required to maintain reserves of a certain volume with the Federal Reserve Banks, *and at the same time the Federal Reserve Banks were given power to advance additional reserve funds to them either by lending to them directly or by purchasing securities and other forms of obligations in the open market.*

Since it became possible under its power for the earning assets of banks to be converted readily into cash and reserve funds, the maintenance of large liquid reserves by individual banks became less necessary. Banks were put in a more secure position than they'd been in when no means existed for enlarging their reserves. In addition, the Federal Reserve authorities were directed to use their power not merely so as to assure ample credit for the legitimate monetary needs of commerce, industry and agriculture, but so as to curb the use of credit in speculation. Under these circumstances, reserve requirements took on a new significance. They became important as a means of giving effectiveness to the regulatory powers to be exercised directly with respect to volume of bank reserves and indirectly with respect to the extension of credit by banks.

Reserve Requirements

As stated in the Federal Reserve Act, the reserve balance that must be maintained by member banks with their Federal Reserve Banks are as follows:

For member banks in central reserve cities (New York City and Chicago), not less than 13 percent of demand deposits (checking account) and 3 percent of their time deposits (including savings).

For member banks in reserve cities (sixty other cities of lesser size), not less than 10 percent of their demand deposits and 3 percent of their time deposits.

For member banks in reserve cities called "country banks", not less than 7 percent of their demand deposits and 3 percent of their time deposit. The greatest number of banks fall in this third classification, but the total volume of their deposits is smaller than that of either of the other classes.

The law permits the foregoing requirements to be changed by the Board of Governors of the Federal Reserve System, "In order to prevent injurious credit expansion and contraction." It limits the possible range however; requirements may not be made lower than those stated in the law nor more than twice as high.

The following table shows the reserve requirements that have been in effect at different periods since 1917:

Classes of deposits and banks	June 21, 1917 - Aug. 15, 1936	Aug. 16, 1936 - Feb. 28, 1937	Mar. 1, 1937 - Apr. 30, 1937	May 1, 1937 - Apr. 15, 1938	Apr. 16, 1938 and after
<i>On net demand deposits:</i>	(Percent of deposits)				
Central reserve city banks . .	13	19 ½	22 ¾	26	22 ¾
Reserve city banks	10	15	17 ½	20	17 ½
Country banks	7	10 ½	12 ¼	14	12
<i>On time deposits:</i>	(Percent of deposits)				
All member banks	3	4 ½	5 ¼	6	5

In practice, these requirements relate to balances maintained on the average over a period (semi-weekly, weekly, or seimmonthly depending on the bank's location) and do not imply that the funds are to be left untouched. While maintaining his average above the reserve balance at or above the required minimum. *A banker may make constant and active use of his reserve account. From day to day he may have credits to the account for checks on other banks received from his depositors: and from day to day he may have charges to the account for checks that have been drawn on him and deposited in other banks. He may also from time to time withdraw currency and have it charged to the account, and when he has more currency than he needs, he may deposit it at the Reserve Bank to be credited to his account. These current uses of his reserve account will not necessarily reduce his average balance below the requirement.*

Since reserve requirements govern the ratio between reserves and deposits, it is apparent that they may be regarded as limiting either the extent to which reserves may be allowed to shrink in relation to a given volume of deposits or the extent to which deposits may be allowed to expand on the basis of a given volume of reserves. Sometimes an increase or decrease in deposits results in a simultaneous increase or decrease in reserves, but this is not necessarily so. Suppose, for example, that a given bank has \$2,000,000 of deposits, is required to have reserves of 10 percent, and has exactly that amount, namely \$200,000. *If a customer deposits an additional \$100,000, either in cash or in the form of a check on another bank, the first bank not only has its deposits increased by that amount, but also is put in position to increase its reserves equally by depositing the currency or check in the Federal Reserve bank.*

But suppose that instead of depositing \$100,000 in cash, the customer borrowed that amount from the bank and deposited it in his account; in that case the bank's deposits would be increased, but the deposit would bring no currency or check with which the bank's reserves might be increased. Furthermore, the \$100,000 which the customer borrowed might be checked out, in which case the bank's reserves would be reduced by half, while its original deposits would remain unchanged. [15]

In brief, when borrowed funds are checked out, the result is a decrease in reserves, and when they remain on deposit, the result is an increase in deposits without an increase in reserves. In either event, lending has an immediate reaction upon the ratio of reserves to deposits. And, as a corollary, the amount of reserves held in relation to legal requirements is a controlling factor in the lending policy of a bank.[\[16\]](#)

CHAPTER IV

The Expansion and Contraction of Bank Reserves

The ability of member banks to lend is largely dependent upon the volume of their reserves; they are required to keep their reserves on deposit with the Federal Reserve Banks: and the Federal Reserve authorities are empowered to extend Federal Reserve Bank credit for the expansion of these reserves. Therefore, the Federal Reserve authorities, through the medium of bank reserves, are able to influence the extension of member bank credit.

There are three prominent factors that, in the absence of operations by the Federal Reserve authorities, may render bank reserves inadequate in amount. One is an increased demand for borrowed funds, which, as banks increase their loans and investments in response to it, result in an expansion of bank deposits without a corresponding expansion of reserves. The second is an increased demand by the public for circulation currency: as the currency is withdrawn, it reduces both the reserves and the deposits of banks by the same amount, but the reduction in reserves is relatively greater than the reduction in deposits, since reserves are smaller than deposits. The third is a drain of gold out of the country, a condition which, like withdrawals of currency, effects a reduction of reserves relatively greater than the reduction it effects in deposits. Payment of federal taxes by the public and purchases by the public of new issues of Government securities also tend temporarily to reduce bank reserves, but these reductions are soon offset when the Government disburses the funds it has received.

When any of the factors renders member bank reserves insufficient, an occasion arises for Federal Reserve Bank credit that is, for funds which the Federal Reserve authorities are empowered to supply for the specific purpose of replenishing or increasing member bank reserves. This need may be confined to relatively few banks or it may affect banks in general. It may be met through loans to individual banks or through open market purchases, depending on prevailing credit conditions and policies.

Discounts and Advances for Member Banks

The loans which individual member banks may obtain from the Federal Reserve Banks are of two main classes:

- (1) the discount of so-called eligible paper; and
- (2) advances.

Eligible paper consists principally of notes, drafts, and bills of exchange used to finance payments for agricultural and industrial products. Such obligations are eligible for discount if their maturities at the time of discount are not more than ninety days in the case of commercial or industrial paper and not more than nine months in the case of agricultural paper. A member bank owning such obligations may transfer them by endorsement to the Federal Reserve Bank, which will credit the proceeds thereof to the member bank's reserves after deducting a discount or interest charge at the established rate.

Advances may be made by a Federal Reserve Bank to a member bank on the latter's promissory note secured by collateral. An advance secured of not more than ninety days and in subject to the same discounts or interest charges as eligible paper itself. An advance secured by other collateral satisfactory to the Federal Reserve Bank may have a maturity of not more than four months and is subject to a rate of interest not less than one-half of one percent per annum above the current discount rate on eligible paper.

Under the two foregoing provisions a Federal Reserve Bank may supply a member bank with any amount of additional reserves the member bank needs, the only limitation being the amount of good assets the member bank may offer the Federal Reserve Bank as security.

Discount Rates

Although the discount or interest rate which the Federal Reserve Banks charge their member banks is generally lower than the rate which commercial banks charge their customers, banks do not make it a practice to borrow from the Federal Reserve Banks for the purpose of gaining a profit by lending at a higher rate, nor has it been the policy of the Federal Reserve authorities to encourage borrowing for such purpose. When member banks borrow, it is for the immediate reason that they need to in order to avoid a deficiency in their reserves. The Federal Reserve authorities may raise or lower the discount rate from time to time, accordingly as it seems advisable to impose restraint upon the lending activities of banks or to encourage such activities.

During the earlier period of the System's operation that is, until very recent years member banks had no excess reserves and in the aggregate were substantially in debt to the Reserve Banks. Under such circumstances, changes in the discount rates, which made this indebtedness either more or less expensive, were the principal instrument by which the Federal Reserve authorities gave effect to credit policy. *In recent years, however, banks have had a large volume of excess reserves, there has been little occasion for them to borrow from the Federal Reserve Banks, and the discount rates have not had the importance they formerly had. Since 1934 they have been maintained at a low level. Throughout the entire year, 1938 discount rates on eligible paper were 1 percent at the Federal Reserve Bank of New York, and 1 ½ percent at the other eleven Federal Reserve Banks, whereas in the 1920's they varied from 3 percent to 7 percent at different Federal Reserve Banks at different times.*

The Federal Reserve Bank discount rates are more closely related to the so-called open market rates than to rates on the loans that banks make to their customers. Open market rates include the rates on commercial paper, bankers' acceptances, Treasury bills, stock market call loans, and other forms of obligations that may be bought and sold in the open market or called without regard to the borrowers' convenience. Open market rates are more sensitive to Federal Reserve credit policy or to market developments than are the rates banks charge their customers, because it is *open market paper that banks usually purchase first when they have an excess of funds and dispose of first when they need funds.*

The relationship between open market rates and Federal Reserve Bank discount rates tends to be close when banks are borrowing and less close when they are not borrowing.

Open Market Operations

The second method of supplying banks with additional reserve funds is through open market purchases of Government securities and other obligations. These purchases are undertaken at the initiative of the Federal Reserve authorities and not of individual member banks. They do not have particular banks in view, but the aggregate reserves of the banking system as a whole.

Securities purchased by the Federal Reserve authorities in the open market come out of the portfolios either of banks themselves or of investors and corporations that are the customers of banks. If they come out of the portfolios of investors and corporations, the checks given in payment by the Federal Reserve authorities are deposited by the investors and corporations in their respective banks, and as a result bank deposits are increased. The banks in turn deposit the checks in their accounts at the Federal Reserve Bank, so that bank reserves also are increased. If the securities come out of the portfolios of banks, however, there is no resulting increase in bank deposits, because the funds paid for the securities are received directly by the banks themselves not through their customers. There is a resulting increase in bank reserves however, for funds received by banks are deposited by them in their reserve accounts at the Federal Reserve Bank. [17]

Open market purchases of securities always increase the reserves of banks, therefore, but whether they increase deposits as well depends on whether the securities purchased come out of the portfolios of banks themselves or of bank depositors.

To the extent that open market purchases increase bank reserves relative to bank deposits, they tend to furnish member banks a larger basis for credit expansion, because expansion is limited by the excess of reserves over the ratio required by law to be held against deposits. Thus if \$100,000,000 of securities purchased by the Federal Reserve authorities came from the portfolios of investors, with the result that bank deposits as well as reserves were increased by that amount, a portion of the reserves say \$20,000,000 would be required as reserves against the \$100,000,000 of new deposits, and only the portion remaining in this case, \$80,000,000 would be available for credit expansion. If, however, the \$100,000,000 of securities came from the portfolios of the banks themselves, the whole amount, when received by the banks and added to their reserves would be available as a basis for credit expansion.

The funds paid for securities by the Federal Reserve authorities do not necessarily remain with the banks that happen to receive them first. Demand will determine to what particular banks the funds will go, in what volume, or how long they'll stay with certain banks before being transferred to others. No matter what bank happens at any time to have possession of the funds, however, they continue to be a part of the aggregate reserves of the banking system as a whole.

The reverse of the process described in preceding paragraphs occur when the Federal Reserve authorities sell, rather than buy securities. If the securities are purchased by investors and corporations that is by the customers of banks there will be a reduction not only in bank reserves but also in bank deposits. If they are purchased by banks, the reduction will be in bank reserves only. In either event the reduction in reserves tends to diminish the amount of credit that banks can extend, but a reduction in reserves without a reduction of deposits tends to diminish it more rapidly, because there is no accompanying reduction in the amount or reserves required.

Open market operations have different objectives at different times. At times their purpose may be to expand reserves, in which case securities are purchased. At other times their purpose may be to reduce reserves, in which case securities are sold. This (of course) does not mean that open market operations are a mechanical process by which any desired result may be obtained at will. On the contrary their efficacy is dependent upon a variety of conditions. In recent years, with reserves at a high and rising level chiefly because of the gold inflow, but with business recovery still incomplete, the policy of the Federal Reserve authorities has been to maintain the existing portfolio in substantially unchanged volume. This policy has effected the purpose of the Federal Reserve authorities to contribute to the maintenance of monetary conditions that would encourage recovery of commerce, industry, and agriculture.

The accompanying chart ([Federal Reserve Bank Credit](#)) shows the amount of Federal Reserve Bank credit year by year for the period the Federal Reserve Banks have been in operation. It reflects the fact that in the 1920's Federal Reserve Bank credit was principally in the form of discounts for member banks, whereas in recent years it has been in the form of United States Government securities purchased in the open market.

Federal Reserve Bank Credit and Member Bank Credit

[Loans and purchases](#) of securities by the Federal Reserve authorities are one of the important sources of member bank reserves; member bank reserves in turn are the basis of member bank credit that is, of the loans and investments of member banks. And member bank credit is a source of the bank deposits transferable by check wherewith business men and other persons make the bulk of their monetary payments. Member bank reserves function, therefore, as a link between Federal Reserve policy and member bank policy.

Thus, for example, when there is an active demand for goods, there is a corresponding need for means of payment wherewith the purchasers may settle their obligations to the sellers. This need is reflected in part in a demand for member Bank credit that is, they lend the funds only if they have adequate reserves. But *additional reserve funds are always available to them in the form of Federal Reserve Bank credit*, which they may get either as the proceeds of loans made to them

by the Federal Reserve Banks or as proceeds of purchases of securities by the Federal Reserve Banks.

In other words, member bank credit is used chiefly in the form of member bank deposits subject to check: Federal Reserve Bank credit is used chiefly in the form of member bank reserves held on deposit with the Reserve Banks, and the volume of member bank reserves deriving in greater or less degree from Federal Reserve Bank credit determines the ability of member banks to meet the demands of their borrowers for member Bank credit.

It is important to note, however, that Federal Reserve [Bank credit](#) and member bank credit are not the equivalent to each other, dollar for dollar. Member bank reserves do not have to be increased by \$500,000,000 of Federal Reserve Bank credit in order to make possible an increase of \$500,000,000 in member bank credit. The additional Federal Reserve Bank credit needed will be only a fraction of the additional member bank credit to be extended. The explanation of this goes back to the fact that an increase in member bank credit brings about an increase in bank deposits, because the funds that banks customers borrow commonly go on deposit; and the fact that reserves which member banks are required to maintain are only a fraction of their deposits.

Suppose that banks were required to maintain reserves of 20 percent and that they had just 20 percent and no more. Then if their deposits were to be increased by \$500,000,000 they would have to increase their reserves by but \$100,000,000. Accordingly, \$100,000,000 of Federal Reserve Bank credit obtained by borrowing or by the sale of securities to the Federal Reserve Bank would increase their reserves sufficiently to enable them to expand their own credit by \$500,000,000. Under varying circumstances, depending on what the reserve requirements are at the time and on the character of the deposits, the expansion of deposits may be as much as ten times the expansion of required reserves. In recent Years the possible expansion of deposits would be considerably less than ten times the expansion of reserves. But, however the ratio may vary, the fact remains that when the Federal Reserve authorities have occasion to provide the amount of reserves necessary to facilitate a given expansion of member bank credit and member bank deposits, the amount of Federal Reserve Bank credit that they may need to supply is only a fraction of such expansion.

This situation is different when a deficiency of member bank reserves arise from withdrawals of currency by the public for circulation or from shipments of gold abroad Whatever the deficiency, it must be made up in full, and the Federal Reserve authorities may in such circumstances have to supply their member banks with Federal Reserve Bank credit to the whole amount of currency or gold withdrawn.

Since the ability of member banks to lend is largely dependent upon the volume of their reserves, since they are required to keep their reserves on deposit with the Federal Reserve Banks, and since the Federal Reserve authorities are empowered to extend Federal Reserve Bank credit for the expansion of those reserves, it follows that the Federal Reserve authorities by the extension of Federal Reserve Bank credit, may influence very considerably the extension of Member bank credit. By enlarging the volume of member bank reserve funds they can make it possible for the latter to direct almost any conceivable volume of demand by borrowers; and by reducing the volume of reserve funds they can apply restraints to an overextension of member bank credit.

Yet, while Federal Reserve authorities have very great powers, they are also very much limited in the exercise of these powers. They can expand member bank reserves and to the extent that they do so, they can subsequently contract reserves. But they have no power to compel an extension of member bank credit. The initiative must be taken by business men and others who wish to borrow. The member banks may extend credit as long as they may have adequate reserves; when their reserves become inadequate, Federal Reserve Bank Credit is available with which to replenish these reserves; to the extent that their enlarged reserves permit, the member banks can expand their loans as long as there is sufficient demand. Thus, the Federal Reserve Bank credit can not insure a demand for member Bank credit; it can and does insure the availability of ample member bank credit when and if a demand exists.[\[18\]](#)

CHAPTER V

The Composition of Bank Reserves

Federal Reserve Bank credit and gold are the two main sources of bank reserves; checks are the principal means by which reserves are transferred from bank to bank.

From the point of view of member banks taken collectively, reserves are derived chiefly from the following sources:

- Federal Reserve Bank Credit, in the form of loans by the Federal Reserve Banks and purchases by them of bills and securities.
- Gold, either produced from domestic sources or received from other countries.

From the point of view of the individual banker, the funds with which he currently maintains his reserves are :

- *Checks and other bank currency*

Although the principal sources of bank reserves are Federal Reserve bank credit and gold, this does not mean that every individual bank, in order to have reserves, must have borrowed from its Federal Reserve Bank or have come into possession of gold. On the contrary, gold may be and actually is the basis of reserves of banks that have not possessed it, and Reserve Bank credit may be and actually is the basis of reserves of banks that have not borrowed.

How Reserve Funds Move from Bank to Bank

When the Federal Reserve Bank receives a [deposit of gold](#) or when it makes a loan or a purchase of securities, and the resulting credits are entered on the reserve accounts of the member banks concerned, the additional reserve funds resulting from the transaction immediately lose their connection with the transaction. They become simply reserve funds, indistinguishable from other

reserve funds and transferable to other banks, regardless of how they originated. Like water circulating through connecting chambers, what is introduced at one point mingles with the rest and flows freely throughout the system.

Suppose, for example, a gold mining company has produced \$100,000 worth of gold, has sold it to the United States Treasury, and has received a check in payment for it from the Treasury. The company deposits the check with the X National Bank, and receives credit for \$100,000 in its checking account. The bank then deposits the check with the Federal Reserve Bank and receives credit for \$100,000 in its reserve account. The mining company buys equipment, pays salaries, and distributes profits; in the process it issues checks aggregating \$100,000 which are deposited by their recipients in other banks.

These banks having given their depositors credit for their checks, send them to the Reserve Bank and receive credit for them in their reserve accounts. At the same time the checks are paid out of the reserve balances of the X National Bank. Thereby the reserve funds derived from the original sale of gold become the reserve funds of banks which never heard of the gold. The other banks know then that checks drawn on the X National Bank were deposited by them in the Reserve Bank and that their reserve accounts have been credited accordingly. It is gold imports rather than domestic mining that has produced the great increase in our gold stock since 1933; but gold from whatever source gives rise to bank deposits and bank reserves substantially as just described.[20](#)

The same is true of Reserve Bank credit. If the X National Bank borrows \$100,000 at the Reserve Bank or receives funds paid for securities purchased by the Federal Reserve Bank, its reserve account is increased by a corresponding amount.

It uses these additional funds incorporated in its reserves to pay checks drawn against it by its customers, and in the process, the funds leave its account and become credited to the reserve accounts of other banks. The funds are part of the total reserves, dispersed in hundreds of thousands of reserve accounts and constantly circulating in and out of each. No connection remains between them and the particular transaction which called them into being.

Although comparatively few banks receive gold and Federal Reserve Bank credit directly, yet all banks are daily receiving checks on one another. About a billion such checks were handled by the Federal Reserve Banks in 1938; no doubt many times that number cleared locally, and through banks in financial centers, never reached a Federal Reserve Bank. But, *by whatever means they are cleared, checks deposited in banks other than those on which they are drawn maintain a constant flow of reserve funds from bank to bank.*

The Flow of Funds and the Volume of Funds

Sometimes a banker receives larger check payments from other banks than they received from him. When that is the case, he gains reserves. Sometimes other banks receive more from him than he receives from them. In that case he loses reserves. It is obvious, however that when a check is deposited in the reserve account of one bank and charged to the reserve account of

another, the total volume of reserves, taking all banks together, is not increased or decreased at all. One bank loses what another bank gains.

But the gold is deposited and the reserve balance of a given bank is increased thereby, there is no corresponding charge to the reserve balance of any other bank, for the gold came either from abroad or out of an American mine. In this case, consequently, not merely the reserve balance of one bank but the total volume of reserves held by all banks taken together is increased. The same is true if the Reserve Bank makes a loan or buys securities; resulting increase in reserves of banks directly affected is not offset by a charge to the reserves of other banks. Instead, total reserves are increased. In both cases, the total remains at the higher level regardless of stream of checks by which funds are transferred from one reserve account to another. It remains at a higher level until any one of these things happens:

1. Federal Reserve sells securities;
2. loans by Federal Reserve are paid; or,
3. currency or gold is withdrawn.

When any one of these things occurs, and is not offset by a factor of opposite effect, there occurs a decrease in the aggregate amount of reserves. It comes about because the securities sold by the Reserve Bank are paid for by a charge against the reserves of the bankers by whom or by whose customers the securities were purchased; or because the loans are repaid by a charge against the reserves of the bankers that borrowed; or because the currency account or gold when withdrawn is charged to the reserve account of the bankers by whom it was withdrawn; and because the charges to these reserve balances are not offset by any corresponding credits to other reserve balances.[\[21\]](#)

From the individual bank's point of view, therefore, reserves are principally maintained by the deposit of checks on other banks; and from the point of view of all banks as a whole, reserves consist fundamentally of Federal Reserve Bank credit and gold. In other words, Federal Reserve Bank credit and gold are the two important basic factors in which bank reserves originate, and checks are the principal means by which reserves come to be transferred and distributed among all banks. Every banker has daily experience of the transfer of reserve funds resulting from check transactions and of his own consequent gain or loss of reserves; but experience of the origination and extinction of reserve funds resulting from gold transactions, open market operations, and Reserve Bank loans, is far less common. Very few banks outside those cities where gold shipments are received or Government obligations are bought and sold in large amounts ever have any direct experience of gold transactions and open market operations; and borrowings from the Reserve Bank, while not common, are never a matter of daily routine as checking transactions are.

Other Factors

Other factors affect the aggregate volume of bank reserves, but mostly in a minor or transitory way as compared with gold or Federal Reserve Bank credit. Acquisition of silver by the Treasury has the same effect on member bank reserves as the acquisition of gold, but the dollar amount of

silver is less than gold. Chief among the transitory factors affecting the aggregate volume of reserves are receipts and expenditures by the United States Treasury. When Federal taxes are paid, the effect is to reduce the reserve balances of banks and to enlarge the cash balances of the Treasury. The same is true when banks use current funds to pay for new Government obligations issued by the Treasury. When the funds are disbursed by the Treasury, the effect is to reduce the Treasury's cash balance, and restore the reserve balances of the banks. The Treasury's transactions are in this way constantly producing large fluctuations which in the long run cancel each other. Similarly, fluctuations in the volume of currency in circulation affect the volume of reserves, but mostly in a temporary way. Currency on going into circulation is charged to member bank reserves and reduces them, and on retirement from circulation it is credited to reserves again and increases them. While these factors are of importance in explaining current fluctuations in the volume of reserves, they do not alter the fact that the basic constituents of reserves are gold and Federal Reserve Bank credit.

The Relation Between Federal Reserve Bank Credit and Gold

Before the Federal Reserve Banks were established, the basic reserves of the banking system consisted almost exclusively of gold, silver, and currency. There was no Federal Reserve Bank credit, nor any institution whose purpose it was to supply additional reserve funds. Banks could borrow from one another, but that meant merely the use of existing reserve funds, not the creation of new ones. Moreover, with banks holding one another's reserves and advancing reserves to one another, the aggregate bank reserves shown on the books of banks always included duplication and exceeded the amount of gold and other currency that could be counted as reserves. Reserves shown in excess of this amount, however, were fictitious. In times of stringency it always developed that reserves were actually less than they appeared to be. With the establishment of the Federal Reserve Banks these faults were corrected. Existing reserves were transferred to the Federal Reserve Banks and the Reserve Banks were empowered to create additional reserve funds. The result is that the aggregate volume of reserves became a definitely known figure, without duplication; and the Reserve authorities can create the necessary additional funds, either by lending to individual banks or by purchasing securities in the open market.

Since the establishment of the twelve Federal Reserve Banks, therefore, bank reserves have consisted basically of gold, the amount of which is not readily subject to control, and the Reserve Bank credit, the amount of which is wholly subject to control. Neither is fixed either in amount or in relation to the other. At times Reserve Bank credit has been a more decisive factor and at times gold. The two tend to displace each other; that is, the more gold there is coming into the country the less need there tends to be for Reserve Bank credit, and the less gold there is coming in or the more gold there is going out the more need there tends to be for Reserve Bank credit. The movement of gold is largely independent of control; although under certain conditions an increase in the volume of Reserve Bank credit may tend to drive gold out of the country by bringing about lower money rates, and a decrease in its volume may tend to draw gold into the country by bringing about higher money rates. [\[back\]](#)

If, for example, there were a reversal of the gold movement of recent years, and gold, because of altered international conditions, began to be exported in large volume, the Reserve authorities, by

lending or by the purchase of Government securities and other obligations, could furnish funds which would add to member bank reserves as fast as the gold withdrawals subtracted from them. The Reserve authorities could by this action prevent the banks of the country from suffering such a depletion of reserves as would force them to make drastic reductions in their loans and investments.[\[22\]](#)

CHAPTER VI

Reserves of the Individual Bank and of the Banking System as a Whole

Additional reserve funds that enable the individual bank to enlarge its own loans by an almost equal amount, enable the banking system as a whole to enlarge the aggregate of loans by several times as much.

Bank deposits result chiefly from loans and other extensions of credit by banks. This does not mean though, that an individual banker can increase his deposits to any desired extent simply by lending. He can not do that, because when his customers borrow they use the money they borrow: they pay it to others by whom most or all of it will be deposited in other banks. The banker has to part with most of what he lends and must be prepared for reduction of his reserves accordingly. When he makes a loan and the funds are credited to the deposit account of the borrower and then checked out, the funds sooner or later leave the bank and go on deposit in another bank. Under the circumstances, his loan increases another bank's deposits. If the other banker is also lending, then the deposits of both will increase still further. Each gets a part of most of what the other lends. So, in fact, the individual banker normally has more money to lend when other bankers are lending than he has when they are not lending. It is only when this process of lending is general and simultaneous on the part of many bankers that it may cause a rapid growth of bank deposits. No one banker has control of such a process. He has no means of making other bankers lend no means of making customers start borrowing. He has to feel his way, constantly watching the volume of his reserves. Unless his reserves are adequate, he will not wish to lend and run the risk of having them depleted. Accordingly, the requirement that he maintain a certain ratio between his reserves and his deposits is in effect a limitation on his power to lend.

Assuming There Were Only One Bank

Suppose there were on/v one bank instead of several thousand, and that this one bank did all the commercial banking business in the country. Suppose further that this bank were required by law to have reserves equal to at least 20 percent of its deposits. Thus if it had deposits of \$5,000,000,000, its reserve balance with the Reserve Bank would have to be at least \$1,000,000,000.

Suppose that it had just exactly that \$5,000,000,000 of deposits and \$1,000,000,000 of reserves, with \$4,000,000,000 of loans and investments. In such case, if it were to lend a simple additional

dollar it would reduce its reserves below the legal requirement, because if it did make a loan, the borrower would be given credit for it in his checking account. The bank's deposits would go up, its reserve balance would not go up, and in consequence the reserve balance would be less than 20 percent of the bank's deposits.

The borrower, of course, would write a check for the amount he wanted to use, and so his deposit balance would be reduced; but the money would not necessarily leave the bank, or if it did, it would come right back. For if the check were deposited by its recipient it would merely transfer a certain amount of deposit credit from the borrower's account to the recipient's account. Or if it were cashed by the bank, the currency would sooner or later be deposited, and the funds which went out of the bank through one account would come back in through another. The bank's deposits would be increased by the loan in any event, except only if the money were kept in circulation, sent out of the country, or permanently lost, destroyed or hidden. There would be no other bank for it to go to.

Realizing that any additional loans it made would increase its deposits out of proportion to its reserves, the commercial bank might stop making the loans. *Suppose, however, that the Reserve authorities were of the opinion that more loans might advantageously be made and that the bank should be provided with additional reserves so that it could make them. Suppose they therefore purchased \$20,000,000 of securities in the open market. The sellers of the securities would deposit in the commercial bank the money they received in payment. The commercial bank in turn would deposit it in its reserve account at the Reserve Bank. Having these additional reserves of \$20,000,000, the commercial bank, by making loans, could increase its deposits to five times as much, or \$100,000,000 the \$20,000,000 being the 20 percent reserves required against deposits of \$100,000,000.*

Another possibility is that the commercial bank might borrow the \$70,000,000 from the Reserve Bank. But whether the commercial bank took the initiative in borrowing or the Federal Reserve authorities took the initiative in purchasing securities, in either event the sum total of reserve funds would be increased, and lending on an increased scale would be possible. In either event also, the Reserve authorities would not need to advance the full amount that the commercial bank would lend, but only enough to supply the 20 percent reserve required against the increased deposits resulting from its lending.

Taking All Banks Together

The same principle that would operate if there were only one bank holds true of all banks taken together the great difference being that effects which are immediately and directly discernible when there is assumed to be only one bank are much more difficult to follow when the explanation is applied individually to the thousands of banks actually in operation. What is true of banks as a whole is not true of every individual bank; there are always exceptions. When bank reserves in the aggregate are in excess of requirements, there nevertheless will be individual banks with no excess reserves; and when, therefore, banks in general are in a position to extend abundant credit, there nevertheless will be individual banks in no such easy condition. In particular, when the sum total of reserve funds is augmented by Federal Reserve or other action the increase will manifest itself first at certain individual banks which happen to be recipients of

the additional funds. But no bank can expect to keep permanently what it receives. Its customers are always checking its funds elsewhere. *By the normal and active process of clearing the enormous number of checks that are constantly being drawn on one bank and deposited in another thereby entailing the transfer of funds from the reserve balance of one bank to the reserve balance of another a rapid movement or circulation of reserve funds is maintained. The result is that an increase in the total volume of reserve funds tends sooner or later to spread itself from the few banks where it originates to many other banks, if not all.*

Let us assume that the Reserve authorities realize that banks as a whole have insufficient reserves for the expansion of credit that is needed and proceed to buy Government securities in order to supply the money market with additional funds. Suppose as before that they buy \$20,000,000 worth and that the entire sum happens to be deposited in some one bank. That particular banks' deposits and reserves will both be increased by \$20,000,000. But the bank is not required to have reserves of more than 20 percent, and 20 percent of the increase is \$4,000,000. Therefore, \$16,000,000 of what the bank receives is excess reserves. It lends the \$16,000,000 assuming it can find borrowers and the whole amount, let us suppose, is checked out and deposited in a second bank. This second bank with increased deposits of \$16,000,000 against which it is required to keep reserves of only 20 percent, or \$3,200,000, gets in consequence excess reserves of \$12,800,000. It lends these funds, and they are checked out by the borrowers and deposited in a third bank. The third bank, having to keep reserves of only 20 percent against the increase of \$12,800,000 in its deposits, gets excess reserves of \$10,240,000 to lend. It lends, and the amount is checked out by the borrowers and deposited in a fourth bank. It is evident that this process could go on till the amounts involved for successive banks were negligibly small. Including six more banks in the illustration, or ten in all, the additional deposits, loans, and reserves made possible by the Federal Reserve Bank's disbursement of \$20,000,000 would be as follows: (see following chart).

The figures assume, for the sake of simplicity, that every bank is able to find borrowers for the full amount that it can lend and that the full amount of every loan is checked out to some one other bank; that there are no leftovers and that the different banks come into the picture one at a time. They make no allowance for the fact that an individual bank in making loans is not limited to its excess reserves, because it can bring them up to the required level by borrowing from its Reserve Bank.

On this basis, the figures show that the first ten banks had additional reserves of \$17,852,516, additional loans of \$71,410,066, and additional deposits of \$89,262,582. Other banks sharing in the remaining portion of the \$20,000,000 of additional reserves would increase their loans by \$8,589,934 and would have additional deposits of \$10,737,418. In the end, accordingly, an expansion of deposits amounting to \$100,000,000 would be made possible by the \$20,000,000 of additional reserves created by Federal Reserve action. The result would be the same if the banks were to purchase securities instead of making loans.[\[23\]](#)

Additional Deposits Received	Additional Loans Made	Additional Reserves Retained
(100%)	(80%)	(20%)

1st bank	\$20,000,000	\$16,000,000	\$4,000,000
2nd bank	\$16,000,000	\$12,800,000	\$3,200,000
3rd bank	\$12,800,000	\$10,240,000	\$2,500,000
4th bank	\$10,240,000	\$8,192,000	\$2,048,000
5th bank	\$8,192,000	6,553,600	\$1,638,400
6th bank	\$6,553,600	\$5,242,880	\$1,310,720
7th bank	\$5,242,880	\$4,194,304	\$1,048,576
8th bank	\$4,194,304	\$3,355,443	\$838,861
9th bank	\$3,355,443	\$2,684,355	\$671,088
10th bank	\$2,684,355	\$2,147,484	\$536,800
Total first 10 banks	\$89,262,582	\$71,410,066	\$17,852,516
Other banks in turn	\$10,737,418	\$8,589,934	\$2,147,484
	<hr/>	<hr/>	<hr/>
	\$100,000,000	\$80,000,000	\$20,000,000

Of course, there would never be an absolutely uniform division as we have been supposing, but the principle nevertheless holds true. Each bank could lend whatever reserves it had in excess of what it was required to have, and in the end the total additional loans and the total additional deposits would be several times as great as the total additional reserve grounds created by the Reserve authorities' purchase of securities. [\[24\]](#)

The fact that what can be done by the banking system as a whole differs so much from what can be done by any Individual bank is one of the most difficult things to understand clearly in the whole field of banking. It seems paradoxical. Yet it is a fundamental fact of utmost importance. The difficulty is to see that the limited power of the individual bank, which can lend somewhat *less* than the amount of additional reserves it receives, can, when exercised by many individual banks, enable them all together to lend several times the amount of the additional reserves. But what each bank receives is in each case the greater part of what has already been received by another bank, so that the same amount keeps working over and over again, a little diminished each time.

The practical consequence of this is that the Federal Reserve authorities by supplying a relatively small volume of additional reserve funds, make it possible for the banking system as a whole to supply the public with a far greater additional volume of credit. Contrariwise, by withdrawing a relatively small amount of funds, when member banks have no excess reserves, the Federal Reserve authorities can make it necessary for the banking system to borrow the

amount withdrawn or to reduce loans and investments and consequently deposits by several times that amount.

CHAPTER VII

Federal Reserve Powers and Limitations

Although Federal Reserve powers are important and extensive, they are nevertheless constantly subject to limitations inherent in the conditions under which they are exercised.

The limitations upon the powers of the Federal Reserve authorities are partly statutory and partly practical. Those that are statutory relate primarily to the reserves that the Federal Reserve Banks are required to maintain against their note and deposit liabilities.

The circulating notes issued by the Federal Reserve Banks and the reserve deposits maintained with them by member banks are alternative forms of Federal Reserve Bank liability. As of December 31, 1938, Federal Reserve notes in circulation amounted to about \$4,500,000,000, and member bank reserve balances on deposit with the Reserve Banks amounted to about \$8,700,000,000. When a member bank needs additional Federal Reserve notes, they are obtained from its Federal Reserve Bank, which charges their amount to the member bank's reserve balance. Correspondingly, when a member bank finds that it has more Federal reserve notes on hand than it needs, it may send the notes to the Federal Reserve Bank and have their amount credited to its reserve balance.

The Federal Reserve authorities expand the volume either of notes or of reserve balances in response to the demands of the public and of the member banks. Although they may at times take action to reduce the volume of bank reserves, they never need take action to reduce the amount of notes in circulation. Currency in excess of the public's needs is promptly deposited in banks and by them is deposited in the Federal Reserve Banks. The process is spontaneous. In effect, therefore, the amount of money in circulation is governed by the public's action, not by action of the issuing authorities, and no more currency will remain in use than is required.

Legal Limitations

The Federal Reserve Act stipulates that the Federal Reserve Bank shall have reserves of gold certificates equal to at least 40 percent of the Federal Reserve notes in circulation and reserves comprising gold certificates or lawful money equal to at least 35 percent of their deposits. Taking the figures as of December 31, 1918, this means that the Federal Reserve Banks must have at least \$1,800,000,000 in gold certificates as the 40 percent reserve against their Federal Reserve notes of \$4,500,000,000, and \$3,535,000,000 of gold certificates assuming they have no other lawful money as the 35 percent reserve against their \$10,100,000,000 of total deposits. That is \$5,335,000,000 of gold certificates, taking the two requirements together. Actually, however, the Federal Reserve Banks had \$12,000,000,000 in gold certificates, or more than twice the

maximum amount required. Notes in circulation and reserve deposits could therefore be more than doubled on the basis of present gold reserves, so far as the law is concerned. And since the Reserve authorities, are empowered to suspend for limited periods the requirements stated in the law, the volume of notes and reserve deposits could be much more than doubled if an emergency should make it necessary.

The accompanying chart ([Federal Reserve Banks - Reserve Position](#)) shows the volume of Federal Reserve Bank liabilities in the form of deposits and circulating notes during twenty-four years of Reserve System operations. It also shows the ratio of the Reserve Banks' reserves, which at their lowest, during 1920, were about 40 percent of note and deposit liabilities, but in recent years have been about 80 percent.

Practical Limitations

The practical limitations on Federal Reserve powers to expand note circulation and reserve deposits can best be understood when Federal Reserve notes and member bank reserves (which are deposits on the books of the Federal Reserve Banks) are considered together with Federal Reserve Bank credit and gold. These four factors are closely interrelated, and no one of them can change without a corresponding change in one or more of the other three. They are the four principal items on the Federal Reserve Banks' statement of condition. Rounding them off and disregarding other items, they may be shown in balance as follows:

(a) Gold certificate	\$12,000,000,000
(b) Discounts and securities . . .	\$2,500,000,000
	\$14,500,000,000
.	
(c) Reserve Deposits	\$10,000,000,000
(d) Notes in circulation	\$4,500,000,000
	\$14,500,000,000

In the latter part of the year 1938 the deposits on the books of the Federal Reserve Banks as shown above (c) were \$10,000,000,000, and the Federal Reserve notes outstanding (d) were \$4,500,000,000. At the same time the Banks held (a) \$12,000,000,000 in gold certificates and (b) \$2,500,000,000 of obligations in bonds, promissory notes, etc. The two groups of figures, taken together, show that \$14,500,000,000 of gold and Federal Reserve Bank credit made possible \$14,500,000,000 of Federal Reserve Bank deposits and notes. In other words, the gold certificates (a) and the Federal Reserve Bank credit (b) were the *sources* of funds amounting to

\$14,500,000,000, and the reserve deposits (c) and the notes (d) represented the uses of those funds in like amount.

The Federal Reserve authorities have no control over the volume of gold. Its shipment into the United States is due to various causes, chief among them the excess of exports over imports, and the flight of capital induced by the economic and political conditions in other countries. As the gold is received, *the Federal Reserve Banks' holdings of gold certificates (a) and their deposits (c) are both equally increased. By the same token, the reserve balances of member banks - which constitute the bulk of Federal Reserve Bank deposits - are increased, and member banks accordingly find it easier to meet reserve requirements.* The demand for Federal Reserve Bank credit (b) is consequently lessened; the member banks will have little occasion to borrow and the Federal Reserve authorities will have little occasion to purchase securities. If, however, the Federal Reserve authorities were to purchase additional securities, the result would be to expand member bank reserves (c). If they sold securities or if some of the discounts (b) were paid, deposits (c) would correspondingly decrease; unless there were simultaneously an increase in gold certificate holdings, or a decrease in the amount of notes in circulation.

The amount of notes in circulation (d) represents what the public requires; if an increase in the amount occurred more notes being drawn into use there would be a corresponding decrease in deposits, and if a decrease occurred a smaller volume of notes being used there would be a corresponding increase in deposits.

Although the power of the Federal Reserve authorities to create reserve funds by the extension of Federal Reserve Bank credit is subject to the statutory requirement as to the reserves in gold certificates and lawful money that they shall maintain against their notes and deposits, it evident that the *practical* limitations upon that power lie in conditions reflected in the other three factors, namely, gold, member bank reserves, and circulating notes. These conditions will of course be diverse. The amount of gold in the country depends upon worldwide economic conditions. The amount of bank reserves depends upon the amount of gold and upon the demand for currency, as well as upon the amount of Federal Reserve bank credit. The demand for currency depends upon business conditions. The demand for Federal Reserve Bank credit is affected by all of these factors and by the demand for member bank credit. In brief, money factors are not only dependent on one another, they are dependent on other factors. A given economic situation the resultant of a wide variety of forces such as invention, labor, agriculture, foreign trade, Government expenditures, taxation, war, weather besides money and credit. Federal Reserve policy must always be related to other factors, and its effectiveness is not independent of their influence.

Required Reserves

The power to change member bank reserve requirements is closely related to the power to *create and extinguish reserve funds.* If member banks are under requirement to have reserves of \$6,000,000,000 and actually have reserves of \$10,000,000,000, it is apparent that they have \$4,000,000,000 of reserves in excess of requirements. This excess would enable them to increase by an enormous amount the volume of bank credit extended by them, assuming a strong enough demand arose. If the Federal Reserve authorities were to lower the reserve requirements, the

amount of excess reserves and therewith the volume of member bank credit that it might be possible to extend, assuming demand, would be still further increased. If the Federal Reserve authorities were to raise the reserve requirements, the amount of excess reserves and therewith the volume of member bank credit that it might be possible to extend would be diminished, so long as the higher reserve requirements remained effective. While an increase in reserve requirements of itself tends to restrict the volume of member bank credit that might be extended, its effect can be offset, if advisable, by increasing the volume of Reserve Bank credit outstanding; with the possible advantage that in principle excess reserves which arise from Federal Reserve Bank credit are more flexible and better subject to current adjustment than excess reserves arising from gold. Consequently, a situation in which the aggregate volume of reserve funds is to a great extent dependent upon Federal Reserve policy is apt to be more in the public interest than one in which the aggregate volume is dependent upon gold, the movements of which are largely beyond control.

At the present time reserve requirements, as shown in Chapter III, are little less than double what they formerly were. The reason for increasing them was that bank reserves had become expanded to an inordinate degree by the immense increase in the country's gold stock. As a result member bank reserves were so much in excess of requirements that the lending power of member banks, instead of being subject, as contemplated in the Federal Reserve Act, to the corrective influence of the Federal Reserve authorities, depended too largely upon the abnormal stocks of gold received from abroad and too little upon domestic factors subject to control. In an endeavor to return more nearly to conditions under which the normal regulatory powers established by Congress are effective, the volume of reserves in excess of requirements was reduced by raising the requirements. This action had the effect of offsetting, to a partial extent, the increase in the gold stock.

An increase in reserve requirements does not increase the power of the Federal Reserve Banks to lend or to hold securities. The lending and investing power of the Federal Reserve Banks is not derived from member bank reserve deposits, and larger required reserve balances do not increase that power. *The lending power of the Federal Reserve Banks is a statutory power whereby the Federal Reserve Banks may acquire promissory notes, acceptances, bonds, and other obligations and give in exchange therefor Federal Reserve notes or credit to the reserve accounts of member banks. Having such power, the ability to lend and to purchase securities is not limited by the volume of funds deposited with them by their member banks. (They can write check against no funds.)*[\[25\]](#)

The Nature of Federal Reserve Bank Credit

Credit in general is a matter of monetary agreements, the essence of it being an acceptable promise to pay. Bank credit is a special form of credit, peculiar in that it involves a promise or assumption of liability by a bank, given in exchange for a promise made to a bank. Thus, a bank accepts the promissory note of a customer and in exchange promises to pay the customer a corresponding amount, which, pending his order, is carried on its books as a deposit in his favor. Bank credit plays a vitally important part in modern economic life. As a source of bank deposits transferable by check, it provides the funds with which the bulk of monetary payments is effected. It is always interchangeable with legal tender money, but for the most part it is not

derived from legal tender money, nor does the volume of bank credit bear any rigid relationship to the volume of legal tender money. If the volume of loans that banks could make and of deposits that they could accept were limited to the volume of currency in existence, bank credit would not have the utility it now has in our economic system. Bank credit is a means by which wealth in other than monetary forms can be transmitted temporarily into monetary forms; as when, for example, a man borrows a thousand dollars on mortgage or collateral security and thereby obtains monetary funds without selling his property.

Federal Reserve Bank Credit resembles [bank credit](#) in general, but under the law it has a limited and special use as a source of member bank reserve funds. It is itself a form of money authorized for special purposes, convertible into other forms of money, convertible therefrom, and readily controllable as to amount.

Federal Reserve Bank credit, therefore, as already stated, does not consist of funds that the Reserve authorities "get" somewhere in order to lend, but constitutes funds that they are empowered to CREATE. The process of creation is one of giving the promises of the Federal Reserve Bank in the form of Federal Reserve notes and deposit credits in exchange for the promises made by banks, the reason for the exchange being that the Federal Reserve Bank's promises are recognized by law as having a particular monetary utility not possessed by the promises of individuals or of private institutions. That is, Federal Reserve Bank promises or "liabilities" as they are commonly called serve in the form of Federal reserve deposits as a basis'dvatepri Reserve notes as the principal element of the circulation medium, and they serve in the form of reserve deposits as a basis for the extension of credit by member banks. These are the specific uses of the funds that have their source in Federal Reserve Bank credit.

Although the powers possessed by the Federal Reserve authorities are important and extensive, nevertheless they are constantly subject to limitations inherent in the conditions under which they are to be exercised. They are most effective when there is an active demand for credit. When the demand is slack, or bank reserves are greatly in excess of requirements, the powers are much less effective. *The Federal Reserve authorities can CREATE CREDIT when it is in demand, they can encourage the demand for it by making funds abundant and cheap, they can create deposits by open market purchases of securities, from others than member banks; but they can not create a demand for credit or cause the created deposits to be actively used.* [\[26\]](#)

CHAPTER VIII

Member Bank Reserves and Related Items

The principal factors involved in Federal Reserve policy are member bank reserve balances, gold stock, Federal Reserve Bank credit, money in circulation, and Treasury cash and balances.

In the four preceding chapters the factors of Federal Reserve policy have been discussed at length. The accompanying chart ([Member Bank Reserves and Related Items](#)) shows the

movement of the more important of these factors from the early years of the Federal Reserve System to the present. This chart, slightly modified for present purposes, and the chart (Member Bank Reserve Balances) which appears later in this chapter, are regularly published in the Federal Reserve BULLETIN to portray current monetary developments.

The chart shows five lines, which may be considered in the following order:

- Member Bank Reserve Balances
- Gold Stock
- Reserve Bank Credit
- Money in Circulation
- Treasury Cash and Deposits

From 1918 through 1932 member bank reserve balances in the aggregate never exceeded \$2,500,000,000 for more than a few days at a time, and until 1932 and 1933 their total fluctuated relatively little. Since 1933 the amount of these balances has greatly increased, until by the end of 1938 that is in a period of five years they were \$9,000,000,000, or three times as much as they ever were before the increase began. These reserve balances are a potential base for a credit expansion far in excess of anything this country has ever experienced.

Gold and Federal Reserve Bank Credit

As explained in preceding chapters, the principal sources of reserve balances are gold and Federal Reserve Bank credit. Which of these is responsible for the remarkable increase in reserve balances since 1933? It is obvious from the chart that it is gold, the total amount of which has doubled since 1934, while the amount of Reserve Bank credit has remained practically stationary; gold has risen to about \$15,000,000,000, while Reserve Bank credit is only \$2,500,000,000.

Before 1934, however, and prior to the recent large increase in the gold stock, the volume of Federal Reserve Bank credit showed wide fluctuations. It was then a more active factor in the volume of reserves. Before 1932 banks generally had no reserves at the Federal Reserve Banks in excess of what was required, and they frequently found occasion to borrow. At the same time and for the same reason, the Federal Reserve authorities had more occasion to buy and sell securities currently in the open market as a means of increasing and decreasing the volume of reserve funds. When the Reserve Banks *increased* their holdings, banks gained reserves and were enabled to pay off their borrowings and extend additional credit; when the Reserve Banks *decreased* their holdings, banks lost reserves and were forced to borrow or else curtail their extensions of credit. In 1932 and 1933 the Reserve Banks increased their holdings of United States Government securities, and the funds given in payment for their purchases first enable the member banks to reduce their borrowings and then increased their excess reserves.

Since 1933 the rapid inflow of gold shown by the chart has increased member bank reserves much more rapidly than bank credit has been expanded. Consequently, banks have held large amounts of reserves in excess of requirements, and there has been little occasion for them to seek Federal Reserve Bank credit, or for Federal Reserve Bank credit to be expanded by open market operations

Money in Circulation, Treasury Cash, and Treasury Balances

It will be noted from the chart that at all times the volume of bank reserves has been less than the total of gold and Federal Reserve Bank credit combined. This reflects the fact that gold and Federal Reserve Bank credit are the principal sources not only of bank reserves, but also of money in circulation, which consists principally of Federal Reserve notes. They were also a source of the cash held in the Treasury or deposited by it in its checking account with the Federal Reserve Banks. The amount of these Treasury balances was relatively small until 1934, when it was substantially enlarged by the increased value of the gold stock resulting from revaluation of the dollar. As explained in a preceding chapter, fluctuations in Treasury balances generally represent a temporary rather than a permanent or basic use of funds. When the Treasury collects taxes, it receives the bulk of the payments by check. These checks in effect transfer money from the commercial banks to the Treasury; that is, they enlarge the Treasury's balances at the Federal Reserve Banks and reduce the reserve balances of member banks. The same thing occurs, in effect, when the Treasury borrows. On the other hand, when the Treasury expends the funds it has received, its own balances at the Federal Reserve Banks are reduced and the reserve balances of member banks are increased. Because Treasury receipts and disbursements alternately decrease and increase the reserves of banks, they tend to cancel out; though at any given time they may account for current changes of considerable magnitude in the volume of bank reserves and of Reserve Bank credit.

Another factor of potential importance, not shown on the chart, is Treasury currency. This includes coin, silver certificates, and United States notes. When these forms of money go into circulation, they are ordinarily deposited by the Treasury in the Federal Reserve Banks and are paid out by them to member banks as currency is required by the public. Like gold and Federal Reserve Bank credit, they are a source of bank reserves. They are not funds obtained by the Treasury from existing reserves through borrowing or taxation. Accordingly, an increase in the issue of coin, silver certificates, or United States notes will tend to increase bank reserves. [\[27\]](#)

Interrelations Between Factors

All of the factors shown on the chart are closely and necessarily interrelated. Some of them are not directly subject to control by the Federal Reserve authorities, while others are subject to control in part. **Increases and decreases in the volume of gold are relatively uncontrollable.** The same is true of money in circulation; whatever the public requires is supplied without delay or interference. Changes in Treasury cash and deposits and in Treasury currency generally reflect fiscal requirements and occasionally monetary policies (e.g., revaluation of gold, gold sterilization, and issuance of silver certificates); at any rate they are not among the factors directly subject to control by the Federal Reserve authorities. **This leaves Federal Reserve Bank credit as the one factor that is largely controllable.** As explained in the preceding chapter, **the fact**

that it is controllable is the reason for its existence; it can be increased or decreased as a counterweight to changes in the less controllable factors.

At the present time, the interplay of the foregoing controllable and uncontrollable factors determines the volume of member bank reserve balances. At any given moment this volume may be affected by the uncontrolled movement of gold, or changes in the amount of money in circulation, or Treasury receipts and disbursements, and by the *controlled increase and decrease* in the volume of Federal Reserve Bank credit.

Bank reserves are not always or necessarily, however, so passive a resultant of other factors as they are under present conditions. At times when member banks have almost no reserves in excess of what they are required to have, as they did before the gold influx of recent years, there will be a greater need for Federal Reserve Bank credit, and member banks will borrow from the Reserve Banks. Under these circumstances changes in the volume of reserves will be a governing cause of changes in the volume of Federal Reserve Bank credit.

It will be noted that prior to 1934 there was a very close relation between money in circulation and Reserve Bank credit, seasonal fluctuations in the two lines almost duplicating each other. This reflects the fact that increases in the volume of money in circulation means withdrawal of currency from the Federal Reserve Banks, with a consequent decline in the volume of member bank reserves. Similarly, when currency is retired from circulation, and deposited in the Federal Reserve Banks, it is credited to the reserves balances of member banks and increases them. When the reserve balances represent merely what banks are required to have and there is no excess, the withdrawals of currency for circulation purposes have to be offset by extensions of Federal Reserve Bank credit. A given member bank, for example, that needs \$100,000 in currency, but has no reserves, will borrow \$100,000 from the Federal Reserve Bank and have the amount credited to its reserve account so that the withdrawals will not reduce its reserves below the required amount. And, correspondingly, as soon as the member bank accumulates sufficient currency, it will deposit what it can spare in the Federal Reserve Bank and pay off its borrowing. Therefore, when banks have only such amounts of reserves as they are required to have as was generally true before 1934 increases and decreases in the amount of money in circulation bring about corresponding increases and decreases in the volume of Federal Reserve Bank credit. But when banks have large excess of reserves as they have had since 1934 increases and decreases in the amount of money in circulation do not appreciably affect the volume of Federal Reserve Bank credit but only the volume of the excess reserves.

A striking feature of the chart ([Member Bank Reserve Balances](#)) is the abrupt increase in the gold in 1934. This reflects revaluation of the dollar, by which the price of gold was raised from \$20.67 to \$35 an ounce. Before this action was taken, all gold already in the country which for the most part was held by the Federal Reserve Bank was turned over to the Treasury. The whole increase in the monetary value of gold went to the United States Government, therefore, and was added to the Treasury's cash balance. Except to the extent that a part of this increment was later expended by the Treasury, the increase in the value of the gold stock had no effect in member bank reserves.

Required and Excess Reserves

The preceding chart (Member Bank Reserve Balances) shows reserve balances divided into required reserves and excess reserves. Required reserves are the part of total reserves which banks must keep in proportion to their own deposits, and excess reserves are the part in excess of what is required.

Before 1932, banks had almost no excess reserves. They maintained just what they were required to maintain and little more. When they needed larger reserves they used Federal Reserve Bank credit, which was therefore a much more active factor, as already explained, than it is now.[\[28\]](#)

CHAPTER IX

What the Twelve Federal Reserve Banks Own and What They Owe

The central banking functions of the Federal Reserve System are reflected in the balance sheet of the Federal Reserve Banks.

The functions described in the preceding chapters are all reflected in the balance sheet of the twelve Federal Reserve Banks, which is made public every Friday and shows the condition of the Reserve Banks as of the Wednesday immediately preceding. It appears in the Friday issue of the principal daily newspapers of the country and is usually accompanied by explanatory comment, particularly as to changes in member bank reserves and related factors.

The statement as of December 31, 1938, in condensed form is as follows, only the most important items being shown separately.

ASSETS	
	Millions
1. Gold cert. on hand, in Treas.	\$11,798
2. Other cash	\$368
3. U.S. Gov. securities	\$2,564
4. Discounts for member banks	\$4
5. Other earning assets	\$16
6. Uncollected items	\$711
7. Miscellaneous assets	\$120
	<hr style="width: 20%; margin-left: auto; margin-right: 0;"/>
Total Assets	\$15,581

LIABILITIES

	Millions
8. Federal Reserve notes	\$4,452
9. Deposits:	
Reserve member banks	\$8,724
U.S. Treasury's acct.	\$923
Other deposits	\$441
10. Deferred availability items	\$694
11. Miscellaneous liabilities	\$3
	<hr/>
Total Liabilities	\$15,237

CAPITAL ACCOUNTS

	Millions
12. Capital	\$135
13. Surplus (section 7)	\$149
14. Surplus (section 13b)	\$27
15. Other capital accounts	\$33
	<hr/>
Total Liab. And Cap. Acct.	\$15,581

Explanation of Asset Accounts

1. *Gold Certificates* on hand and due from the United States Treasury. This amount comprises certificates due the Federal Reserve Banks for gold acquired by the Treasury, including both gold transferred by the Federal Reserve Banks to the Treasury upon adoption of the Gold Reserves Act of 1934 and gold subsequently acquired. It includes \$10,000,000 constituting a redemption fund for Federal Reserve notes.
2. *Other cash* is coin and paper money (not including gold certificates or Federal Reserve notes) in the Reserve Banks vaults.

3. *United States Government Securities* are bonds, Treasury notes, Treasury bills purchased from dealers and others in the open market. This account shows the amount of Federal Reserve Bank credit created by such purchases in order to increase or replenish member bank reserves. Like the account which follows, Discounts for Member Banks, it reflects one of the most important Reserve Banking functions. Under the present law, Government obligations are never purchased from the Treasury by the Federal Reserve Banks but are purchased only in the open market.
4. *Discount for Member Banks*. This account shows the amount of Federal Reserve Bank credit created by lending and is represented in part by promissory notes of member banks secured by collateral, and in part by promissory note, or other obligations endorsed over to the Federal Reserve Bank by member banks. These are usually called discounts, or rediscounts, because when the Reserve Bank acquires them it gives credit for the amount thereof less a discount, i.e., an interest charge deducted in advance at the established rate. Like the account which precedes, United States Securities, it reflects one of the most important central banking functions. Until recent years, until gold imports expanded the reserves of member banks and made it unnecessary for them to borrow except infrequently and on small scale, discounts were very large. In 1920, for example, discounts for member banks were \$2,500,000,000. United States Government securities owned were only \$300,000,000, and other earning assets (mostly acceptances bought in the open market, now less than \$1,000,000) were \$400,000,000. This is in marked contrast to the more recent figures.
5. *Other earning assets* are now mainly loans made to industrial and commercial enterprises in accordance with section 13b of the Federal Reserve Act. This item also includes bills purchased, which, as referred to in the preceding paragraph, now amounts to less than \$1,000,000. At times when the supply of bank reserves has been low, however, the Federal Reserve Banks have bought substantial amounts of bills and thus have supplied funds for seasonal credit and currency demands, especially in the autumn months. These bills are acceptances, that is, twoparty obligations arising from transactions in commodities, especially, in the import and export trade, The Federal Reserve Banks purchases them at established rates in such volume as they are offered for sale.
6. *Uncollected items* include checks and other cash items deposited with the Federal Reserve Banks and still in process of collection at the time the statement is made up.

7. *Miscellaneous assets* consist of several items, of which the largest is the bank premises owned to the Federal Reserve Banks and carried at \$43,000,000. They also include premium on securities owned and accrued interest receivable. [\[29\]](#)

Explanation of Liability and Capital Accounts

8. *FEDERAL RESERVE NOTES* are the obligations of the Federal Reserve Banks that circulate as money. They are described in Chapters II and VII.
9. *Deposits* consist mainly of the RESERVES of MEMBER BANKS. They also include, checking accounts of the United States Treasury and other Governmental agencies, deposits of foreign banks, and deposits maintained by certain nonmember banks, for use in clearing and collecting checks.
10. *Deferred availability in terms* are of technical rather than general significance. The account arises from the fact that Federal Reserve Banks do not give immediate credit for checks deposited for collection. Broadly speaking, deposits credit is deferred until the checks have had time to reach the banks upon which they are drawn and to be paid by them. Pending this, the Federal Reserve Banks give what is known as "deferred credit." These items are generally in approximate balance with "Uncollected items," shown among the assets (Number 6).
11. *Miscellaneous liabilities* consist of several Items. The principal ones are discount on bills and securities and miscellaneous accounts payable.
12. All of the *capital stock of the Federal Reserve Banks* is owned by banks which are members of the Federal Reserve System. See Chapter I.
13. *Surplus (section 7)* is governed by section 7 of the Federal Reserve Act. It can be drawn on to meet deficits or losses, if any. It can not be distributed to the stock-holding member banks, except as may be necessary to pay the regular 6 percent

dividend. The law provides that, if the Reserve Banks are dissolved, any surplus be paid to the United States.

14. *Surplus (section 13b)* represents the funds received from the Secretary of the Treasury for the purpose of making loans in accordance with section 13b of the Federal Reserve Act, plus or minus the net earnings or net loss arising from the use of such funds.

15. *Other capital accounts* consist primarily of reserves for contingencies, amounting to \$33,000,000, and undistributed earnings, if any.[\[30\]](#)

It is plain from a glance at the statement that four items are by far the largest, namely, Gold Certificates and Government Securities among the assets and Notes and Reserve Deposits of Member Banks among the liabilities. These items, with Discounts for member Banks, reflect the essential operations of the Federal Reserve Banks as central banking institutions. The amount of gold certificates is increased from time to time as the Treasury makes use of the gold it acquires. The Government securities, discounts, and other earning assets are acquired when the Federal Reserve authorities create additional reserve funds for member banks. They represent the Reserve Bank credit advanced by the Reserve Banks and discussed in previous chapters.

Federal Reserve notes, on the liability side, constitute the largest and most flexible portion of the country's circulating medium. As already explained, their amount can increase or decrease in immediate response to the public's requirement of increased or decreased amounts of cash.

The reserve deposits standing to the credit of member banks on the books of the Reserve Banks serve at the same time (a) as clearing balances through which bank checks are collected and through which currency is drawn into circulation and returned therefrom, and (h) as to the means through which regulation of the lending power of commercial banks is effected. See Chapters II, III, and IV.

It will be observed that the Federal Reserve Bank statement shows a very small proportion of assets that yield income only about 15 percent of the total. That 85 percent of the assets are in such a form that they yield no income is abnormal from the view point of privately managed enterprise operated for profit. It is not usual even for a central bank, but since such an institution is conducted for public purposes and is not guided by the motive of earnings, circumstances may be such as to result in a large proportion of its lending power remaining unused. Such circumstances exist today.[\[31\]](#)

CHAPTER X

Federal Reserve Bank Earnings

The operations of the Federal Reserve Banks, **although not conducted for profit**, yield an income which is ordinarily sufficient to cover expenses. The Federal Reserve authorities have special power to curb the use of credit for speculation in securities.

The creation of Federal Reserve Bank credit through lending and through purchases of securities incidentally yields an income to the Federal Reserve Banks in the form of interest.

Ordinarily this income is adequate to cover the necessary expenses of the Federal Reserve Banks and the Board of Governors and to leave a balance. Around the year 1920, the net earnings of the Federal Reserve Banks were large, to a great extent because of operations in connection with war financing, but since that period they have been relatively small. Some of the Federal Reserve Banks in certain years have operated at a loss. In twentyfour years (1914-1938) the total earnings of the twelve Federal Reserve Banks have amounted to \$1,277,000,000.

The distribution of these earnings is shown in the accompanying chart ([Distribution of Earnings of Federal Reserve Banks, 1914-1938](#)). In round numbers, earnings have been used as follows:

	Millions
Expenses and reserves	\$669
Dividends	\$170
Paid U.S. Treasury	\$150
Paid to Fed. Deposit. Ins.	\$130
Surplus Remaining	\$149
	<hr/>
Total Expenses	\$1,277

The twelve Federal Reserve Banks operate with a force of about 11,000 officers and employees, and the total payroll in the course of twentyfour years, after deducting salary reimbursements, has been about \$345,000,000. Other important items of expense in the same period have been \$51,000,000 for depreciation and chargeoffs on bank premises; \$50,000,000 for the expense of issuing and redeeming Federal Reserve currency; \$56,000,000 for postage, expressage, and insurance on currency and securities shipments; \$22,000,000 for local taxes; and \$26,000,000 for maintenance of the Board of Governors, in Washington, which regulates and supervises the Federal Reserve System. The Board is not supported by Government funds or appropriated moneys but by assessment upon the twelve Reserve Banks.

Congress provided in the Federal Reserve Act that dividends of 6 percent per annum, cumulative, be paid by the Reserve Banks on their capital stock. The Act requires that this stock

be purchased and held by member banks. Dividends are paid after all necessary expenses have been met.

Until 1933, the Federal Reserve Act required each Federal Reserve Bank to pay to the United States Treasury an annual franchise tax consisting of all net earnings after payment of dividends and certain additions to surplus. The sum paid, in the course of eighteen years amounted to about \$150,000,000. In 1933, Congress required the Reserve Banks to pay about \$139,000,000 to the Federal Deposit Insurance Corporation, which had just been organized. This payment reduced the surplus by about half. At the same time Congress removed the requirement that the Reserve Banks pay the Government a franchise tax. This enabled the Banks to apply unused earnings to a more rapid restoration of their depleted surplus.

As indicated, the surplus of the Federal Reserve Banks is now about \$149,000,000. This, with their capital of about \$135,000,000 gives them capital and surplus combined of about \$284,000,000.

The surplus is available to the Federal Reserve Banks for meeting losses, deficits, and unearned dividends, but it can not be otherwise distributed to the stockholding member banks. As already stated, the law provides that if the Reserve Banks should be liquidated, any surplus would be paid to the United States, after payment of debts and the par value of the stock with dividends due thereon.

The accompanying chart ([Disposition of Net Earnings of Federal Reserve Banks](#)) covers the whole period of Federal Reserve Bank operations and shows, year by year, the amount of net earnings transferred to surplus, the franchise tax paid to the Government, and dividends paid to member banks. It reflects the fact that there were large additions to surplus in the years about 1920 when earnings were highest, and in some subsequent years either there have been no additions or surplus has been drawn down. It reflects the fact that in 1933, as stated, Congress directed the Federal Reserve Banks to pay an amount equal to half their surplus to the Federal Deposit Insurance Corporation and also discontinued the franchise tax. It also reflects the fact that dividends have remained about the same.

As the chart shows, the net earnings of the twelve Federal Reserve Banks have varied considerably in the course of years. They were highest in 1919, 1920, and 1921, when the total was \$310,000,000. In these three years there was a strong demand for credit, and the Reserve Banks made a large volume of loans. Their net earnings in those three years amounted to approximately onehalf their total net earnings in twentyfour years. In 1936, 1937, and 1938 the total net earnings were \$29,000,000. The reduced earnings in recent years reflect the fact that there has been little demand for credit. In 1920 when the Federal Reserve Banks had the highest earnings, they had loans and investments of more than \$3,000,000,000, most of which were loans yielding from around 4 ½ percent to 6 percent or 7 percent. In 1938, when their net earnings were only a small fraction of what they were in 1920, they had loans, and investments of about \$2,500,000,000, most of which were Government securities yielding less than 1 ½ percent.

CHAPTER XI

Margin Requirements

The regulatory powers of the Federal Reserve authorities so far described relate to the volume and cost of bank credit in general, without regard to the particular field of enterprise or economic activity in which the credit is used. In one respect, however, the Federal Reserve authorities are enjoined by law to give particular attention to the use to which credit is put. That is its use in speculation.

Speculation may occur in almost any field. It may occur in land, in commodities, or in securities, and wherever it occurs it is apt to have marked effect upon credit conditions in general. The Reserve authorities are instructed by the statute to keep themselves informed as to "whether undue use is being made of bank credit for the speculative carrying of or trading in securities, real estate, or commodities" and are authorized to take certain actions to prevent undue use of credit in these fields. In addition, they have special power to curb the use of credit for speculation in securities.

This power is exercised by limiting the amount which holders of securities may borrow upon them, either from banks or from brokers and securities dealers, for the purpose of purchasing or carrying securities. The amount is a percentage of the current market value of the securities. It is determined by the Board of Governors of the Federal Reserve System. Since 1934, when Congress gave the Board this authority, the figure has been as low as 45 percent and as high as 60 percent. A figure of 60 percent means, for example, that a person owning listed stocks currently worth \$1,000 may borrow on them for speculative purposes no more than \$600. The limitation does not apply, however, to any loan for commercial purposes, even though the loan be secured by stocks. When it appears that there is borrowing on a large and growing scale to finance purchases of stock, and that it is in the public interest to exercise further restraint on speculation in securities, the Board may reduce the percentage which can be borrowed. As indicated, the limit has been as low as 45 percent.

In this field, as in the general field of credit regulation, therefore, the Reserve authorities undertake to exercise a stabilizing and corrective influence.

This power to establish loan values for securities is commonly spoken of as a power to establish "margin requirements," that is, the amount of collateral which must be put up by the borrower in excess of the amount of his loan. If one is buying \$1,000 worth of securities, and the loan value is 60 percent, he may borrow \$600 against the securities and must furnish the other \$400 himself. The banker or broker who makes him the loan then holds collateral worth \$400 in excess of the amount of the loan. This is his margin. The Board's regulation may be thought of therefore, either as prescribing minimum margin requirements or as limiting maximum loan values.

The Board's regulation applies to the margin required at the time the loan is made. If the collateral security subsequently declines in value, the regulation does not make it necessary either to put up additional collateral or to reduce the loan.

Aside from having to do with a specific use of credit, the authority with respect to security loans differs from other Federal Reserve powers in reaching outside the Federal Reserve System to banks which are not members of the System and to brokers and dealers in securities. It is closely related, however, to other regulatory powers of the Federal Reserve authorities, because the use of credit for purchasing or carrying securities has a very important bearing upon its use for business purposes in general. The greater part of credit used in carrying securities is extended by brokers, whose customers pay only partly in cash for the securities they purchase and go into debt to the broker for the balance. The broker himself must pay in full for the securities he buys, however, and ordinarily he borrows from his bank. Since brokers could not carry customers on any substantial scale unless they were themselves carried by the bank, most of the credit used by the customers in buying the securities is in reality furnished by the banks, and fluctuations in bank loans to brokers, as in any other bank loans, directly affect the bank's reserve position. A strong demand on brokers for credit, reflected in a strong demand by brokers for bank loans, may occasion substantial changes in money rates. By limiting the amount that can be borrowed on securities, therefore, and so restraining such demand for credit, the Federal Reserve authorities are able to impose restrictions on the use of bank funds for stock market speculation without restricting the volume of credit available for commercial and industrial needs or raising its cost.[\[32\]](#)

CHAPTER XII

Summary

The Federal Reserve System has successfully overcome certain difficulties that formerly beset American economic life and imposed upon it great losses; the System still has constantly to meet new problems and difficulties.

The basic powers of the Federal Reserve authorities relate to money and banking. They are monetary in that they deal with the means of payment, which consists in part of currency, in part of deposit credit **originating from gold**, and in part of deposit credit **originating in loans and in purchases of securities** by banks.

Before the Federal Reserve System was organized, the outstanding defects of American banking were diagnosed as "**Inelastic currency**" and "**scattered bank reserves**." Establishment of the System promptly cleared the way for the anticipated improvements. Elasticity of the currency was achieved. The machinery for note issue proved adequate for the purpose and in time was found to work almost automatically. For many years now the volume of money in circulation has expanded and contracted smoothly and efficiently in accordance with the varying requirements of the public, and the currency function of the Federal Reserve Banks has become virtually a matter of routine, entailing no uncertainties and no difficult administrative problems.

The reserve function, on the other hand, has assumed far greater importance. It has come to be recognized as much more than a matter of "Pooling" or "mobilizing" scattered reserves and

making available to banks in need of funds the surplus reserves of banks that have more than they need. It involves a power to *create reserve funds* and to *extinguish them*. If the funds lent by a Federal Reserve Bank, or paid by it for securities, were merely the funds deposited with it by its member banks, the loans and the purchases would not enlarge the total volume of reserve funds. In fact, however, they *do* enlarge the total volume of reserve funds. By acquiring the obligation of a member bank or other obligor and in exchange crediting an equivalent amount to the reserve balance of the member bank, a Federal Reserve Bank expands both its assets and its liabilities, and the expansion continues in effect so long as the obligation is held. The action is creative.

This does not mean that the power of the Federal Reserve authorities is unlimited and that they can create something out of nothing. The law itself limits their power to expand their deposits that is, the reserve balances of member banks and to expand their note issue by requiring that their liabilities not exceed a certain ratio to their holdings of gold certificates. Although this limitation has lost effectiveness, because of the present large gold stock, a fully effective limitation of more practical nature remains. This is that Federal Reserve action will not result in an increased use of bank credit unless there is a demand from the public for additional funds. The Federal Reserve authorities have considerable control over the volume of bank reserves, but they have no corresponding control over the use of bank reserves, and in particular they do not have power to create a demand for credit. They are able to expand bank reserves to meet almost any conceivable demand for credit once that demand comes into existence and also to curb or discourage a demand for credit when it shows signs of developing speculative excesses. They possess no means, however, of impelling bank customers to borrow or of impelling bankers to lend.

The purpose of Federal Reserve functions, like that of Governmental functions in general, is the public good. Federal Reserve policy can not be adequately understood, therefore, merely in terms of how much the Federal Reserve authorities have the power to do and how much they have not the power to do. It must be understood in the light of its objective which is to maintain monetary conditions favorable for an active and sound use of the country's productive facilities, full employment, and a rate of consumption reflecting widely diffused wellbeing. In carrying out their policy, the Federal Reserve authorities take into account the factors making up the prevailing situation and use their powers in the way that seems to them best calculated to contribute, with other agencies, to economic stability.

In recent years the most important problems affecting Federal Reserve policy have arisen from the enlargement of bank reserves as the result of the increasing amount of gold in this country. This increase has been contributed to by increased production of gold from domestic mines, but to a much larger extent it has been the result of movements of gold into this country from abroad. The stock of gold in the United States has become about four times as great as it ever was before 1934 and amounts to about 60 percent of all the monetary gold in the world. Various causes have brought about this unprecedented accumulation, but the principal cause has been the disturbed economic and political situation in Europe. The result of the accumulation has been the expansion of the reserves of American banks to an amount and degree never before approximated. Member bank reserve balances, which scarcely ever exceeded \$2,500,000,000

before 1933, have amounted to \$9,000,000,000 and more principally as a result of gold shipments from other countries.

The potential lending power derived by banks from receipt of this gold creates an unprecedented problem of control; because the unusual reserve of banks are much greater than can be absorbed by the Federal Reserve authorities under present powers. If changed conditions should result however in a return of gold to Europe the powers of the Federal Reserve authorities would be found highly effective in protecting American interests from being hurt by the withdrawal.

The principal means through which the Federal Reserve authorities may exercise their powers over bank reserves are in review the following:

OPEN MARKET OPERATIONS. These operations directly affect the volume of reserves: purchases of securities by the Federal Reserve authorities supply banks with additional reserve funds, and sales of securities diminish the volume of such funds. As a means of credit expansion, these operations are limited only by the supply of bills and securities available for purchase and by the reserve position, of the Federal Reserve Banks themselves, assuming a demand for bank credit. As a means of credit contraction, they are limited by the amount of bills and securities held by the Reserve Banks. At the end of 1938 this amounted to about \$2,500,000,000, which of course is considerably less than the amount of member banks' excess reserves.

DISCOUNTS. Through the power to discount and make advances, the Federal Reserve authorities are able to supply individual banks with additional reserve funds and may make these reserve funds more or less expensive for member banks by raising or lowering the discount rate. Discounts can expand only when member banks need to borrow.

RESERVE REQUIREMENTS. Raising or lowering requirements as to the reserves which member banks maintain on deposit with the Federal Reserve Banks has the effect of diminishing or enlarging the volume of funds that member banks have available for lending. Under existing law, the requirements may be raised from the present level by only about one-seventh and lowered by about three-elevenths.

As already stated, the foregoing powers directly affecting the volume of member bank funds have no immediate effectiveness with respect to the utilization of those funds. In the field of stock market speculation, however, the Reserve authorities have a direct means of control over the use of funds namely, through margin requirements. The Reserve authorities may also exercise limited influence over the credit practice of banks through bank examinations.

In addition to the credit functions which have just been described, the Federal Reserve Banks perform certain services of which the most important are: holding member bank reserve balances; furnishing currency for circulation; facilitating the clearance and collection of checks and the transfer of funds; and acting as fiscal agents, custodians, and depositories of the United States Government.

Establishment of the Federal Reserve System has made it possible to meet and overcome many difficulties that formerly beset American economic life and imposed upon it great losses. The

System has accomplished improvements in the monetary and banking field that are now taken for granted. Yet new problems and needs are always arising. Those that result from recent changes in monetary conditions here and abroad are especially complex and difficult. **Federal Reserve policies must be constantly adapted to conditions in an ever changing world.**

THE END OF REPRINT STORY

The above completes the story of banking as told in the 1939 edition of the **"THE FEDERAL RESERVE SYSTEM" Its Purposes and Functions**. We changed the format, compressing the material on just half as many pages, left out the pictures of Reserve bank buildings, filled in resulting blank spaces with comments. We commend this reprint, with our comments, to you for your serious consideration. if there should be any question in your mind, please write us, and we will frankly answer your question.

It is astounding, an unbelievable thing, that Congress would farm out to private corporations the creation of money and control of the nation's credit, free, then in emergency force the Government to borrow its own credit, and compel the people to pay billions of dollars taxes a year as interest on bonds the nation gave them. It is also astounding that the educated people who have read this book and know of this book, these crimes, have remained silent!

Lincoln said, "To sin by silence when one should speak makes cowards of all men."

S.W. Adams, publisher

801 Herndon Lane
Austin, Texas

THESE FACTS SHOULD OUTLAW BANKING

"We shall nobly save or meanly lose the last best hope of earth."

Abe Lincoln.

The Whole story of the Creation of New Bank Deposits Money

This following quotation is lifted from the 1939 Edition of *THE FEDERAL RESERVE SYSTEM Its Purposes and Functions*:

([This page](#), in this book) Paragraph 3:

"Realizing that any additional loan it (the member bank) made would increase its despotism out of proportion to its reserves, the commercial bank might stop making loans. Suppose, however, that

the Reserve authorities were of the opinion that more loans might advantageously be made and that the bank should be provided with additional! reserves so that it could make them. Suppose they therefore purchase \$20,000,000 of securities in the open market. The seller of the securities would deposit in the commercial bank the money (**the Reserve authorities' check against no funds**) he receives in payment. The commercial bank in turn would deposit it (the seller's check received from the Reserve authorities) in its account, the Reserve Bank. **Having these additional reserves of \$20,000,000, the commercial bank, by making loans, could increase its deposits to five times (or 10 times today, 1958), as much, or to \$100,000,000 (or now \$200,000,000) the \$20,000,000 being the 20 percent bank reserves required against deposits of \$100,000,000!** End of quote. The parentheses enclose my explanatory statements.

S.W. Adams, author of the
"Legalized Crime of Banking,
and a Constitutional Solution."

Banking was conceived in iniquity and born in sin. Bankers own the earth. Take it away from them, but leave them the power to create money and control credit, and with the flick of the pen they will create enough money to buy it back again. Take this great power, away from the bankers and all great fortunes like mine will disappear, and they ought to disappear, for this would be a better and happier world to live in, But if you want to continue the slaves of bankers and pay the cost of your own slavery, **let them continue to create money and to control credit.**

Sir Josiah Stamp in '20s
the then president of the Bank of England
and the second richest man in England.

The Reserve authorities may do this, **create with one check \$20 million new commercial bank deposits, and \$20 million new commercial bank reserves; and the commercial bank may expand its loans (new deposits) from \$100 million to \$200 million, on basis of the free \$20 million reserves they got gratis.**

The Reserve authorities are now before Congress seeking to make across-the-board ten percent reserve requirement, which would mean that every time a commercial bank received an additional dollar in its reserve account, it could lend \$10. How would you like to multiply your bank deposits by 10 at any time? That is exactly what the banks do.

In the above "supposed" case given by the Reserve authorities, when under the influence of the Dr. Franklin Delano Roosevelt humanizing serum at their own instigation, they added \$120 million to monetary funds of the Nation, just by buying \$20 million corporation stock. You will note that the Reserve check set in motion a chain reaction in creating money:

1. it added \$20 million to the corporation's bank account,
2. it added \$20 million to the commercial bank's reserve account,
3. the commercial bank multiplied its new reserves by 5 (in this supposed case) and wrote on its own books \$100 million,

4. it used these \$100 million to make loans or buy investment obligations,
5. this added \$100 million to the bank's customers' deposit accounts,
6. it also added to their portfolio of securities, your notes, mortgages, bonds, etc., another \$100 million, and when the securities were paid off, the customers transferred all of the \$100 million they borrowed from the banks, got their notes, and the **banks transferred the \$100 million to their undivided profit and surplus column** securities were "canceled out" at the cost of the borrowers, but no deposits were canceled out.

Let's trace all the wealth that "grew" out of that one Reserve check: \$20 million to corporation depositor, \$100 million to commercial Bank customers, and another \$100 million in securities to the commercial bank total \$220 million dollars; but when the notes were paid off, \$100 million they represented were canceled out, leaving \$120 million in the permanent deposit column \$20 million in the hands of the people, and \$100 million in the banker's hands.

The people either sold the corporation goods or served it for the \$20 million, but all the bank did was to do some ordinary bookkeeping! Remember this sort of thing is going on all of the time, so when you take into consideration the Nation's 14,000 member Banks doubling and multiplying our deposits continuously, you will begin to understand why our real estate and material resources are rapidly falling into the hands of the few and Sir Josiah's words take on a more sinister meaning.

The \$20 million out of the above supposed case that went to the customers of the corporations were earned by the recipients. The \$100 million that finally became the deposit assets of the banks cost the bank nothing the \$20 million in reserves cost them nothing, and the interest on the \$100 million they loaned paid them the cost of bookkeeping, the cashing and clearing the depositors' checks, **with a handsome profit, of course!**

We boast of having liberated four million slaves, but we are careful to cancel the ugly fact that by our **iniquitous money system, we have nationalized a system of oppression more refined but none the less cruel than the old system of chattel slavery.**

Horace Greely on the passage of the National Banking Act,
our first legalizing the crime of debt dollars,
and the expansion of credit five to ten times.

And Sir Josiah Stamp said,

"If you want to continue the slaves of bankers and pay the cost of your own slavery, **let bankers continue to create money and control credit!**"

THE PAUPER AND THE RICH MAN

The pauper (the Federal Reserve System) with assets of only \$52 billion with no productive knowhow, with no productions of goods, and less than 100,000 stock holders, loaned (?) the rich man (the United States of America) with a trillion in productive capacity and know-how, with well over \$500 billion in assets and 170 million stock holders, including the aforesaid 100,000 bank stockholders, \$250 billion to fight World War II.

Can you imagine the greatest corporation on earth, The Government of the U.S., with 110 million alert fullofknow-how stockholders, and assets running over \$600 billion, turning to a small segment of its population, with more than 100,000 stockholders and assets of only \$52 billion to borrow money?

Can you conceive of Rockefeller saying to his chauffeur, "Tom, I am transferring my personal bank account which is well over \$1 billion, to your account. You may spend it as you please; provided as often as I ask for money, you will let me have it. Of course, I will give you my note for cash I receive, and try to rustle from my children enough money to pay you interest on the borrowed money."

Well, that is exactly what Congress did in 1913 when it passed the Reserve Act. To fight World War II, we gave the bankers of the United States \$250 billion in U.S. Bonds that we might use our own, the Nation's credit. In addition, we permitted them to take credit in their reserve accounts for \$250 billion This gave them \$1 trillion 250 billion bank credit.

They now want to make it double! These credits are to the bankers what your deposits are to you. They can lend it, or use it to buy investment obligations it is cash to them!

So adding the \$250 billion in U.S. Bonds we absolutely gave to them their \$1 trillion 250 billion bank credit, and we find that the bankers (the then paupers) came out of World War II \$1,500 billion richer, and the (then rich man) the United States Government came out \$250 billion in debt to the bankers (the paupers) thanks to the stupidity and/or venality of our Congressmen, newspapers, journals, and educated people of the nation.

Appendix to The Federal Reserve Book

**AND THIS IS THE LAW CONSTITUTIONAL MANDATE TO
CONGRESS**

Article 1, Sections 8 and 10:

The Congress shall have the power . . . to coin money, regulate the value thereof, and of foreign coin, and fix the standard of weights and measures.

No, state shall . . . coin money, emit bills of credit; make anything but gold and silver coin a tender in payment of debt.

If no state may coin money, then certainly no private corporation may constitutionally do that.

With above comments, I submit this Reprint of **The Federal Reserve System Its Purposes and Functions** to you for your serious study and considerations.

Respectfully submitted, this the 2nd day of March, 1958.

Sincerely yours,

S.W. Adams, publisher

901 Herndon Lane
Austin 4, Texas,

BANKERS ARE NEVER SATISFIED!

In 1957 they passed through an unwitting Congress, S. 1451, an act to revise and amend all banking laws, stretching out to 100,000 words. This year, first days of the Second Session of the 85th Congress, they have reintroduced the same text "to again revise and amend" the 252 page law. Congressman Abraham J. Multer of New York, said after hearing the banking experts testify before house banking and currency committee:

"My purpose at this moment is to alert the membership to the situation presented by the attempt to enact this bill. Every witness who testified before this committee referred to and discussed changes in the Federal (Reserve System) statutes **"of major importance."**

If the bill is enacted with these changes, most of the safeguards written into our banking laws since the 1920's will be eliminated and destroyed. **Bank depositors and stockholders will again be put at the mercy of the moneyed Interests, and the big bankers of the country.**

"The money changers who were driven out of the temple in the 1930's will not only be back in the temple, but they will take it over "lock, stock, and barrel."

That last is a misstatement of fact in '33, emergency palliatives saw bankers merely scolded, given billions of dollars, and sent down the same road of wreck and ruin they have traveled for 190 years: and a benign (?) Congress graciously demonetized pesky gold, and authorized banking gamblers to go into the open markets and buy corporation stock in act of creating bank reserves. This nice provision Congress left in the bill bankers wrote has enriched the bankers,

moneychangers, the neat sum of \$1 trillion 500 billion out of just World War II, and the threatened depression they now have hanging over our heads was planned and begun that they might scare Congress into passing the 1958 version of what they admit is "of major importance" (to them). They will assure these Congressmen that if **they will "revise and amend" existing banking laws**, they will be good boys, and slow down the siphon, turn on the pumps and we will all go back to work again, and eat, and buy gadgets, and be as foolish as we have been since the World War II.

THE SIMPLICITY OF MONEY

Money is anything a government provides that is in common use as a medium of exchange; therefore, money is a medium of exchange.

Honest money represents the surplus products of man's labor.

Originally money was a substance, usually gold or silver, coined into units by the government. Before man began to use money men with surpluses bartered the man gave five bushels of wheat for a goat.

When buyer and seller became too remote from each other to barter, and the seller had a surplus of products and there was no one wanting it at the time, the government hit upon the plan of coining metals, and the holder of surplus products could dispose of them selling them to a dealer, and the dealer would pay him in the gold coin, which he could hold until he found something he wanted to buy, and he paid for it with the coin he held, and the dealer would hold his products until a buyer came along with coin, and sold to him so a third party came into the picture, became a part of the medium of exchange.

All of this was barter of the products of labor. The gold was a product of labor, so when the producer sold to the dealer, it was in reality a barter of wheat for gold, and the government did not have to put a redemptive clause on the gold coin, because the seller would readily receive it for his goods, knowing that another buyer would readily accept it for goods.

But when the supply of gold was exhausted, the government began the practice of printing money, putting on the bills a redemptive clause, making the money redeemable in gold. So the sellers would take it, if they could not get gold, believing they could get dollar for dollar in gold from the government if they demanded it and many did; for as late as the postCivil War period, sellers demanded repayment in gold coin. Even our United States Constitution provides that "states may not emit bills of credit," paper money, and could make nothing but gold and silver coin legal tender in the payment of debts.

When banks began to keep the people's money on deposit, it was an easy step to another money, the personal check, which was good money if written by a person of integrity, who had funds in the bank to cover the check.

This form of money is used to make the great bulk of our monetary payments; and currency is used only for pocket and cash register change for payment of goods over the counter. It would be

the best money on earth if the government took over the keeping of the people's deposits, cashing and clearing their checks.

The producers of goods have a prior right to have the money, and those serving the producers have a joint prior right to receive the money. Those who do not produce goods nor serve in the production of goods, have only a secondary right to have the money. Gamblers, of all sorts, have no legitimate right to have the money.

So long as all money in circulation is the production, surplus products dollar, and the government makes available to the producers additional money as the surpluses mount, it is an honest, sound, useful dollar.

But under our Federal Reserve System we have no honest, production, surplus dollars all of them are the gamblers' dollars, debt dollars, upon which the people must pay an interest charge, which runs into many, many billions of interest dollars annually. This takes money out of production, out of hands of consumers. The flood of debt dollars, all created by banks, has become so great that the products of labor now cost the consumers four to five times what they would have to pay if we were using an honest, production dollar.

The Government should take over the money, out of the hands of the bankers, gamblers in the stock markets, and establish Treasury depositories everywhere in the Nation, as post offices are located, keep the people's deposits, cash and clear their checks but lend no money, buy no investment obligations, nor dabble in the stockmarket gambling. And the Government should see that no dollar enters the volume of money that is not a production dollar, an earned dollar, an honest dollar, an interestfree dollar, then add to the money supply of dollars as often as production, the annual turnover of business, grows larger than volume of money having as its goal the simple matter of keeping the volume of money that amount required to carry on the Nation's business at any and all times.

This would make an honest man of the banker, who has said during the years that he lends the depositors' money, while as a matter of fact, he has never loaned the depositors' dollar, he has loaned his own created dollars, debt dollars, which have cost the people so many billions of dollars over the years the phony dollars, the gamblers' dollars, the dishonest dollars.

GLOSSARY

RESERVE ACT OF 1913 Created the Federal Reserve System, by which Congress abdicated its Constitutional authority to create money and control the Nation's credit, turning this important function of government over to private banking corporations, bent on gain, profit!

Reserve Act of 1934 Demonetized gold and substituted corporation stock as our "standard of money", raised price of gold from \$20.67 to \$35 an ounce, and outlawed the selling of gold in any form to other than the Government, and made it illegal for a person to own gold coin or

bullion, except that which he bought from the Government to be used in the arts; making it compulsory that the Government buy all gold mined in the United States, or sent to the United States.

Reserve Act of 1957 Greatly extended the powers of the Reserve authorities. They are asking this year (1958) to lower reserve requirements by half, etc.

Federal Reserve System The 12 Federal Reserve Banks with some 14,000 commercial member banks, trust companies and savings institutions, combined into a giant private corporation with the power to issue money, create deposits, control the Nation's credit, and dominate the entire national economy it holds the power of life and death over all business every person in the Nation.

Reserve Board of Governors Seven persons appointed by the President and confirmed by the Senate, and serving 14 years. They supervise the operations of the 12 Reserve banks, have more power than Congress or the President, and make no report to any Governmental agency, not even to Congress or the President.

Twelve Reserve Banks One located in a district, with its branch banks. Each is a corporation. Member banks are their stockholders, and their principal functions are to control the credit of their district, receive and hold their member banks' reserves, clear their checks.

Reserve Open Market Committee Is composed of the seven Board of Governors and five members of the 12 Reserve Banks. The committee directs the open market operations of the Reserve banks; that is, the purchases and sales of U.S. securities and corporation stock. The purpose of these operations is to create bank reserves, basically, which banks use to buy investment obligations and to make loans.

Reserve Advisory Council Twelve members, one chosen by each district Reserve Bank, who work with the seven Board members, in making policies, directing the overall affairs of the Reserve System, member banks and all.

Member Banks All National and State banks, trust companies, savings banks, will meet the requirements for membership, and several hundred small banks who function under the control of larger member banks.

Commercial Banks Private corporations who carry deposits of the people, make loans and buy investment obligations, They are the contact points between the Reserve Banks and the people.

Currency Is bills and coin engraved and minted by the Treasury to be used as cash register and pocket change.

Treasury Certificates Are the smaller bills, fives and onedollar silver certificates, redeemable in silver.

United States Notes #173; Under Lincoln's urgent demand, Congress ordered the Treasury to engrave approximately \$350 000, just promises of the Government without interest; and these notes are still in circulation, an unknown remainder of them, and they have been the best money the Nation has ever issued, and have done hundreds of billions of services with no interest to pay.

Gold Certificates The Government is denied authority to issue its own gold certificates, as it did before 1934, and does in the matter of silver, but it has engraved in large denominations approximately \$22 billion Reserve Gold Certificates which may not be used in general circulation, but which transfers the title to our \$22,620,251,821 gold stocks to private corporations, and these gold certificates lie in the 12 district reserve banks, which the holders could present if the crises came, and take possession of all the gold in the Treasury and in the Fort Knox bullion tomb Tax payers bought the gold, and the Treasury made it over to the bankers another gratis surrender.

Reserve Notes The Treasury has engraved over \$27 billion Federal Reserve notes for the Reserve Banks at a cost of only 30c a \$1,000. These notes are used in preponderant volume in all currency circulation.

Reserve Bank Notes The Treasury did engrave early in the Reserve Bank's history several hundred million dollars worth, but discontinued that because they had to pay a 1% interest on them; so they are rapidly retiring them. Bankers like to collect interest, but hate to pay it. In 1946 the Circulation Statement shows there were \$455,708,045, but the 1957 statement shows only \$135,333,191 in circulation.

Reserve Bank Reserves Funds created by the depositing of Reserve checks by commercial banks, which had been deposited to the credit of the recipients in their accounts, dollar for dollar.

Commercial Bank Reserves The same figures on the books of the Reserve banks to the credit of commercial banks.

Reserve Bank Credit The unlimited power to create money, granted to them in the Reserve Act of 1913. It "consists of 'funds' they are empowered to create. The process of creation is one of giving the promise of the Reserve Banks, in the form of Reserve notes or deposits, in exchange for the promises made to the Reserve Banks."

Commercial (Member) Bank Credit multiple, ranging from 5 to 10 times the amount of reserves the bank holds in its Reserve Bank. The Board of Governors raise or lower this requirement at will, making money tight or easy.

Reserve Authorities A term applied to any group of Reserve officials when it is unnecessary to indicate which group is functioning.

Commercial Bank Deposits The deposits created when banks make loans or buy investment obligations, and the borrower or seller leaves his money on deposit. All deposits are created in

this way, except when the Reserve authorities buy Government or corporation securities but the effect in the latter is to multiply reserves five to ten times.

Personal Check A depositor's order instructing his bank to transfer funds from his account to the recipient's account, and it is used in making the bulk of the people's monetary payments.

Legal Tender Money Coin and currency. On the Reserve Notes there is printed this: "This note is Legal Tender or All Debts, Both Public and Private and is redeemable in lawful money (that is by giving you another bill like the one you present) at the United States Treasury or at any Federal Reserve Bank. " On U.S. Silver Certificates, it is the same except it is "redeemable in silver dollars."

Investment Obligations U.S. Bonds, corporation stocks and bonds, personal notes, mortgages, debentures, bills of exchange any acceptable promise to pay, any promise representing a monetary value.

Loans The extending of bank credit to borrowers, and the "purchase of investment obligations by banks is an extension of credit;" therefore a loan.

Cash Is the bills and coin bankers keep on hand to issue to depositors, to be used in over-the-counter purchases. It has no value until in the hands of a wouldbe buyer,

Rediscount The buying at a discount of commercial bank investment obligations by Reserve Banks.

Acceptable Paper Usually drafts held by shippers or sellers of goods while in transit.

Fiscal Agents of Government are the Reserve Banks who hold the Government's deposits, and clear their checks; they also serve in assisting the Government in issuing bonds and other securities.

Issuing Currency The Treasury engraves all bills and mints all coin, but all of it is put into circulation by the Reserve Banks. All coin and Treasury certificates are deposited by the Treasury in the Reserve Banks, for which the Government gets deposit credit, but all Reserve Notes and Reserve Gold Certificates are turned over to the Reserve Banks (on demand) gratis, and the Government gets no deposit credits for them.

Cashing Checks The depositor buys from the bank, cash, paying for it by checking to the bank an equal amount of his deposits.

Clearing Checks The passing of checks drawn on one bank and deposited in another, through a "clearing house" or the Reserve Banks.

Public Debt That sum spent by the Government above its income now about \$280 billion dollars.

When Congress returns the creation – the addition of new deposits and the control of credit back to the Government, and keeps the people's deposits, cashes and clears their checks, our Nation will prosper as never before, and the producers cannot be robbed of their products.

They boast, "We made the United States the richest nation of earth!" But **no nation is rich when workers are on the dole immediately after a layoff.**
