THE FEDERAL RESERVE SYSTEM
AND THE FEDERAL OPEN MARKET COMMITTEE

An Honors Thesis (ID 499)

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Ball State University
Muncie, Indiana
November 1980
CONTENTS

I. THE DEVELOPMENT OF THE FEDERAL RESERVE SYSTEM ........................................ 1
   The First and Second Banks of the United States ........................................... 2
   The National Banking Act. .................................................................................. 2
   The Aldrich Plan. ......................................................................................... 3
   The Glass - Willis Proposal ............................................................................ 4

II. THE STRUCTURE AND PURPOSE OF THE FEDERAL RESERVE SYSTEM. .................. 4
   The Federal Reserve Board of Governors. ......................................................... 5
   The Federal Reserve Banks ............................................................................. 7
   The Federal Reserve Member Banks. ................................................................. 9

III. FEDERAL RESERVE POLICY INSTRUMENTS ......................................................... 10
    The Discount Rate ....................................................................................... 10
    Reserve Requirements. .................................................................................. 13
    Other Policy Instruments. ............................................................................ 14

IV. OPEN MARKET OPERATIONS ........................................................................... 15
    The Federal Open Market Committee ............................................................ 16
    The Purpose of Open Market Operations ....................................................... 16
    The Federal Reserve Bank of New York and Open Market Operations ....... 17
    The Formulation of Open Market Policies ..................................................... 18
    Conducting Open Market Operations ............................................................. 20
    The "Bills Only" Policy ................................................................................. 24

V. RECENT AND FUTURE CHANGES ..................................................................... 27
    Monetary Policy ......................................................................................... 27
    The Definition of the Money Supply. .............................................................. 29
    The Banking Reform Act. ............................................................................. 30
    Growth of Eurocurrency Deposits ................................................................. 30
    Treasury Accounts ....................................................................................... 31

VI. CONCLUSION .................................................................................................. 31
THE FEDERAL RESERVE SYSTEM
AND THE FEDERAL OPEN MARKET COMMITTEE

The U. S. government influences the economy through changes in its fiscal and monetary policies. Fiscal policy is concerned with the taxing and spending decisions of the government. Monetary policy deals with the supply of money in the economy. Since 1913 the U. S. government has implemented its monetary policies through the policy instruments of the Federal Reserve System. An understanding of the Federal Reserve System and the policy instruments at its disposal is helpful toward an understanding of the effects of these instruments on the supply of money and credit in the economy.

THE DEVELOPMENT OF THE FEDERAL RESERVE SYSTEM

After the Revolutionary War the founding fathers of the United States were faced with an immense and awesome task. They were responsible for the creation of a stable foundation which would enable the new nation to grow and prosper. The creation of a sound financial system was an essential part of this foundation. Alexander Hamilton, Secretary of the Treasury, advocated the idea that the nation's supply of money and credit be handled through a central bank. Thomas Jefferson, Secretary of the State, opposed this idea because he felt that the constitution did not give Congress the power to establish such a bank.¹
The First and Second Banks of the United States

In 1791 Alexander Hamilton and his supporters won the dispute, and the First Bank of the United States was created. This nationwide banking system was headquartered in Philadelphia, and its major functions were accepting deposits, issuing bank notes, making loans, and purchasing securities. In 1811 the First Bank came up for recharter. Although President Madison favored its recharter, the power of the First Bank frightened many people. The First Bank lost its attempt to be rechartered; it failed to pass both houses of Congress by a single vote.

The War of 1812 brought chaos to America's financial system. The government lacked a safe depository for funds, a transfer mechanism, and ways in which it could market its own securities. State banks issued notes of little value. In an attempt to solve these problems the Second Bank of the United States was chartered in 1815 for twenty years. This bank possessed many of the same powers of the First Bank. Andrew Jackson, campaigning for re-election in 1832, opposed the Second Bank. His opponent, Henry Clay, wanted to pass a bill through Congress to recharter the Second Bank and use Jackson's veto against him in the election. Jackson won the election, however, and in 1835 the Second Bank of the United States was not rechartered. For the next 25 years banking was unregulated. This was a period consisting of large fluctuations in the amounts of bank notes, issued by state-chartered banks, and demand deposits, risky loans, and insufficient bank reserves.

The National Banking Act

In 1863 the National Banking Act was passed to create nationally chartered banks and to provide capital requirements for these banks. Only national banks were allowed to issue bank notes, and those notes in circulation
had to be backed by U. S. government securities. This act proved to be inadequate because banking was still a local, decentralized function. There was no head bank, no central point of power, and no national viewpoint. The National Banking Act did not provide an effective mechanism for controlling the flows of money and credit in the economy. Reserves, in the form of vault cash and deposits with other banks, were scattered around the country. Money had to be shipped with great costs and inconveniences. Check clearing was slow, undependable, and the charges were not uniform throughout the country. This did not allow for a governmental depository system or banking machinery for the federal government. There was little correlation between the needs of the government and the business community. National bank notes were secured by U. S. government bonds, thus the money supply responded to changes in the bond market rather than to business needs. The inelastic response of currency to trade demands made it possible for seasonal bursts of activity, such as autumn crop movements, to virtually ruin credit availability and provoke financial crises. Financial panics and the subsequent bank failures such as those in 1884, 1890, 1893, and 1907 brought attention upon the inadequacies of the National Banking Act.

The Aldrich Plan

In 1908 Congress passed the Aldrich - Vreeland Act creating the National Monetary Commission. The purpose of the Commission was to study the changes needed in the money and banking system. In 1911 the Commission presented the Aldrich Plan calling for the creation of a single central bank along European lines. This bank, known as the National Reserve Association, was to issue currency and rediscount the commercial paper of member banks. It would be run by a Board of Directors made up of bankers. In 1912 the
House Banking and Currency Committee held hearings in order to examine the control of the banking system. It was found that control of the system was concentrated in the hands of just a few bankers and men of Wall Street. Opponents of the Aldrich Plan felt that it would enhance the already considerable power of these men.\textsuperscript{10}

**The Glass - Willis Proposal**

While the Aldrich Plan was in legislation, Woodrow Wilson became President. New men became sponsors of the Aldrich Plan. Wilson's advisors, Carter Glass, Chairman of the House Committee on Banking and Finance, and H. Parker Willis, former professor at Washington and Lee University, developed an alternative to the Aldrich Plan in an attempt to combat the monopolistic power of bankers.\textsuperscript{11} The Glass - Willis Proposal formed the basis for the Federal Reserve Act and was designed to provide an elastic currency and mobile reserves under governmental control. This proposal called for a banking system made up of regional banks. These banks would hold a portion of member bank reserves, perform central bank functions, and issue currency. The currency would be an obligation of the U. S. government. These regional banks would be controlled by a central board and would form a governmental public agency. After considerable debate and discussion, both houses of Congress passed the Federal Reserve Bill. President Wilson signed the bill into law on December 23, 1913, and the Federal Reserve System was created.\textsuperscript{12}

**THE STRUCTURE AND PURPOSE OF THE FEDERAL RESERVE SYSTEM**

The original purpose of the Federal Reserve System was "to give the country an elastic currency, to provide for discounting commercial paper, and to improve the supervision of banks."\textsuperscript{13} The primary objectives of the
Federal Reserve System have been expanded to include economic stability and growth, a high level of employment, a stable dollar, and a favorable balance of payments with foreign countries. The long-run objectives of the Federal Reserve have been to insure that the growth in the supply of money and credit is adequate to provide for a rising standard of living. These long-run objectives need to be considered when the Federal Reserve is trying to combat the short-run inflationary and deflationary pressures of the economy. The Federal Reserve's main responsibility is to regulate the flow of money and credit, but it also performs important supervisory and service functions for the public, the United States' Treasury, and commercial banks. The Federal Reserve tries to achieve economic goals through its ability to influence the availability of bank reserves, credit, and money. It does this through its power to establish the reserve requirements of member banks, the discount rate, and open market operations.

The Federal Reserve System consists of three bodies which are responsible for developing and implementing monetary policy: the Board of Governors, the Federal Reserve Banks, and the Federal Open Market Committee.

The Federal Reserve Board of Governors

The Federal Reserve Board of Governors, an agent of the federal government, consists of seven members appointed for terms of fourteen years. Terms are arranged so that one expires every two years, and members may not be reappointed after having served a full term. All appointments are made by the President of the United States with the consent of the Senate. The President names the Chairman and Vice-Chairman of the Board for four-year terms which may be renewed at the end of the term.
The Federal Reserve Board acts as the government's principal fiscal agent. It does this through its auctions of Treasury Bills and the exchange of issues. The Federal Reserve holds treasury checking accounts, processes applications from the public for the purchase of securities sold by the U.S. Treasury, allots and delivers securities among dealers, acts as a source of financing of dealer positions through repurchase agreements.\textsuperscript{16} It collects payments, redeems securities, makes wire transfers of securities to other cities, makes denominational security exchanges, pays interest coupons, and performs open market transactions for various accounts.\textsuperscript{17}

The major responsibility of the Board of Governors involves the development of monetary policy. The Board also has general supervisory and regulatory responsibilities over the activities of the Federal Reserve Banks and commercial banks. The Board of Governors is responsible for actions that affect the international transactions and foreign operations of U.S. commercial banks and the U.S. activities of foreign banks. The Board establishes the reserve requirement against borrowings by member banks from their foreign branches and regulates the lending by these branches to U.S. residents. This is done to control the balance of payments of the United States while implementing domestic monetary policy. The Board also acts on member bank applications to establish and acquire foreign branches and affiliates.\textsuperscript{18}

The Federal Reserve Board of Governors is responsible for determining the amount of credit available for the purchase of securities, establishing the maximum rates of interest which member banks may pay on savings and time deposits, regulating the Bank Holding Companies Act and the Bank Merger Act, administering the Truth in Lending regulations of consumer credit, determining the ratio of reserves which commercial banks must keep against deposits, and establishing the discount rate.\textsuperscript{19}
The Board of Governors submits an annual report to Congress containing statistics and information concerning the Federal Reserve System's activities. The Board publishes the Federal Reserve Bulletin making this information available to the public. The Board draws upon specialists from around the System in an effort to reach an understanding of common economic concerns through a number of conferences and committee meetings which are held at various locations and times throughout the year. The Board confers with the Federal Advisory Council on economic and banking matters, and the Council makes recommendations regarding the Board's affairs. The Council consists of one member from each Federal Reserve district. This person is usually a prominent banker of the district and is selected by the Board of Directors of that district's Federal Reserve Bank. The Federal Advisory Council is required by law to meet four times a year. The Advisory Committee on Truth and Lending meets at the option of the Board of Governors. 20

The Federal Reserve Banks

The Federal Reserve System is divided into twelve regions, each with its own Federal Reserve Bank. The twelve Federal Reserve Banks, which are essentially bankers' banks, are located in Atlanta, Boston, Chicago, Cleveland, Dallas, Kansas City, Minneapolis, New York, Philadelphia, Richmond, San Francisco, and St. Louis. 21 Branches of these Federal Reserve Banks are located in twenty-four additional cities, and the Federal Reserve has facilities for clearing checks. No operations are conducted from the System's offices in Washington, D.C. 22

Each Federal Reserve Bank is administered by its own Board of Directors and officers under statutory authority. Each Federal Reserve Bank is incorporated with its own nine-member Board of Directors. By law
Class A directors represent the member banks. Class B directors are engaged in pursuits other than banking and are elected by the member banks of that district. The Board of Governors appoints three Class C directors. One of these is named as Chairman, and another is named Vice-Chairman. No Class B or Class C director may be an officer, director, or employee of a bank. Class C directors are also prohibited from being bank stockholders. 23 Each branch of a Federal Reserve Bank has a five to seven member Board of Directors. A majority is appointed by the district Federal Reserve Bank Board of Directors and the others are appointed by the Board of Governors.

The President and First Vice-President of each Federal Reserve Bank are appointed for five-year terms by the bank's Board of Directors with the approval of the Board of Governors. "The President shall be the chief executive officer of the bank and ... all other executive officers and all employees of the bank shall be directly responsible to him..." 24 The President exercises administrative control over bank operations and assumes the final responsibility for maintaining and improving the Federal Reserve Bank's public relations position in the district. The President serves as either a voting member or nonvoting participant in the Federal Open Market Committee. The President meets several times a year with the other eleven bank presidents in the President's Conference to discuss the operational problems encountered by the banks. 25

The earnings of the Federal Reserve Banks consist of the interest received from security holdings and loans made to member banks. These earnings are used to pay the expenses of the bank, assessments made by the Board of Governors to defray its expenses, a six percent statutory dividend on Federal Reserve stock which member banks are required to purchase, and
any additions necessary to maintain each Bank's surplus equal to its paid-in capital. The remaining earnings are paid to the Treasury. Should a Federal Reserve Bank be liquidated, the surplus would become the property of the U. S. government. 26

**Member Banks**

National Banks are chartered by the comptroller of the currency, an official of the Treasury Department. They are required by law to become members of the Federal Reserve System. State-chartered banks may become members if they meet the requirements set by the Board of Governors. In 1974 approximately 5,800 commercial banks out of a total of 14,000 were members of the Federal Reserve. These banks accounted for almost seventy-nine percent of all bank deposits. 27

Member banks are required to subscribe to capital stock of the Federal Reserve Bank in an amount equal to six percent of its own capital stock and surplus. Of this amount three percent must be paid-in and three percent is subject to call by the Board of Governors. Member banks are entitled to a cumulative dividend of six percent on the value of their paid-in stock. The ownership of Federal Reserve Bank stock does not carry the usual benefits of control and financial interest as does corporate stock. 28

Membership in the Federal Reserve System has many advantages. The Federal Reserve Banks provide facilities for member banks to deposit non-cash items for collection, such as notes, drafts, warrants, coupons, and bonds. The member banks can borrow from the Federal Reserve Bank when in need of temporary funds. The member bank can use Federal Reserve facilities for collecting checks, settling clearing house balances, and making wire transfers to other cities. The bank can obtain currency from the Federal Reserve Bank
as needed, and it can share in the information and communication facilities of the Federal Reserve System. Membership also entitles the bank to participate in the election of six of the nine directors of the Federal Reserve Bank in the district. 29

There are certain obligations and requirements which banks must meet as members of the Federal Reserve. The bank must maintain sufficient reserves to meet the requirements established by the Board of Governors. The member bank must remit at par for checks drawn against it when presented for payment by the Federal Reserve Bank. The bank must comply with various Federal laws, regulations, and conditions of membership regarding the adequacy of capital, mergers with other banking institutions, the establishment of branches, relations with bank holding companies, interlocking directorates, and loan and investment limitations. State-chartered banks are subject to general supervision and examination. 30

FEDERAL RESERVE POLICY INSTRUMENTS

The Federal Reserve has three important tools at its disposal for use in implementing monetary policy. All three affect the availability of bank reserves and money, and all influence the cost of credit. These tools are the discount rate, member bank reserve requirements, and open market operations. The first two will be presented here, and the last instrument, open market operations, will be presented in the next section.

The Discount Rate

The discount rate is the rate member banks must pay on borrowings from the Federal Reserve Bank, and this rate is determined by the Board of Directors of that bank. Originally each Federal Reserve Bank was to have its own discount rate which would reflect the economic conditions in
that particular region, but as the integration of national markets grew, a national discount rate was produced. This rate is adjusted periodically to reflect changes in money market rates, and these changes should be interpreted in terms of how they complement or are complemented by other policy actions. 31

Member banks may wish to borrow from the Federal Reserve Bank for many reasons. This borrowing is usually for only a few days in order to cover a temporary need for reserves due to increases in loan demand, temporary difficulties in obtaining funds through money markets, or for portfolio adjustments. Federal Reserve borrowing may be used as a safety valve for member banks as a group during periods of monetary restraint. Federal Reserve borrowing cannot be used for speculative purposes, to finance lending in the federal funds market, or to acquire securities at a profit. 32 Nonmember banks may borrow from the Federal Reserve in certain circumstances, but this is usually done at an interest rate above the discount rate available to member banks.

Access to the discount window is a privilege of membership, not a right. The Federal Reserve restrains member bank borrowing in order to have control over the volume of such borrowings and to avoid excessive and unexpected fluctuations. The Federal Reserve judges whether the bank is relying too much on borrowing at the discount window by considering the amount of bank indebtedness in relation to its required reserves, the frequency of such borrowing, and any need for funds due to computer breakdowns in transfers and special circumstances affecting the bank.

There are two ways in which a member bank may borrow from the Federal Reserve, the discount and the advance. Both of these methods are generally referred to as discounting. The discount involves the sale of "eligible"
paper, such as bankers acceptances and municipal warrents and other securities meeting the requirements set by the Federal Reserve. The advance is the most prevalent type of borrowing and involves a loan evidenced by a promissory note and backed by adequate collateral. Three types of collateral may be used to secure this type of borrowing: U.S. government securities and Federal Agency obligations, "Eligible" commercial, industrial, and agricultural paper, and other satisfactory securities. Many banks leave their securities at the Federal Reserve Bank for safe-keeping, consequently it is easy to use these securities as collateral. Loan secured with other than U.S. government securities and "eligible" paper are more common now than in the past, but the rate charged on such loans is 1/2 a point higher than borrowing secured by U.S. government securities and "eligible" paper.33

In 1973 the Federal Reserve established the seasonal borrowing privilege which enabled the Federal Reserve Banks to supply credit to smaller banks during periods of peak seasonal need. The bank must have a recurring season need for funds persisting for at least eight weeks, and it must lack access to the money markets. The bank must meet a part of the need in an amount equal to five percent of the average deposits over the preceding year. It must arrange for this credit in advance of the actual need.34

Emergency credit is available to individual banks faced with financial problems due to adverse local, regional, or national financial developments. The Federal Reserve has become known as the "lender of the last resort" because it has played a role as the ultimate lender of liquidity. Emergency credit is available to nonmember banks, but at a higher rate of interest and after special authorization by the Board of Governors.35
The major difference between borrowing from the Federal Reserve and making portfolio adjustments in the money market is that Federal Reserve borrowing increases the total reserves of banks. If not offset by open market operations, this could provide a basis for the expansion of money and credit. Market adjustments, such as borrowing from the Federal Funds market, merely redistribute already existing bank reserves.\textsuperscript{36}

**Reserve Requirements**

The Board of Governors of the Federal Reserve System has the authority to set the minimum ratios for reserves that member banks must hold against demand and time deposits. These ratios range from seven to twenty-two percent on demand deposits and three to ten percent on time deposits depending on the size of the bank. These reserves may be kept in non-interest bearing deposits with the Federal Reserve Bank or as cash in the bank's own vault. Reserve requirements for a particular week are computed on the liabilities of two weeks earlier. Vault cash used to satisfy the requirement is the daily average of such cash for the same period two weeks earlier.\textsuperscript{37} In any week excess reserves up to two percent above requirements may be carried into the following week to help meet that week's requirements. Any deficiency, up to two percent may be carried into the next week. Penalty rates equal to two percent above the discount rate may be levied against deficiencies beyond the two percent carry forward, but this has rarely occurred.\textsuperscript{38}

Changes in reserve requirements are normally undertaken as part of a monetary policy designed to moderate inflationary or recessive tendencies in the economy. These changes first influence the liquidity of banks and their ability to expand loans and investments, gradually these changes will
affect all financial markets. When changes are made for structural reasons, the potential impact on credit markets can be offset through open market operations. 39

Actions to change reserve requirements do not affect the total amount of member bank reserve funds as a whole, but they do affect the volume of deposits and loans that can be supported by these reserves. When the reserve ratio rises, the amount of deposits and investments which can be supported decreases resulting in a restrictive monetary policy. When ratios are low, the amount of loans and deposits rises resulting in an expansive policy.

Adjustments in member bank reserve requirements are less flexible than the discount rate and open market operations because all member banks in a given class are affected at once. Small changes in the reserve ratio can bring about large changes in the margin between total reserves and required reserves. These small changes can have a large impact on deposits and credit. 40

Other Policy Instruments

The Federal Reserve also has the ability of setting ceilings on the rates of interest which member banks may pay on savings and time deposits. These ceilings can affect the flow of funds through banks and can influence the availability of credit. Regulation Q established these interest rates, but a banking reform act passed in 1980 has authorized the elimination of interest rate ceilings over the next six years. 41

The Federal Reserve sets the initial margin requirements, downpayments in cash or collateral, on credit-financed purchases of corporate stocks and convertible bonds. Margin requirements have varied from fifty to eighty percent on stocks and from fifty to sixty percent on convertible bonds. 42 The Board imposes limitations on the amounts of credit used by dealers and
brokers (Regulation T), banks (Regulation U) and other lenders (Regulation G).\textsuperscript{43} All U. S. persons who use securities credit are required to comply with the Board's margin regulation (Regulation X). These requirements have been imposed to minimize the dangers involved in the use of credit in financing stock market speculation. The purpose is to prevent the speculative booms such as the one which ended in the collapse of stock prices in 1929 and the depression.\textsuperscript{44}

The Federal Reserve has the responsibility of setting selective credit controls on consumer installment and real estate credit. The Credit Control Act makes it possible for the President of the United States to authorize the Board of Governors to regulate and control all extensions of credit.\textsuperscript{45} This Act was first implemented by President Carter in March 1980.

**OPEN MARKET OPERATIONS**

About ninety percent of the currency in circulation is issued by the Federal Reserve Banks in the form of Federal Reserve Notes. These are obligations of the Federal Reserve Bank and the U. S. government, and they must be collateralized by the Federal Reserve holdings of government securities, gold certificates, special drawing rights certificates, or certain other types of assets. The Federal Reserve System's portfolio consists primarily of U. S. government securities and obligations of federal agencies. Open market operations are conducted continuously in these securities as the Federal Reserve adapts to the ever-changing financial markets and economic conditions. For these operations to be effective, the central bank must be able to buy or sell securities on a timely and convenient basis, and in the volume necessary to obtain prevailing policy objectives.
The Federal Open Market Committee

Open market operations, the principal instrument used by the Federal Reserve in implementing monetary policy, are directed and regulated by the Federal Open Market Committee (FOMC) for the joint account of the twelve Federal Reserve Banks. The FOMC consists of the seven members of the Board of Governors and five Reserve Bank presidents. The president of the Federal Reserve Bank of New York is a permanent member of the committee, and the other bank presidents fill the remaining four seats on a rotating basis with each serving one-year terms. By tradition the Chairman of the Board of Governors is elected to serve as Chairman of the Federal Open Market Committee. The president of the Federal Reserve Bank of New York is traditionally elected as Vice-Chairman. The FOMC selects the senior officer of the Federal Reserve Bank of New York to be the Manager of the System's open market operations. The Manager has immediate responsibility for implementing open market operations.

The Federal Open Market Committee supervises the purchase and sale of government securities, federal agency securities, and bankers acceptances for the System's portfolio. The FOMC also authorizes and directs operations in foreign exchange markets for convertible currencies. These foreign currency transactions are directed by the FOMC and a special manager at the Federal Reserve Bank of New York.\textsuperscript{47}

The Purpose of Open Market Operations

The original purpose of open market operations was to provide the Federal Reserve Banks with a profitable method of employing funds during periods of easy money when member banks were not borrowing. Open market operations were designed to strengthen the Federal Reserve's discount rate
position. The Federal Reserve may, in order to force member banks into line, buy (sell) securities in the market. This addition (subtraction) of bank reserves expands (contracts) the supply of credit in the market and lowers (raises) the market rate of interest in harmony with the Federal Reserve discount rate. Open market operations are designed to affect the availability of bank reserves in accordance with directives from the Federal Open Market Committee.

The Federal Reserve Bank of New York and Open Market Operations

All open market transactions are conducted through the Federal Reserve Bank of New York. Under FOMC directives the Federal Reserve Bank of New York also conducts operations in bankers' acceptances and repurchase agreements for its own account. It acts as an agent for foreign central banks, the U. S. treasury, and others. It performs some fiscal functions for foreign central banks and other foreign official and international accounts. These purchases and sales in which the Federal Reserve Bank is acting as an agent must be made without interfering in the aims of monetary policy. They must also be made at rates which reflect the current market prices. In some cases agent transactions may call for open market operations in order to offset the undesired effects of these transactions on monetary conditions. Care is taken to insure that transactions being made as an agent are not interpreted as indications of changes in monetary policies.

The staff at the Federal Reserve Bank of New York carries out the FOMC's directives through a "trading desk" having direct telephone communication with approximately two dozen dealers. All purchase and sale orders for open market transactions are executed through this desk. In order to keep open market transactions and agency transactions separate, different people
make the two types of transactions. Traders are arranged around a horseshoe type table. On one side sales and purchases are made for the open market account; on the other side transactions for which the Federal Reserve Bank of New York is acting as an agent occur.51

The Formulation of Open Market Policies

The process of formulating open market policies occurs through successive meetings of the Federal Open Market Committee. This is a very complex process because the resulting quantity and flow of money and credit affect and are affected by all aspects of the economy’s production and consumption activities.52 The complex relations which link the United States economy with the rest of the world much be considered. These include the forces affecting the supply and demand for U. S. goods and services, the determinants of the supply and demand for U. S. products competing with imports, factors affecting the international flow of funds, the effects of international flows of funds on domestic markets, changes in technology and exchange rates, and the capital flows between the U. S. and foreign financial centers.53

FOMC meetings and discussions are preceded by staff research and reports highlighting comprehensive written materials, evaluating outlooks, and supplying information on alternative policies. The Committee receives forecasts in the changes of monetary aggregates, interest rates, bank reserves, and the discount rate which result from changes in policies. About three times a year the staff provides the members of the FOMC with full-scale projections of the domestic economic outlook which shows the expected levels and quarterly changes, given in current and constant dollars, of key GNP sector accounts for the next twelve to eighteen months.54 These projections,
based on assumptions of monetary, fiscal, and governmental policies, show "trade-offs" resulting from strategy alternatives. They also reflect the opinions of economic analysts experienced in using large scale econometric models of the U. S.

Committee members receive documents reviewing the facts and implications of recent domestic and foreign financial development. These documents explain the extent to which these developments have confirmed or deviated from past projections, and they give long-run implications of policies. The Committee receives information regarding the levels of unemployment, inflationary or deflationary pressures, balance of payments, and other factors which could affect the U. S. economy.

The FOMC must forecast carefully into the future when formulating policies. It takes time for policymakers to recognize that economic conditions indicate the need for policy changes. It takes time for the corrective steps to restore the desired level of activity, and it takes time for these measures to have effects on the levels of output, employment, and prices. These three lags: the recognition lag, the administrative lag, and the impact lag, sometimes require six months before the policy changes begin to affect the economy and even longer before the effects reach the desired targets.

During each meeting of the FOMC the System's open market account manager presents detailed written and oral reports regarding the transactions which have taken place since the last meeting and explains any special problems. After studying the large amounts of statistical data, economic information, and staff forecasts, the members of the Committee discuss their individual opinions as to the present state of the economy and its
relationship to desired goals such as output, employment, prices, and interest rates. The members make recommendations regarding their opinions as to what open market policy, both in the short-run and the long-run, should be. A general consensus is reached, sometimes after extended discussions, in order to integrate the members' opinions into meaningful directives to guide the Manager in the conduct of open market operations until the next meeting. An understanding is reached regarding specific targets and ranges to be considered during the implementation of these policies.

The Board of Governors is required by law to keep records regarding the meetings of the Federal Open Market Committee and the actions taken. The Board must maintain a record stating the underlying reasons for these actions, and the FOMC meeting records must be published in an annual report to Congress. Policy records, containing information on the policy directives accepted with a record of favorable and dissenting votes, as well as the reasons for these dissents, are usually made available to the public ninety days after the FOMC meeting.57

**Conducting Open Market Operations**

Open market operations are conducted every business day in order to prevent market factors from introducing independent shifts in bank reserves which are inconsistent with Federal Reserve policy or which may lead to larger fluctuations in the money markets.58 These transactions are primarily in U. S. government securities and, on a smaller scale, in Federal Agency issues and bankers' acceptances. When the Federal Reserve buys securities, the supply of bank reserves is expanded. When it sells securities, reserve availability contracts. Most of the System's transactions, whether in the dealer market or directly with official accounts, occur in Treasury Bills.
This is the most active section of the U. S. government securities and Federal Agency markets. Sometimes the Federal Reserve will enter the market to deal in intermediate and long term securities.

Open market operations affect initially commercial bank reserves and the prices and yields of U. S. government securities. The effects of these operations soon spread to other money and capital markets, and finally they reach the market for goods and services, income, employment, and price levels.59

To summarize, monetary policy is intended to raise or lower the level of spending by the private sector, and it operates through (1) portfolio adjustments, (2) wealth effects, and (3) credit availability effects. Most economists agree that monetary policy influences are transmitted through portfolio adjustments that occur as a result of a change in the Federal Reserve's holdings of government securities. Wealth holders, including commercial banks, are induced, by changes in the money supply and the yield on financial assets, to alter their relative holdings of various types of financial and real assets. Thus the prices of existing real assets rise when the money supply is increased, and this, in turn, induces an increase in newly produced goods and services, with subsequent effects on the level of employment and on prices in general. At the same time, these changes in economic activity have feedback effects on the financial system, so that financial and real variables interact, moving the economy toward a new equilibrium position.60

The System's open market account manager's techniques must be flexible and adaptable in order to adjust to the rapidly changing financial developments. He must be able to rapidly reverse the flow of reserves when the effects of open market transactions have been too great or too little. Daily open market transactions are organized through daily conference calls which include the System's account manager, the senior staff at the Board of Governors, and a Federal Reserve Bank president who is currently a voting member of the Committee. The manager receives information
continuously on money and security market conditions; he receives information after a one-day lag on bank reserve positions. He receives daily projections for the upcoming weeks in variables affecting reserves, and he receives weekly projections of money and credit aggregates. A memorandum is sent to all FOMC members and Federal Reserve Bank presidents regarding the action to be taken that day.

In gauging what volume of reserves to supply or absorb through open market operations in order to achieve the objectives of monetary policy, the FOMC must consider the extent to which member banks may wish to borrow from the Federal Reserve or repay outstanding borrowings. Member bank borrowing usually increases during periods of monetary stringency. Since open market operations are the principal means by which the Federal Reserve can affect the volume of Federal Reserve Bank credit and member bank reserves, changes in the Federal Reserve Bank holdings are watched closely. A breakdown of holdings, by the type of security, is shown each week in a published statement.

When the System's open market account manager seeks to execute a transaction, his staff contacts dealers, who in fulfilling their obligations to make regular markets, quote bid and offer prices. Purchases and sales of securities originate in what is known as a "go around." All dealers are asked to quote and to "stand on their market" for about twenty minutes. This is done so that the trading desk can decide upon the issues and the amounts to be used. Dealers will quote a variety of issues and prices. Quotations are compared and the managers select those which are lowest if buying and highest if selling. Dealers are ready to do business on either side of the market desired. Since nearly two dozen dealers are
now acting in this market, the trading desk has no difficulty in completing its orders rapidly. When orders are large, the trading desk utilizes an auction method in distributing its orders among the various dealers. 64 All dealers are asked to submit bids or offers for securities of the type and maturity being sold or purchased. The Manager accepts amounts and bids or offers in sequence until his transaction is completed.

A dealer is not required to make a market every time the Federal Reserve does a "go around" or auction. But if he should stay out of the market for a prolonged period of time by refusing to buy or by maintaining unusually wide spreads, he would be dropped from the Federal Reserve's list of dealers. 65

If the System's manager has an order from the Federal Reserve customer, such as a foreign account, that matches up with the Federal Reserve's needs, he may execute the order directly through the System's open market account. Since the trading desk keeps hourly records of all bid and offer prices being quoted by dealers for a full list of Treasury securities, foreign orders can be transacted directly with the System's portfolio at the "best" market prices. 66

When temporary additions to bank reserves are needed, the Manager may engage in short-term repurchase agreements with dealers. The Federal Reserve will buy securities from dealers who agree to repurchase them by a specified date. Repurchase Agreements are usually dated to terminate in from one to fifteen business days. Most terminate in less than seven, and dealers have the option to terminate agreements before maturity if they desire. 67 Pre-maturity withdrawals may also suit the needs of the Federal Reserve because they absorb reserves. These pre-maturity withdrawals
occur often due to a greater than anticipated reserve availability which results in reduced dealer borrowing costs or large sales by dealers.

Repurchase agreements are distributed among dealers through an auction. All dealers are informed of the auction, but because banks have access to the federal funds market and discount window, only nonbank dealers are asked to submit tenders. Individual dealers may enter more than one bid at various rates. The Manager arrays bids in descending order and accepts the amount needed to fulfill the Federal Reserve's needs.

When the Federal Reserve needs to withdraw funds only temporarily, the Manager will make matched sale-purchase transactions. This involves a contract with dealers, both bank and non-bank, for immediate sale to and a matching contract for purchase from the participating dealers. Maturities of these transactions usually do not exceed seven days. The initial sale causes reserves to flow from the banks and dealers to the Federal Reserve. Upon maturity, the Federal Reserve will buy these securities and the flow of funds will be reversed.

The "Bills Only" Policy

With a monetary system based on paper, the public must have confidence in the paper itself, as well as in the people who buy, sell, and hold the paper. The Manager of the System's portfolio needs to be highly respected by the public and uninfluenced by ulterior motives or political pressures. Since securities are likely to be sold in the future because of credit management functions, it is necessary that an adequate percentage of the securities of a desirable type and maturity be available. Since the FOMC is largely restricted to U. S. government securities for its open market operations, maturities are very important. This is due to the fact that
all U. S. government securities are free of default risk, highly liquid assets, and have an active market. The only differences are due to the length of time until maturity. With an announcement of the Treasury - Federal Reserve Accord on March 4, 1951, the Federal Open Market Committee moved toward a policy of freeing the bond market. On May 17, 1951 the FOMC authorized the creation of an ad-hoc subcommittee to study the effects of its operations upon the functions of the Government Securities Market.70 The principal recommendations of the subcommittee were adopted by the FOMC at the meeting on March 4, 1953. The subcommittee recommended that the FOMC stop operating at all maturities and concentrate in short-term maturities only. The objective of operating in Treasury Bills was to promote the making of better markets and to bring about a smooth market due to lack of uncertainty about the Federal Reserve's operations.71

Treasury Bills were used to implement monetary policy for many reasons. Many people felt that the uncertainty existing among dealers and investors with respect to FOMC intervention resulted in less depth, breadth, and resiliency in the market. It was felt that operating in short-term securities would provide assurances to investors and would result in a market of greater depth, breadth, and resilience. It was felt if open market operations were conducted in a smaller market, such as longer term securities, the reactions would be too violent.72 The effects of changes in any section of the U. S. government securities market are transmitted through arbitrage to all sections. Operations confined to short-term securities were believed to bring about more rapid effects. It was also felt that operations in Treasury Bills only would be effective because they are a highly desirable holding for central bank portfolios.
Demand for short-term securities is relatively elastic with respect to changes in the prices of securities. Due to the narrow price ranges these securities can be bought and sold without causing immense changes in interest rates. The "Bills only" policy was believed to contribute to these narrow spreads and result in better dealer performance in both short and long-term securities.\textsuperscript{73} It was believed that operations in long term securities would cause sharp changes in bond prices and interest rates.

The use of the "Bills only" policy lasted until February 20, 1961, when the Federal Reserve announced that it was terminating the policy. This was recommended as a means of solving problems created by the recession and balance of payments. The government wanted to lower long-term rates and raise short-term rates. This was known as "Operation Twist." Under the "Bills-only" policy, this would not be possible because lowering short term rates would lower long term rates.

The Federal Reserve now deals in a "Bills Preferably" policy. Longer term securities are bought when the market of Treasury Bills is temporarily depleted and longer term issues are available. Sometimes the FOMC will purchase longer term securities to implement a specific interest rate strategy. The impact of such transactions tends to be marginal because the term structure of interest rates is influenced by the expectations of the market participants as a group.\textsuperscript{74}

With the "Bills Preferably" policy the Federal Reserve can operate in longer term securities without the public knowing that it has been in the market. It may contact directly those dealers who have already shown their offerings. The Federal Reserve will ask to make sure these securities are available and the terms involved. If these dealers can fulfill the Federal Reserve's needs, other dealers may not be approached.\textsuperscript{75}
RECENT AND FUTURE CHANGES

There have been many recent changes which have altered the power and policies of the Federal Reserve System. Many more changes are expected in the future.

Monetary Policy

Effective monetary policy occurs through the coordinated use of open market operations, the discount rate, and reserve requirements. In April of 1975 Congress asked the Federal Reserve System to announce target rates for the growth in the money supply.\(^76\) Up to this point in time the Federal Reserve had been concerned with the growth of bank reserves, money market conditions, and the Federal funds rate, which was considered a key economic indicator. This rate, which is the rate at which banks are willing to lend or borrow excess reserves on an overnight basis, reflected the tightness or ease of reserves. Many economists felt that the cause of most economic instability was unstable governmental policies, especially monetary policy. Excessive monetary growth was responsible for inflation, and inflation was responsible for high interest rates.\(^77\) It was felt that a stable growth in the money supply, consistent with economic growth, would be the answer. The Federal Reserve was asked to focus more on monetary aggregates and less on interest rates.\(^78\)

Monetary policy for most of the post World War II period had been procyclical rather than contracyclical. Instead of sticking to a determined rate of monetary growth, the Federal Reserve had inflated in periods when the demand for money was strong, and deflated when demand was weak. It kept interest rates from rising as much as necessary when the economy needed to be tightened, and it kept them from falling when the economy needed stimulation. "The Federal Reserve thus helped to exacerbate economic
dislocations, turning expansions into runaway booms and contractions into full-scale recessions. 79

After the actions by OPEC in 1973–74 increased oil prices, the subsequent actions of the Federal Reserve made it evident that watching aggregates was not enough. Congress passed a resolution asking the Federal Reserve to maintain growth consistent with economic growth, maximization of employment, a stable dollar, and moderate interest rates. It asked the Federal Reserve to report to Congress with yearly targets for future monetary growth. 80

Although the Federal Reserve is supposed to control long-term growth in the money supply, it has generally responded to the economy by adhering to its traditional interest rate targets and temporarily abandoned its money supply goals. Consequently, it has done a poor job of achieving its target growth rates. From 1965 through the first quarter of 1975, when the Federal Reserve was not paying attention to the monetary aggregates, it did a better job of controlling monetary growth. 81

Many people think that the Federal Reserve would be more effective in controlling monetary growth if there were less Federal Reserve rules and regulations. The monetary base is an important indicator of the amount of raw material available to the banking system and the money supply. The Federal Reserve, while trying to control interest rates, has not controlled the growth in the monetary base. This has resulted in an increased growth in the monetary supply. Many economists feel that the link between the growth of the monetary base and the money supply is unstable due to the complex number of regulations. An economist at the Pittsburgh National Bank feels that the "use of the monetary base would be made easier if the Federal Reserve floated the Discount rate at a premium over the Federal funds rate." 82
Interest Rates

After Congress passed the resolution asking the Federal Reserve to pay more attention to monetary growth and less to interest rates, controversies appeared concerning the economy's ability to survive the interest rate changes which would accompany a policy of rigid monetary growth. One economist answered this by saying:

Now you do get some noise in short-term rates, but it might not be any larger if the Federal Reserve stopped trying to stabilize them - this may just be a case of a government agency trying to do a job that should be left to private arbitrageurs.\textsuperscript{63}

The Federal Reserve is under immense pressure due to the fact that every time interest rates rise, there is an outcry from Congress. The Federal Reserve is caught between its responsibility to control the money supply, which affects the level of interest rates, and controlling the level of interest rates themselves. One economist suggested that this problem could be overcome by not letting the Federal Reserve have any control over interest rates. Monetary policy could be achieved by regulating the amounts of reserves in the System. This would affect interest rates, but operations would not have specific target rates in mind.\textsuperscript{64}

The Definition of the Money Supply

In addition to increased attention being paid to the growth rate of the money supply, the Federal Reserve has become concerned with the definition of the money supply itself. On February 7, 1980, the Federal Reserve changed its definition of the money supply to account for the growth of negotiated orders of withdrawal (NOW) accounts and automatic transfer services (ATS). The change is hoped to make it easier for the Federal Reserve to control the money supply and monetary growth. In addition to this
change in the definition of the money supply, the Federal Reserve is also considering changing the system by which commercial banks determine their required level of reserves. The present system, which has been in effect since 1968, is said to make monetary control more difficult.  

**Banking Reform Act**

A bill designed to reform the banking system was passed recently which gives the Federal Reserve new powers to control monetary growth. The bill provides the Federal Reserve with emergency authority to boost reserve requirements to any level it desires, and it extends the Federal Reserve's authority to control the growth of checking accounts by raising reserve requirements. The bill extends from 4,600 to 40,000 the number of institutions which could be regulated through reserve requirements. The bill will prohibit the establishment of bank trust offices across state lines for eighteen months. It will increase the amount of Federal Deposit Insurance to 100,000 dollars, and it will prohibit foreign bank acquisitions until July 1. This will also gradually phase out the Regulation Q ceilings within six years by increasing ceilings to market rates.

**Growth of Eurocurrency Deposits**

The growth of eurocurrency deposits due to the increase in multinational trade has raised many questions concerning the Federal Reserve and its international operations. There are currently no reserves needed for eurocurrency deposits, and many people think that the Federal Reserve should place requirements on these deposits. It was felt that unregulated eurocurrency deposits may be inflationary and lead to monetary expansion. Other economists feel that reserve requirements on all types of deposits should be eliminated. The argument stating that without reserve requirements
the money multiplier would approach infinity does not consider the leakages from the banking system. Due to leakages such as currency and other money substitutes, some of the borrowed funds will not return to the banking system. Individual banks will loan money only if the returns received are greater than the risks and costs associated with making the loan. Banks are in business to earn money; this profit motive placed limits on the size of the banking system even without reserve requirements. Some feel that reserve requirements even hinder the effectiveness of open market operations and should be eliminated for this reason.

Treasury Accounts

Since 1977 financial institutions have been able to retain Treasury funds at market based interest rates. This system has alleviated the amounts and complexities of open market operations resulting from the Treasury's procedure of holding the bulk of its balances at the Federal Reserve Banks. This has facilitated the execution of monetary policy. Under this system the Treasury has been able to obtain a return which had previously been achieved through Federal Reserve earnings. This has been done without the operational complications of open market operations.

CONCLUSION

The monetary policies of the United States are implemented through the instruments available to the Federal Reserve. These are the discount rate, reserve requirements, and open market operations. Open market operations are the most widely used because of their flexibility, adaptability, timeliness, and general widespread effects. All open market operations are conducted by the System's account manager at the Federal Reserve Bank of New York, and they are coordinated by the Federal Open Market Committee.
Open market operations are conducted daily in order to implement monetary policy. In recent years the Federal Reserve has been asked to increase its concentration on monetary growth and lessen its attention on interest rates. This has been initiated through new definitions of the money supply, concentration on the monetary base, and banking reform acts giving the Federal Reserve more authority. There have been suggestions made regarding the elimination of reserve requirements on all types of deposits, changing the powers of the Federal Reserve so that it can not alter interest rates as a main objective of policies, and the total restructuring of the powers of the Federal Reserve. Whether these suggestions become reality remains to be seen.

The Federal Reserve System has been faced with awesome and complex situations since it was created in 1913. In some situations it has been instrumental in alleviating economic problems, and in others it has done the wrong things. This System has contributed greatly to the stability, prosperity, and growth the United States has achieved in the last century, and it will play an even wider role in the coming years.
ENDNOTES

3. Ibid.
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30. Ibid.
32. U. S. Board of Governors, op. cit., p. 72.
34. U. S. Board of Governors, op. cit., p. 74.
35. Ibid.
37. U. S. Board of Governors, op. cit., p. 82.
39. U. S. Board of Governors, op. cit., p. 79.
40. Ibid.
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43. U. S. Board of Governors, op. cit., p. 87.
44. U. S. Board of Governors, op. cit., p. 89.
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49. U. S. Board of Governors, op. cit., p. 91.
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52. U. S. Board of Governors, op. cit., p. 57.
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60. Henning, Charles N., op. cit., p. 468.
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73. Scott, Ira O. Jr., op. cit., p. 162.
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