

I Bet You Thought

David H. Friedman

Federal Reserve Bank of New York

Public Information Department

Federal Reserve Bank of New York

33 Liberty Street

New York, New York 10045

Preface

Most of us acquire two types of knowledge - "school knowledge" and "folk knowledge." Folk knowledge is information and "wisdom" passed from generation to generation or acquired on the streets.

For example, we're often told that sitting in a draft will give us a cold. Science tells us the common cold results from a virus. Yet, still we change our seat to avoid a draft. We may acknowledge that drafts only contribute to lowering our resistance to infection, but we still blame the breeze rather than the bug.

So too, most of us hold certain economic misconceptions - folk knowledge containing a germ of truth and a plague of misconception, economic myths picked up by misreading or the acceptance of "facts" from a friend or relative. Few of us are immune to economic myths or misconceptions. If you don't think so. I bet you thought...

Table of Contents

Before reading this booklet, indicate whether each statement below is true or false. After, check your answers and rate yourself.

True False

1. Money is simply coin and paper currency.
2. Checks are money.
3. Only coin and currency are real monies because the government says they're "legal tender."
4. Gold and silver are the only perfect monies.
5. Credit cards are a new form of money.
6. Banks are part of the government.
7. All banks are the same.
8. Banks are so powerful they can fix interest rates on loans and deposits and do just about whatever else they please.
9. Wall Street banking interests established the Federal Reserve and control monetary policy.
10. The government reduces money's value by printing too much currency.
11. Checkbook money is "created" by currency deposits.
12. Gold "backing" gives the dollar its value.
13. The Federal Reserve controls the amount of currency in circulation.
14. Banks borrow money from the Federal Reserve at the discount rate and lend the funds at a higher rate to make a profit.

Money is simply coin and paper currency.

Money is any generally accepted medium of exchange, not simply coin and paper currency. Money doesn't have to be intrinsically valuable (valuable in itself), be issued by a government or be in any special form. In our past, items ranging from iron nails and dried codfish to gunpowder and tobacco have served as money.

Anything people generally accept in exchange for items of value is money. Money also is a standard for measuring value and a means of storing purchasing power for future use. Any item that has these three traits is money.

Today, Americans use several types of money: coin issued by the Treasury, paper currency issued by the Federal Reserve Banks, checkable deposits at depository institutions such as demand deposits and automatic transfer accounts at commercial banks, share draft accounts at credit unions, and negotiable orders of withdrawal (NOW) accounts at savings banks and savings and loan associations. Money in these accounts can be readily used for transactions. The most common form is the demand deposit.

Checkable deposits are the nation's most common form of money, comprising about 70 percent of all money in circulation. This checkbook money is bookkeeping money created mainly by the nation's commercial banks. Americans prefer using checkbook money because it performs as a more efficient medium of exchange than coin or currency for many transactions. Check writers have with one blank check the potential for spending small or large amounts. Since each check must be signed before funds are transferred, checkbook money cannot easily be stolen. In addition, cancelled checks provide written proof of payments. Since we prize convenience, safety and recordkeeping, it's no wonder that checkbook money is preferred.

Checkbook money works because people are confident in the strength, safety and prudence of the American banking system. Their confidence has been bolstered by government regulation of banks and government deposit insurance. The check clearing and collection system of the Federal Reserve, the nation's central bank, has also made checkbook money highly acceptable by speeding checking account transfers nationwide.

We've been big check users for quite a while. The move began in the post Civil War era, when bank deposits became the dominant form of money held. Today, if all payment transactions were counted, including those for stock, bond and real estate purchases, the dollar volume of check spending compared with coin and paper currency spending would be enormous.

Only about 3 percent of our money is in coins, and for every 10 cents in small change we keep, we hold about a dollar in paper money. As a nation, we hold only about \$150 billion of cash, compared with \$385 billion of checkbook money

Checks are money.

Checks aren't money in themselves. They are simply order forms instructing commercial banks and other depository institutions, such as savings banks and credit unions, to move transactions balances, which are money, from one account to another. Those checkbook deposits are bookkeeping entries on the ledgers and in the computers of depository institutions.

Banks don't keep cash in checking accounts and don't transfer currency or coin when acting on a check's instructions. Checkbook balances may be transferred between accounts as bookkeeping entries.

In 1983, the nation's 37,000-plus depository institutions held about \$375 billion of checkbook deposits for individuals and businesses.

Only coin and currency are real monies because the government says they're "legal tender."

Coin and currency are "legal tender," money the government says has to be accepted if offered to settle a debt. But that approval doesn't make cash any more "real" than checkbook money or similar transactions balances.

Until the 1860s, "legal tender" applied only to coin, yet even then we used more private bank notes and bank deposits as money than coin. Legal tender designation was given to certain government-issued paper currency during the Civil War to win public confidence in the paper money. However, there has been no meaningful distinction between "legal tender" and other U.S. money since 1933, when Congress made all coins and currencies legal tender for all public and private debts.

Regardless of what any government says, money must have certain characteristics that make it acceptable. Without those traits, even "legal tender" cannot be successful as money.

Governments did not issue most early monies. They were commodities, such as salt, cattle and rum that were widely known and easily sold or used. But commodities proved less than perfect monies. The tobacco used by the early Virginia settlers is an example.

The leaves weren't easily divisible, causing difficulty in "making change." The varying prices for different grades of tobacco made value difficult to determine. It also was hard to carry and store. Temperature and humidity changes caused flaking, which "devalued" the leaves. In short, tobacco lacked many characteristics needed to make it work well as money.

For an item to perform successfully as money it must be durable, divisible, portable and difficult to counterfeit. More important, as the Virginians' experience shows, while any item can serve as money, it won't work well or last long unless it can also serve well as a standard and store of value.

People's willingness to accept money, in any form, is rooted not in the law but in money's ability to effectively measure and hold value.

Gold and silver are the only perfect monies.

Gold and silver monies have been used for thousands of years, but they are far from perfect. Gold and silver always have been desired. The scarcity, luster, and almost mystical appeal of the metals made gold and silver acceptable as jewelry, armor and religious symbols. Gold and silver's use as commodities, and people's desire for them, established the acceptability of precious metal money centuries ago.

But precious metal, like all "commodity" monies, proved less than perfect. Coins were heavy and accumulation posed problems of safe transport and storage. Coins also could be remelted, mixed with common metals, and restruck, which reduced their intrinsic value. Gold and silver were scarce and as a result their value was high relative to common metals.

The history of American coinage deals largely with attempts to resolve problems of precious metal money.

For example, Congress issued paper money during the American Revolution because it lacked gold and silver coins and the metal to make them. In the 1870s, the U.S. allowed people to exchange silver dollars for paper dollars because the weight and size of the coins made them unpopular and little used. In the late 1960s, rising industrial demand forced silver's elimination from U.S. coinage.

Today's U.S. coins don't contain precious metal. The face value of our coins is greater than the value of the metal in the coins. We accept coins as "token" or "convenience" money for the small financial transactions of daily life, such as vending machine purchases, phone calls and tips.

The use of paper currency grew directly out of the problems of coins. The inconvenience of carrying and keeping safe large quantities of coin caused people in different societies to exchange paper receipts for coin or bullion held in a national treasury or private bank. More important, paper money was often used to overcome the scarcity of precious metal coins.

Paper money, however, also proved less than perfect. The basic problem concerned its source. When money was predominantly gold and silver coin, governments were prevented from issuing more coin by the amount of metal in their treasuries, dug out of the ground, or obtained for goods sold to other nations. Without similar restrictions on currency, governments and banks could over issue, reducing the value of each note, and jeopardizing paper money's acceptability by making currency a poor store of value.

During the American Revolution, Congress so over issued continental currency its value almost disappeared. Indeed, the expression "not worth a continental" was widely used then to connote worthlessness. The colonists were so angered that after independence, Congress didn't issue paper money for over 70 years, even though it had the Constitutional power to "coin money" and "regulate" its value.

Until the Civil War, state-chartered banks issued their own currency. In the early 1860s, as many as 10,000 different bank note issues circulated. Banks were pledged to redeem their notes for coin or bullion, but because many banks had only a fraction of the precious coin or metal needed for repayment, and because many were headquartered in remote regions, the value of their notes was suspect. The result was a chaotic currency system in which people sometimes accepted bank notes at less than face value.

Until after the establishment of the Federal Reserve System in December 1913, the U.S. didn't have an "elastic" currency, a currency whose supply could expand or contract to meet seasonal variations in the public's demand for money.

Credit cards are a new form of money.

Credit cards aren't a form of money, but a "deferred payment" device, a means of obtaining goods and services by promising to pay later. Credit card transactions are similar to loans.

When you use a credit card, the card company pays what you owe to the merchant directly and immediately. In time, you receive a bill from the credit card company, which you can either pay fully, or partially, with cash or checkbook money. Until you pay, the credit card company is extending you credit for which you will pay interest after a short period.

Many credit cards carry a "credit line," a maximum amount the issuer will lend you. A \$1,000 credit line allows you to accumulate \$1,000 in unpaid purchases or cash advances. Credit lines are prearranged loans that become effective when used.

All commercial bank lending depends on the availability of reserves. As the amount of reserves available for lending - so-called "excess" reserves-grows smaller, banks will have to ration loans among competing borrowers. Commercial banks alone lent about \$45 billion through credit cards and related plans in 1983, which was about 20 percent of their consumer loans to individuals that year.

Even though credit cards aren't money, they affect the way we spend money and, in that sense, are important to understanding people's purchasing behavior.

Banks are part of the government.

Many banks carry very official-sounding names, like "Bank of America" and "State Bank of Albany," but they aren't run by, owned, or part of government.

Commercial banks are privately owned businesses trying to earn profits primarily by lending money to other businesses, individuals and governments. Don't get the wrong impression from the government-type seals on their windows.

Banks must be licensed to operate. The license, called a "charter," is given either by the federal government (Comptroller of the Currency) or the government of the state in which the bank wants to operate. Banks choosing federal charters, about 30 percent of all commercial banks, must have the word "National" in their name or the letters "N.A." (National Association) after their title. State-chartered banks don't have to use the word "State" in their names, but many do.

Banks must meet government rules and regulations. Banks with federal charters, for example, must join the Federal Reserve System. The System - an independent agency created by Congress - regulates the nation's flow of money and credit and exercises some supervisory and regulatory powers. State-chartered banks may join the Federal Reserve, an option chosen by only 10 percent of the nation's 10,000 state-chartered commercial banks.

Banks belonging to the Federal Reserve may display a seal on their main window indicating they are a "member of the Federal Reserve System." Member commercial banks are subject to many Federal Reserve regulations but Federal Reserve membership doesn't make a bank a "member" of the federal government.

Regardless of their federal or state charter, all banks can join another "Federal" organization, the Federal Deposit Insurance Corporation (FDIC). Congress established the FDIC in 1933 to insure depositors against loss when a bank fails. Virtually all U.S. commercial banks and mutual savings banks are FDIC members; credit unions and savings and loan associations are also insured by federal agencies. Most depository institutions have a seal on their main door or near tellers' windows indicating that deposits are insured up to a maximum, which Congress sets, of \$100,000 per account. But again, that "membership" doesn't mean the bank is part of, run by, or owned by the government.

Most commercial banks in this country are small, locally owned businesses, with no branches, just a few employees, and a few million dollars of deposits. Relatively few commercial banks are big businesses with many branch offices and thousands of employees. Concentrated mainly in major cities, these big banks, like Chase Manhattan and Chemical Bank in New York City, and Bank of America in San Francisco, are owned by public stockholders. Their ownership shares are bought and sold on the stock exchanges.

Commercial banks try to earn profits for stockholders by lending money and by investing in federal, state and local government securities. Most commercial bank loans are to businesses, which need funds for such purposes as buying raw materials and modernizing factories.

Although many of the largest banks aim most of their advertising at consumers, only about \$1.85 of every \$10 lent by commercial banks are "consumer" loans. About \$3.75 of every \$10 lent is "commercial and industrial" loans. Real estate loans take about \$2.90, and loans to financial firms, farmers, or others about \$1.60 of every \$10 lent.

All banks are the same.

There are a lot of financial institutions that people think of as banks. Among them are commercial banks, savings and loan associations, savings banks and credit unions. Though all operate under either a federal or state charter, they are not all the same. While they differ in their corporate form, the most important differences among them are in the banking functions they perform and the customers they serve.

Commercial banks were chartered to service primarily the credit and deposit needs of business even though they also made loans to and held the deposits of consumers in what were mainly interest rate regulated accounts. Savings and loan associations, savings banks and credit unions - called "thrifts" - were chartered to serve the banking needs of consumers by making home mortgage loans and by holding their savings in passbook accounts.

Since the late 1970s, the banking powers of thrifts have been expanded. Like commercial banks, thrifts can now offer a variety of savings certificates that pay market-related interest rates. Further, they can offer deposit accounts that pay interest on which checks can be written, such as a negotiable order of withdrawal (NOW) account. In addition, thrifts can also make loans to businesses, issue credit cards and provide certain types of trust and fiduciary services.

While thrifts have become more like commercial banks, the banking functions they perform and the customers they serve are still basically geared to meeting the depository and credit needs of consumers.

Banks are so powerful they can fix interest rates on loans and deposits and do just about whatever else they please.

Banks cannot do whatever they please. Their marketplace "power" and their ability to set interest rates are highly restricted by laws and government rules and regulations, and by active competition among banks and other depository institutions.

There are four federal agencies that have bank regulatory responsibilities. Federally chartered banks are regulated by the Comptroller of the Currency, a part of the Treasury Department that serves as the federal government's bank chartering agency. Since all federally chartered banks must belong to the Federal Reserve System, they are also subject to the central bank's rules.

Both the chartering state government and the Federal Deposit Insurance Corporation regulates nonmember banks. In addition, all commercial banks are subject to the authority of the Justice Department, if their activities appear to violate antitrust laws.

The broad goal of government regulation of banks is to safeguard the public's money by making sure banks are operating prudently. Federal and state laws, for example, prohibit banks from investing in common stocks, and limit the maximum loan they can make to one borrower.

Furthermore, banks cannot open new branches, merge with other banks, affiliate with other businesses, such as credit card companies, or change business hours unless the regulatory agencies say okay.

In recent years, regulators have focused on bank lending and advertising practices. Recent legislation, for example, has aimed at eliminating racial and sexual discrimination in lending and requires that borrowers be informed of the precise conditions and terms of loans.

Commercial banks must conform to federal and state laws on interest charged on some loans and interest paid on deposits. State "usury" laws set the legal interest rate limit on loans to individuals. State governments also determine maximum rates on residential mortgage loans and on interest-earning (time) deposits at state-chartered banks.

In 1933, Congress prohibited commercial banks from paying interest on checking account funds (demand deposits). At the same time, Congress gave the Federal Reserve power to set ceilings on what member commercial banks could pay in interest on time deposits. Uninsured banks are limited to the maximum rates established by the states. Since the 1930s, the FDIC's interest rate ceilings for insured nonmember banks have matched those imposed by the Federal Reserve. In 1980, legislation was passed to gradually phase out rate ceilings on interest-earning accounts at banks, savings banks, and savings and loan associations.

Commercial banks, however, do not charge the same rates for similar loans or pay the same rates for similar deposits. Commercial banks actively compete against each other and against "thrift institutions" - savings banks, savings and loan associations and credit unions - for deposits and many types of loans.

It is not uncommon for banks in the same area to have different automobile, home improvement or mortgage loan rates, different rates on savings and time deposits and different charges for financial services, such as money orders, personalized checks, and checking accounts.

Wall Street banking interests established the Federal Reserve and control monetary policy.

In 1913, the most vocal opposition to the Federal Reserve came from the Wall Street banking community. In part, that opposition stemmed from the intent of Congress to establish the Federal Reserve with built-in "checks and balances" specifically to insure that monetary policy-making would be decentralized and made in the broad national interest. The System's structure, organization and relationship to Congress make it impossible for any private interest group to dominate monetary policy.

The Federal Reserve System consists of three interlocking parts - a seven-member Washington-based Board of Governors, 12 regional Reserve Banks, and the Federal Open Market Committee.

The Board of Governors is a government agency. The President of the U.S. with the advice and consent of the Senate appoint each Governor to a 14-year term. Terms are staggered for an

appointment every two years. By law, Governors must come from different regions of the country, and "fair representation" must be given to financial, agricultural, industrial and commercial interests in their selection.

The 12 regional Reserve Banks aren't government institutions but corporations nominally "owned" by member commercial banks, who must buy special, nonmarketable stock in their district Federal Reserve Bank. Each Reserve Bank has nine directors, who serve three-year staggered terms. As stockholders, member banks elect the majority of the directors (six), but only three bankers can serve on a board, representing a small, medium and large bank. Thus, the most powerful banks cannot dominate the banking directors.

The Board of Governors, as required by the Federal Reserve Act, appoints the remaining three directors. The three Board-appointed directors must represent the public generally with consideration given to the interests of agriculture, commerce, industry, labor and consumers.

In recent years, the New York Reserve Bank's directors have included chairmen and presidents of corporations and banks throughout the New York Federal Reserve District. But educators, a civil rights activist, law firm partners, and the president of a philanthropic organization also have been recent New York Reserve Bank directors.

Reserve Bank directors appoint their Reserve Bank president. The Board of Governors must approve directors' appointments of presidents.

The Federal Open Market Committee (FOMC) is the System's key policymaking group. The FOMC, which meets eight times a year in Washington, D.C., to decide the course of monetary policy, consists of all seven Governors and five Reserve Bank presidents, four of whom serve one-year terms on a rotating basis. The president of the New York Reserve Bank, who traditionally serves as vice chairman, is the only Reserve Bank president who serves as a permanent FOMC member.

FOMC decisions aren't secret. A summary of the deliberations and record of policy actions are made public about 50 days after each meeting. A record of the vote of each member of the Committee appears after the formal policy decision, called the "directive." Dissenting votes are recorded with the reasons for the dissent. The 50-day delay is designed to avoid creating excessive reactions to policy moves that might hinder the functioning of markets and the orderly implementation of policy decisions.

What's more, the chairman of the Federal Reserve Board of Governors formally reports to Congress twice each year on the course of monetary policy and the Federal Reserve's long-term objectives. In addition, System Governors routinely testify on key economic and banking issues before House and Senate committees.

The Federal Reserve is unique among government-type institutions in that it is "independent" within the federal government. Congress specifically structured the Federal Reserve so that monetary policy judgments and actions would be made nonpolitically. The 14-year term for Governors is an example of that intent.

Neither the System's monetary policies nor its banking activities are designed to guarantee profits for anyone.

Almost all Federal Reserve earnings come from the interest paid by the U.S. government on the \$160 billion or so of government securities, including federal agency issues, the System acquired over the years for monetary policy purposes.

In 1983, the System earned just over \$16 billion. About 90 percent of this was returned to the U.S. Treasury. Funds retained by the System are used to pay the budgeted expenses of the Reserve Banks and the Board, maintain a small surplus, and pay the 6 percent statutory dividend on the Reserve Bank stock held by member banks. Except for this dividend, member banks don't share in the System's earnings.

The government reduces money's value by printing too much currency.

The Bureau of Engraving and Printing in Washington, D.C., a unit of the Treasury, is responsible for printing the nation's currency. But its orders to print come from the 12 Federal Reserve Banks, not the President or Congress. The Reserve Banks, not the Treasury, determine how much currency is printed, based mainly on estimates of depository institutions and public cash demands. Under this arrangement, the government can't print more Federal Reserve notes to pay its bills or debts.

Since most U.S. money is checkbook money, the printing presses have little to do with the buying power of money. Maintaining money's value involves the Federal Reserve's control over commercial bank reserves. It is through these reserves that banks can create checkbook money by lending.

The Federal Reserve controls the amount of bank reserves in three ways. Starting in 1980, all depository institutions that maintain transactions accounts, whether or not they are members of the Federal Reserve System, are required to maintain reserves against deposits either in the form of coin and currency in their vaults or as balances at their district Reserve Bank. By raising the percentage of reserves that must be held, the Federal Reserve reduces banks' ability to create more money. Lowering reserve requirements increases banks' money-creating ability.

Second, the Federal Reserve may lend money, generally for only a day or two, to depository institutions. Prior to 1980, this borrowing privilege was available only to member banks. For credit extended, the Federal Reserve charges interest, called the "discount rate." Changes in the discount rate have the effect of making Federal Reserve loans more or less attractive.

The most important control is open market operations - buying and selling U.S. government securities through some three dozen private dealer firms. When the Federal Reserve sells securities from its \$160 billion portfolio, dealers pay with checkbook money that is taken out of circulation when the checkbook funds are transferred from dealers' banks to the Federal Reserve. When the Federal Reserve buys securities, it pays with checkbook money, increasing money in circulation.

Checkbook money is "created" by currency deposits.

Commercial banks create checkbook money whenever they grant a loan, simply by adding new deposit dollars to accounts on their books in exchange for a borrower's IOU.

Money creation bookkeeping isn't gimmicky. Far from it. Banks are creating money based on a borrower's promise to repay (the IOU), which, in turn, is often secured or backed by valuable items the borrower owns (collateral).

Someone obtaining an auto loan, for example, might use the new car as collateral. A home improvement loan might be secured by the homeowner's equity in the house being improved. Business loans may be secured by physical assets, such as machines, factories and inventories, or may be "unsecured," backed only by the company's earnings record and expectations or general creditworthiness.

Banks create money by "monetizing" the private debts of businesses, individuals and governments. That is, they create amounts of money against the value of those IOUs.

To create money, however, banks must have "excess" reserves, funds exceeding those they are legally required to hold.

Even without legal rules, prudent banking dictates that some reserves be held. Bankers know that, on any given day, they will have to pay out coin and currency to people cashing personal checks. They also know that they will have to transfer reserve balances as checks drawn against accounts they hold are presented for payment by other banks. Meeting these routine transactions requires that banks hold some reserve funds.

If a bank has excess reserves, it can create an amount of money equal to that excess; it can grant a loan. Borrowers write checks against their new deposits. When these checks are deposited at other banks, those banks collect payment from the borrower's bank. Bankers know that when other banks present borrower's checks for payment, they will have to transfer reserves on a dollar-for-dollar basis.

If a bank creates an amount greater than its excess reserves, it also would lose some required reserves and face temporary violation of requirement rules. Prolonged violation of requirement rules subjects banks to penalties. So they tend to match lending to excess reserves. A bank short of required reserves usually will borrow from another bank. Or it can borrow from the Federal Reserve.

As checkbook dollars move from bank to bank, banks gaining excess reserves can make additional loans.

Deposit creation, rather than currency deposits, accounts for most of the \$375 billion of checkbook money. Banks hold only about \$40 billion of reserves. Only \$20 billion of that total is cash. The remaining reserves are deposit balances at Federal Reserve Banks. Reserves are the base on which the banking system has generated the bulk of the nation's money.

Gold "backing" gives the dollar its value.

Until 1968, U.S. currency had to be partially backed by gold. However, gold never gave the dollar its value. The dollar's value always has been determined by the amount of goods and services it can buy - its purchasing power. Gold backing was required through most of U.S. history as a means of restraining government over issuance of paper money and improving public

confidence, and, therefore, the acceptability of paper money.

When the Federal Reserve was established, Congress required the 12 Reserve Banks to back their currency, known then as Federal Reserve bank notes and today as Federal Reserve notes, with gold and "eligible paper" (short-term IOUs of businesses and farmers). Gold was bought from the Treasury. Eligible paper was obtained from commercial banks that presented these customer IOUs as collateral for loans. Essentially, only those IOUs representing commercial bank loans made to expand manufacturing or farm output were designated "eligible" as collateral by the Federal Reserve.

The backing requirements on Federal Reserve notes were designed to regulate currency issuance automatically to the pace of the economy's growth, since only increased business activity and bank lending could generate the collateral necessary for more note issuance.

Backing requirements were liberalized and reduced over the years, as we gained better insight into how the economy works and how money should be regulated.

By the 1930s, Congress allowed Reserve Banks to use assets other than eligible paper, such as U.S. government securities, to back currency. In 1968, Congress, eliminated gold backing entirely.

Federal Reserve notes are still "backed" dollar for dollar by the assets of the Reserve Banks. About 90 percent of these assets consist of U.S. government and agency securities the Federal Reserve purchased over the years. The remaining 10 percent consist primarily of certificates representing pledges against the Treasury's gold supply.

Currency backing isn't relevant in today's economy. Currency cannot be "redeemed," or exchanged, for Treasury gold or any other asset used as backing. The question of just what assets "back" Federal Reserve notes has little but bookkeeping significance.

Money's value, however, is highly relevant. Maintaining the dollar's value means maintaining its purchasing power. Rising prices - inflation - reduce purchasing power; stable prices keep purchasing power strong.

Too much money results in excess spending. When consumers, businesses and governments spend excessively, they compete for the available supply of goods and services and force prices up. When prices rise, the purchasing power of money falls. To keep purchasing power strong, then, the supply of money must not increase too rapidly.

The Federal Reserve controls the amount of currency in circulation.

The Federal Reserve doesn't control the amount of "currency" in circulation. The public does. The Federal Reserve, however, determines the total amount of "money" in circulation.

When people want more currency, they draw on their accounts at banks or thrifts. When banks want more currency they can purchase it from their Reserve Bank with the checkbook money they have on deposit as part of their required reserves. Only the composition of the money supply changes when the public alters the form in which it holds money balances.

The public has shown, over the years, a very strong preference for checkbook money over cash. At particular times of the year, however, such as in December, this long-term preference shifts decidedly toward cash, and more than \$2 billion in currency and coin is taken out of banks to be used by the public. In January, demand shifts back to checkbook money, and cash returns to the banking system.

The Federal Reserve doesn't try to alter public preferences, but can accommodate them by selling currency to banks and thrifts to meet public demand and accepting currency deposits to reserve accounts as demand slackens.

Banks borrow money from the Federal Reserve at the discount rate and lend the funds at a higher rate to make a profit.

Federal Reserve banks can provide credit to commercial banks and thrifts in a way that seeks to assure these loans will be used to allow orderly adjustments to short-term drains of funds. In 1980, certain other depository institutions were given access to the Fed's discount window. Fed loans are not designed to meet a continuing need for funds.

Periodically, banks can suffer reserve deficiencies when depositors unexpectedly make large withdrawals or when loan demand rises beyond anticipated levels. A bank faced with a temporary reserve deficiency has various options. The bank can adjust its assets and liabilities by turning down new loan requests, by obtaining new deposits, by selling off some investments, such as government securities, or by borrowing in the money market. Or, it can borrow at the Reserve Bank "discount window" for a relatively short period.

In administering the discount window, Federal Reserve Bank officers keep a careful record of how much banks are borrowing, how often and for how long. A bank that relies too heavily on the discount window can expect a call from one of the Fed's officers to discuss the reasons for its borrowings.

Borrowings at the discount window by large banks with access to national money markets are typically for only one day at a time. These larger banks are expected to try to satisfy their short-term liquidity needs by borrowing reserves elsewhere before approaching the Federal Reserve. Smaller banks without this type of access to alternative sources of funds might use discount window credit for longer periods, perhaps several weeks, while they adjust their asset and liability positions.

Aside from short-term adjustment credit, certain other types of credit are available at the discount window. One type is aimed at relieving "seasonal" reserve drains usually seen at smaller rural banks. Another is aimed at banks serving areas hit by unusual problems, such as flood or earthquake, or an individual bank facing exceptional difficulties. The Fed also has limited and rarely used authority to lend to nonbank institutions such as corporations and even individuals. These emergency loans will be granted only if the borrowers cannot get credit from other sources and their failure to get credit would adversely affect the economy.

The discount window gets its name from the earlier practice of banks bringing to a teller's cage, or window, customer notes against which banks then borrowed. The Fed "discounted" the notes, in effect lending the banks an amount less than the face value of the notes. Today, all Federal Reserve credit is extended in the form of advances which must be secured by satisfactory collateral.