

Lecture 9: Money and the Federal Reserve System

Previously we have assumed that the money supply is whatever the government wants it to be as a simplification to present previous material. In this lecture, we will be looking at how money is actually created. However, before we do that we must know exactly what constitutes money.

Just what is Money

The best place to begin is with a simple discussion of some basic topics about money:

- Three functions of money
- The forms money has taken
- Money today

The Three Functions of Money

Many different things have served as money over the years. Any thing that serves all of the following purposes can be thought of as money:

Money is a Medium of Exchange

Money liberates us from the perils of a barter economy. People who literally work for money, as opposed to what money can buy, are candidates for psychotherapy. However, the cost of exchanging goods and services for each other directly instead of using a medium of exchange is very high.

Money is a Storer of Value.

We keep our assets or at least part of our assets in money, but watch the following trick question:

Table 9-1 Just What is Money
Fred has the following assets: Stocks with a market value of \$400,000 Government Bonds worth \$100,000 A \$50,000 Certificate of Deposit \$500 in Currency \$10,000 in a checking account at the 87 th National Bank \$15,000 in gold coins
How much money does he have?

Money is a Unit of Account

Most debts and prices are stated in terms of dollars. In other countries the currency might be

¥	Yen	Japan
£	Pounds Sterling	United Kingdom
€	Euro	European Union

A country need not have its own currency, many counties (Panama, for example), use the US dollar, and indeed, there are more \$100 bills in circulation in Russia than in the USA.

Forms Money has taken

We will talk about things we use as money shortly, but there is a long history of different commodities used as money. For many years, Gold was a form of money. However, even gold had problems. How could you be sure that the piece of yellow metal you were offered as payment for something was actually gold, of the right purity, and of the right amount? Governments often came to the rescue here, by taking (say) a pile of gold nuggets, assaying them for purity, weighing them, and then minting them in coins which were then returned to the owner of the gold (less a service charge). Because the government made the coins, subsequent holders could be sure of their value. The government milled the edges of the coins to prevent clipping, and imposed severe penalties on counterfeiters.

Gold is an example of commodity money. Commodity money is money that has intrinsic value, or value unto itself. Besides gold, there have been many other types of commodity money that have been used.

In the early days of colonial America, people used Indian wampum, tobacco (Colonial Virginia had an established church, and paid its ministers in tobacco), grain, fish, and furs as mediums of exchange. These forms of money were not as convenient as gold coins. They were big and bulky and not of uniform quality. Many Anglican priests in Virginia were paid in poor quality tobacco.

There is a famous study of a POW camp in World War II, where cigarettes constituted the money supply. Massive cycles of inflation and deflation took place as distribution of Red Cross Parcels came and went. We know from the previous lecture that changes in the money supply will lead to changes in the price level, after adjusting for economic growth. In the POW experience, when a new package of cigarettes arrived, the money supply increased and inflation soon followed. If no new packages arrived, then the money supply would shrink as prisoners lit up, causing prices to fall.

Paper money is a relatively new phenomenon. The Continental Congress paid for much of the cost of the Revolutionary War by issuing paper money, commonly called *Continentials*. They issued so many Continentals that, in the 1780's they were essentially worthless. After the American Revolution, state-chartered banks began issuing paper money. Between 1789 and 1865 over 30,000 different types of paper bills were issued by 1600 banks in 34 different states. People preferred to be paid in gold rather than in one of these uncertain currencies. If the bank went bankrupt, then the paper money was worthless.

In 1861, the US government issued greenbacks, the first national paper money to finance the War Between the States. The authority of the *National Banking Act* of 1863 gave the federal government permanent authority to issue money. But many banks issued these notes themselves, and the consequence was continued uncertainty about the value of money. The value of greenbacks (in terms of Gold) rose and fell with the fortunes of the Union Army during the War Between the States.

Stability of greenbacks was not restored until 1876, when the Federal Government guaranteed its convertibility into Gold at par, which had long been established at \$20.67 an ounce. At this time the paper money became what is known as commodity backed money. This meant that the government would convert \$20.67 of paper money into an ounce of gold on demand or give \$20.67 in paper money for one ounce of gold.

Today, Gold plays no role in our monetary system. In 1933, President Roosevelt ended the domestic convertibility of paper money into gold, at the same time restating its value at \$35 an ounce for international purposes. At the risk of getting ahead of our story (we talk about the international monetary system later), President Nixon ended that convertibility in 1972, effectively linking any relation between our monetary system and Gold. We still hold a lot of Gold in Fort Knox and the vaults of the Federal Reserve Bank of New York. (Curiously, most other countries hold much of their gold in the vaults of the Federal Reserve Bank.) Nonetheless, it plays no role in the monetary system.

Types of Money Today

When we think of money today, we generally think of currency and checking accounts.

American currency today consists of Federal Reserve Notes, what we call *fiat money*. It is not backed by anything other than the phrase “Legal Tender for all debts, public and private”. If you owe someone \$20 and offer him or her \$20 of Federal Reserve Notes, it must be accepted. If someone owes you \$20, you must accept \$20 of Federal Reserve Notes in payment. Clearly, currency meets the three tests for being money (medium of exchange, unit of account, storer of value).

Checking accounts generally meet these three tests, for checks are routinely accepted in payments of a bill. They are not perfect substitutes, as you will quickly find if you try to buy something from a vending machine after class. In some cases, it is also better, as you would find if you tried to pay for a new house with a wad of \$20 bills.

Nor is “money” limited to currency and checking accounts. There are, as we shall see, a number of items that can be counted as “money”. A Treasury Bill is for many purposes as good as a checking account. As a consequence, there are alternative definitions of money. The most famous are

- M_1 , currency held by the public plus checking accounts, and
- M_2 , M_1 plus time deposits less than \$100,000 and money market mutual funds

Economists also are interested in another definition of money:

- M_b , the monetary base, consisting of currency held by the public plus currency held by banks and bank deposits at the Federal Reserve System.

Warning required by the Economist-General:

- These definitions are not precise. Formally, the three variables are defined as

Monetary Base includes

- Currency in the hands of the public
- Bank Reserves

M_1 includes

- Currency in the hands of the public
- Transaction-account balances (a bank account that permits direct payment to a third party), which includes:
 - Demand deposits at commercial banks
 - NOW and ATS accounts
 - Credit union draft shares
 - Demand deposits at mutual savings banks
 - Traveler's checks

M_2 includes

- M_1 plus:
- Savings accounts
- Time deposits of less than \$100,000
- Money market mutual funds

There are, to be sure, other definitions such as M3 and Liquidity, but these are the more important ones.

Credit card balances are *not* counted in most definitions of money. While credit cards (lines of credit, etc.) are a useful medium of exchange, the cards themselves are not a store of value, in contrast to cash or a bank balance. Credit cards are, in economics terms, not a form of money, but a substitute for money.

Table 9-2 shows some data on how much money there is of different types:

Table 9-2
The Money Supply as of Dec 1999,
in Billions of Dollars
(Averages of Daily Figures)

Definition	Amount
Monetary Base	\$590.3
Currency Held by Public	\$516.9
M ₁	\$1,125.4
M ₂	\$4,662.7
M ₃	\$6,484.9

Making Money

Money can be made, in part by the banks and part by the actions of the government. We need to spend some time talking about the role of the two players in making money.

The Role of The Federal Reserve System

When the Federal Reserve System decides to increase the money supply, it does so by increasing the monetary base. Suppose the government decided to increase the monetary base by \$200. The Federal Reserve System, the branch of the government responsible for the money supply, would purchase in the open market a government bond that is held by the general public with newly created money. To be more specific, let's suppose the Federal Reserve System purchased the bond from Fred. This purchase, *an open market operation*, is the most common, and usually the only way, that the Federal Reserve System changes the money supply. (When the Federal Reserve System purchases a government bond it increases the money supply, when the government sells a bond it reduces the money supply) This purchase of a government bond for \$200 would cause a \$200 increase in the monetary base and of course M₁ and M₂.

What would Fred do with his \$200 in newly created money? Most likely he would deposit a portion in his bank and hold back a portion in cash. Perhaps he would keep \$100 in cash and put \$100 in his checking account at

Key Bank. When Fred deposits the \$100 in Key Bank, the composition of the money supply changes. The public (that is, Fred) holds \$100 less currency, but \$100 more of demand deposits. Furthermore, this transaction has no effect on the monetary base. Depositing the \$100 would lower the monetary base, except that the bank now has a \$100 in the vault (new reserves). \$100 of the monetary base has just shifted from one component to another. The composition of the money supply would change, but the monetary base and M_1 and M_2 would be unchanged by this deposit.

The Role of the Banks

Many people assume that new checking account balances come from cash deposits such as the \$100 deposit described above, but this is only part of the answer. Banks create money by making loans. When a bank makes a loan, it simply credits a customer's account with the amount of money being loaned. In effect, the bank is creating money, because these account balances are counted as part of the money supply. (However, banks are not free to create as many deposits as they want. Regulatory constraints and, increasingly business realities place limits on how much money they can create.) We will talk more about how the regulatory agency, the Federal Reserve System controls the money supply a little later.

Note, by the way, while most people think of commercial banks (Key Bank, Bank One, Fifth-Third Bank, etc.) when they think of banks, economists include many other financial intermediaries in this category. Many financial institutions perform the same services as banks (accept deposits, offer check-writing services, and make loans). Money market funds, life insurance companies, and stockbrokers can also do all of these services. When we talk about banks, we should include all such financial institutions, not just those legally classified as banks

Creating Money

Continuing on, Fred has taken \$100 of the \$200 received by selling the bond to the government and deposited it in his account at Key Bank. Key Bank wants to make a profit and will want to make a loan and earn some interest. However, two factors will keep it from lending out the entire \$100 and, instead, keep some portion as reserves, either as cash in the vault or on deposit at Key Bank's Bank, the Federal Reserve Bank of Cleveland. Key bank will do this for two reasons:

- To fulfill its deposit obligations. The depositor may suddenly decide that he needs \$5 to buy a present for his economics teacher, and write a check to cover the present.

- most banks in this country, is bound by the *reserve ratio*, which is set by the federal government. This reserves, and the bank must maintain this minimum level. The amount that the bank must hold as reserves *required reserves* amount of money a bank can loan out from deposits.

since reserves do not earn interest for a bank. It figures out ways to hold

day and age, to get around the very high reserve requirements required by the government. One way of doing this is to set up a money market account, transfer the funds automatically to the money market account (which has no legally set reserve requirement) and then put funds into a customer's

In any case, suppose that Key Bank reserve

withdrawals) or to meet government requirements. The \$100 deposit gives it \$80 of excess reserves, which it will lend out to some deserving individuals. *When the bank does so, it has in fact created money.* Table 9-3 shows how this process works. The person that borrowed the money will most likely

borrower transferring the funds to another bank or taking part in cash. Be

above the \$36 now required. It can once again lend out the difference, now \$64, between the required reserves and total deposits. This process of deposit creation will continue until Key Bank only has the minimum required reserves for the total amount of deposits. Total of deposits would be \$500 when there are no excess reserves as shown in table 9-3.

Table 9-3		
Creating Money With a 20% Reserve Ratio		
	Deposits	
We start with an	<u>\$100</u> \$100 Total	\$80 Excess Reserves
Then we loan excess reserves	\$100 <u>\$80</u>	\$20 Required Reserves \$16 Required Reserves ves
excess Reserves of \$64	\$100 <u>\$64</u> \$244 Total	\$16 Required Reserves \$12.80 Required Reserves
↓	↓	↓
After several more rounds, there are no excess reserves to loan	\$500 Total	\$100 Required Reserves \$0 Excess Reserves

What would happen if we allowed the borrower, say Barney, to transfer funds to another bank? Suppose, for instance, Fred took his \$100 to Key Bank, who kept \$20 and lent the funds to Barney, who deposited the funds with (say) Huntington Bank. Suppose also that Huntington Bank has a 20% reserve requirement. Then Huntington bank would have \$80 in deposits, \$80 in reserves and \$64 in excess reserves available for a loan. The second round expansion would still take place, but Huntington Bank, not Key Bank, would do it. As before, this process of deposit creation will continue until each bank is left with only the minimum required reserves for the total amount of deposits.

After going through this example, you may be interested in how the money supply changes in response to a change in the monetary base. The simplest way to calculate this is by use of the multiplier, which is

$$\text{Money Multiplier} = \text{Money Supply} / \text{Monetary Base}$$

$$MM = M^s / M_b$$

where our measure of the money supply could be either M_1 or M_2 . Obviously the value for the multiplier will be different, depending on which measure we use.

Using this multiplier, you can determine how much the money supply will increase (decrease), given an increase (decrease) in the monetary base, by simply multiplying the change in the monetary base times the multiplier. For example, using the data in Table 9-2, the M_1 multiplier equals $1125.4/590.3 = 1.91$, while the M_2 multiplier equals $4662.7/590.3 = 7.89$.

Let's summarize what has happened. Initially, the open market operation increased the monetary base by \$200 and the money supply. \$100 was kept back as cash and \$100 was deposited in Key Bank. When the \$100 was deposited, it enabled the bank to make a new loan, after holding back some reserves. At this point, the money supply increased again, and continued to do so as long as the bank (or banks) had reserves above the minimum required. Using these multipliers, we would expect an increase of $(1.91)(\$200) = \382 in M_1 and $(7.89)(\$200) = \1578 in M_2 .

$$MM \times \Delta M_b = \Delta M^s$$

A word of caution is in order. These simple calculations overlook the possibility that the multipliers will change as events unfold. They will change if:

- Individuals like Fred decide to keep a greater/smaller fraction of their money in cash and a smaller/greater fraction in bank deposits.
- Banks may decide to hold a higher/lower percentage of their deposits as reserves.

A partial list of things that could trigger one or both of these changes:

- The public becomes concerned that they will not be able to withdraw their deposits on demand from their banks

- Banks become more concerned that they are not keeping enough reserves to meet their depositor's demands
- Foreigners become concerned about the solvency of their banking systems, and begin to hold more dollars themselves.

Warning required by the Economist-General:

- These cautions are important. Changes in the Money Multiplier triggered the Great Depression. Many of the current economic troubles in Asia are the result of similar changes.

The Federal Reserve System

Let us now turn our attention to the Federal Reserve System and its role in this process. First, a little back ground on the Federal Reserve System. In the 19th century, the United States was subject to a number of bank Panics, when several banks would go bankrupt at the same time. After a series of bank failures in 1907, a national monetary commission was established to examine ways of restructuring the banking system. After five years of study, the commission recommended the Federal Reserve System. Congress accepted the commission's recommendation and in 1913 President Wilson signed the Federal Reserve act.

The Structure of the Federal Reserve System

In simple terms, the Federal Reserve System (a.k.a. the Fed) is a “bank’s bank”, where all of the other banks in the country do their banking. Almost every other major country has a similar central bank, such as the *Bank of England* or the *Bank of Japan* or the *European Central Bank*.

The Federal Reserve System is composed of 12 regional Federal Reserve banks. All national banks (those chartered by the Federal Government) are required to belong to the Federal Reserve System. State chartered banks may or may not belong, but most major banks do belong.

Warning required by the Economist-General:

- The Federal Reserve System should not be confused with the Federal Deposit Insurance Corporation (FDIC) or with the functions of the Comptroller of the Currency or other regulatory agencies. Everyone else does, but you should not.

Board of Governors

The Board of Governors, composed of seven members, of the Federal Reserve System ultimately runs the System. The President appoints members of the Board of Governors for 14-year terms. Appointments are subject to confirmation by the United States Senate. Board members cannot be reappointed. The president selects (subject to Senate confirmation) one of the governors to serve as chairman of the board for four years. Alan Greenspan, the present chairman of the board, was originally appointed by Reagan, re-appointed by Bush, and once again re-appointed by Clinton in 1996 and 2000. Greenspan is the primary spokesman for Federal Reserve System policy and reports to Congress every six months on the conduct of monetary policy. Greenspan succeeded Paul Volker, who was appointed in the Carter Administration, and served for much of Reagan's administration.

You are probably asking now how could Alan Greenspan be reappointed for a fourth term as chairman of the Federal Reserve System, and thus end up serving for 16 years. It is very rare for a person appointed to finish their whole term as a member of the Board of Governors, the average length of time a person serves is less than 7 years. Greenspan was appointed to finish the term of someone who resigned. He was eligible for his own 14-year term.

One of the reasons that the appointments are so long and staggered is that it gives them a measure of political independence. Once appointed, they are not beholden to any elected official since they cannot be reappointed, and will hold office longer than will any president. This political independence puts the nation's money supply beyond the immediate reach of politicians.

The designers of the Federal Reserve System were worried that political control of the monetary policy would cause wild swings in the money supply and macro instability. While most economists approve of this degree of independence, some argue that the independence of the Federal Reserve System makes it unresponsive to the will of the majority.

Regional Banks

Each of the regional Federal Reserve Banks has a nine-member board of directors. The board of governors appoints three; private banks in each Federal Reserve Districts appoint the remaining six. Each regional board then elects a president of that bank. In truth, the regional banks are less important than they were when the Federal Reserve System was established. The Regional Banks perform many useful administrative functions, but the Board of Governors and the Federal Open Market Committee (FOMC) make policy. Here, the Regional Banks do play a role since their presidents serve on a rotating basis on the FOMC.

Federal Open Market Committee

The FOMC is responsible for the Federal Reserve System's daily activity in financial markets. It plays a critical role in determining the level of reserves held by private banks. The membership of the FOMC includes all members of the Board of Governors, the president of the New York Federal Reserve Bank and, on a rotating basis, presidents of four of the remaining eleven regional banks. The New York branch president is always included because the New York branch carries out the daily activity of the Federal Reserve System. (New York is the financial center of the United States).

The FOMC meets in Washington on Tuesday morning every six weeks throughout the year to review the economy's performance, and decides what action to take, if any, in regards to monetary policy. It decides if the economy is growing fast enough or too fast, then adjusts monetary policy as needed.

The role of the Federal Reserve System

The Federal Reserve System has a number of important administrative functions such as auditing of banks, but we will not talk about these. The main policy function that interests us is its ability to control the money supply. It does so through three techniques:

- The Federal Reserve System sets *Reserve Requirements*, which each member bank must meet, either by holding cash at the bank or deposits at the Federal Reserve System. The reserve requirements are set as a percentage of total customer deposits at the member banks, must be met each week, and do not pay interest.
- The Federal Reserve System sets the *Discount Rate*, the rate at which banks can borrow from the Federal Reserve when they need

liquidity either to meet their obligations to other member banks or to meet the Federal Reserve System's reserve requirements.

- By far the most important power of the Federal Reserve System is one we have already discussed: it can print money. When it buys government bonds from the public - an *Open Market Operation* - it pays for them with newly created money. Similarly when it sells bonds to the public, it destroys the money it receives in payment for the bonds. (The colorful images of “printing, creating and destroying” money are, alas, only illustrative. Most of this money consists of bookkeeping entries of “deposits” at the Federal Reserve System.)

Let's talk about each of those in turn.

Reserve Requirements

In theory, changes in reserve requirements are a powerful weapon for altering the lending capacity of the banking system. An increase in reserve requirements will reduce the lending capacity of the banking system and reduce the money supply. However, the Federal Reserve System uses this power sparingly. Indeed, many economists see it as an unimportant tool, since banks are finding ways around the reserve requirements.

For example, suppose I keep \$1,000 in my Key Bank checking account and the Federal Reserve System mandates that Key Bank maintain a reserve of (say) 20 percent of this checking account. In fact, Key Bank offers me a “sweep account”. They will transfer my \$1,000 to a money market fund, a mutual fund invested in Treasury Bills, certificates of deposits at banks, and the like. They maintain my checking account, but keep no money in it. When I deposit \$100 in my checking account, the bank will instantly transfer it to my money market fund. When I write a check for \$100, the bank will transfer \$100 from my money market fund to the checking account just before they pay my check. The consequence is that my checking account has a zero balance, and hence zero required reserves. If the Federal Reserve System raises the reserve requirement to 20, 30, or even 40 percent of my checking account, the required reserves are still zero.

What about reserves for the bank money market fund? The Federal Reserve System has no authority to set reserve requirements for the money fund. In short, I have what functions like a checking account with no legally required reserves.

However Key Bank will, as we have noted, still maintain reserves. They are worried that an abnormally large number of their customers will

descend on the bank at the same time and demand their funds. Thus they prudently keep reserves. However, these reserves are kept to meet business requirements, and not to meet the dictates of the Federal Reserve System. It is just like the local McDonalds keeping a reserve of cash in coins and small bills to make change for its customers. McDonalds keeps cash for good business reasons, not because the law requires them to.

We should note that Key Bank keeps part of its reserves as “vault cash” in case I want to cash a check for \$100 and part as a deposit at the Federal Reserve System. If I write a check which is deposited at Huntington Bank, Key Bank settles up by transferring – on paper – some of its Federal Reserve deposits to Huntington Bank.

The Discount Window

Banks do worry about maintaining these reserves dictated by business practice. What happens if they run out of money? For a bank, this would be serious indeed. It is also a serious thing for McDonalds to run out of change at the noontime rush, and they take steps to avoid that, usually by sending someone to the bank in the middle of the day to get extra change. It costs money to send someone to the bank, but doing so ever so often makes much better business sense than either running out of change or keeping twenty times as much change as they could possibly use.

So too with banks, and they have developed means for vault cash and deposits at the Federal Reserve System whenever they are needed. Since the Federal Reserve System will always give the bank cash equal to its deposits at the Federal Reserve System, the main task to for a bank is to watch its reserves at the Federal Reserve System. One way of making sure that you don't run out of reserves is to borrow reserves from a bank with excess reserves. Reserves that are borrowed from by bank from another are referred to as "federal funds" and are lent for short periods, usually overnight. Funds borrowed overnight are not interest free. The prevailing interest rate on these loans, called the federal funds rate, is published each day in the Wall Street Journal. For example, an **overnight loan of \$1 million**, with an **annual rate of 12%** will cost **\$329 in interest**.

An alternative is to borrow directly from the Federal Reserve System. For obscure historical reasons, direct lending from the Federal Reserve System is called *discounting*.

The interest rate that the Federal Reserve System charges on these loans is called the *discount rate*. From time to time, the Federal Reserve System changes the discount rate. When it does so, it will make the network

newscasts that evening and it sounds like a big deal. However, in reality it is not really a big deal. If the Federal Reserve System increases the discount rate, it will be more costly for banks to borrow reserves, and they are more likely to hold additional reserves on their own, reducing their ability to make new loans. Of course, this decreases banks ability to create new deposits, decreasing the money supply.

As a practical matter, the Federal Reserve System discourages banks from using the discount window. When a bank borrows on a regular basis from the Federal Reserve's discount window, the System gets nervous and wants to know what is wrong with the bank. If the borrowing is a one shot deal, no problem. Repeated borrowing through the discount window will likely earn the bank a visit from Federal Reserve examiners wanting to know why the bank cannot either keep its room neat or manage its own affairs.

Open Market Operations (OMO)

In actual practice, the Federal Reserve System relies almost exclusively on open market operations to alter the money supply. Any time the Federal Reserve System buys or sells government bonds, it adds or subtracts from the monetary base, respectively, making an increase in the money supply possible. This is the Federal Reserve's primary means of altering the money supply.

Independence of the Federal Reserve System

It is worth repeating and stressing at this point that the independence of the Federal Reserve System is a key to its success in the US. Countries where the central bank is not independent have consistently higher rates of inflation on average than countries with an independent central bank.

The main policy making organization of the Federal Reserve System, the FOMC is composed to ensure as much independence as possible. The regional bank presidents, five of who serve on the FOMC, are selected by the banks in each district, and not by Congress or the President. The appointments of the members of the board of governors are staggered every two years to keep a sitting president from being able to gain control of it through his appointments.

The Gold Standard

Let's conclude our discussion about money and the Federal Reserve System by considering a topic that comes up from time to time, the Gold Standard.

Most countries, including the United States, use a *fiat monetary* system. That is, what we call money is money just because the government says it is. By law, our money is legal tender, which means that people must accept it in payment of debts. Because it controls the money supply, the Federal Reserve System is able to expand and contract the money supply to a level that it feels is best for the economy.

The US operated under the *Gold Standard* at one time; where the government promised that paper money would be freely convertible into gold at \$20.67 an ounce. By government, we mean the Treasury before 1913 and the Federal Reserve System afterwards. Other countries had also promised convertibility at fixed rates, effectively fixing all exchange rates. Under this system, gold was part of the monetary base, so that the amount of the money supply depended, in part, on how much gold the government held.

With the gold standard, the government could not expand or contract the money supply at will. For instance, there might be a flow of gold into the country. It could come from newly mined gold or gold shipped from other countries. In any case, the new gold would permit monetary expansion. The government had some influence over how much gold backed the money supply, but there were times when it worked the other way. Events forced the government to ensure the dollar price of gold, no matter what the effect on the money supply.

For example, suppose that some event caused the public to want gold instead of currency or deposits. Then everyone would use dollars to purchase gold from the government. Perhaps the banking system was doing so poorly that people thought it was safer to buy gold and then use it to purchase safer foreign money. We would describe this as a “run” on the dollar. These days, even without the gold standard, people might purchase gold in this situation as a hedge against inflation. If someone withdrew currency, for example, and bought gold with it, then that currency would no longer be in circulation. Clearly, the money supply would decline, unless the government stopped selling gold (thus ending the gold standard), made gold more expensive (say, \$35 dollars an ounce), or somehow gave people an incentive to keep their dollars.

Some people want the United States to return to a gold standard. Since the United States abandoned the gold standard in the 1930's, the Federal Reserve System has used its power to control the money supply without fear of a run. Since then, we have had a level of inflation unprecedented in this country's history. Advocates argue that going back to the gold standard would restore discipline that the Federal Reserve sorely needs.

Most economists would oppose a return to the gold standard. The reasons are complicated and would take us a couple of weeks to cover. In brief, we have not had any depressions or recessions of the magnitude of those that occurred when we were on the Gold Standard. Many economists argue that those depressions resulted from the Gold Standard. Whatever the reason, most economists believe that, for all its faults, we are better off with a properly managed system of fiat money than the old gold system.

Relation to the Text

Each lecture ends with a section relating it to the text. In some cases, material is omitted, either because the text covers it well enough or because it is not worth learning. In other cases, material is added. Each of these “lectures” will end with a brief note relating the lecture to the text, describing what material is left to the student to learn alone and what material may safely be skipped.

Which Chapters does this lecture cover?

Section from Stockman	Coverage
Ch. 10, History and Roles of Money	Covered
Ch. 10, Measuring The Money Supply	Covered
Ch. 10, Federal Reserve System	Covered
Ch. 10, Financial Intermediaries	Not Covered. You are responsible for this material
Ch. 10, Short-Run Effects of Federal Reserve Policies	Not Covered Here. See the lecture on Monetary Policy
Ch. 10, Appendix: The Formula for the Money Multiplier	Covered through the short hand method used in the lecture. You may thank your instructor for not requiring you to memorize this equation.

What material is new?

None.

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