



## THE MONETARY AND BANKING SYSTEM

Dr. Robert P. Black

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Reviewed by: Colonel J. H. M. Smith, 26 November 1962

**INDUSTRIAL COLLEGE OF THE ARMED FORCES**

**WASHINGTON, D. C.**

1962 - 1963

# The Monetary and Banking System

5 September 1962

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Reporter: Albert C. Helder

Reviewed by: Col. J. H. M. Smith Date: 26 Nov 1962

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Publication No. L63-16

INDUSTRIAL COLLEGE OF THE ARMED FORCES

Washington 25, D. C.

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5 September 1962

COLONEL MORGAN: We have as our guest lecturer this morning, Dr. Robert P. Black, Vice President of the Federal Reserve Bank of Richmond. He is going to discuss with us, "The Monetary and Banking System." As an operating manager in this field Dr. Black is well-qualified to explain to us our highly refined and unique system.

Dr. Black, it is a pleasure to welcome you back to the college.

DR. BLACK: Thank you very much Colonel Morgan. It's certainly a pleasure to be here again. I was here last year, and as I wrote Admiral Rose after my visit here, this is the best group before which I ever spoke. I didn't intend that as an idle compliment; this is absolutely the truth. The questions asked and the interest shown were greater than any I've ever encountered anywhere that I had spoken before. So, I consider it a distinct honor to be back with you here again.

Now, I'm sure that you are already on your guard since Colonel Morgan has mentioned to you that I'm an economist, and having studied a little economics you know what economists are like. A fellow the other day told me that the only good economist is a one-armed economist. Do you know what that scoundrel had in mind? He said a one-armed economist is a good one because he can't say "On the one hand things may go this way, and on the other hand they may go that way." Well, unfortunately I'm a two-armed economist but I'll try so far as possible to give you a one-armed approach; to be as definite as I can about things.

Now, there are three points that I want to cover today, and the fact that there are three points sets this talk apart from our ordinary talk. Usually, the most generous thing that anyone can say about one of my talks is that it's Texas longhorn talk. That's not a speech; it's a talk with a point here and a point there and a lot of bull in between. Don't snicker; this has still got all the bull in between. The only difference is that there are three points and not two. Here they are.

First, let's look at our nation's money supply and the type of backing we have for that. Second, let's examine the impact of money upon the economy; and third, let's wind up by discussing the actions that the Federal Reserve can take to try to insure the proper behavior of money.

Now, turning to point one, what's behind your money? When we think of money we ordinarily think of the long green stuff or the kind we jingle in our pockets. The most important type of this money is the Federal Reserve note which is issued by the 12 Federal Reserve Banks. This is the kind of paper money that bears the green seal, and this constitutes 17% of our total money supply. Well, now, the Federal Reserve note must be backed by at least 25% in gold certificates. We must hold in our asset structure, we being the 12 Federal Reserve Banks, at least 25% in gold certificates back of each dollar's worth of Federal Reserve notes outstanding.

These gold certificates are really warehouse receipts for an equal amount of gold. But the gold we have, of course, is over here at Fort Knox where it is stored underground and where it lays peacefully with you folks guarding it. So, it's nothing but a warehouse receipt, but nevertheless it's a 100% mortgage on this gold, so the money is backed at least 25% in gold. In addition, we must back all our

Federal Reserve notes by government securities or certain other types of assets that are eligible, but mainly government securities to the extent that they are not backed by gold certificates. For example if we have 35% in gold certificates back of our money, then we've got to have the remaining 65% in government securities or certain other types of eligible assets, but mostly government securities.

Now, another type of money that we have and that you're familiar with - Treasury currency. This makes up all other kinds of paper money that you are familiar with. The most important type of this is the silver certificate which is the kind that bears the blue seal. This is backed entirely by silver in an amount equal to the purchasing power of that dollar. That doesn't mean the silver could be sold for that; rather, it's an amount of silver having monetary value that much. So, it's really not 100% at all.

There are other types of money that the Treasury has outstanding too. Most of these are relics of bygone monetary laws that are still on the books and should be removed. One of the important types of these is the United States note or the so-called green-back that you studied in your study of the history of the Civil War period. There are outstanding \$340 million worth of these now, and these are the ones that have the red seal. These are backed only by the credit of the U. S. Government plus \$156 million in gold, which also backs some very rare types of money called Treasury notes of 1890.

There are a number of other types here: Federal Reserve Bank notes, National Bank notes, a few gold certificates, etc., outstanding. But by and large this covers it, really; the silver certificates and the United States notes, plus your

coins which are backed only by the metal they contain.

Now let's turn over to the other side of this and look at a more important type of money. These make up only 20% together. There is another type - demand deposits - that makes up the largest part of our money supply; some 80%. Now, it may seem to you that demand deposits should not be considered money since we generally think of money as being anything that is readily accepted in payment for goods and services. And certainly, being in the Services, as you travel around the country you're quite aware that bankers don't always want to accept your checks. Nevertheless, I take refuge in this definition of "generally acceptable," in that about 90% of all payments, it's estimated, are made by check. And I think as reasonable people, we would have to say that the money supply or the demand deposits held by the private public would really come under the definition of generally acceptable.

Well, demand deposits are backed too in the case of those held by member banks, those that belong to the Federal Reserve System. These are backed by reserves which are in the form of balances that they hold on our books - deposits with us - or in the form of vault cash. Member banks must now hold 16% in reserves back of their demand deposits if they are located in reserve cities, which are those that have branches or head offices of the Federal Reserve Banks, or are important financial centers, even though they don't have these offices. For example, Washington is a reserve city. For banks located in these areas 16 1/2%.

Banks located elsewhere are called country banks even though they may be in very large cities, and these must hold 12%. Well, this doesn't stop right here,

because, the Federal Reserve Banks must hold back of those balances that member banks hold with them, reserves also, and these reserves must be held in the form of gold certificates. So that, you've got a situation here where you have a type of gold. At the present/<sup>time the</sup>ratio of gold to these types of money that have to be backed by gold is in the nature of 33%. Let me qualify that a bit. Back of Federal Reserve notes and back of member bank reserves and other deposits of the Federal Reserve Banks we hold about 33% in gold. So, we're well above the minimum now, although, of course with our heavy gold losses we're not as high above the minimum as we were earlier.

Well, you see, if you look at this thing it forms a sort of pyramid effect, where the money supply by and large - the most important part of the money supply, anyway - is tied directly to gold. Now, the key to this whole thing is the member bank's reserve account, because, when the banks are supplied with reserves this gives them funds to lend. And you will study, if you have not already studied, it's possible for banks to make loans ~~or investments~~ any time they've got on hand excess reserves.

Well, when they make loans, for example, they set up deposits for their borrowers. The borrowers draw on these deposits, the funds, say, are transferred to another bank, while the fellow that receives the check deposits that check in another bank, and that gives that bank funds. It, in turn, can make loans or investments. And the net effect of this, without belaboring the details, is that when you increase the reserves the bank can increase the money supply by an amount several times the volume of the increase in the reserves.

Similarly, if the reserves go down this may force a contraction in bank credit and demand deposits by an amount several times the decline in reserves. So, this is a very important thing; with demand deposits making up virtually all of our money supply and with the volume of demand deposits largely determined by the volume of reserves, you can see that that occupies a key place in the monetary structure.

Well, let's move on, then, to point two. What impact does money have upon the economy? Perhaps I can bring this out best if I refer you to this dial board here on my right. On the left hand side of the dial board you'll see that there are three dials. The top dial represents the volume of consumer expenditures, the second dial the volume of business expenditures, and the third dial the volume of government expenditures; including here not only federal government outlays, but those of state and local governments as well.

Now let's take a look at what happens to those various types of spending between the period of, say, '54 and 1961. This is just for illustrative purposes; it doesn't matter what period we take. Consumer expenditures during 1954 stood at \$238 billion dollars. Business outlays during that same year were \$50 billion. The government at the same time was spending \$75 billion on newly-produced goods and services. Now, this is not total government outlays; this is just the amount they spent on goods and services. A lot of this, of course, is in pensions, subsidies, and things of that sort. This is only the amount that they actually spend on goods and services. That's the reason it looks as small as it does. Well, adding these three together, total outlays during 1954 were \$363 billion.

In order for the economy to make this kind of expenditure it's necessary for there to be an adequate amount of money. During this period of time the money supply, as conventionally defined, stood at \$130 billion. Even so, \$130 billion, large as it may seem, we could not have financed all of this outlay had we not had this money supply used several times. Well, during this period of time, 1954, the average dollar was spent 2.8 times on newly-produced goods and services.

Now, this was the number of times the dollar was spent on final goods and services. Of course, in the process of paying workers and buying raw materials, ~~at all the~~ intermediate stages the dollar was spent much more than the average - several times more than this; 28 or 30 times - something of that nature. But this was the number of times it was spent on final goods and services.

Well, during this period of time, physical output - if we value physical output in terms of dollars - and after all, this is about the only way we can value all of our physical output; we can't say X number bushels of wheat and Y number of oranges, etc., we've got to put a dollar value on these if we're going to group the diverse elements that enter into our total physical production. So, you can think of this as being 363 billion units of goods and services worth a dollar each. So, the physical output, you see, from this base period, will be the same as the total spending.

Now let's examine what happened when spending rose above these levels and see where we ended up. All right; between 1954 and 1961, consumer expenditures climbed from \$238 billion to \$338 billion. Business outlays rose to \$73 billion from \$50 billion. Government outlays up to \$108 billion; which meant that total

expenditures had climbed from \$363 billion to \$519 billion. To finance such a growth in expenditures we had to have more money, or existing money had to be used more intensively. This is just what happened; both of these things occurred. The money supply climbed to \$142 billion; the turn-over of money rose to 3.6 thereby enabling us to finance this rise in total expenditures.

Well, let's look now at what happened to physical output during this period of time. It stood at 363 billion units worth a dollar each in 1954. Then it climbed to only 448 billion units in terms of the prices that prevailed in 1954. In other words, total expenditures rose much more; from 363 to 519 billion, whereas physical output climbed from 363 to 448. So, the inevitable result was that you had more demand for goods than we had goods coming out on the market. So, the net result of this was that prices rose. Prices rose from a level of a hundred, which is the base period of 1954 by some 16% to 116% of what they were back in 1954.

Well, this thing puts into an over-simplified framework, perhaps, the relationship between money and economic activity. You cannot have total expenditures rising faster than total physical output can increase, without having inflation. Similarly, if expenditures do not rise as fast as the economy is capable of turning out goods and services you have a recession or, at best, a slow rate of economic growth. So, the ideal situation is to have total expenditures rise at something like the same rate that the economy can generate goods and services. This is really the ultimate aim of any stabilization policy whether it's on the part of the federal government through its fiscal policy, the way in which it handles its taxation and spending, or through the federal authorities responsible for our monetary

policy, the Federal Reserve System. Or, whether you have price-controls. These are basically the objectives of any kind of control. Keep this flow of spending in line with the flow of goods and services that can reasonably be expected to be.

Let's turn, now, to point three, and ask ourselves what the Federal Reserve can try to do to insure that the flow of spending does behave appropriately in terms of what we are doing in the way of physical output of goods and services. Let's look, then, at our tools of monetary policy. And in the process of looking at the tools let's also discuss the various groups within the system that do establish monetary policy.

There are really three main things that the Federal Reserve can do to try to stabilize the economy: One group of these actions can be called "the general credit controls." These are the ones with which you are most familiar. They are the ones that are designed to effect the over-all cost and availability of credit.

There is a second group called the "selective credit controls," the margin requirements for the purchase of stock, for example, which are aimed at a particular segment of the economy; in this case, the credit moving into the securities market. These are not aimed at over-all costs of availability of credit and for that reason they have quite different impacts upon the economy.

The third type of action the Federal Reserve has is one into which it entered just recently, and that is its operations in the foreign exchange market where it tries to take certain actions through the buying and selling of foreign exchange to offset undesired fluctuations in our exchange rate in comparison with the exchange rates of other countries. And also to avoid gold losses at times, or at least to smooth

out, gold losses.

Well, the selective credit controls are not too important and our time is limited, so I won't mention those further. The international operations we have I'll be glad to answer questions about. But either of these are pretty complicated and are really not too important to understand the whole picture. So, I won't say anything further about those. What I'll focus my attention on are these general credit controls that the system has in trying to influence the over-all cost and availability of credit.

The most important of these operations are the open-market operations which refer by and large to the buying and selling of government securities in the open market. This is the most important tool we have. When, for example, the system buys government securities from government security dealers this has a much more important impact upon the economy than when a private individual buys government securities from, say, an institution. When a private individual buys securities from an institution he draws down his demand deposits to pay for those securities, and the demand deposits are transferred to that institution. There is no change in the money supply; there's merely a shift in the ownership. Now, when the commercial banks come in and buy government securities from institutions they write checks on the Federal Reserve to pay for those securities. These checks are then deposited by those who sell the securities and their demand deposits go up. That increases the money supply, so that has an important impact upon the economy than when there is a swapping between two sectors of the private economy.

But, when the Federal Reserve gets in and buys these securities there is a

much more important impact in that we pay for these by writing checks on ourselves. These checks are deposited by the government securities dealer, his demand deposits go up, his bank forwards that check on to the Federal Reserve Banks for collection, and it increases that banks reserve account. This makes possible the expansion of bank credit by an amount several times as large. It also would tend to cause an easing of interest rates as more credit became available.

Conversely, when we sell a government security in the open market and the government securities dealer draws down his bank balance to pay for that security, we take the check and we collect that check by deducting it from the reserve account of the bank at which he banks. So, that wipes out reserves. And that, if not offset, could cause a multiple contraction in bank credit.

Well, open-market operations are under the jurisdiction of the Federal Open-Market Committee. This is composed of the seven members of the Board of Governors of the Federal Reserve System, all of whom are appointed with the advice and consent of the President of the United States, with the advice and consent of the Senate. Also on this open-market committee there are five presidents of the Federal Reserve Banks. The president of the New York Federal Reserve Bank is ex officio a member of this board, and the other presidents serve on an alternating basis. This committee has sole jurisdiction over what the system does in the way of open-market operations.

Purchases and sales are conducted by the Federal Reserve Bank of New York acting simply as an agent for the committee. Now, there are two types of Federal Reserve open-market operation. One of these is called "defensive." This is

simply a purchase or sale that is taken to offset some other factor that is increasing or decreasing member bank reserves. Sometimes these factors can cause a big change in member bank reserves at a time you don't want them to change. So, you simply offset these with an open-market operation. That's purely defensive.

Then there's the second type called "dynamic operations" which are those we take when we try to bring about an easing or a tightening in over-all money market and capital market conditions, through our actions.

Our second type of control is changes in reserve requirements. Changes in reserve requirements are under the sole jurisdiction of the Board of Governors in Washington. They are empowered by law to change member bank requirements within specified limits which are designated by the Federal Reserve Act. Changes in reserve requirements have two main effects upon the economy. Let's take the case of a lowering of reserve requirements first. If reserve requirements are lowered, say they were cut in the case of reserve city banks, from 16 1/2% to 16% of their demand deposits, this would mean that those banks then would have excess reserves on hand not needed to back their deposits, in an amount equal to 1/2 of their deposits. They start off with 16 1/2%; you decree that they have to hold only 16%, so, 1/2 of their deposits is in excess reserves.

This would provide a basis for multiple expansion of bank credit, an amount several times as much as the increase in excess reserves. So, that's one impact.

Then, they have a second one in that by virtue of their reserve requirement having been lowered, any subsequent additions to reserves will make possible an even larger expansion in bank credit than would have been available had reserve

requirements remained at 16 1/2%. For example, if member bank reserves increased by 1/2 million dollars and reserve requirements are 16 1/2%, that half million dollars won't support as much expansion in bank credit as that same half million would if the reserve requirements were 16%. So, there's a two-fold effect. When we want to ease credit the action we would take would be to cut requirements because of the stimulative effect upon total bank credit, money supply and the general downward pressure that this kind of action would exert upon interest rates.

Now, if we wanted to tighten up by the use of reserve requirements we would increase these. This, instead of providing excess reserves would create deficiencies in reserves. Banks hold 16%, say, and you suddenly say they've got to hold 16 1/2%, they've got to get that extra 1/2% in some way. So, they would start adjusting to this by selling government securities in order to get funds in order to meet their higher reserve requirements. As people bought these government securities they would draw down their demand deposits and the money supply would contract by an amount several times the amount of reserves that had to be held over and above what had to be held before as required reserves.

And also, any time any change in reserves has occurred - an increase in reserves, with a higher reserve requirement - this would have a smaller impact upon the economy than it would have if reserve requirements had been kept at a lower level. Well, this is a very powerful control, and because it's so powerful it is seldom used. We used it in '51, '53, '54, '58 and '60. But we aren't in there every day or every week. That sounds right often to you, but we buy and sell

government securities almost every day, certainly every week. And so, in comparison to this we don't use it very much.

And any time we change reserve requirements, this is so powerful that we have to offset part of those effects by using open-market operations as well. For example, if we lower reserve requirements this gives the banks so many excess reserves that we have to sell some government securities to sop up some of these excess reserves, so that it won't create too easy a situation too suddenly. And conversely if we should raise reserve requirements. This is the scalpel right here, and this is the ax.

Now, a third control is changes in the discount rate. The discount rate refers to the rate that is charged member banks when they borrow money from us; that is, from the Federal Reserve Banks. Now, the discount rate is set by the Board of Directors of the 12 Federal Reserve Banks, but the discount rate must be okayed by the Board of Governors. The discount rate can have all sorts of effects upon the economy. Sometimes it doesn't have much effect at all. For example, if interest rates in a period when we are trying to tighten credit move up, these interest rates will often move up prior to the time that we increase the discount rate. In that case, when we raise the discount rate the market doesn't respond very much because they realize that we are merely bringing the discount rate into line to prevent banks from having the incentive to borrow from us at a low rate and invest in government securities at a higher rate. This can't be, so we bring it into line. But they expect that this will occur and so the market responds before it actually takes place.

But at other times the discount rate can have an important impact upon the economy because it can be a clear signal to the financial community that the system has shifted policy.

The most dramatic instance of this in recent history was on November 15, 1957. We moved into a recession; the system had already begun to ease somewhat, and on November 15th we announced that the discount rate had been cut. This was after the markets had closed that day. Well it so happened that American Telephone and Telegraph was trying to market a large issue of convertible debentures. These had already been purchased from AT&T by the underwriters and they were on the shelves of the underwriters. But they were not attractively priced. The yield that they had was 4 1/4%, as I remember it, was not attractive in that day's market. So, the underwriters couldn't sell the things; they were backing up.

Well, when the discount rate change was announced, overnight those shelves were cleaned out. When discount rates went down this was a signal to the financial community that other rates were likely to come down too, and this 4 1/4% rate which had not been attractive earlier in the day, after the close of business became extremely attractive and the shelves were cleaned out in what was later described as "moonlight trading" because it was done during the night. I know you're going to ask me if we did that for the benefit of AT&T; I'll explain that in the discussion period. They didn't benefit; they had already sold them. The underwriters were the only ones who did, and any time you change it somebody is going to benefit and somebody is going to be hurt; you can't avoid it.

Well, the discount rate has this important signal effect that I mentioned, and

also it does have a direct effect upon interest rates. Because, when banks are confronted with a high discount rate and they suddenly lose deposits for some reason or other, the banks have got to get funds from somewhere. Now, if the discount rate is high it's not going to be attractive for the banks to obtain the temporary funds they need by borrowing from us. They'll find it more attractive, rather, to sell short-term securities in the market. And as they sell short-term securities in the market, Treasury bills and the like, this exerts a downward pressure on the price of such securities. This means that their yields are that much higher.

For example, suppose you've got a coupon issue that will pay you 3%. It's going to pay you 3% on the \$1,000 par value regardless of what price you pay for it in the market. If the price goes down to \$900 and you buy it for \$900 you get \$30 interest per year, and you're going to be yielding more than 3% on the \$900 you paid for it. And similarly, if you paid \$1,100 for that security you would get only \$30 interest. So, \$30 on the \$1,100 is less than 3% interest. So, if the prices on bonds and other interest-bearing securities go down, that means the interest rates have gone up.

So, the discount rate will effect such rates by virtue of the fact that banks transmit the effects through the sale of these securities in the market. Also, for purely psychological reasons, the money-market will adjust to this fact. They expect rates to move in a certain direction; therefore they do - a self-verifying type of expectation. We got a kick not so long ago about a wire which we got from a New York bank, which we receive daily - some rising developments in the market. And they had a little phrase in there - I can't remember exactly what it said - but, anyway, it said, "The market is reacting this way out of respect for what it considers

system policy to be." Well, that struck us as sort of funny, but it really does do this. The expectations cause the change and then they are backed up by concrete action.

Well, these three tools of credit policy are all very closely coordinated. It might appear, with three different bodies controlling these, in effect that you would have operations working against each other, but that is not the case. This is your real policy form right here. Most of these actions and changes that are made are discussed right here, and all the presidents of the Federal Reserve Banks, whether they are members of the committee at the time or not, attend and participate fully in the discussion. And, in a sense, if they are persuasive in presenting their cases they can have almost as much influence on policy as those who are actively voting at the time. They have no vote, but they can persuade people to vote in certain directions. So, this is where it's really thrashed out.

If the president, for example, of a Philadelphia bank thinks his directors are going to recommend a change in the discount rate - which, incidentally they do on the recommendation of the president - he is really the guy who leads them into what they do in almost every case - he will call this to the attention of the other people at the open-market committee meetings and they will be pretty well aware that this is going to happen.

Well, what are we trying to do with our credit policy? In essence, it's what I suggested over here. We are trying to influence, so far as we can, this flow of money spending, so that it will not proceed faster or slower than we can get our physical outputs to change.

Now, we really think of our objectives as being broken down into four main things. For one thing, we try to fight inflation to the extent we can. Second, we want to encourage a high level of employment. Third, a growing economy. That simply means that our gross national product per capita steadily increase as it has done throughout our history, because this is the way we raise our standard of living. Then, fourth, we want to contribute so far as we can to maintain the international value of the dollar; toward maintaining a sound balance of payments position in relation to other countries.

Well, it might look that some of these are in conflict with each other. The arguments have been made by many; many think they are. But the system has taken the position that they really aren't in conflict and that you have to work simultaneously for these four objectives. At times you may emphasize one more than the other. For example, at the beginning of a recession you're more worried about employment than you are about price increases, etc. But always you have in mind these four objectives and working to achieve all of these.

Now, for example, if you don't have high levels of employment you obviously are not going to have as fast a growing economy because you're not using your resources. If you're not using your resources how can you step up your output of goods and services? If you have inflation this encourages the wasteful use of resources. It also tends to aggravate economic stability - or so we feel, anyway - by fostering an unsound buildup of inventories, business spending on plant and equipment, consumer durable outlays, etc., that cannot be maintained. If these expenditures rise at an unsustainable rate they collapse, and so you have a

recession. This slows your growth rate in the process. So, by ironing out price increases we believe that you get a better rate of economic growth.

On the international front it would appear sometimes that there is a conflict between our international objective of maintaining a sound balance of payments, and our domestic objectives of maintaining a growing economy at stable prices. But, if we have a sound balance of payments position - which we don't have now - then we are perfectly free to follow whatever objectives we think we need domestically. If we are in a recession we can throw all our guns into the fight and bring us out of the recession because we don't have to worry about the balance of payments if its sound.

Conversely, if we've got a sound domestic policy and we've had a growing economy at stable prices, then we can compete internationally and there's not apt to be nearly the problem - and probably not any problem - on the balance of payments problem. It's only when you've had a bad situation develop on either side that the two tend to get into conflict. For example, the conflict that we discuss now, the fact that we can't let our interest rates go too low because this would encourage an outflow of money abroad which results from the fact that we've got an unsound balance of payments position. This does interfere with our domestic policy to some extent. So, we have to pay some attention to that. But it's because that's unsound.

Similarly, if we had been able to fight inflation as successfully as we should have, or would like to have done in the post-war period, then our prices would be more competitive in comparison with those abroad, and we would have a sounder

balance of payments situation. It's only when you let one get out of hand that you have any conflict here, or so the system has argued, and I think, correctly.

Well, there are certain advantages to system policy that I'd like to point out to you, as well as some disadvantages. For one thing, the system policy is a highly impersonal sort of control. It depends on your standard of values as to whether this is desirable or undesirable. When I say it's highly impersonal, what I mean, really, is that system policy pretty well leaves the determination of what is going to be produced in the economy, to the private economy, and to the government spending units. We don't tell anybody that they can't buy gold-plated Cadillacs if they want them; if they've got the money they can buy them. Nor do we tell the municipality that it can't borrow money to build a school. They can borrow the money and get it just as fast. These are decisions that are made by countless millions around the country. And system policy leaves this pretty well undisturbed.

Now, you may say, "Well, you tighten up." When we tighten up, what we are trying to do is to prevent total expenditures from rising too fast. We don't care what type expenditures increase, just total. It's sort of like extending the outfield bleachers in a ballpark - a baseball park - you make it harder to hit homeruns, but you don't change the rules of the game. And, when we ease up we bring in the outfield bleachers. This doesn't change the rules of the game either, but it makes it easier to hit homeruns; in other words, to step up expenditures. That's one advantage.

The second advantage is that the system open-market committee meets every three weeks and establishes a policy then and there before it leaves. The policy-

making process is flexible. There may be some lags after we decided what to do, but we do reach a decision very quickly. And, so far as total government expenditures and taxation are concerned, of course, these things have to be decided, to a large degree, by Congress. The proper decision requires debate and this takes time. So, we can act more quickly than certain other types of stabilizer can do.

Another important point, I think, is that Congress, in setting up the Federal Reserve System made it independent within government. We're certainly part of the government, but we are responsible to Congress rather than to the Administration. And the consequence is that within the limits of these broad powers that Congress has given us, which they can take away or modify if we abuse our stewardship, we are free to act in the economic best interests of the country. There is a wide latitude there. We don't have to consider the day to day political considerations that would necessarily get in if the central bank were a part of the Administrative Branch of the government.

I don't want to create the impression that we think we are all-wise, all-knowing. We are certainly not; we're all human; we're going to make mistakes. And I'd like to point out that there are times when we may do all we can in our power and the economy may not respond. If we supply reserves to the banks and they don't lend, no action. We also have forecasting difficulties. We don't know what's going to happen, exactly, although I think we've got the best economic information in the country, nor do we know exactly what would happen if we take this action or if we don't take this action. There's a large degree of error there.

Another point that can cause trouble is the extent to which our economy has

become non-competitive; to the extent that there are heavy concentrations of labor power or business power, where these units are able to push up prices pretty well apart from what is going on elsewhere in the economy. To the extent that these pressures exist they can push up prices and we can do very little about it.

A third point where we run into limitations is, if the aims of fiscal policy run counter to those of monetary policy. They may be right; we may be right. The fact is, here are two very powerful instruments and they may offset each other to some degree.

But I think that very clearly we can achieve a reasonable degree of stability, and our hope of achieving this stability lies in getting three things: One is maintaining a competitive economy, and I'm not sure that this isn't the most important of all, so that prices are free to come down as well as move up. The second is a wise fiscal policy. The third is a proper monetary policy. Now, we can go astray on all three points, but if we as people demand that we have stability and achieve these four objectives which I mentioned, and about which there seems to be little disagreement, then I think our chances of achieving stability are very good.

QUESTION: Has the reduction of the margin requirements effected the stock market to any extent yet, from your standpoint?

DR. BLACK: It's very difficult to say. I think that the prevailing opinion is that it hasn't really had much impact, actually. But it's, again, something that's awfully hard to measure. You don't know what the market would have done if you hadn't changed requirements, and so it's a matter of judging what it would have

done if you hadn't, and comparing that with what it did do. The general opinion - and, of course, this has to be a judgment since you can't measure it statistically - is that it hasn't had an appreciable amount of impact. But nevertheless, I think, on balance, that the people within the system would think this was a good action, really, because it removes one of the hindrances to the free flow of funds in the economy. We prefer, as far as possible, to leave the spending decisions up to the individuals, businesses, and government spending firms. And when you have a margin requirement you are inhibiting funds from moving into a particular sector. So, by removing that even though it may not have sparked the market we would think from a philosophical standpoint anyway, that this would be desirable.

QUESTION: I understand the 25% gold certificates that you have backing up your Federal Reserve notes, but I don't quite understand where the money comes from with which you buy the government securities to back up the other 75%.

DR. BLACK: Well, we create that money, is really the answer. Now, that requires an explanation. What we do is, really, write a check on ourselves. That is all it is, a cashier's check on ourselves, just like a commercial bank can write a cashier's check on itself. This cashier's check is then given to the government securities dealer; we get the government security; he gets a demand deposit when he deposits that check with his bank; and then his bank, in turn, sends the check on to us for collection, and the reserve balance of that bank goes up. So, what we've got, then, is the government security on the asset side, and on the liability side the member bank's reserve has gone up. We have just created, in a sense, the assets, liabilities, or whatever you want to think of it as, just by virtue of the fact

that we can do this until our deposits plus our Federal Reserve notes outstanding are four times the volume of our gold certificate reserve. You see, we now have excess gold certificate reserves of about \$4 billion. Under the existing reserve requirements of 25% this means that we could expand the reserves by four times four or by about \$16 billion, the reserves and the money outstanding.

Now, there's a question. If we continue to lose gold, as to what's going to be done about this. I'm sure the law will be changed. But it could present us with a problem and I hope we lick this gold loss problem before then.

QUESTION: Assuming that the unlikely happens and that the national debt, which I assume represents most of the government securities, were retired, what would you have to substitute for these government securities?

DR. BLACK: Well, that would raise some interesting questions. There are two other types of assets, really, that are eligible to serve as collateral. One is customers' notes that commercial banks have discounted with us. Now, they can borrow from us either on their own note secured by government collateral or customer paper, or they can actually re-discount with us, customer paper; in effect, sell the customer paper to us. They don't do that to any extent, so that would be a problem. There wouldn't be much coming from that source.

The second thing that we can use is bankers' acceptances, which are really - this is a technical sort of thing - they're bills of exchange. They're similar to checks drawn on banks except that they are time instruments; they run for 90 days or so before they're paid; the bank writes "accepted" across the face of it; it's then an obligation of the bank and can be sold in the market. Well, to some extent

we buy these bankers' acceptances in the open market and we can use those. But if the government debt were paid off the only way in which we could have a central banking function would be to empower the central bank - the Federal Reserve - to buy other kinds of securities; say, short-term municipal securities, or even open-market commercial paper, a kind of standardized promisory note that large corporations sell on the open market. We could buy this sort of thing and make that eligible as collateral. Of course, the thing really, to handle money, is to have faith in the U. S. credit and government, more than anything else. These other things are there, but it's the faith that this money will maintain its purchasing power, to some degree, anyway - to some reasonable degree. But that's the only way we could get it; we'd just have to make some other asset eligible.

QUESTION: Dr. Black, most of us in this room venture into the larger money market periodically, buying and selling homes. I wonder if you could explain the function and the actual device of the points we normally pay both ways, in addition to the regular interest rate when we buy or sell a home. What function is the system supposed to serve?

DR. BLACK: You've asked me to explain something that I've never understood too well myself, but I'll try, having been a home-buyer myself. I think, really, it's a device that the mortgage lender have for confusing the rest of us. But aside from that, the points really do serve some kind of a function. You have these - for example, take the case of the GI Loan rate which was one of the prime examples. You decree by law that lenders can't earn more than 4 1/2% - back in the old days; this makes a better example; on this kind of money. Well, they can't lend

their money out in other places at a higher rate than 4 1/2%. So, naturally they aren't willing then, to lend their money at 4 1/2%. But the law says it has to be 4 1/2%. Well, one way of upping that rate is to charge these points. So that, in effect what they get is a higher rate of interest by this process, and that's how they came into being, really. Because the interest rates were not free to fluctuate in accordance with the demand and supply of mortgage money. So, they found an artificial means of causing the effective yield to the lender to fluctuate.

Now, if you were to free the rates and let them just move up and down and find whatever level they would you would never get into the case where a person who was willing to pay the existing rate could not obtain credit. Then the rationing would be done by the rates moving on up. But as it is, you know you ran into that process even taking into account the points, they still couldn't get a high enough rate compared to what they could get elsewhere so there just wasn't any money of this type available. Does this answer sort of what you had in mind? I don't know much about it from a technical standpoint. But this is how they came into being.

QUESTION: Could you give a little bit more explanation on the effect of your philosophy on the turn-over of money when you tighten up on your money market? Does it have any impact?

DR. BLACK: That's a very good question that has been raised here. One of the criticisms that has been made against monetary policy is that when you try to tighten up - to over-simplify this we can think of this by preventing the money supply from growing as fast, the people tend to economize on their existing balances by various devices so they can squeeze more expenditures out of the existing

dollar. In other words, turn it over faster. And, of course, as this dial board indicates, this can finance expenditures. So that, where you try to tighten up the velocity goes up, and this allows expenditures to go ahead and rise even though you are trying to stop it. Well, our feeling is that while this is a troublesome problem, really, it's something you have to allow for, and you'll try to allow for it in your monetary policy in tightening up, to offset the increase in velocity that is occurring.

Some people say that you can't tighten up; that this causes disruptive effects on the economy, etc., but this argument, it seems to me, is tantamount to saying that you can't hold total expenditures in line without disrupting the economy. I don't accept that, really, myself, although this is a point that the experts disagree on. But we try to offset it by holding tighter somewhere else; that is the answer to what we try to do.

QUESTION: To what extent and in what particular areas are the decisions of these policy-makers inclined to be political rather than purely economic, and is there any political pressure put on them?

DR. BLACK: I think that's a good question. Now, to start off, as I mentioned to you before, we are responsible to Congress rather than the Administrative Branch of the Government, and so far as Congress is concerned we've got a pretty broad range of powers. We are pretty free within those limits to do what we think is in the economic rather than the political best interests of the country.

Now, on the other hand we do - you see? I told you I wasn't a one-armed economist - we do have to cooperate to some degree with the Administration necessarily; for example, the Treasury Department. When the Treasury is borrowing

money in the money markets we feel constrained that nobody has brought any pressure on us to make us feel this way; it's just a logical feeling - and I think you'll see why in a minute - not to change our policy while the financing is on. For example, if we tighten up policy while the Treasury is trying to borrow money, then the people who buy the Treasury securities quickly have a decline in the price of those securities. And this is not the sort of response, price-wise, that you would need if the Treasury were to find receptive borrowers.

If the borrowers feel that every time they buy a security you are going to pull the props out from under them and the thing is going to decline in price, your government securities market would not be as wide as it otherwise would be. And similarly, we can't ease up shortly after they buy securities either because this would give a rise in securities prices and this would give a free ride to the securities speculator. We don't want to do that either. So, we hold our policy constant while the Treasury is in the market.

This, really, I don't think has been much of a constraint on our policy. It has caused us to delay policy from time to time, but we've ultimately ended up doing what we thought was wise even so; a little later maybe; but nevertheless, this has not been a real problem.

The Chairman of the Board has frequent consultations with the members of the Administration on various things. But if we got to a point where there was a disagreement as to policy I think, since we have our responsibility to Congress, that we would be perfectly free to act within what powers we have to do what we felt was in the best interests of the country.

Now, to carry this thing on a little further; obviously this has to be political to some extent because we have only such powers as the people through Congress has given us. And if we, for example, were determined to stop every bit of the price increase regardless of what this did to total employment there is no doubt in my mind but that Congress would step in and do something about that. So, as long as we exercise wise stewardship we have got a very wide leeway here where we don't have to consider these day to day political things. So, I would say, largely in our policy we are non-political but we have only such broad powers as the people through Congress have been willing to give.

So, whether you say this is political or not, I don't know. It's not in the sense that we would favor one party over another. We're strictly neutral so far as this is concerned. In the cooperation we've had in the last two Administrations, I would say, it's been equally good. We consider ourselves strictly neutral. But these are things I think that both parties, in a sense agree on. There's a difference in emphasis, of course, but both of them are really in agreement with our broad objectives.

QUESTION: My question relates to the last one. The President is the elected official and is held accountable for the economy of the nation. He, in all of this, would have the same motherhood objective as you outlined on the board, that the Federal Reserve has. Why shouldn't he control the Federal Reserve?

DR. BLACK: Well, that's a good question, and many people feel that he should. My answer would be that this would mean that, as has happened, everytime a sovereign has had anything to do with the money supply there's too much of a

temptation to tamper with it; too much of a temptation to inflate. And, it's better that these things be established on non-partisan grounds, as far as possible. Many wouldn't accept this, of course, but that's the reason I think it should be separate.

QUESTION: Shortly after World War II there was considerable discussion on possible methods of retiring the public debt. One proposal I heard was for the creation of new money in order to pay off the debt. Given the apparent impossibility of retiring the debt through budgetary surpluses, is there any apparent present discussion on possible methods of obtaining this goal in order to relieve the tax-payer of this burden?

DR. BLACK: There is very little serious discussion of it that I know of. I'm sure there is in some quarters, but I haven't seen anything just lately on it. Every now and then you'll see an exchange of articles in the professional journals about the desirability of doing that, but personally, nothing that I know of recently, has been said about it.

QUESTION: How secure are we against bank failure throughout the country?

DR. BLACK: I think very secure really. This is a value judgment, but the main reason we had a failure of banks in the '30s I suppose more than anything else was that the banks were very illiquid. They couldn't meet their deposits with demands for cash. It was not that they were insolvent, although some were, but it was not that they were largely insolvent in the sense that their liabilities exceeded their assets; rather, that they couldn't convert their assets into cash.

Now, one of the advantages of the central bank is that the central bank can

create funds. And if the banks need cash we can issue Federal Reserve notes up to almost any amount unless we run into problems on this gold question, that the banks would need to provide the cash for the purpose. They could borrow money from us freely, and we would do so. I don't think there is any problem in the sense that we had before. Of course, you've got better bank supervision now; more stringent regulations on the type investments that they have; and the banks are clearly in a sounder position, although in the event of a real recession some of them would undoubtedly have problems.

QUESTION: The system that we are studying and which you described was originated in 1913 at which time we were on the gold standard, appears to have grown like Topsy since that time and is a pretty delicately balanced machine. You have studied this stuff. If you had the power to devise the monetary system would you come up with the same inverted pyramid on gold that we have now?

DR. BLACK: You know, I said, when I first got up here, that you asked better questions than any group I've ever encountered, and there goes one of them.

I think probably I would, really. There's a lot to be said for the old gold standard, but there's a lot to be said against it too. But I think I would favor this kind of thing. Now, many people will argue that you don't need any gold back of your money at all because it's a matter of the faith and the credit of the government - which it is, largely, as I admitted - but the fact that we have got gold back of this money means that if we get to the point of where we don't have gold, or we approach the point where gold is only 25% of our reserves and our money, we've got to have some kind of public discussion of the issue.

For instance, if our balance of payments difficulties continue and we continue to lose gold, we're going to get to that point at which we've got to pause and discuss this thing. And I think that is a point in favor of having the gold. It makes us take steps to correct the problem sooner than otherwise we would take those steps. So, I'm glad we've got this gold thing because people have become concerned about it much sooner than they otherwise would have been. And everybody agrees that we've got a balance of payments problem. And I think most everybody agrees that the longer we let it go on the more serious it's apt to become.

The gold forces us to discuss that thing and consider it now, and I think it's good for that reason.

QUESTION: You indicated that one of the signs or causes of economic difficulty was the fiscal policy and monetary policy are counter to each other. Do you consider that there are any significant areas of difference between present fiscal policy and monetary policy, and what are these differences if there are any?

DR. BLACK: I think there are a lot of problems that exist here. More than anything else I think from the standpoint of fiscal and monetary policy is the difficulty of implementing fiscal policy on a discretionary basis.

But before I go into that let me take this case. During a recession there is a tendency for the federal budget to run a deficit, because revenues go down faster than outlays go down. This means that the fiscal authorities are increasing spending; they're taking less out of the income stream in taxes than they are pouring back in expenditures. This tends to stimulate the economy. And this is exactly what the system would be doing at such a time when we were in a recession.

It would be following an easy money policy trying to stimulate the economy.

Similarly, as we move into a period of expansion, policy tends - as price pressures threaten, anyway - policy tends to tighten up. In this period we haven't had any tightening, really, because there haven't been any inflationary pressures. But in a period when inflationary pressures start to build up the system will try to tighten up, and fiscal policy, by virtue of these automatic stabilizers, the fact that income taxes - corporate and personal - will tend to rise faster than expenditures, you tend to get a surplus during a period of boom purely because it is the automatic working of the budget.

This, I think, would be perfect coordination between the two if it all worked this way. But so far as discretionary expenditures are concerned, you have two factors. One is the difficulty of trying to change either taxes or expenditures in time to curb a recession, or to curb inflation. It requires Congressional debate on these, in large part, and this, of course, requires time. We wouldn't want it to be done without adequate consideration. So, there can be lags in this.

And the second is the fact that there has been very little in the way of surpluses in the post-war period, which is what fiscal policy would have had during certain times if it were being used solely as an economic stabilizer.

Now, there are other arguments on why maybe it isn't desirable to have these at times, but if the criterion were to use it solely as an economic stabilizer there would have been more surpluses. Because even a balanced budget is considered expansionary. A lot of people say it isn't, but the economists generally consider even a balanced budget expansionary.

So, I would say that this brings out the political part of it, then, that it's very difficult, politically, to achieve a balanced budget or surplus, whereas it's easy, politically, to achieve an unbalanced budget. So, to the extent that they have failed to achieve surpluses at a time when the inflationary pressures were evident, there may have been some differences there. This is not easy to do. I'm not trying to minimize the problem or place the blame anywhere.

So far as economic stabilizers are concerned they haven't had too good an experience in the post-war period. And I think regardless of who you talk to on that that is probably what they would say.

QUESTION: My question concerns the Federal Credit Unions. Are they responsible to general monetary policy, and how can they reinforce your growth and stabilization policy?

DR. BLACK: The Federal Credit Unions?

QUESTION: No, the Federal Credit Agencies.

DR. BLACK: Oh! The Federal Credit Agencies. Well, I would say in large part they are really not too responsive to our credit policies really. I expect I don't know enough about all of their operations. There may be some instances in which they don't borrow money because money is tight and consequently they don't make loans as readily as they would if money were easier. But, by and large I don't believe they are particularly effected by our policy. They go ahead and make their loans on the basis of other considerations, I think, really.

If their loans are going up at a time when it seems to us that we ought to tighten up, then I suppose we could say that this is an added consideration that we have

to consider in deciding what is an appropriate degree or ease of tightening elsewhere in the economy. But this is sort of a given condition, I would say, really, and we establish what we ought to do on the basis of this and other given conditions that we can't really do much about.

COLONEL MORGAN: Dr. Black, I than you very much for a very fine presentation on this subject.