MONEY AND THE MONETARY SYSTEM
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CONTENTS

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DR. KRESS: Admiral Hague, General Niblo, members of the class: Today we are down to a subject that we all know something about--money. That is we have some knowledge of it in a very personal way. We have had economists now from Ohio State and from Northwestern. Today we switch back to the East--the University of Pennsylvania.

When I was a graduate student, I was told that economists knew everything about money except how to get it. Our speaker this morning doesn't have any difficulty in that way. He has long been a consultant to business and continues to be a consultant in a practical way to some of the insurance companies; and is a university teacher. But that is not what I am thinking about. This little book that he wrote about money is a best seller; that is the best kind of friend an economist can have.

Dr. Whittlesey, it is a pleasure to welcome you to this platform.

DR. WHITTLESEY: It is a great pleasure to be here and to discover how financial I am.

I was reminded, as I was driving down here, of the difference between Washington and Fort Knox. Fort Knox has a great concentration of gold. Washington is something like that, but instead of gold, it has a great concentration of brass. I can only hope that brass is "wax to receive and marble to retain," for I have a good deal to get over this morning. I hope you will give me an opportunity to develop further in the question period any points which I have not made clear.

I shall start by speaking briefly about the nature of money. There are three types of money. The first type is pocketbook money, that is, currency or common money. The second type is checkbook money. Checkbook money consists of deposits at banks against which checks can be drawn. It is estimated that roughly 90 percent of business is carried on by means of this type of money, which is founded as I shall show later, upon credit. It is something that can be created by banks; it does not have to be turned out at the mint.

The third type of money is reserve money. By reserve money I mean money like the gold at Fort Knox, which doesn't circulate and which you or I never see. This type of money is not used as a medium of exchange. Yet it is money. Reserve money also includes gold certificates which constitute the reserves of the Federal banks, and reserves of commercial banks, such as all members of the Federal Reserve System are required to hold in the form of deposits at the respective Féderal Reserve banks. Gold and gold certificates are never seen; but they are the basic element of our monetary system. The gold constitutes what is called standard money, while the gold certificates form the basis of checkbook money, to which I have already referred.

There are, then, these three types of money--pocketbook money, checkbook money, and reserve money. Why must they be regarded as money? Because they perform monetary functions.

The only real test of what is money is the performance of monetary functions. The test of what constitutes money is very simple: Money is anything that regularly and typically performs the functions of money.

That test or definition is a very simple one to apply. You will have noted that some writers don't follow this definition. The text you use defines money as something that acts as a medium of exchange. That is a good definition within limits. It is a functional definition, as my definition is. But the fault with it is that it limits money to just one function, namely, that of a medium of exchange. It would leave out, for example, gold and gold certificates, which are obviously money. By broadening that definition to include not only the medium of exchange, but anything which typically and mainly functions as money, you get it all in.

In order to qualify as money, it may perform only one money function, but it has to do so typically, not just occasionally, as happens in the case of barter. Anything that regularly and typically functions as money is money. The statement has been made that "money is one of those concepts which, like a teaspoon or an umbrella but unlike an earthquake or a buttercup, are definable by the use or purpose which they primarily serve." That is the same as what I have said, but it is said a little more pointedly.

Having said that the nature of money lies in the performance of certain function, I want to turn now to my next major topic--"The Functions of Money."

The first function, logically speaking, is as a medium of payment. The medium of payment exchange or function may find expression in a purchase at a newsstand or a store, a transaction between giant corporations running into millions of dollars, or a payment by the Government to an airplane manufacturer or shipbuilding concern. The medium of payment function also includes contractual settlements, such as payments for wages, taxes, insurance policies, bonds, and the interest on bonds.

Broadly speaking, the medium of payment function involves all monetary expenditures. This raises extremely important questions, and we are going to come back to it later. It is an aspect of the subject that we are more conscious of now than we were 20 years ago. The long and short of it is that market demand expresses itself in the use of money as a means of payment. The payment of money constitutes effective demand, upon which the entire functioning of the economy depends.

Changes in monetary expenditures represent changes in market demand. They constitute retardations or stimulations in the flow of money payments. Such changes in the volume of expenditure are now regarded as the principal determinant of changes in the level of business activity. Prosperity or depression, inflation or deflation, involve changes in money payments. If you examine forecasts of the business outlook, you will usually find that somebody is saying that total money payments, reflecting, perhaps, changes in Government, consumer, or business spending, are going to decline or are going to rise.

Thus the use of money as a medium of payment embraces a great deal more than may be suggested by the expression--medium of exchange.

The second function is as a standard for stating values. Some people say, "a standard of value." "A standard for stating values" puts it a little more sharply. Money is a bookkeeping medium, a means of keeping accounts, a contracting medium. Above all, it is a pricing medium. You can't have prices without money. When you have money, you are bound to have prices. Prices are simply the monetary expression of values. It is impossible to have money, except in a museum showcase, without having the value of goods and services expressed in terms of price. Prices and money are inseparable. Money makes it possible to have prices, with all the benefits that follow and flow from the price system.

As a device for keeping records and accounts, in this most complex society of ours, money clearly performs an essential function. Likewise, it is used as a medium for contracts--as a means of contracting for insurance policies, Government bonds, wages, rents, services, and the like.

The third function of money is to serve as monetary reserves. It is chiefly through the use of money as reserves that central banks undertake to exercise control over economic activity. Reserves are the basic regulator of the financial system and a primary regulator of economic activity in general.

The fourth function of money--much less important than it once was--is as a storehouse of value. Money is a medium for accumulating and storing wealth. This was a very important function in the Middle Ages. It is still important in times of great economic and political disturbance. Thus a Communist invasion of Hong Kong doubtless would immediately lead to a tremendous demand for gold in neighboring countries. For the most part however, in our country and in general throughout the world, this function is not as important as it used to be. Today we use savings accounts, insurance policies, bonds, and investments as a means of storing value for the future.

The fifth and final function of money is its cash-balance function. This somewhat overlaps with the previous function, but there is an important distinction. By the "cash balance" function I mean that money is used as a reserve of liquid purchasing power. The aim is not to store value for some more or less definite future time, but to provide liquidity currently and at once. It is the availability of money that gives us the power, in case we suddenly want to do so, to buy goods when we see a good opportunity, speculate on the stock market, buy a ticket on the train, make an unexpected journey, or be prepared if an accident occurs. In this cash-balance function the aim is not to store value for the future but to achieve liquidity in the present.

It is often said that money is the one perfectly liquid asset. There are degrees of liquidity, but liquidity is always defined in terms of being like cash, like money in the pocketbook. Unlike any other economic asset, money possesses this enormously important characteristic, "the power of universal command." Money gives us the power to command, as Thomas Carlyle said, merchants to provision us, servants to wait upon us, soldiers to defend us. This power of universal command, which resides in money and money only, has been called the most important single fact about money. Its use as a source of liquid purchasing power is a major and increasingly recognized function of money.

So much for the functions of money. Now I wish to shift to a third major topic--"The Changing Aspects of Money." Money, as I said earlier, is defined in terms of the functions it performs. The test of what is money lies in what money does. The test of how good our money is lies in the success of its performance of monetary functions. (One type of money may perform one function, another some other function.) It is important to recognize that the functions of money change. Any change in the functions of money alters the criteria for judging the performance of money.

That which might be a thoroughly satisfactory type of money at one time may conceivably be quite unsatisfactory following a change in the functions that need to be performed. Changes from a cash-payment economy to a credit economy, the development of deposit credit by commercial banks, the greater division of labor, all influenced the functions and performance of money. Types of money have changed with changes in the functions of money. Society develops, and it is necessary that money should have appropriate adaptability to change.

Beyond that is the fact that money itself is a dynamic factor. It is an instigator of change, a factor that causes change. Money is recognized today as a major causal influence in the functioning of the economy. Inflation and deflation are monetary phenomena. Monetary relationships play an important role also in international political affairs. It is no coincidence that a recent violent political upheaval in Brazil followed hard on the heels of monetary difficulties, investment troubles, commercial crises, and devaluation of the currency. Heroic measures failed to prevent serious political disturbances. That sort of thing has happened again and again.

The level of business activity and whether we have rising prices or not are now generally regarded as directly influenced by the flow of monetary expenditures. The emphasis upon this aspect of money--that of monetary spending as a causal factor--is a new development. It is associated with the name of Lord Keynes, whose influence, even today, is enormous and continuing. The attention directed to the use of money, to monetary expenditures, is the greatest change that has come over monetary discussion in our lifetime.

I turn now to my fourth major topic--"The Distinguishing Features of Modern Money." I want to differentiate money today from that of other periods. These are points to bear in mind, in order to have an understanding of modern money as contrasted with money of other times and places.

The first distinctive feature of modern money is the subordination of the commodity aspect of money. Gold does not circulate at all and silver is relatively little used compared with the past. Gold is still, of course, the legal basis of our monetary system and serves as reserve money. But even though it is in our monetary system, it no longer controls the behavior of money. While legally present, gold, which was once supposed to determine our monetary supply and to govern the movement of prices, has ceased to be the controlling factor.

The second distinguishing feature is the predominance of bank money, that is, checkbook money. Nowadays, as I said, 90 percent or more of all payments are effected by means of checks. Such money is created by the lending process. This is a complicated subject and I am not going into it in detail. You will have to take it pretty much on faith. What I want to emphasize now is that checkbook money is created by the banks' lending operations. When they lend or invest, banks may bring about additional deposits, and those deposits are drawn against by check. Modern money is created by the lending process. This is the modern philosopher's stone.

Now, it is largely the credit operations of business and the Government that govern the volume of public and private debts to which is tied the money supply. It happens that credit is rather unstable. Because our monetary system is tied to credit and because of the instability of credit, it follows that modern money tends to be unstable, too. Being bank money it is no longer tied as it once was to something tangible, gold. It is tied to something relatively volatile, credit.

The third feature of modern money is more or less a corollary of the first two. It is the rise of monetary management. The question of whether we should or should not have monetary management is a dead issue. We have it and will continue to have it as long as we have a central bank. We have had it, in fact, ever since there was a central bank--that is over 250 years. The very purpose of a central bank is to manage our money so that it will behave better than it otherwise would.

When we go from an economic system that is relatively simple to one that is complex, monetary management becomes increasingly important. If we don't have a commodity such as gold to regulate our money, if money is tied to something that is itself unstable like credit, then there is need for some authority to give character and stability to our money. That is what our central bank attempts to accomplish.

Monetary management involves two critical relationships. One is the quantity of money in relation to the volume of goods and services. If the money supply were allowed to become too great, it could lead to inflation. The other critical relationship is the flow of monetary expenditures in relation to the level of business activity. The first critical relationship in the management of money is the quantity of money in relation to the quantity of goods and services available for purchase. The second is the rate of flow of monetary expenditures--what is often described as "effective demand." The expenditures by consumers, investors, and the Government add up to the total market for everything that is produced.

So much for the three distinguishing features of modern money. That brings me to the question of "Monetary Policy." This is what I understand by monetary policy: It is the attempt to influence monetary phenomena and relationships in ways that will improve the functioning of the economic system. Monetary policy involves the use of monetary means to make the economy work better, to influence those critical relationships that I referred to a moment ago. In seeking that objective, we have abandoned the attempt to find a purely automatic monetary system. We have in effect relinquished any serious hope of achieving a truly automatic system. That doesn't mean, of course, that we cannot hope for some elements of automatic behavior.

There are three principal agencies of monetary policy--the Federal Reserve, the Treasury, and the International Monetary Fund. The International Monetary Fund was set up at the end of World War II in an attempt to find a substitute for the old gold standard to facilitate trade between the different countries. The Fund has not worked as people had hoped it would. After all, few things have. It is still part of the monetary system and it is still trying to establish order in monetary relationships throughout the world.

The objectives of monetary policy are several and varied. One of the most familiar is "to keep the price level stable," that is, to avoid inflation and deflation. It is the attempt, as Eisenhower said and as Roosevelt said before him, to achieve a dollar which will have the same value to our children that it has for ourselves.

A second objective is "stable exchange rates." This promotes order and stability in monetary relationships with other countries throughout the world. I know there are many in the room who fully appreciate the importance of that.

The third objective--there are others I could mention, but I want to stress these three particularly--is, "full employment." This objective came in with the New Deal and has been seized upon by critics of the New Deal as a point of attack. But I assure you that full employment, by one name or another, has become a primary objective of monetary policy in this country and in almost every country of the world. The expression "full employment" is not altogether clear. It might be better to say that we mean high and stable business activity. This has become the primary target of monetary management, and we can be sure that it will continue to be of prime importance.

I have spoken about agencies and objectives. What are the methods of monetary management today? They are focused on the two critical relationships mentioned earlier. The first is the quantity of money in relation to the amount of goods and services available. The second is the level of monetary expenditures in relation to the supply of final goods available for purchase, in other words not the quantity but the use of money.

The specific measures directed toward influencing monetary quantities and monetary expenditures include, first of all, central bank policies such as the discount rate, changing the reserve requirements, changing the terms of consumer credit, and so forth. They include, second, Treasury policies. An example of such fiscal measures is tax reduction to stimulate consumer spending, such as is in process at this time. Another Treasury device is debt management, as in changes in the amount of borrowing by war savings bonds. This may be done with a view to reducing the rate of spending and thus combatting inflation, or to stimulating spending and thus combatting deflation.

Now I come to the most difficult part of my lecture, and I ask your indulgence. Despite the limited time at my disposal I want to take up three "Principles of Monetary Policy" even if I can do little more than bring them to your attention.

The first is the principle of deposit creation. Banks create money; they do it in this way: You have to imagine before you a "T account," separated into assets and liabilities, for all the banks of the country. Then suppose the Government wants to borrow. How is it done? The process, in great oversimplification, is as follows: The Treasury goes to the banks and asks for a billion dollars. The banks add to the asset side of the "T account" (the balance sheet) the IOU's of the Government for a billion dollars, calling them an investment. But they don't pay out currency, pocketbook money, that already exists. Instead of that, they place demand deposits to the credit of the Government, authorizing the Government to draw checks to the amount of a billion dollars.

Lo and behold, we thus have the remarkable phenomenon of the creation of checkbook money. It has come about by setting up demand deposits as part of the process of lending. That money did not exist before. It exists because the banks have lent it. It came into existence as part of the process of lending.

You are likely to wonder what happens next. Who is going to use the money that appears where it didn't appear before? What happens to the checks drawn against these new deposits? The answer is that these checks are deposited in other banks, and thus the deposits that have created continue in existence. Except for a small amount drawn out in the form of currency, which is a minor limiting factor, they are redeposited again in the same or other banks, and thus remain in the banking system as long as the investments (or loans) that led to their creation remain on the books of the banks.

That, in brief, is the way banks create money. It is tied to the lending operation. In the five years from 1941 to 1945, it led to a tripling of our money supply. This phenomenon contains great potentialities for contributing to business activity and to the activities of the Government. At the same time it contains within it the seeds of inflation, no less serious than the inflation that comes about through the printing of paper money.

Such deposits have been called invisible greenbacks. To describe them in that way is not to criticize the process of deposit creation. It is doubtless a good thing. But it is dangerous unless it is well managed. That is by way of introduction to your speaker of tomorrow who will discuss Federal Reserve policy.

My second basic principle is the quantity theory of money. The quantity of money is important, according to those who hold the quantity theory, because it is the primary factor determining the level of prices. The theory of money is usually defined in this way: Prices (P) are equal to the quantity of money (M), multiplied by the velocity (V), and divided by T. In other words $P = \frac{MV}{T}$ where T represents the total of all transactions. (I take it that you have all read your homework and know what I mean.) The quantity theory of money does more than say that prices are equal to $\frac{MV}{T}$. It says that P is passive--determined, not determining. In the more rigid form of the theory, it says further that V and T are not likely to change very much; therefore that M is the critical factor to watch.

That was the dominant monetary theory until about 1933. It is still important but people are somewhat disillusioned with it. It is to be regarded as emphasizing one very critical factor, M, in the relation of the volume of money to the volume of goods and services. I think it is fair to say that policies of the central bank, the Federal Reserve, are largely concerned with applying the quantity theory of money, especially in its less rigid form.

The third principle is one with which the Treasury is most concerned in its operations, although the Federal Reserve also takes more cognizance of it than was once the case. That is the theory of total effective demand to which I referred before. You will find this a very helpful principle to remember, one that will contribute substantially to your understanding of economic developments.

The principle of total effective demand says that at any given time there is some ideal level of total monetary expenditures by society which will produce full employment without inflation. The idea is that if there is more spending than the ideal amount, inflation will result. If there is less spending than the ideal amount, there will be rising unemployment and depression. That is the essence of the principle of total effective demand. It has become a major guide to policy. It is the basis of most current economic forecasts. It is the principal tool of fiscal policy and an indispensable tool of monetary policy at any level.

The principle of total effective demand is a legacy of the "great depression" and of developments since that time. It is the brain child of Lord Keynes, though it has gone through many modifications since. It is as much a guiding principle of the Eisenhower administration as it was of the administrations that preceded it.

Those are the three major principles: the principle of deposit creation, which is a factual matter; the quantity theory of money, which puts chief emphasis on quantitative relationships; and the principle of total effective demand, which, while an abstraction, is the basis for explaining changes in the level of business activity.

In conclusion I wish to underscore one fact--money is a mechanism. It is a piece of machinery. Its functions relate to exchange, payment, pricing, contracting. Money is a device for accomplishing those ends. The gold standard was a particular type or model of monetary mechanism, just as a Pontiac is a particular type of automobile. So was the paper standard. Our present managed monetary system is another such model and, like any other monetary system, must be judged on the basis of how well it fulfills the basic monetary functions. It is good if it works well; it is bad if it doesn't.

History does not reveal any monetary system that worked altogether satisfactorily. When we hear someone complain about our present monetary system or our monetary overlords, it is important to remember that there was likewise great dissatisfaction with the international gold standard. Moreover, that standard broke down more than once. Notwithstanding present difficulties and dissensions, it may well be that we have, under the Federal Reserve, the Treasury, and the International Monetary Fund, a better monetary mechanism than the world has ever seen before; and, moreover, one that will improve still further in the years that lie ahead.

DR. HUNTER: Dr. Whittlesey, why don't more people go into the banking business if there is this wonderful opportunity for making money in the simple manner that you described?

DR. WHITTLESEY: I could give you some facetious reasons, but there are some serious ones too. Partly as a result of controls within the system itself and partly as a result of legislation, there are pretty substantial limits to the process of creating money. While all the banks viewed collectively can create money, no single bank can do so.

Suppose that a banker decides that this is easy money; he will make a big loan where the other banks won't. He lends a million dollars, creating a million dollars of additional deposits on the books of his bank. Immediately checks will be drawn against those new deposits. Prior to this he was getting as many checks coming in, in his favor, as were drawn against him so that his current balance was even. Now he will be subject to a sudden drain on his reserves to meet the adverse clearinghouse balance. This drain of reserves will cause his reserves to fall below the legal limit. Even in the absence of a legal limit he would be restricted since he would simply run out of cash and become bankrupt.

The process of deposit creation can go on actively only when all banks are engaging in it. That would be at a time like a war or a general boom. Suppose all banks begin to give out credit too freely. That is where the Federal Reserve steps in. It is the function of the central bank--if the normal operation of the market doesn't regulate this process of deposit expansion and prevent it from getting out of balance--to do certain things to prevent the banks from lending too much, from creating too many deposits. They can do it by raising the reserve requirements. They can do it by other methods that Mr. Wayne will describe to you tomorrow.

QUESTION: Dr. Whittlesey, you made the remark that if there were a Communist invasion of Hong Kong, it would immediately create a demand for gold and there would be a consequent increase in the price of gold in local markets. I have heard that statement many times, but I still don't understand it. Will you explain it?

DR. WHITTLESEY: Such a development has occurred again and again. The idea is simply that at a time of unrest or political crisis, people want to get their wealth in as small a compass as possible, so that it will be transportable. They want to convert it into some commodity that they can move, take with them. Gold meets this requirement better than almost anything else and consequently a premium develops on gold.

Does that answer your question?

QUESTION: To some extent. But I don't understand the significance of Hong Kong and Macao.

DR. WHITTLESEY: There is no significance to those two cities as compared with others. It could happen at any spot in the world, including this country. Money is a storehouse of value and the premium on gold is a phenomenon of prices. Payment of a premium on gold is a means to the preserving of wealth, which has nothing to do with Macao or Hong Kong. They are just handy examples.

QUESTION: Is there any history of currency increasing in value instead of depreciating? It always seems to go one way.

DR. WHITTLESEY: It is very true that the general trend has been toward depreciation of currencies. But there are exceptions; there have been currencies that went up. For example, at the time of the Civil War, the American dollar depreciated to about 50 cents. By 1879 we were back on the gold standard and prices were considerably lower than they had been before. The same thing happened after the First World War. There have been cases of revaluation upward. There have been no cases, however, where money rose in value to anything like the extent that it has depreciated in value.

There is a very interesting and surprising point that I might mention. Indexes of wholesale commodity prices show that in 1925 and also in 1941 a dollar would buy as much as it would in 1800. Let me say that again, because it is hard to believe. The dollar would buy as much--a thousand dollars would buy as large a heap of wheat, iron, coal, and selected other things--140 years later as it did in 1800. That surprising fact is accounted for in this way: Many things have become more expensive, but other things which were manufactured, for example, iron nails, which were formerly beaten out on an anvil but are now squeezed out by a machine, have become much cheaper.

There have been only four periods of substantial inflation in the United States. Every one of them was associated with a great war--the War of 1812, the Civil War, World War I, and World War II. There has been no case of peacetime inflation of any consequence in the United States. That suggests that if we avoid a serious war, we can reasonably hope to maintain the purchasing power of the dollar.

QUESTION: On this matter of monetary policy and keeping a stable price level, it seems to me I have heard the argument that permitting some inflation to continue over a length of time will keep up business enterprise and keep people fully employed. On the other hand I have heard it said that we should have some deflation in order to get better production. The consumers represent one side and labor the other. Would you comment on that?

DR. WHITTLESEY: There are different points of view on that, and you stated them well. Everybody recognizes the desirability of relative price stability. If we had to choose, however, between conditions of mass unemployment with a constant level of prices and full employment with moderately rising prices, I think that we would abandon price stability.

In the period of the great depression they coined a word--reflation. Reflation meant getting prices which had gone too low to go up, more or less back to where they were before. More recently somebody coined another word--disinflation--where you try to get prices down. Each of these terms relates to a modified form of price stability. It means that you don't want to stabilize at either too low or too high a level.

Money, as I mentioned earlier, is a dynamic factor. When prices rise, costs tend to lag, and that makes profits high. Now profits are the moving influence in economic activity. Thus in a period of inflation, business is stimulated--though not always in a healthy manner. It has been said: "If the tires of business are sagging, let us pump them up with a little monetary inflation." Unless we are extremely doctrinaire, we are likely to feel that a certain discretion should be allowed as to whether the time has come for a little deflation or a little reflation. That is precisely what the central bank is supposed to determine. Somebody has to make the decision as to whether the time has come for this action or that, for this objective or the other, for one technique or another. That is the reason we have a central bank. It is basically what I referred to as constituting monetary management.

QUESTION: Would you say a little about the distinction between an expanding economy and inflation, rising prices, and other aspects that might appear to be expansion?

DR. WHITTLESEY: Yes, and I will try to cut it short, because that could be a very lengthy discussion.

Fundamentally we want more goods and services. The average standard of living is a simple fraction--goods and services divided by population. We want an expanding economy in the sense that we want more goods and services, and perhaps more means of defense and all the rest. We don't want the expansion to take the form merely of raising the prices on the existing volume of goods and services. We are in favor of the first type of expansion and opposed to expansion of the meretricious type, which is inflation.

To the extent that we can get expansion in a real sense, then, and to the extent that monetary policy can contribute thereto, it is a good thing. But monetary policy has always had the function also, still within the limits of multiple objectives, of combatting the expansion that consists merely of raising prices. Money has certain functions to perform. One is as a medium of exchange; another is as a medium of contracting. Inflation alters contracts, upsets business activities, creates abnormal stimuli.

DR. HUNTER: Has a little inflation come to be thought of as essential by and large and in the long run for an expanding economy?

DR. WHITTLESEY: In a situation such as we had in 1932, when deflation had wrought many evils, there was general agreement that some inflation would be helpful. Even at a time such as we have now, there are a few economists and others who think that we should have some inflation in order to stimulate the economy. I don't agree. We have today a high level of employment and almost complete stability of the price level. A great deal depends on how vigorous we think the economy is, how strong demand in this country can be without the monetary pump, the stimulus of inflation. If I were very pessimistic, as many were in the period of the thirties, concerning the strength of American industry and American consumers, then I would be in favor of inflation. But I have confidence that, under God--and with the help of the Treasury and the Federal Reserve--we can achieve satisfactory levels of business activity without inflation.

QUESTION: Does the fact that the Canadian dollar has passed the American dollar recently mean that the Canadians have better management, less inflation; or what is the significance of it?

DR. WHITTLESEY: It is a matter of supply and demand. What has happened is this: The demand for goods and services between the two countries, and particularly the desire of Americans to put investments in Canadian enterprises, like oil wells and uranium mines, has been such as to cause the amount of American dollars to be high relative to the amount of Canadian dollars; supply and demand make their dollar dearer than ours.

Now, personally, I think that what is called flexible exchange rates--where we allow these things to happen in response to supply and demand--is desirable. While a certain degree of movement is all right, discretion should be exercised to prevent random and disturbing fluctuations. Who is going to decide? Well, our monetary authorities have that job. The International Monetary Fund helps to look after it. But as between the Canadian and the American dollar at the present time I think the situation is pretty good.

QUESTION: Doctor, during the discussion period yesterday it was brought out that the gross national product for 1953 was 367 billion dollars; that the figures up to this point in 1954 indicate that there was a considerable drop, down to 350 billion. There was considerable concern about that. Would you please comment on the importance of investment in connection with the national ability to maintain the national product.

DR. WHITTLESEY: We were in an inflationary situation from 1940 to 1953. As soon as we get to a point where the tide turns and, instead of having inflation, we have steady prices and some rise in unemployment, people begin to say: "Deflation is coming. We must do something to put people back to work." I believe that our judgment was better 5 or 10 years ago when we said that 3 million unemployed was compatible with a healthy economy. We should not get so excited when we have 3 million or so unemployed. We should have confidence in natural forces, without thinking of immediate resort to Government interference. The present situation seems better than operating under forced draft. Maybe this is a more normal condition than with millions working on overtime.

I admit that what I am saying involves calculated risk. But I am convinced that we have a strong and vigorous economy, with sufficient drive within it to move forward even if unemployment should rise at times to 4 or 5 million. I believe that we can afford to rely more fully upon the forces of inner power and strength which we say our system and our country possess. I would like to see them tried because I have confidence in them.

DR. HUNTER: Our time is up. I thank you, Dr. Whittlesey, on behalf of the Commandant and all the rest of us for a very valuable contribution to our knowledge.

(22 Oct 1954--250)S/en