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Irving Fisher's World Authorities
on
THE MEANING OF MONEY

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FOREWORD

THE CONSUMERS GUILD OF AMERICA, INC., is one of many organizations that have been studying the subject of money and seeking eagerly for authoritative guidance. None of the contemporary discussion, proposals and legislation seemed to contain any evidence of erudition. The befuddlement seemed world wide. We could not find anywhere a master mind.

While we were thus engaged in our research there came to our notice a press report of a public address by Professor Irving Fisher, monetary economist of Yale University, in which he indicated that most persons who undertook to discuss money did not understand the subject and that those "who understood the real meaning of money" were very few. We found no difficulty in agreeing with this but the statement would have no value without the revelation of who were "the very few." We put the question to Professor Fisher and he gave us a list in a letter which we reproduce on a following page.

The making of such a list was of such wide interest that we released it to the press with the statement that we had prepared a questionnaire to be sent to each authority named, from the responses to which a symposium would be made for the information of Congress. The story received very wide circulation in America and abroad and a number of editors and others challenged Professor Fisher's right to be an authority on authorities. It is only fair to Professor Fisher to point out that he has not set himself up as such an authority. He has merely stated that he knows only a very few who understand the true meaning of money. Nor did he offer to name them, he was invited to do so. He has not undertaken to establish an exclusive circle and expressly states that "there are doubtless several others whose names do

not happen to occur to me just now, as well as still others, especially among younger economists, whom I do not even know."

There is no way by which an authority on authorities can be authoritatively determined. It is a volunteer job, no one can be drafted to it and there are few who are willing to render the public service of naming the master minds with all the possible criticism that such an undertaking involves. We wish to go on record as stating that had we the choice of selecting the maker of the list we could think of no one better qualified than Professor Fisher. He has been a student of money for forty years during which time he has pursued the writings of many other students. He has a wide personal acquaintance with the contemporary monetary economists and the quality that above all commends him is his openmindedness. Indeed, he has been criticized for entertaining and even espousing novel monetary ideas but without entering into the merits or demerits of such ideas the very fact that they were entertained by Professor Fisher demonstrates that he is not opposed to new thought. He has shown himself also as broadminded by including on his list of those he highly respects a number who do not agree with him and those who are on opposite sides of the current Roosevelt policies. Professor Fisher did not name himself as an authority but we added his name to the list and he kindly agreed to respond to our questionnaire.

Of course the nomination by Professor Fisher (or any one else) of persons qualified to stand as authorities on the subject of money does not make them such. They are merely the ones who by reason of such designation are especially worthy of consultation. To us it is not a glorification, it is admission to a special test. Some of those named saw fit not to take the test. Nomination on the list by Professor Fisher and request by us to answer the questionnaire of course imposed no obligation upon any

and reasons for declining in each instance that they were given to us are included in the essential correspondence given in the back of this volume, from which (or the absence of answers) the reader may draw his own conclusions.

The questionnaire was drawn to give full latitude for the respondent to express his views as well as his alignment with or against different schools of thought and different sides of current monetary controversy. But it was not drawn after the orthodox manner that would admit of copybook answers. It is retrospective, prospective and introspective. The Question No. 2-D throws the door open wide for imagination and speculation and offers the opportunity for complete abandonment of all the classical theories of money. Question No. 9 makes a challenge we believe to be without precedent. Question No. 7-A seems almost foolish in view of universally accepted opinion and its correct answer brings surprises.

We have undertaken to render a service to the reader by reviewing the answers, reconciling them wherever possible, contrasting them where necessary and rationalizing all of them to the best of our ability. Our own views on money, arrived at through several years of study prior to undertaking this symposium, of course assert themselves.

We have tried, however, to apply them critically rather than constructively, which seemed the appropriate attitude here. In a separate volume entitled "Money Freedom," we express our views constructively.

E. C. RIEGEL.

THE SYMPOSIUM

QUESTION 1. *What is the meaning of money?*

FRISCH

It is customary to attribute three functions to money: (1) as a measuring rod for values, (2) as a means of storing up value, (3) as an instrument in helping to circulate commodities and services (and certain forms of claims and rights).

In modern society it is the last of these three functions that is the most important. It is through this function that the most far-reaching effects—to the good or to the bad—are produced by money on the whole economic structure. The last function is more vitally connected with our idea of "money" than either of the other two. The first two functions may be, and have actually been, performed by other means. But the third function cannot be carried out by anything but money; indeed, anything which actually serves as a medium of exchange, helping to circulate commodities and services would by most people naturally be called money. Personally, I am therefore inclined to take the third function as *the* definition of money. In accordance with this view the term "paying medium" may just as well be used instead of money.

QUESTION 2-A. *Is it essential to its function that money be a thing of value?*

Anything that is generally accepted by the public as a paying medium will, by this very fact, have a *value in exchange* equal to the goods for which it is accepted. Therefore, if by "value" one understands value in exchange, money must necessarily have value.

I presume, however, that in the formulation of the question (2-A) value is taken in another sense, namely in the sense of *intrinsic value*. Value in this sense means that the thing is pursued for its own sake, for the services it may render in consumption of production. As a rule it also means that a *real cost* is involved in its production. In my opinion it is *not* essential that money have this kind of value. It seems to me that experience has amply proved this.

I go further. Not only is it unessential that money shall be a thing of intrinsic value, but it is directly *detrimental* to its good functioning. In my opinion a monetary system in the modern and in the future society can never become sound if money is a thing that has intrinsic value or—which amounts to the same—if through strict rules of redemption it is connected with an individual commodity that has intrinsic value. In particular I believe that the monetary system can never become sound if it is based on gold. Some generations ago the situation was different. So long as men were living in a deficit economy there was something to be said for the popular idea that a monetary system based on gold or some other precious metal was a "sound" system. But in modern society the situation has been reversed. I shall elaborate this statement somewhat.

As an example of a monetary phenomenon consider the foreign exchange rate. The possibility of maintaining at any given moment a stable exchange rate depends on a whole set of basic factors that determine *the trend of international capital movements*. Some of the more important of these factors are: relative price levels, profit expectancies and interest levels in the various countries, political uncertainties, etc. These factors have of course always been active in exerting a pressure on the exchange rate in one direction or another. But in earlier times they did not act so spontaneously, rapidly and forcefully as now. There was time and room for corrective influences to be set in motion by the responsible leaders of the monetary systems in the various countries (adjustment of interest rates, etc.). As a barometer or an incentive *reminding the leaders* of the right thing to do in this connection the gold standard had some good effects, although the same could perhaps have been obtained by other and more appropriate means.

Even in these earlier days the effect of the gold standard was thus more of a *formal* than of a *real* nature. Gold, through its connection with the monetary system, served as a warning signal, but was not itself one of the really determining factors. In modern times this formal character of the gold standard has been greatly accentuated. In my opinion the whole economic life as characterized by the technique of production, the procedures of international finance, etc., has now come into a stage where gold appears only as an historical reminiscence

appealing to people's imagination, but having no effective power in matters of monetary stabilization. The basic factors work indeed now in such a manner that a simple *warning device* such as the gold standard—or any similar system—is a quite inadequate means of effecting monetary stabilization. If monetary stabilization shall ever again become possible, it must use measures that aim much more directly at the underlying factors themselves. It is, therefore, highly desirable that we now learn to distinguish better than we have done before between realities and formalities in the monetary sphere.

Amongst others we must clearly recognize that if the basic factors in the exchange rate problem, i.e., the relative price levels, the profit expectancies, etc., are actually such as to permit the maintenance of a stable foreign exchange rate, then this stability may *technically* be assured by any of a great variety of conceivable schemes of international banking transactions (for instance, by the scheme suggested by Knut Wicksell several years ago). In particular it is entirely unessential whether the technical details are worked out in the form of a gold standard or not, provided only that the basic factors are favorable to the maintenance of a stable exchange rate.

On the other hand, if one gets into a situation where the underlying determining factors do not any longer permit the maintenance of a stable exchange rate, then it will break down, no matter whether the gold system was originally in operation or not. If a gold redemption system was originally in operation, it will simply *be discontinued*. Experience has shown over and over again that this is what will happen. Thus in modern society gold as a stabilizer of the monetary system is little more than a fiction. Real stability depends on entirely different things.

But that is not all. Not only is the gold standard ineffective and unnecessary but it will frequently lead the

monetary authorities to do things that are actually *harmful* to the functioning of the whole economic mechanism, and often it will prevent them from doing what the situation really requires.

For instance: the international competition for monetary gold may force a central bank to raise its re-discount rate and take other credit restricting measures in a period where just the opposite policy should have been adopted. And changes in the production or in the special market conditions of gold may necessitate monetary measures that have no relevant connection whatsoever with the real monetary needs of industry and commerce. If at any given moment the rigid rules of the gold redemption are changed in order to satisfy the actual needs of industry and commerce (for instance, by lowering the gold content of the monetary unit or by some other measure), some relief may be obtained, but it will only be a temporary relief. New difficulties are certain to develop sooner or later if the artificial connection between money and gold is maintained and the world continues its rapid technical, social and economic development.

Freeing money from its artificial connection with gold would, therefore, in my opinion, be an important and highly desirable monetary reform. It would mean that one could finally begin to concentrate on the *truly monetary* problems. By this I mean to manage the monetary system in such a way that it is at any time adjusted *directly* to the objective purpose it shall serve, namely to help the full and free circulation of the goods and services that are or can be produced.

Similar arguments would apply to any other specific commodity or restricted group of commodities (silver, wheat, labor-hours, kilowatt-hours, etc.) which one would try to identify with money. I therefore believe that it is both desirable and possible to use as money a thing that has no intrinsic value.

QUESTION 2-B. *Is it essential that it be in the form of a promissory note by a specified issuer?*

FRISCH

The essence of a promissory note is that at some future date something will be "paid for it." It shall be exchanged for something else. And, from the monetary viewpoint, this something else shall be still more "liquid" than the promissory note. A thing that shall function as money, i.e., that shall be instrumental in helping to circulate commodities and services need *not* have this characteristic of promissory note. This is entirely unessential to its good functioning as money. The only thing that needs to be promised in the case of money is that it will be generally accepted in exchange for commodities and services. This is the only "redemption" or "promise" needed, and in modern society it may be assured in many other ways than by giving money the usual form of a promissory note.

QUESTION 2-C. *Is it essential that it carry a specification of exchange value in one or two commodities such as gold or silver? If so, why must such commodity be arbitrarily priced, or denied a free market?*

FRISCH

From my answer to Question 2-A it follows that, in my opinion, it is not only unessential but even detrimental if money carries a specification of exchange value in one or two commodities such as gold or silver.

If money is nevertheless connected with these commodities the need for a "regulation" of them and a control over their markets must necessarily present itself just because these commodities *in themselves* have no effective monetary stabilization power, but will, on the contrary, when connected with money and left to themselves produce certain highly undesirable influences on the monetary system, as mentioned under Question 2-A. One artificial step thus necessitates another. These attempts at "regulating" gold or silver give in my opinion an excellent proof of how irrelevant the whole gold or silver standard system is to the purpose which money shall really serve. They show that, instead of solving the monetary stabilization problem, the gold or silver standard rather creates a new puzzle.

QUESTION 2-D. *Is it possible to have a true commodity dollar without intrinsic value or specie redemption, sponsored only by the trader and backed solely by the commodity which it negotiates in exchange?*

FRISCH

I feel convinced that such a system is possible. The proof is that in essence *we have had it*. We have indeed had inconvertible paper money in many countries during periods that, taken on the whole, have been much more prosperous for those countries than the present period. And any system of inconvertible paper money is in its functioning equivalent to a commodity-dollar system.

If it is necessary as a concession to people's superstition, a commodity-dollar system may be *camouflaged* as a gold standard by establishing rules of redemption that are made so elastic as to be harmless and leaving in reality the monetary authorities free to apply those measures that are necessary in each given situation. But there is no other reason for maintaining such rules than just people's superstition.

QUESTION 2-E. *Is the issuance of money the sole prerogative of the sovereign, and if not, who may issue money?*

FRISCH

This is purely a question of what is found practical in view of the special circumstances under which the nation works. If the monetary authorities of the country really understand the nature and functioning of money in a modern society, then it is highly desirable that the issuance of money is reserved for a central monetary institution. In the future this condition will probably be realized, but in the past and at present it has, in my opinion, not been so. With a few exceptions the leaders of the monetary systems in most countries have shown a deplorably superficial understanding of the great economic upheavals which we have gone through and particularly of the role played by money in the course of events. They have been moving along the same lines of thought that they have been accustomed to from their youth, using types of arguments that would apply to the situation a generation or two ago but which are irrele-

vant to the present situation. Practical—and maybe political—reasons may make it difficult to change the higher personnel in the central banking institutions; it may therefore be found desirable, in certain cases as a temporary arrangement, to establish new institutions with the power to issue money, or which in some other way could carry out the function which money under the old system has not been able to perform satisfactorily.

QUESTION 3-A. *Is the fiat of the U. S. Government upholding the price of gold or is gold upholding the creditability of the fiat?*

FRISCH

The fact that a great country like the United States maintains a gold standard will undoubtedly be an important element in upholding the price of gold.

On the other hand, gold is only an unimportant element in upholding the creditability of the fiat of the United States Government.

The true factors underlying this creditability are the government's power to impose taxes and to manipulate monetary and fiscal institutions in whatever way the legal authorities may in any given situation permit. The enormous power over the whole economic machinery which these facts constitute, are the real underlying elements that uphold the creditability of the fiat of the government. If the monetary and fiscal authorities understand the requirements of the situation and act accordingly, no other factor is needed to uphold the creditability of the fiat. But, of course, if there are doubts about the understanding or the willingness of these authorities to act in the right way, then a monetary system based on gold may be an element in preserving the public's faith in the currency.

QUESTION 3-B. *What would be the influence on our money and trade and upon the price of gold if the U. S. Government refused to buy gold at any price and sold it at the best price obtainable in a free world market?*

FRISCH

The price of gold would be depressed if the U. S. Government refused to buy gold at any price and sold it at the best price obtainable. This would mean a lessening

of debt burdens fixed in terms of gold. In my opinion this would be to the good. Trade would in all probability be stimulated, the good effects on the economic situation may even be so strong that also the holders of gold and the debtors in gold currency would derive a net benefit, their indirect gain being larger than their direct loss.

QUESTION 4-A. *Can the United States, by inflating or deflating the price of gold or silver, inflate or deflate the price of any or all other commodities?*

FRISCH

This depends on the principles on which the monetary system is built. If the system is *not* connected with gold or silver, then an attempt by the Government to inflate or deflate the price of gold or silver would of course only have a small—probably a negligible—effect on the whole price system.

If money is linked to gold such an attempt by the government would influence the general level of prices. But it would do so only indirectly and only after a time lag that may under certain circumstances be considerable. The price of gold—when the monetary system is based on gold—will indeed not affect the other prices directly, but only by influencing certain intermediate factors that are themselves directly operative in determining the level of commodity prices.

QUESTION 4-B. *Is price determined by supply and demand of commodities or by supply and demand of money?*

FRISCH

The question cannot be put this simple way. It is not a question of the chain of causation running one way or the other; it is a question of *mutual dependence*. If two balls are resting in the bottom of a bowl, it is impossible to say whether one is determining the position of the other, or vice versa.

I shall mention a few points characteristic of the mutual interdependence between supply and demand of commodities and supply and demand of money in the fixation of prices, although an exhaustive description cannot be given in the brief space devoted to these answers.

In the supply of money two parts should be kept distinct: the supply of money at the disposal of producers and consumers respectively. Both these parts of the money supply will influence the supply of commodities and thus influence prices, but in different ways.

The ultimate supply of commodities is determined by the producers. There are two "minimum factors" that determine the producer's policy. In the first place he must (under private capitalism) have the incentive to produce which consists in the expectancy that he will be able to sell at a profit. This expectancy is to a large extent a question of the actual and future supply of money to the consumers. This depends of course, again to some extent, on the producer's own activities (through his payment of wages and salaries). But it also depends on factors that may be influenced without an immediate increase in the producer's activities. This latter influence is one of the most important facts to take account of in any recovery scheme that is built on private enterprise. The flow of money to consumers may be increased if the government adopts such a policy of expenditure that *it gives out more purchasing power than it absorbs from the consumers*. This is done when the government either *creates* the necessary money (printing of notes) or if it borrows in such particular forms that the total volume of credit and bank deposits increases by the operation (such forms exist) or finally if it uses a system of taxes that are *differentiated* in such a way that they hit those persons or groups who have the purchasing power but not the consumption power.

The difference between the purchasing power given out and taken in by the government may perhaps be called the *circulation-difference*. I want to emphasize that the essential point in stimulating industry and trade is this circulation-difference, not the question of what particular items are included in the expenditure budget. Thus if public works are financed through economies on other parts of the budget, such as administration—salaries and the like—the recovery effect will be nil (although some future gain for society as a whole may be realized if the administration was actually superfluous and the public works do create real capital). On the other hand a stimulating effect will be produced even if no public works are started but a circulation-difference is created by the fact that those taxes that hit the general public are lowered, and the government covers the deficit by such forms of borrowing that will increase the total credit structure.

The other minimum factor in determining the production policy of the producers is the supply of money at his disposal. This, of course, is essentially a question of the general credit policy. It must be remembered that this supply of producers' credit is only *one* of the two necessary conditions for an expansion. This explains why a general policy of credit expansion for production pur-

poses is in itself insufficient to revive the economic activity in a depression period. The producers simply won't move unless they are assured that there will be an effective demand for their goods, and this in turn is a question of the flow of money into consumption. To break the vicious circle this latter flow must be increased *first*, and no one else can do it but the government.

The price, as finally fixed in the market place, is a composite result of the various demand and supply factors here briefly outlined.

QUESTION 4-C. *Is the volume of trade influenced by the volume of money or vice versa, and why?*

FRISCH

This depends on whether one thinks of a particular phase of the economic process or on the process as a whole.

If one confines the attention to the working of a particular part of the mechanism, say the banking system, then, of course, it looks as if the amount of money in circulation is determined by the volume of trade, and not vice versa. Consider, for instance, a cashier in a bank. He will naturally be under the impression that the outgoings and ingoings in his caisse—as depicted by the account he writes in his books—depend on certain things that happen outside of his sphere. He will most decidedly have the impression that he cannot make these things happen just by writing figures in his book. The point of view of some—perhaps most—practical bankers will, in many respects, be similar to that of the cashier. They will be under the impression that their working capital, mainly consisting of deposits from the public, is determined primarily by forces which they cannot influence. On the other hand, the demand for credit from their customers also seems to be largely determined by outside factors such as the general trade activity, the prospects of profits, etc. The bankers will, therefore, get the impression that they have no great leave-way in their dispositions and that consequently the amount of credit in the system and the amount of notes circulating—the two principal forms of money—will be determined by the volume of trade and production.

But if one follows up the more remote effects of the various transactions and tries to see the economic life of the nation as a whole, it will be perceived that the chain of causation runs also the other way. Then one will understand that mere decisions to write things in the books of the banks may entail certain important consequences

for the general trade and production activity. This may take many forms. As an example, consider the case where a bank decides to grant the Government a loan to be used for increased public works. This may, if the transaction is carried through in the right way, mean a direct increase in the total volume of credit in the system, which, in turn, will be the instrument by which the total volume of trade and production is increased. In this case the volume of money has determined the volume of trade and not vice versa.

QUESTION 5-A. *In round numbers the United States has outstanding six billions of currency and twenty-two billions of bonds and other interest-bearing instruments. Aside from the interest factor and the negotiability, is there any difference in essence between these two forms of obligations?* 5-B. *Are they both money?*

FRISCH

5-A

Yes, there seems to me to be still an essential difference between these two forms of obligations. The currency, that is to say notes and metallic money pieces circulating, has as its essential function to *circulate*, more or less indefinitely. The notes and metallic money pieces are in fact— from the point of view of their real function as tools in the nation's economic activity—never to be redeemed. The promise of gold redemption or any other similar promise has no functional connection with the services which these instruments render. It is only a reminiscence of the particular way in which these instruments historically happened to come into function.

In the case of the bonds and other interest-bearing instruments the situation is different. These instruments will actually have to be redeemed in something else. This redemption is not an historical reminiscence, but is an actual expression for the purpose which these instruments serve. The bonds, etc., are indeed expressions for definite debt relations and the special form of the bonds is a practical expression for the way in which these debt relations are to be regulated.

5-B

No. I would not call the twenty-two billions of bonds and other interest-bearing instruments money.

QUESTION 6-A. *What part of the existing forty billions of dollars of bank deposits is money? 6-B. Of what is the balance constituted?*

FRISCH

6-A and 6-B

The existing forty billions of dollars of bank deposits cannot be separated into certain parts that are money and other parts that are not money. This is not a question of either/or, but of more or less. The various items may have the monetary characteristic to a lower or higher degree. It all depends on the *velocity of circulation* of the various items. A first part consisting of more or less frozen credits performs such an insignificant amount of "circulative" work that it may, for practical purposes, be disregarded as money. A second group consists of deposits that show some turnover, although slow, for instance, savings deposits in country towns. They perform some, but not a very active monetary function. Other categories circulate still faster. At the extreme end of the scale we find deposits in New York banks from firms which utilize their accounts very frequently, possibly drawing checks which will in a few days amount to much more than the average net balance on the accounts. These latter kinds of deposits are typical representatives of modern money.

QUESTION 6-C. *What was the twenty-five billions of bank deposits that has disappeared in the last four years while government currency and bonds have increased several billions?*

FRISCH

These twenty-five billions were money, to a larger or smaller degree, according to their velocity of circulation. *How and why did this money disappear?* To explain this it will be necessary to say a few words in general about the mechanism by which paying medium is created or destroyed under the present day banking system.

There does not exist any mysterious "fund" that is determined by outside factors and constitutes the amount of paying medium at the disposal of the nation. To a large extent this fund is increased or diminished by purely psychological processes. In particular this applies to the volume of bank deposits.

The individual depositor knows that *he* had to sacrifice and make real savings in order to get his account in the bank. And from this he concludes that the total volume of deposits in a country is an expression for the total real savings. This reasoning is typical for a deplorable, popular confusion that exists in many fields in economics, and which in general terms may be described as the confusion between facts pertaining to the economy of an individual and those pertaining to the economy of the *group* of which the individual is a member. The total result of a number of economic actions of a certain kind cannot always be deduced as the simple sum of the individual actions. Frequently it arrives that each individual action through its indirect effects *work counter to the other individual actions*. This indirect counteraction may for any given individual be so small that he does not see it, but for the group as a whole the effect may be decisive because these small indirect counteractions occur in such a large number. Thus if one individual by means of real sacrifices increases his savings deposits, the important question from the nation's viewpoint is if this will actually mean a net increase in the total volume of deposits, or if it will only mean such an increased difficulty for the *other* depositors that they are unable to maintain *their* deposits intact. The answer to this question will be entirely different in times of prosperity and depression. It depends on certain factors that are *not* revealed by studying the real-savings aspect of deposits but which can only be understood when the whole problem is considered from the point of view of *monetary circulation* and banking policy.

Adopting this point of view one will see that the volume of bank deposits is not primarily determined by the amount of real saving that goes on in society, but depends, to a very large extent on whether the average *banker* is under an inflatory or deflatory psychosis. Let us consider this in some detail.

The bankers' willingness to give credit depends on two things: (1) The manner in which they view their liquidity position, (2) The manner in which they regard the "credit worthiness" of the applicants for loans. Both these things are, to a large extent, a question of the psychological status of the bankers at the moment. It depends

on whether they are on the whole optimistically or pessimistically influenced.

Let us suppose that the bankers of the country at a specific moment generally have the feeling that their liquidity is great, perhaps too great for the resources to be utilized with the greatest possible profit in view. And let us also suppose that they are on the whole optimistically influenced in their estimate of the "credit worthiness" of the applicants for loans. If this is the case increased credits will be granted throughout the country in general. The banks' customers draw upon these credits and use the money for payments of various kinds. In the first place this means that the liquidity reserves of the banks are attacked. Those who receive the notes or checks do not however keep them in their pockets. By many roundabout ways these resources *again return to the banks*. If there are no special circumstances present which tend to keep more notes in circulation than previously, all the resources here considered will return to the banks, partly in the form of payment-down to other outward loans, partly in the form of increased deposits from the public. Of course, this does not apply to each individual bank, but to the banking system as a whole. After the transaction the total *liquidity situation of the banks will therefore be approximately as good as it was before*. It may even have been improved if the increased activity has brought to the public a larger optimism which results in hoarded notes returning to the banks.

That which the bankers believed was "consuming" a part of their liquidity reserve, has thus for the entire banking system regarded as a whole, not been any "consumption" at all. Liquidity reserves are just as great after the transaction as before. They have proved to have the astonishing quality of replenishing themselves automatically when one dips into them. A further continuation of this development is just what characterizes the usual optimism during a period of prosperity. It is the psychosis of inflation.

During a period of depression the opposite takes place. The administration of the individual bank is nervous, it fears that something will take place in the system which will have consequences for the bank concerned, for instance, will appear in the form of a run or the like. The administration of the bank finds, therefore, that it must

strengthen its liquidity reserves by drawing in on the outward loans. When this is the position generally over the country as a whole, the effect of the reduced outward loans will, however, *not* be an increase in the banking system's total liquidity, but will, on the contrary, appear either as an increase in certain other outward loans or as a fall in the deposits from the public, or in both. The liquidity reserve for the whole banking system has thus—particularly in a depression period—the remarkable quality that it will not increase if one endeavors to replenish it, because there are other factors in the system which give way.

The volume of deposits is especially elastic. And it is all the more elastic the more *general* the banks' policy of "strengthening" their position. In the extreme case where absolutely no increase in other loans is permitted, the volume of deposits is almost the only elastic element that gives way. In other words, *when the bankers attempt to draw in on their outward loans, they are in reality drawing deposits out of their own and other banks.* A general attempt on the part of the banks to "strengthen" their position will consequently a short time afterwards manifest itself as a drop in the deposits statistics of the country. Such a drop will make the bankers even more pessimistic in their dispositions, which will lead to a new fall in the deposits, and so on. In this way the whole banking system will enter into a falling spiral.

There are of course certain other factors which to some extent will cooperate in determining the magnitude of the deposits, outward loans and reserves. But that which I have here pointed out is the *essential*, when one will endeavor to understand what takes place during a deflation.

The bank deposits that have disappeared in recent years is thus largely a psychological phenomenon and a matter of bookkeeping. Those who believe that this fall reflects a corresponding fall in the country's real capital and real productive power build their belief on pure fiction.

This shrinkage in the total amount of deposits means a corresponding shrinkage in the paying medium of the nation, and this will of course have a tremendous effect on the total economic activity. This effect will propagate itself through many channels, amongst others, it will have a disastrous effect on the price system. This is not the place to depict these effects in detail.

QUESTION 6-D. *If you use the term "credit money," please define the difference between money and credit money, give the quantitative relation, if any, and the authorized issuer of both.*

FRISCH

I do not find any particular need for distinguishing here between "credit money" and money in the restricted sense of notes and metallic pieces. In practice there may be some minor difference in the effects produced by these two forms of money, but in most respects the two forms exert a similar influence.

QUESTION 7-A. *Does President Roosevelt have any power (aside from government loans and expenditures) to increase or decrease or stabilize the purchasing power of the dollar? 7-B. If so, name the power and the effect of its exercise.*

FRISCH

7-A and 7-B

I take it that the "purchasing power" of the dollar in the present connection means purchasing power in terms of commodities and not in terms of foreign exchange. The problem of increasing, decreasing or stabilizing the purchasing power will be very different if one has the commodity purchasing power in view, or the foreign exchange. For instance, stabilization in one sense may be incompatible with stabilization in the other sense.

Another distinction must also be made. A stable commodity-purchasing power has sometimes been used to express the fact that one dollar buys *the same percentage* of the nation's yearly output, and sometimes to mean that the dollar buys a constant "basket full" of commodities. Under increasing productivity a stable purchasing power in the first sense would mean an increased purchasing power in the second sense. In the present connection I presume that a stable purchasing power means that one dollar shall buy a constant "basket full" of commodities.

President Roosevelt may exert some influence on the purchasing power through various sorts of manipulations with the monetary system. Even without making very radical changes in the monetary system some effects in this direction may be achieved. It may be done by legislative rules, for instance, rules tending to increase or to decrease the issuance of bank notes. And it may also be done, to some extent, by the President (or his agents) "advising" the individual banks to accept, more or less

"voluntarily," certain methods or procedures in their credit policy.

A more thorough-going and *quick* control over the purchasing power of the dollar would, however, necessitate rather radical reforms in the monetary system. Amongst others I think it would be necessary completely to abandon the connection between the monetary system and gold (or some other special commodity), or at least the connection with gold (or some other special commodity) would have to be made purely formal, as mentioned under my answer to Question 2-D. Under such conditions I think a highly centralized banking system could by radical expansions or contractions of the volume of credit for different kinds of uses effectively influence the price level.

I want to add that I am not convinced that a stabilization of the purchasing power of the dollar by such means is the absolute ideal towards which the monetary management of the future should strive. There are other objectives which are more essential and which may even, to some extent, be inconsistent with such stabilization of the purchasing power of the dollar.

QUESTION 8-A. *Has there ever been an instance of monetary inflation (depreciation of the purchasing power of the currency) by any government whose fiat had not suffered discredit? If so, please name one or two.*

FRISCH

It all depends on what is meant by the nation's fiat suffering discredit. I do not think one can say that the big belligerent nations in the beginning of the world war had recourse to inflation only after their fiat had suffered discredit. For instance, when Germany and—in a different form—France had recourse to inflation, the reason was *not* that the public was not confident that the government could and would meet its various forms of obligations. The reason was rather a technical one: If the large sums needed should have been raised by a regular taxation or loan technique, it could hardly have been done rapidly enough. And furthermore if an attempt in this direction should have been made, it would have caused a general tightening of the credit market that would have been very uncomfortable in the particular situation the government had to face.

QUESTION 8-B. *Can a government with sound credit depreciate the purchasing power of its money by any device whatsoever? If so, please name such a device.*

FRISCH

This, again, depends on what is meant by "sound credit." If sound credit means a system that maintains the real value (the "commodity value") of debt claims, then of course depreciation of the purchasing factor will ipso facto mean that the credit becomes unsound.

On the other hand if "sound credit" means a situation where bank deposits are increasing, or at least not decreasing, where profits of the banks are ample, where there are few failures, etc., then a depreciation will in general just tend to produce "sound credit."

The general criteria of "soundness" or "unsoundness" of the credit system will be judged differently by different people, mainly according to their special economic interests. This applies particularly to the affects of a depreciation.

In neither case do I think that the judgment about the soundness or unsoundness will depend very much on the device by which the depreciation is carried through; the choice of the device is only of secondary importance in this connection.

QUESTION 9. *Is it possible for the Constitution to convey to Congress the power to "coin money and regulate the value thereof" or is there an economic law that frustrates statutory law?*

FRISCH

In my opinion it would lead to undesirable consequences to convey to *Congress* the control over the monetary system. But I do believe that a change can and

should be made in the present organization. The control over the monetary system should, I think, rest with the President (the government). It is an obsolete system that the money of a nation is managed by an independent authority which in certain cases may act in discordance with the government. The more the element of planning is introduced into a nation's economic life the more unsatisfactory it will be felt that such an important sector of the economic life as the monetary system is conducted to some extent independently.

Nor do I see any economic law that would work counter to such subordination of the monetary system to the central responsible government of the country. I believe that it is both possible and advisable to convey to this central authority the power to "coin money."

But from what I have said under Question 7-A follows that I do not consider the regulation of the "value" of the dollar by the central monetary authority (whether directly subordinate to the government or otherwise) an easy task, although it may perhaps be carried through by sufficiently radical measures. Nor do I feel convinced that it would be desirable to put up the absolute stability of the purchasing power of the dollar as the principal object to be pursued by the central monetary authority.