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MONEY, CREDIT AND PRICES

by

Dr. Charles O. Hardy, Economist.

October 3, 1932.

Remarks by Lt. Colonel W. A. McCain, Director,
introducing
Doctor Charles. O. Hardy.

After getting his Ph.D. from the University of Chicago in 1916, Dr. Hardy was successively a teacher, a professor and a dean in mathematics, history, economics and finance.

He is a member of the Institute of Economics, the American Economic Association and the American Statistical Association.

He is an author of considerable note and has traveled extensively in Europe, making a special study of banking and credit. Today he is a world authority on those subjects.

He has come down here today solely in the interest of the public service in order to give us the benefit of his expert knowledge. I have the honor to present Dr. Charles O. Hardy, of the staff of the Brookings Institution.

MONEY, CREDIT AND PRICES

Lecture by Dr. Charles O. Hardy, Economist.
October 3, 1932

The subject "Money, Credit and Prices" is a very large and inclusive sort of topic and leaves one the greatest discretion as to where to begin and where to stop. It is a subject over which professional economists have always been able to enjoy themselves wrangling with one another, and non-professional economists have perhaps been more prolific with schemes for applying knowledge and lack of knowledge to human betterment in this field of regulation of money and prices than in any other field of the economic organization.

I want to comment a moment on the relation of money to credit, and of money and credit to prices. So far as the relation of money to credit is concerned the situation can be summarized in this way - that throughout all recorded history the credit element in money has been getting bigger and bigger until at the present time what is used as money consists almost entirely of credit. In a society where there is no confidence on the part of the individual in other individuals, and particularly no confidence in organizations, it is necessary to use as money something which has a definite value in itself. So we have used as money, gold, silver and other things having high value content and durability. Just as soon, however, as the state of social organization and degree of confidence is sufficient, the process begins of substituting some sort of credit instrument for the thing that has intrinsic value. That takes two forms: first, substitution of a credit instrument which is representative of the specific item such as gold but which is in a more convenient form to handle, and second, a credit instrument which wholly or partially represents a promise to pay but not ownership of any thing reserved for that specific use. You get the same condition in regard to other commodities, such as wheat. You may have an organization where you have a warehouse receipt for wheat. The warehouseman may sell part of the wheat, as he is under no obligation to keep the full amount of wheat to represent the full amount of the certificate you hold.

In the field of money the first stage is reached when you substitute a gold certificate for the gold in circulation. The United States and France are the only countries where credit money is of this character. The other type, fiducial money, rests on the ability of the user to obtain money on demand as represented by our bank currency. Credit is merely confidence that the note (credit instrument) has been issued in good faith. We do business with checks and drafts drawn against the ability and willingness of institutions to furnish money as demanded by carrying a relatively small stock for the purpose. The situation in regard to credit money is not different from the situation in regard to the bulk of paper currency. In the one case you have an obligation not backed by gold but by ownership of saleable assets like securities or acceptances; in the other case, notes based on the taxing power of the Government; in both cases no claim to a specific asset but merely confidence on the part of the holder that the money will be forthcoming if he demands it. The proportion of this feduciary money has been increasing steadily over the past century and a half.

The expansion of the volume of effective money through the use of credit far beyond the amount of gold or silver has made possible a raising of the price levels far higher than would otherwise be possible with existing stocks of money. Whatever your theory may be as to the relation of money and prices, it is clear that you could not possibly sustain the present volume of business at present price levels if you did not have this system of expansion and balance of paper money beyond the amount of gold. That is not to say that any particular benefit has resulted from the existence of this super-structure, but once you have a credit situation and a price situation adjusted to it, it becomes important to maintain it. Anything which happens, such as has happened during the last few years, to destroy confidence in the responsibility and solvency of the power whose credit is being used as money, operates to create a shrinkage in its value and operates very disastrously in effecting an eventual reduction in the quantity of money.

That sounds as though I am working up to a statement of the relationship between quantity of money and price level with the conclusion that price level is to be controlled in the interests of whatever objective you think worth while through manipulation of the quantity of money. A great many economists go very far in that direction. This is a very ancient controversy and I think perhaps it will make for clearer thinking if I state my own position after warning you it is not a statement to which all economists would agree. There is no question at all that the big changes in the quantity of money are bound to have repercussions in the field of prices. Take for instance the silver discoveries of the 16th century, the great gold discoveries of the 19th century - certainly they can be traced through to their effect on the changes in the level of prices. It is quite inconceivable that any government could amplify its quantity of outstanding currency by numbers in ten or twelve digits as has happened in several cases without a very noticeable effect on the price level. If prices stayed where they were the holder of a small frantion of the outstanding money could buy anything.

On the other hand, the price level is, in my own mind, not very sensitive to small changes, and is not sensitive over short periods to fairly considerable changes, in the quantity of money, and certainly is subject to very considerable changes which have their origin outside the monetary factor. The industrial plant in the community is being operated at some percentage of capacity which is, say, average; the labor forces of the community are reasonably fully employed; the goods being produced are being sold, part to industries as means of operating additional capital equipment and part to consumers. The thing that is important from the standpoint of the money and price theory is that your money stock is going around and around through a circuit whether being paid as labor, to creditors as interest, part to the landlord as rent and part to people who are to be paid for raw materials and half finished goods. In a situation where no new monetary factor is entering the picture, where there is no credit expansion on the part of banks and no activities on the part of counterfeiters, you can get a situation where at some price level the wages will be sufficient to buy the consumers' goods at the price asked. The situation from the standpoint of national income will be as satisfactory as can be under the existing state of the arts and the existing efficiency of labor, distribution, etc. Once you get an equilibrium therefore, the situation is satisfactory no matter what the price level is, because no matter what it is, it is such as to move the goods.

Now, if in this state of affairs the situation is disturbed by the injection of a new money supply into the circuit or the withdrawal from the circuit, you get a different picture. First take the injection of new money. Let us say there are new gold discoveries and gold is being spent, or there is an extensive counterfeiting operation, or the lowering of the ratio at banks by loans. The effect is that the people into whose hands it goes have purchasing power to offer to industry that exceeds the purchasing power industry has disbursed as costs. Consequently that money will be spent; the existing goods will be bought at a figure which exceeds the costs; profits will go up and prices of commodities will be pushed out of line with wages, and there will be an era of prosperity. To keep our picture from getting too complicated, we will make the assumption that there is a single discovery of gold and that when this is put into circulation, the thing is through. In that case there will be abnormal profits on the first turnover; industry getting higher prices and bigger profits naturally will pay out larger amounts for labor and it is only a question of time before you get a new level of costs, and there are no longer any abnormal profits, and your boom has played out. Then comes the reaction in the other direction and that is the sort of thing that has happened repeatedly in the history of the world. You get temporarily a great impetus to production and it is possible to sell goods at more than their cost of production. Now that same situation could arise if the consumers who are also wage earners and interest receivers, instead of new gold discoveries and new injection of bank credit, have decided not to hoard money any longer. Nearly a billion dollars went into hoards last fall. If, in a short period, this money could be released and spent for the products of an industry it would give tremendous impetus to business, putting up wages. It would, however, be a temporary factor and necessary in the process of getting from one level to another.

Take the reverse situation. We hear a great deal about the importance of spending as compared with the importance of saving. The really important thing now is not how much you save as how it is saved. Let us assume in the former situation that the community which has been saving 5% of its income suddenly determines to save 15%. In making that saving, however, it does not hoard money, but merely goes out and buys securities. The result would be that you would have a greater demand for the products of those industries that produce machinery and build bridges, and a smaller demand for the products of industries that produce for immediate consumption. That would not make a change in the level of prices. If the increase of saving were permanent it would be necessary to gear up this productive machinery to produce a larger amount of capital goods and a smaller amount of production goods in the future. If, however, the community decides to save, not by buying capital goods, but by sticking cash away out of use, or if it decides to do it by merely holding bank deposits idle, then the result is the same as if it destroyed that money. Where $1000. is expended in costs of production by an industry, it gets back only $900. The price level would have to fall.

The loss of money by shipwreck, through abrasion and through hoarding, all have exactly the same effect. They all result in pressure on the price level, industry not being able to sell for as much as it cost to produce. That could theoretically happen in one of a good many ways. With regard to hoarding, the thing can work either way, and its results may be very disturbing. You may have immediate changes in the quantity of money represented by bank deposits because of a change in bank policy. Assume that the banks suddenly decide they will carry 15% reserves and lower their lending rates, till they succeed in lowering their ratios from 20 to 15%. The effect is that a lot of fresh buying power is created, during the transition, but once we are on the new price level there is no longer an excess of buying power above the amount which existed before. That suggests the possibility of very great disturbance in the functioning of industry if these changes in bank policy take place irrationally and hence the necessity of some system of control.

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Out of this has come the theory of central bank cooperation in the interests of world prosperity. The theory is very simple. If at any given time you do not have labor fully employed it will have a beneficial influence to lower interest rates and push fresh purchasing power into circulation, because that will be used to take up the slack. The only sound reason for having central banks is on the assumption that you have at certain times a lot of slack which can be taken up by artificially injecting a new monetary supply into circulation, and there have been many kinds of activities all over the world since the war designed to accomplish that sort of thing, and with very little success. I think we are justified in saying we have no evidence that the world has on the whole been more "prosperous" - that is, has had fewer years of depression and unemployment - over the last ten years than it would have been if we had not had the Federal Reserve system, etc. Some forms of control have been useful for other purposes (such as clearing checks, taking care of seasonal shares in the money market, and so on) but so far as their activities that are intended to control price levels are concerned, I do not see any evidence that they have been at all successful. I think the reason is this: There is an inherent bias in the scheme of things in favor of constant expansion. There is never going to come a period when public opinion is going to sanction anything but an easy money policy - a policy of expansion. In the second place, unfortunately, it seems as though the efforts of banking systems to expand the amount of money in effective circulation are more successful at times when least needed - when business is moving rapidly, when prices are moving upward. It is easy then for banking systems to expand.

On the other hand in periods like 1930-1932 when the theoretical argument for doing it is strongest, it appears to be impossible to accomplish the purpose by any sort of central banking activity. Take for instance, the tremendous experiment made last Spring. The Federal Reserve System suddenly embarked on a program of buying twenty-five million dollars worth of United States securities a week. That was finally put up higher. By doing that they were able to put commercial banks in possession of a great deal more funds, and for a time the results were pretty clear. A part came back to the Federal Reserve Bank in payment of debts, a part went abroad and part piled up as excess reserves in the banks. There is no evidence that any considerable part of it was absorbed by the public in increased spending operation. It is very easy to encourage an expansion movement at times when there is no real necessity for it, but difficult to overcome the thrust of public opinion in the other direction. We are dealing with mass phenomena of enormous magnitude and any group of individuals trying to manipulate price levels and appease millions of people always remind me of the story of the little boy who saved Holland by thrusting his thumb into the hole in the dike and holding back the North Sea all night. It is out of the relm of the practical. That sounds like a council of despair, but so far as any activity in the field of money and prices that is going to reverse the tide in either direction is concerned, I am extremely pessimistic.

There is another angle however, which gives a little more promise. It is quite possible that if we can grasp the situation early enough we may find that the seeds of depression and deflation are being sown in the previous period of expansion, and it may be possible to do something to prevent development of the condition that starts it. I am not over-optimistic about this either.

It is fairly clear I think, that whenever you do have a general expansion of bank credit, whenever you have a prosperity movement engendered by giving the people more money to spend for goods that the producers are disbursing, you put funds in the hands of people who are going to use them for investment instead of consumption. If the bank extends loans to business men it is for productive purposes rather than loans to consumers, the tendency is for this added purchasing power to go out on the business side rather than the consumer's purchasing side. This is the same as the effect of an increase in savings. It tends to divert a lot of our labor and natural resources into production of capital goods. An increase in the community's production of capital goods is all to the good if it takes place as a response to the willingness of a community to save. If the savings are not hoarded but are spent for capital goods, the result is that you have more and better tools in the next circuit. That is the difference between the civilized and uncivilized parts of the world. The countries farthest advanced and which have the largest national incomes are enjoying the fruits of vast savings.

If however, the production of this capital goods is not made possible by the willingness to save but by the injection of fresh purchasing power the result is that when the injection stops you find yourself with an actual shortage of capital, to complete the jobs that have been started. You find that you have a more capitalistic type of organization than you can support. Take for instance expansion of railway building. We built a lot of railways in new territory; then we reached a situation where no further funds were forthcoming from investors to develop the farms to provide the grain for the railroads to haul, so the railroads were useless and there had to come a period of adversity. The same thing happened in canal building in the thirties. It happens in every case where you have one of these major industrial crises and long continued depressions. You had the same situation in the 90's where the flow of capital into undeveloped parts of the world had been too great. It set a pace that the community could not continue to keep up. It was as though we had agreed that we would temporarily lay aside other pursuits to build a great machine and then found before the machine was finished that we had to drop the work to produce food and clothing, consequently never to realize the saving we had begun. There might be other reasons for that. It might result from a temporary burst of saving which the community might be induced to undertake by promises of profit because of a new invention; it has happened because of some sort of monetary expansion that could not be continued indefinitely.

Take Germany for instance. The effect of the expansion of 1921-1922 was an immediate inflation of capital. Business men were put in position of constantly increasing products, and when that process came to an end they suddenly discovered that the community did not have capital enough to carry the thing through to produce complementary goods and other types of capital to buy the products. There you get over-capacity not in terms of capacity of the community to consume but in terms of capacity of one type of capital-producing industry to buy the products of another.

That suggests then that it may be difficult to attempt to improve on the working of competition by measures which do temporarily stimulate production but which, if they cannot be continued indefinitely, may leave you with a more unbalanced organization than you had to begin with. That is what has happened in recent years.

I do not believe however that the conclusion we are forced to is that nothing whatever can be done. I do not believe it is incumbent upon the banking system or upon the price regulating agency to simply sit back and wait for prices to correct themselves.

The hoarding practise is one that you can measure pretty correctly. Last fall six or seven hundred million dollars were put out which could be ear-marked as having been drawn for hoarding. It seems to me that it is a perfectly legitimate function of the banking system to offset that. That does not mean that you artificially stimulate the production of capital goods. It means you are offsetting an artificial hindrance to normal flow of funds, and I think the action the Federal Reserve Bank took was commendable and useful, and probably prevented a very much worse panic than we had, likewise with regard to certain other forms that savings take.

The useful activity of the banking system is not so much in direct action as in indirect action, particularly action designed to allay unreasoning fear, and to a certain extent reasoning fear, and prevention of failures. It seems to me that of all the action taken in the last three years in connection with the depression, the most useful thing has been the creation of the Reconstruction Finance Corporation, not because of the benefit to stockholders of the individual concerns which receive aid, but in the effect of allaying fear least all banks, good and bad, should go down.

Much that has been done in the way of direct stimulus has been useless. It is necessary to do something if you are in the public eye and for the time being it could not do any harm. The real danger lies in the risk that we cannot properly damp down the next upswing when it comes. That sounds ridiculous now, but there is a tremendous possibility that once you get public sentiment reversed, that is, the policy toward hoarded currency and unused money in the banks, there will be a tremendous inflation. The worst of it is, of course, that in its early stages it will be highly beneficial and it may bring up an extremely difficult question of public policy as to how far the thing should be allowed to run before precautions are taken to prevent full utilization of the capacity for credit expansion that has been created. In the effort to check deflation there has been created a capacity for a great deal more expansion than we can bank on.

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Q. I take it from your remarks that really the fundamental cure is saving on the part of the community

A. I say the fundamental cure is a rate of capital production that is kept in harmony with the rate of savings. What happens is that you get capital production that outruns the rate of saving; then you have to catch up. The first is a depression and the second a boom.

Q. Was not the cause of the depression the diminishing of the saving power of the community. We were all tied up in buying radios on time, washing machines, automobiles, etc.

A. My own view is not. When we were paying for these things we were putting that purchasing power back into the hands of the people who loaned it to us. When we bought that automobile somebody bought securities to enable us to buy it. The trouble comes when the person whom we pay does not loan it again or spend it. The existence of that big batch of indebtedness and the holding of the corresponding batch of securities need not necessarily make the thing difficult except to the extent that when the commercial credit corporation that paid for the automobile which I bought, receives my payment I have to contract my expenditures and there is no corresponding expansion. It is just as if the money were hoarded.

There is a very nice point of theory there when installment credit expands in this way. Apparently little thought has been given to where the money goes when people pay their installment debts.

Q. Is it possible for the price level to get back to that of 1908? That was the last year in which the Army got a raise in pay. I was wondering if the Army had any economic reason to present to Congress why our pay should not be cut.

A. It is a bold man who would say anything was impossible in the light of recent events. As to what is probable, you could put the case this way: that this deflation movement has run the same course as deflation movements have in the past, and certainly the pay ought to be adjusted on the theory that this is a deflated price level now. Forecasting is an extremely dangerous business. However, I do not see any probability of getting back to the level of 1928.

Q. To what do you contribute the real cause of the depression?

A. From 1923 to 1929 there was in a great many countries, an inflow of capital from surces from which it could not be permanently obtained. It does not make any difference whether it is loaned, or how you get it, if you get an inflation of capital from sources which cannot be maintained. I think the difficulty can be summarized as follows: International loans of a type that will not be continued indefinitely because they are based on lack of knowledge; investment based on bank credit expansion that cannot be indefinitely maintained, and the stock market psychology which is bound to change. These three factors combines to create a situation where it was impossible to get funds to continue our rate of capital formation; hence we got a collapse of activity in industries producing for industries which had to have fresh capital in order to keep on buying.

Q. Can you tell us something about the situation which arose in Europe last Summer or Spring which eventually drove England off the gold standard. Was that a question of hoarding, or what happened to reduce the amount of gold, first in Austria, then in Germany and England?

A. I cannot answer that fully but perhaps I can throw some light on it. One unsettled issue is how far the French policy was responsible. In Austria, Hungary and Germany there was great dependence on foreign capital. They had sold bonds in this country and had capital from bank deposits. I saw the figures for Bulgaria - something like 90% of the bank deposits were owned outside the country. Germany was a case in particular where a country had been financed by short borrowing and then used the funds either for capital investment or for loaning it to Poland and Roumania, money which they were liable to have to pay on demand. All banks are always in the position of owing money on demand which they have loaned on time. Those countries were in that situation with the added difficulty that the creditors were foreign, so there was likely to be a demand on all banks if the cause of the trouble was political. The only reason you can run a bank is that you expect the demands on it will not be simultaneous. If the reason for the withdrawal is political, it may effect the whole country at once.

In the case of Austria the situation was worse because two-thirds of the banking money was in one bank. The deposits were owned chiefly in England and the United States by large banks, a half dozen in England, a dozen in the U. S., and a small number in France. The funds were withdrawn from Austria for two reasons: particularly because rumors got abroad the bank was in bad shape; it was well known that they had been compelled by the government to absorb other banks in order to prevent other failures. That situation was bad enough for a run on the Kreditanstalt might have been started. Then the Government announced a Customs Union between Germany and Austria. Announcement of the Customs Union brought protest and pressure was brought to bear by France to prevent that arrangement from going through. There is no doubt about that. They did the same thing in Germany in 1929 in order to bring pressure in connection with the Young Plan. That is hinted at very broadly in report of the German Reichsbank of that year. When they brought that pressure in 1931 the national banking system of Germany and England came to Austria's assistance. The next thing that happened was pressure in Germany. My own opinion is that it was French political pressure. There is a plausible explanation on the other side in the acknowledged weakness of the Kreditanstalt enough to encourage doubt in people's minds about the big German banks. Just as soon as American bankers saw that they began to draw money out. No political pressure was brought to bear in this country for that. No banking system is strong enough to resist unified pressure - there are not reserves enough in the world. You get this situation; on the one side you have undoubtedly a legal right to withdraw money on demand. On the other hand, this scrambling to withdraw money out of Germany was very bad business ethics because anybody who has money out at 8% interest knows it has to be tied up more or less permanently and if he does rush to get it out he is in a position very much like that of trying to get into the lifeboat first. He has a legal right but there is a certain moral obligation on individuals who put their money in a country at 8%.

Q. Do you think Great Britain came to the assistance of the U. S. in April, May and June when France was withdrawing from this country so heavily? What saved us then?

A. The fact that we had enough. I think if anything the British probably withdrew more than they put out. I think the great weakness in the stock market last Spring was a great deal a matter of British sales of American securities, but the thing that saved us was that we had enough gold (in 1930 we imported a lot) to pay off the French and leave our banking system intact. It is claimed by Einzig that the demand was made by France to dictate what the Federal Reserve Bank discount rate should be in New York. I doubt if that is true.

Q. You suggest in the conclusion of your remarks that during the next period of inflation it might be a good idea to inject artificial control, but you do not say what kind of control.

A. There has been a great deal of artificial control in an effort to stimulate the upswing. Economically speaking, it would be desirable to begin pretty early to curb the possibility of over-expansion. The tendency is to go faster and farther when you are trying to effect an expansion. The other measures, of course, would be comparatively easy to reverse. The Reconstruction Finance Corporation can stop making emergency loans. The important thing is the question of reserves in order to enable the banks to pursue a liberal policy which is badly needed. I would not suggest any new agency of control.

Q. What do you consider will be the ultimate outcome of our so-called cancellation of debts on our money system?

A. The effect on the money system is the same if you cancel the debts or if you postpone paying them. That is the real issue. They are not going to pay them anyway. The question is which is a better way to lose the money. I think that if the war debt payments could be continued on the basis of resources of the countries that owe the debts without our having to make loans to them, so far as the fiscal situation is concerned it would be a great help to the American taxpayer. There are two difficulties:

the point is long past where there is any feeling on their part that they ought to pay. The other difficulty is the effect on the trade situation. You cannot make this large payment and maintain an excess of imports over exports. I think some people would prefer not to have them pay than to have the tariff barriers lowered. There is one possible way to collect the debts; that is to make foreign loans out of the proceeds of which the governments can make the payments. I have always contended it would be a good thing if the war debts were gradually converted into debts to private individuals because you can leave private individuals in debt with much less friction than you can governments. No Government has ever yet paid obligations approaching in magnitude the ones involved and I do not think they are going to. I do think, however, it is a political question and the issue should be faced squarely; the foreign Governments should repudiate rather than have us cancel. Of course, the objection to that is that it would be very much easier to float another loan if we would cancel. That should not be the governing consideration. The solution is for those countries to say what they will pay rather than us to say what we will accept when they have already decided.

Q. You are not officially connected with the Federal Reserve System. I would like to get your opinion as to the most effective method of restricting credit.

A. My view of that is that the set-up is such now that the open market operation is the one by which almost all the influence is exerted. The rediscount rate has almost no effect. Originally it was thought that the eligibility would have a great deal of influence. What is eligible paper has ceased to be the main consideration. As between the two things it is in the hands of the Federal Reserve System to decide which should be the effective instrument, and they have encouraged an attitude toward borrowing which makes rediscount rates relatively unimportant.