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VII

Two Decades of Decadence in Economic Theorizing

I

THE CONSTANTLY PROLIFERATING TREE of economic theory has various branches. In this paper, attention will be devoted not to all the branches but only to that which is concerned with monetary theory, and especially with monetary theory as it relates to the fluctuations of business, to the alternation of "prosperity" and "depression."

An understanding of the way in which restriction of the circulating medium conduces to business depression can probably best be reached if we begin with the simplest possible case. Let us assume, therefore, an economy in which there are no banks and in which all transactions are carried on by the use of money. There is, as in the world we know, buying and selling of commodities, borrowing and lending of money, leasing of land and buildings and the hiring of labor. Let us assume that the amount of money in circulation in 1928 and until (say) June 30th of 1929 was 21 billions of dollars, that trade has been and is active and that employment is steady and high.

But immediately thereafter the quantity of money decreases, and rather quickly, to 14 billion dollars. In order that our illustration may more closely simulate the conditions often occurring in the contemporary world, we shall assume the decrease in money to occur in such a way that almost no one has any realization of what has occurred to others than himself and that, in any case, few would understand its significance or anticipate its consequences. Through one or another circumstance, each person has lost (on the average)

one-third of his money by fire, by dropping it into the water, losing it in the fields and woods or otherwise. Each person has available for spending, on the average, two-thirds as much as previously. But, as said above, no one or almost no one is aware that all others have suffered an equivalent money loss.

Under such circumstances, dull business and unemployment would be almost inevitable. For the amount of money available to spend has been reduced by $7,000,000,000, and with only two-thirds as many dollars available to spend, as previously, how *can* as many goods be purchased or as many workers be hired?

There is, of course, no mathematical reason why depression and unemployment should ensue just because the total volume of spending is reduced by a third. These results would not manifest themselves *if* prices, wages and rentals would all decline in as great proportion—*and as quickly*—as the volume of spending. For even though only two-thirds as much money is spent for commodities, just as many commodities can be and will be purchased with this decreased money provided the commodities sell for only two-thirds the previous prices. And even though only two-thirds as much money is spent in the hiring of labor, as many workers can be and will be hired and for as many hours, provided wages are only two-thirds as high. And likewise with the leasing of houses and of business property and other business transactions.

But who will assert that such a decrease of money and resulting decrease of demand for goods and for labor would be immediately succeeded by acceptance of equally reduced prices, wages and rentals? Who will assert that the necessary proportionate reduction in prices (including retail prices as well as wholesale and raw material prices) and of wages and rentals would come within a month or two? Who, indeed,

will declare with confidence that such a reduction of prices *and* of rentals and wages would come within a year—or even two years?

But then it may be argued by some that even with a great reduction in the number of dollars *available* to spend, there need be no proportionate reduction in the number of dollars spent—or no reduction at all! Men will make up for the decrease, it may be said, by spending money that they had been holding for emergencies. That is, the *velocity of circulation* of money will be greater.

Yet to suppose that there is no reduction at all in the amount of money spent is to suppose that a man *will spend as many dollars when he has few as when he has many!* The truth is, whatever may be the mathematical possibilities in the case, that human beings spend less money when they have less money, and that to reduce the amount of money in a country (the number of dollars, francs or marks) causes less to be spent than if the amount of money had not been reduced. Hence the demand for goods declines and the tendency of prices is downward.

Indeed, there is a reasonable probability that a decrease in the number of dollars, before very long and at least for some time, will reduce the number of dollars spent in even greater proportion. For the decrease of demand for goods and the incipient fall of prices may give rise to anticipation of further fall of prices. Thereby it may induce business men to delay spending their money lest the goods they purchase with it prove unsalable except at a loss; or may induce consumers to delay spending in the hope of finding better bargains later. That is to say *velocity of circulation* of money may not only fail to become greater but may actually become less.

Under such circumstances, business can remain as active as before only if prices fall even more rapidly than the decline in the number of available dollars.

If, however, commodity prices do fall in a sufficient ratio, this will still not insure business activity if at the same time such business expenses as rentals and wages remain comparatively rigid. Thus, if commodity prices fall because of a decrease of money and yet wages do not fall in anything like the same proportion, then the goods produced by labor will not sell for enough to pay these rigidly held wages. Demand for labor must and will decline, unemployment must result and production be cut down.

If charges made by owners for the use of land and capital are rigid despite falling commodity prices, there will be more land and capital left unused.[1] In consequence, labor will be less well equipped with the means of production, will produce less, and must accept even lower wages than otherwise if it is to be employed.

But is not all this unrealistic? We do not carry on business solely with money. In fact, much more business is transacted by the use of bank checks than by means of money in the narrow sense. Does not this fact make the above analysis irrelevant?

The answer is definitely in the negative. Although most of our business is indeed done through the transference, by checks (and bank drafts), of bank demand deposits from one person to another, this means merely that bank deposits are part of the circulating medium and act on the demand for goods and on prices precisely as does money. And if, with only money used, a decrease of (say) one-third in the number of dollars would bring business depression, then, with bank demand deposits used, a decrease of one-third in the volume of bank deposits as well as in the volume of money, would likewise result in business depression.

[1] In the case of land, the holding of a considerable amount of it out of use seems to be a *chronic* evil. I have discussed this in my book on "The Economic Basis of Tax Reform," (Columbia, Mo., Lucas Bros., 1932) and would refer especially to chapter IV, §3.

The truth probably is that central banking policy has more to do than anything else with the alternation of prosperity and depression, and that central banking policy affects business activity through affecting the volume of circulating medium of which bank deposits subject to check are, at any rate in the English-speaking countries, the major part. Unwise bank policy can quickly turn prosperity into depression. And the explanation of how it does so is almost identical with our explanation above of how a disappearance of a third of all money would do so. In fact, the causal influence leading to depression may be every bit as unperceived by the generality of men as if each individual had accidentally lost a third of his money while yet no one knew that any others than he had suffered such loss.

The decrease of circulating medium which thus tends to depression, always or almost always results from restriction of bank credit, and such restriction, when there is a controlling central bank or central banking system, is usually a matter of central bank policy. This of course does not mean that those who control central banking policy deliberately seek—or have ever sought—to bring about depression. It means rather that bank credit policy may be, and sometimes is, inept, so that evil consequences ensue which the determiners of policy did not intend or expect.

If the interest (and discount) rates charged by banks are unduly low, there is encouragement to borrowing from banks, to the increase of demand deposits, therefore, on which checks can be written and, in extreme cases, to serious inflation. On the other hand, if the interest (and discount) rates charged by the banks are unduly high, there is discouragement to borrowing from banks, and the volume of demand deposits on which checks can be written declines. This decline in the volume of circulating medium, if sufficiently great and prolonged, will bring depression.

Students of banking understand that the central bank or banking system—in the United States, the Federal Reserve System—has ways of controlling the lending policy of the other banks. Thus, by lowering their own interest and discount (rediscount) rates, by purchasing eligible securities in the open market and in other ways, the Federal Reserve banks can promote increase of the circulating medium. On the other hand, by raising their own interest and discount (rediscount) rates, *selling* securities in the open market and otherwise, they can force other banks to restrict their lending and can thus bring about a *decrease* of the circulating medium. And such a decrease may be sufficient to induce business depression.[2]

That such action by the central banking system could bring—and even that it did bring—business depression was a view that had considerable support prior to the rise, in the Nineteen Thirties, of the "new economics" and its "prophets." Here was a cause which very obviously *could* bring about depression. Here was a cause which was definitely in operation prior to and into the depression of 1921–1922. Here was a cause which was definitely again in operation prior to and into the depression of the Nineteen Thirties. The late Irving Fisher stated that according to the best estimates he knew, "check book money," *i.e.*, bank demand deposits, "shrank between 1929 and 1933 from 22 billion to 14 billion dollars" and that it was "this shrinkage of 8 billions that constituted the essence of the depression."[3] Why, then, should the "prophets of the new economics" apparently reject—or, at any rate, soft-pedal—central bank policy as the most significant cause of depression, and spend their time in speculations as to whether relatively inconsequential condi-

[2] In my "Basic Principles of Economics," (2nd edition, Columbia, Mo., Lucas Brothers, 1947), I have presented the elements of this subject more fully than I am doing here and would refer readers who need such a discussion of the elements to Chapters V and VI of that book.

[3] In "100% Reserves," *Commercial and Financial Digest*, Los Angeles, Cal., June 1937.

tions, and conditions perhaps largely generated by depression itself, are the significant causes; or whether the causes are to be found in conditions that cannot convincingly be shown to operate in that direction at all?

About a year and a half before the stock market crash of 1929 a distinguished Swedish economist, the late Gustav Cassel, who was at that time in the United States, appeared before the Banking and Currency Committee of the House of Representatives. In the light of the events of 1929 and following, his statements before this Committee may seem to be almost prophetic. Here is his testimony:[4]

The Chairman. In connection with the practical situation that confronts us here now, we are in the midst of what has been termed a speculative situation. Yesterday the Federal Reserve Bank of New York raised its rates. Brokers' loans were reported to have increased $150,000,000 in the report that was issued yesterday. Much attention is being directed to the volume of brokers' loans and its effect on the whole monetary situation.

We would be very glad to have your opinion on that present situation, if you care to express it.

Doctor Cassel. Well, Mr. Chairman, I am very glad that you ask me this question, because it gives me an opportunity to show how the aim of checking this speculation, from the point of view of stabilizing the money of this country, is an outside interest, involving the monetary policy in great difficulties. If you had not that speculative tendency in the New York Exchange, the Federal Reserve banks here in this country, I understand, would be able to keep a 3½ or 4 per cent rate of discount. Now, there is this stock speculation, and to meet that the Federal Reserve bank in New York feels it is obliged to raise the rate of discount to 4½ per cent. That is, I assume, not at all done for monetary purposes; that is a measure entirely outside of the normal province of the Federal Reserve system, which is to regulate the currency of the country; but there seems to be a popular demand that the Federal Reserve system should mend all difficulties arising in the country and particularly fulfill the function of keeping the speculators in New York within reasonable limits. I think that is unsound.

[4] Given May 16th, 1928. See *Stabilization Hearings before the Banking and Currency Committee of the House of Representatives*, on H.R. 11806, p. 381.

It would be a great benefit to the country if some means could be devised by which it would be possible to limit speculation on the New York Stock Exchange without increasing the Federal Reserve bank's rate, because such increases may be very unwelcome. They may disturb the whole monetary policy, and it may have an effect on the general level of prices that will result in a depression in production in this country, followed by a decrease of employment, all only for the purpose of combating some speculators in New York.

There is, to be sure, a bit of careless statement at the end of Cassel's testimony. One should not say, it seems to me, that a decrease of production would be *followed* by a decrease of employment. When there is such a decrease of production from restriction of bank credit, there is, obviously, a *simultaneous* decrease of employment. Also, I think it may be better from the point of view of the logical possibilities in the case—and without prejudice to whatever statistical studies may show to be the most common line of sequence—not to say categorically that credit restriction by the banks decreases production *because* it reduces prices. Credit restriction must certainly bring reduced production and unemployment if prices are generally rigid or "sticky" and do *not* fall. And also, of course, reduced production and concomitant unemployment must ensue if prices of commodities do fall while wages do not.[5]

But whatever criticism one may make of particular sentences in Cassel's statement, it remains true that he did emphasize the possibility that the policy being followed, would lead to business depression and unemployment. It is also true that the policy in question was even accentuated in the succeeding year, that some of the Federal Reserve banks charged even higher discount rates than they were already charging when Cassel made his comment and that, in addition, securi-

[5] This result need not follow, of course, if the reduced prices are consequent on greater productive efficiency and larger output instead of being due to decrease of circulating medium.

ties were sold by the Federal Reserve banks in the open market, thus further tending to reduce the circulating medium and the demand for goods. And we did have depression, both long and severe.

Under these conditions does it not seem that economists might reasonably have been expected to emphasize and re-emphasize the very great importance of central banking policy and, especially, to stress the serious dangers of sharp and persistent bank credit restriction? Average wholesale commodity prices were already lower in the earlier months of 1929 prior to the stock market crash than they had been in 1928[6]; and the prices of 1928, though a little above those of 1927, were definitely lower than those of 1926. It can hardly be argued, therefore, that this persistence in restrictive action was necessary or desirable *to prevent price level inflation!*

II

YET SCARCELY HAD THE BREAK OCCURRED than, despite the warning of Cassel, the view began to gain support among economists that the stock market crash and the downward movement of business came upon us *not* because of this restrictive action of the Federal Reserve banks but because they did not apply such restriction sooner! The thought seems to have been that failure to restrict credit earlier encouraged stock market speculation and a rise in the prices of corporation stocks well above their "normal" values, that such (assumedly) speculative rise of prices of stocks would probably be succeeded by a fall, that this fall of stock prices would destroy business confidence and that thus business depression would ensue.

To this opinion there are a number of cogent objections.

[6] See the *Federal Reserve Bulletin,* January, 1930, p. 30. The figures of the Bureau of Labor Statistics for price levels over many years can be found in the successive issues of the *Federal Reserve Bulletin.*

First, whatever height stocks attained at this time cannot be regarded as unreasonably high *merely* because stock prices fell so low in the succeeding depression. If the depression had been avoided, business activity *and* prices *and* corporation incomes would have remained high and relatively high prices for corporation stocks would have been justified. One may well ask with *what* standard of reasonable values were these allegedly speculative prices of stocks compared? Has any economist who holds the view herein criticized, taken the pains to work out what would have been "normal" prices for these stocks in case the depression had *not* come and to compare *such* prices with the prices ruling before the stock market break?

Second, it is not at all demonstrably the case that a slump in the stock market will, of itself, induce such lack of business "confidence" as to bring significant depression. There was such a stock market slump in 1903, called "the rich man's panic of 1903," which was not accompanied, or followed in any short enough interval so that the sequence could be fairly regarded as causal, by serious business depression. This is not to deny that business activity may have been a shade less in 1904 than in 1903. But 1904 was a year of fairly active business nevertheless and so were 1905 and 1906. And the considerable stock market reaction in the summer of 1946 has not, to date, been followed by business depression.

Third, even if it were sufficiently demonstrated that a stock market slump would of itself be likely so to affect the minds of business executives as to reduce greatly their borrowing from banks and their demand for commodities and labor, there seems good reason to believe that any such tendency could be completely or, certainly, mostly offset by an easy credit policy of the Federal Reserve banks. Federal Reserve rediscount rates could be lowered. The Federal Reserve

banks could purchase eligible securities in the open market, thereby giving increased buying power to those from whom the securities were purchased and giving, also, increased reserves and lending power to the various member and nonmember banks and thereby indirectly (through the lending of these banks) increasing demand deposits and buying power.[7]

[7] The same answer could logically be made to those persons who contend that stock speculation (*e.g.*, in 1928–1929) "takes money away from legitimate business,"–if there were any convincing evidence that such speculation does actually require the use of any appreciable proportion of the circulating medium.

In this connection it may be appropriate to comment on a passage from a recent article by Lloyd A. Metzler, entitled "Business Cycles and the Modern Theory of Employment" (*American Economic Review*, Vol. XXXVI, June, 1946, paragraph at the top of page 286). Mr. Metzler says:

"It is hardly necessary to point out that Say's Law of Markets is no longer a widely accepted economic doctrine. One of the principal achievements of the modern theory of income and employment was to emphasize that savings do not constitute a demand for capital goods; in large part, they constitute simply a demand for legal evidences of wealth, such as stocks, bonds, and savings accounts. A substantial portion of the demand for investment goods comes from business men, and is not directly related to the level of income. It is therefore entirely possible, indeed at most times probable, that an increase in total output will increase the total supply of goods more than it increases total demand; some of the increased income will be used in the purchase of previously existing assets, and will not represent a demand for currently-produced goods. Hence, general overproduction is a possibility which must be taken into account."

If we assume that demand for such "legal evidences of wealth" undergoes a vast relative increase in a relatively short period; *if* we suppose that those who sell these "previously-existing assets" to the new purchasers of them do *not* use the proceeds of such sale to purchase "currently-produced goods" but in turn themselves buy other "legal evidences of wealth" from other sellers who in their turn buy still other "legal evidences of wealth." and so on and on, then it must be admitted that some part of the circulating medium is both *withdrawn* from the "currently-produced goods" market and, for a period, *kept away from* that market. *If*, further, the proportion of circulating medium so withdrawn is *considerable*, and *if* prices in the currently-produced goods" market are "sticky" and *if* there is no easing of bank credit nor any other policy directed to increasing the total of circulating medium, there will obviously be less *demand* for "currently-produced goods." *In that sense*, it can then be said that "general overproduction is a possibility which must be taken into account"!

But before the reader consents to the view that there is anything of appreciable importance in what Mr. Metzler calls "one of the principal achievements of the *modern* theory of income and employment" (italics mine), there are several points of which he should take careful note. First, Metzler's statement gives no basis for concluding that there is "overproduction" except as there is price rigidity. Second, it does not show that there would be such "overproduction" *even with* such price rigidity *except* because of *a decrease of circulating medium in the "currently-produced goods" market* consequent on the use of more of it in the "legal evidences of wealth" market; and this difficulty could be obviated by an easy credit policy which would fully replace any such circulating medium thus withdrawn, by an equal addition of circulating medium. Third, so far as stock market speculation is concerned, it appears that vast exchanges are effectuated with the use of relatively little currency. The late James Harvey Rogers showed, in his brilliant but rarely cited article entitled "The Effect of Stock Speculation on the New York Money Market" (*Quarterly Journal of Economics*, Vol. XL, May, 1926, pp. 435–462) that, having due regard to "the mysterious economies introduced by the operation of the Stock Clearing Corporation, . . . for the three-year period May 1, 1922

Certainly the *assumption,* without any convincing proof, that some inferential tendency of a stock market slump to bring business depression, absolutely *could not* be offset by a properly adjusted Federal Reserve policy, is wholly gratuitous, however numerous or distinguished the economists who make that assumption.

During the Nineteen Thirties the view even gained currency among economists—and I have heard it argued vociferously—that banking policy had demonstrated its ineffectiveness to stabilize business and the price level. Yet in fact we did not have, during the period from 1928 into the depression years, a banking policy both wisely adjusted to the purpose and determinedly persisted in. A careful study of banking policy and of business during the period in question does not demonstrate that banking policy *could not* maintain reasonable stability. Rather does it lead to the conclusion that banking policy affects business activity powerfully and that, in this instance, an inept policy worked powerfully to reduce both business activity and employment as well as the price level.

But then it has been argued, by various economists, that, in any case, it is impossible for banking policy—or any purely monetary policy devoted to increasing the circulating medium—to bring business back near to normal in any reasonable period, once depression has become acute. For, it is contended, the increased money (or bank deposits subject to check) will in any case merely be hoarded. Depression psychology will prevent borrowing from banks for business

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to April 30, 1925, the purchase prices of securities bought on the New York Stock Exchange were paid for with a deposit currency having a velocity of turnover of approximately 1,100 times a year. Or . . . the efficiency of a dollar of bank deposits in transferring stock exchange securities is approximately equivalent to that of $37 in ordinary personal and commercial use." (See pp. 444–445.) And Dr. Rogers went on to say (p. 445): "In fact, when it is borne in mind that, on account of those high velocities, the existing volume of such speculations for the past three years was financed with an average of approximately $15,000,000 of deposits, is there any wonder that no observable influence on New York money-market rates can be traced?"

expansion, however large member and non-member bank reserves become through favorable Federal Reserve policy. Depression psychology will prevent any person or persons from whom the Federal Reserve banks purchase securities, from either investing or spending the money so received! And if the federal government directly supplements Federal Reserve policy, printing billions of dollars of new money which it then pays out to buy back or redeem federal government bonds, this new money will also be hoarded, every dollar of it, and so will have no effect toward increasing the demand for goods and restoring employment! In this view it would appear that if each person in the country, during a period of depression, were put into possession of more money than before—whether twice as many dollars or 100 times as many or 10,000 times as many—there would nevertheless be no appreciable increase in spending, no increased demand for goods and no stimulus to business and employment! Instead, production would remain low or even sink lower, spending would remain low or even become less, prices of goods would remain low or fall even lower! All this, of course, is preposterous nonsense but it is to such a conclusion that those economists must inevitably be driven who do not admit that monetary policy can possibly promote recovery from depression.[8]

It may be interesting, in this connection, to examine the statements of a member of the Federal Reserve Board, Adolph C. Miller, who had previously taught economics at Harvard, Cornell, Chicago and the University of California. This statement was made to the same committee, the Banking and Currency Committee of the House of Representatives, by

[8] Even then, when and if government is driven to the direct employment of labor, this would be a use of monetary policy in a very real sense if the labor so hired is paid with new and additional circulating medium. If the labor is not so paid, then the withdrawal of money (by taxation or by borrowing) from those who might otherwise spend it themselves, may decrease employment in other industries as greatly as it promotes employment in the industries encouraged by the government spending.

whom Gustav Cassel was questioned just two days later. Following are the questions of the committee chairman and Mr. Miller's reply:[9]

The Chairman. I notice this, Doctor Miller, that following the activities of the board in the spring of 1923, the wholesale price level went down until, say, September of 1923, to about 97 or 98, which was followed by some irregularity later on in the year and in the early part of 1924, but in midsummer of 1924 the wholesale price level reached the low point of about 95. Was that lowering to that point of 95 the direct result of the activities that were taken by the Federal Reserve Board in the early part of 1923?

Doctor Miller. I would say emphatically no; emphatically no. I would say that prices were down at that time primarily because they went up so high in the previous period and that the whole movement of prices in this period was one toward the ascertainment of a new level. The prices themselves were, so to speak, finding their new level.

Must it now be pointed out that *prices* are *not alive* and that they cannot "find" their level as the woodchuck finds its hole! Certainly if several of Mr. Miller's colleagues on the Federal Reserve Board entertained the same ideas or other ideas equally wide of the truth, one should hardly be surprised to find a Federal Reserve policy adopted which would lead to calamitous deflation and depression or to great inflation or to alternations of inflation and deflation. And one should find it quite possible to admit that such a policy or policies would then be entirely consistent with the best possible *intentions* and the most conscientious—however misguided—effort to serve the public well!

It should indeed be noted that not all of Mr. Miller's testimony before this committee ignores so cavalierly or denies so categorically any possibility of significant Federal Reserve influence on the general level of prices. Nevertheless, it is hard to believe, in view of his statement quoted above, that he

[9] *Stabilization Hearings before the Banking and Currency Committee of the House of Representatives*, pp. 295–6 (May 14, 1928).

could have had a very keen realization of how controlling Federal Reserve policy can be.

III

AMONG ECONOMISTS, AS ELSEWHERE, there are various trends and fads which have, each, their little day and then give place to others. At one time the talk and controversy among members of the craft is about "neo-classicism," at another time about "institutionalism," at still another time it is about the theory of imperfect competition, or the Keynesian theory and the idea of "liquidity preference." In the early years of the twentieth century there was great emphasis on detailed facts and on statistical verification, even in problems where statistical studies yielded little if any light. More recently we have had the writings of Keynes, Hansen and others of the Keynesian "school," with little or no attempt at the statistical checking of conclusions on monetary theory but rather just an attempt to build new theoretical systems.

Already in the second and third decades of the century there had been considerable reference to the velocity of circulation of money and bank deposits and to the conditions that induce men to spend quickly or slowly, or even to hoard. Certainly there was some recognition of the possibility that under certain conditions men may tend not to spend their money quickly but to hold it temporarily unspent, awaiting business recovery if various investments are in contemplation, or awaiting a fall—or further fall—in prices so that their money may buy more. This really meant, though the expression "liquidity preference" was not then commonly employed by economists, an inclination on the part of some of the community to keep their resources in "liquid" form—as money or bank deposits.

There was also, I think it may be claimed, considerable understanding among economists—certainly some economists

had such understanding—in the early decades of the century, of the general concept of velocity of circulation. And so there was understanding of the fact that an additional number of dollars introduced into circulation, like the dollars already in circulation, would ordinarily be spent again by those who received them, and still again by the second recipients and so on; and that thus the introduction of this money would be likely to have a more stimulating effect than if it could be spent only once! The new money, like the old, would have "velocity of circulation" although, as has just been noted (paragraph above), velocity is not necessarily constant and precisely predictable under changing conditions. Certainly it is not in the least necessary to use the term "multiplier" in order to understand or to convey understanding that an increase of circulating medium may promote revival from depression. It may be questioned whether anything is gained by introducing this new term to express the fact that money introduced into circulation will be spent more times than once or twice—unless it be regarded as a gain so to fill economic literature with technical terms and make it seem so occult a science as to frighten away the non-specialist citizen from consulting economists' writings at all! For this is only one among a variety of new terms.

Of course, economists can still write and speak for each other's delectation. They can still devote time to criticizing each other's views. They can still seek the plaudits of other—younger and less noted—economists who may become their admiring disciples, participate in defending their views against dissenting economists, and gain reputations by applying the theories and definitions of their masters to particular cases, or by suggesting minor modifications of these theories. Indeed, the very fact of using many technical terms may help give some of these writers reputation among that part of the

journalistic reviewers and general public who impute learning where there is incomprehensibility!

It might seem to the ordinary intelligent and public-spirited person that economics can be useful in proportion as its principles are presented as simply and clearly as is reasonably possible, and with a minimum of technical terminology. For, in a democracy, public policy depends upon the approval, active or tacit, of many minds and it is important that the truly significant reasons for or against particular economic policies be widely understood. Yet so soon as it begins to be fairly evident that a particular force or set of forces is the most significant cause of an economic evil and the related theory is sufficiently clarified to make possible wide public understanding, it appears that not a few professional economists are seized with a desire to direct discussion into the introduction of new terms, into quibbling over trifles, into holding up inconsequential facts as significant causes, and into suggesting as causes facts which may have no causal influence at all.

But now let us return to "liquidity preference" in its relation, if any, to the causation of business depression. There is a considerable group or "school" of economists whose view it is that very low returns on capital conduce to business depression through causing men to hold idle, waiting for a more favorable conjuncture, funds they would otherwise lend or invest.[10] Because of such hoarding, demand for labor and for commodities is reduced, workers are subjected to unemployment and business activity is decreased.

"The concept of *Hoarding*," said the late Lord Keynes,[11] who is generally considered to have been the leader of this group or school of economists, "may be regarded as a first approximation to the concept of *Liquidity-preference*. In-

[10] See J. M. Keynes, "The General Theory of Employment, Interest and Money," New York, Harcourt, Brace and Co., 1936, especially Chapters XIII and XVI.
[11] *Ibid.*, p. 174.

deed, if we were to substitute 'propensity to hoard' for 'hoarding,' it would come to substantially the same thing."

It is of course true that few persons are willing to *borrow* at (say) 4 per cent interest when they are confident that the capital thus secured will yield only 1½ per cent or 2 per cent. Nor will they borrow even at 1 per cent if they firmly believe the capital will yield only ½ per cent or nothing at all. And there is no doubt that some persons under some conditions will refuse to lend at rates low enough so that borrowers can pay them from the annual returns of the capital.

But before concluding that the genesis of business depression is to be thus explained, we must raise several important questions.

First, if and when returns are so low on capital as to discourage borrowing, must there not be some *reason* for these low returns? And should we not inquire what such reason may be? What if the low returns which are alleged to be causative of business depression are in fact *caused by* restriction of bank credit? Restriction of bank credit does tend—if prices are somewhat rigid, and also if wages and rentals are rigid even though commodity prices are not—to bring about business depression; and business depression means *low returns on capital.* Also, continued restriction of bank credit does bring, despite a degree of rigidity or "stickiness" in many prices, a general fall in the price level. With such a fall the returns on capital, *measured in money terms,* are reduced even though business does not become less active. The capital may be as effective as before in producing wheat or cotton, automobiles or shoes, electric refrigerators or nylon stockings. But if the prices of these products have fallen since the investment was made, the *dollar* returns as compared to what capital *was* worth in dollars when it was constructed, will be low. Of course in a period of falling prices the capital itself, even if not at all depreciated physically, will be of progres-

sively less monetary value. And thus the return on capital each year may be a reasonably high per cent of the value of the capital *in that year*. But this return will obviously be a smaller per cent of the earlier or initial monetary value of the capital. And hence unless the interest rate which the lender charges the borrower is sufficiently reduced, the borrower must suffer loss. It follows that, when prices are falling or are expected to fall, the potential borrower (if at all understanding) will not be an actual borrower—*unless* at an interest rate which is lower in terms of the per cent on the number of dollars borrowed.

But why should not lenders readily accept such a reduced interest rate in order to be able to lend? Why should not competition at once bring the interest rate down so that borrowing would not be discouraged? Just what is the *raison d'etre* of this "liquidity preference" on the part of lenders? May not it, too, at least in considerable part, stem from an inept central banking policy?

If central banking policy—or, equally, the general monetary policy of government—is so directed as to result in a fluctuating price level and in alternating periods of business activity and business depression there will certainly tend to be fluctuations in the interest rate (as measured in money terms) that borrowers are inclined to pay. Yet at the time when demand of borrowers is the lowest and when it is therefore difficult to lend except at a low rate of interest, many lenders will more or less confidently expect—and, on the basis of the fact of such fluctuations in the past, have some reason for expecting—a turn for the better. Such an expectation will make them unwilling—or less willing—to commit themselves irrevocably, for periods of any considerable length, to loans at low interest rates and make them prefer to hold their resources in the form of cash or checking accounts, *i.e.,* in "liquid" form easily transferable, in case of a favorable conjuncture, into some

other form. In case circulating medium *is actually* thus held out of use, the effect may indeed be to deepen any existing depression. But through all our analysis we must hold fast to the fact of some degree of rigidity of prices, including wages, rentals, etc. For if all prices would immediately and adequately fall, then *any* amount of reduction of circulating medium *or* of its velocity of circulation would militate not at all against active business. All goods, including buildings, machinery and other capital, would fall enough in price to be purchasable *without* the use of the withheld funds of the hoarders.[12] And of course, potential lenders unwilling to lend can themselves purchase capital or hire men to construct capital.

In any event, to say that "liquidity preference" (and, therefore, reduced velocity of circulation) may deepen depression is very different from saying that it ever did *initiate* or is likely ever to initiate depression. In the analysis followed herein above, bank credit restriction decreases the circulating medium; with the resulting decrease of demand for goods there is a tendency for the price level to fall but not to fall quickly and adequately; and this decrease of circulating medium and so of demand, *along with* the rigidity of prices, wages, etc., brings declining production, employment and trade.[13] Then, *because* of falling prices and *because* of dull business, it is quite conceivable that there will be a greater tendency to hold money uninvested and unspent, *i.e.*, a tendency towards reduced velocity of circulation of money and checking accounts (in other words, "liquidity preference"). There is likely to be, also, less inclination to borrow from

[12] If the interest rate (or rates) charged by lenders is somewhat rigid, we can say that it is just one more of the "sticky" prices. Even so, if other prices fall *enough*, there will not be depression.

[13] For a fuller discussion of some aspects of the theory of business depression, see my *Basic Principles of Economics*, 2nd edition, Chapter VI, and my article on "Policies for Full Post-War Employment," in AM. JOUR. ECON. SOCIOL., January, 1944 (Vol. 3, No. 2).

banks, and thus a further decrease of the *volume* of circulating medium. And if business failures bring about bank failures, there is a still further tendency to decrease of circulating medium, since purchases cannot be made by writing checks on failed banks.

For all these and perhaps other reasons, there is the possibility that a depression, once started, and if no adequate remedy is applied, will continue for some time and even grow worse. And in this process, as we have seen, reduced velocity of circulation ("liquidity preference") may quite possibly play a part. But is there any evidence—have any of the economists of this "new" school ever presented convincing evidence—that business depression ever has been or is at all likely to be *initiated* by a "liquidity preference" which manifests itself *independently of any adverse banking or general monetary policy?*

Conceivably, a long period of active business with the price level stable or slowly rising would generate such an *expectation* among lenders of receiving their *customary* favorable returns that, when credit restriction by the banks reversed this trend, some of these lenders would for some time refuse to accept low enough interest rates to continue lending. And this might be not because they were anticipating an improvement for which they desired to be "liquid", but just because they would have become *habituated* to the higher returns. It might be because they would have come to think of these returns as part of the fundamental nature of things and so would be unable, for some time, to reconcile themselves to accepting any less. Such an attitude is hardly to be termed "liquidity preference" but is rather mere obstinacy based on habituation. Here again, however, the initiatory influence does not come from a declining velocity—if, indeed, velocity does so decline—but from a restriction on the volume of cir-

culating medium from which restriction the other phenomena flow.

Of course it may be contended that, in the absence of any business or price level fluctuations from unwise monetary (including banking) policy, the returns on capital might conceivably become so low—conceivably less than enough to cover depreciation—that many recipients of money would hold it indefinitely rather than invest in productive capital. If no gain at all could be realized from investment in buildings, machinery, steamships, etc., and especially if there were an average loss, one who wished to provide for his old age or for the education of his children would do as well or better just to lay his savings aside in the form of money (at any rate if he could count on its being stable in value or purchasing power) until such time as he might need these savings to live on. Could this be called "liquidity preference"?

But such a condition, *with* wise control of the volume of circulating medium, would not tend to bring business depression. If so much money were hoarded as to threaten reduction in the demand for goods and in the general level of prices, a wise monetary policy would provide for the issue of enough additional money (and/or bank credit) to maintain the price level. This would mean that the demand for goods in general at this price level would *not* decline, for such decline would bring the price level down. A sufficiency of money to maintain the price level would, by that very fact, be a sufficiency of money to maintain the demand for goods in general. Hoarders laying aside money for future use could be permitted to do so freely, yet there need be no disrupting decrease in the demand for goods and labor. Obviously—though the uncomprehending may deny this—there will be some limit to the amount of money wanted for hoarding, since each hoarder would naturally *apportion* his available

money (or money and bank deposits) between his current needs and his anticipated future needs and neither would nor could hoard all of it.

Capital is productive but its marginal productivity decreases as the amount of capital in relation to labor and land increases. And thus it could *conceivably* happen, as just assumed, that a widespread and continuing spirit of thrift would so increase the amount of capital as to bring its marginal net productivity rate and, therefore, the rate of interest, close to the zero point or even below zero. However, as the marginal productivity of capital approached zero, an increasing number of persons would begin to show a preference for keeping their savings in the form of money,—or of gold, platinum, silver, diamonds or other valuable and easily stored commodity not subject to appreciable physical depreciation. And so there is some reason to doubt that the average net marginal productivity of capital would ever go below zero or, even, go quite to zero, no matter how widespread the spirit and habit of thrift might become.

There is, however, another aspect of the matter of gain from saving and capital construction, *viz.*, taxation. The average net marginal productivity of capital may be (say) 8 per cent. But if a general property tax takes nearly half of this and if a high progressive income tax plus, perhaps, an excess profits tax takes much or most of the remainder in those years when yield is high, while leaving the owner to suffer loss in bad years, then the average per cent on capital *to the owner of it* can be very low indeed. In such circumstances the considerations as to hoarding presented in the paragraph above would be entirely applicable. But, as indicated in the paragraph second above, this fact need not bring business depression, provided there is a monetary policy calculated to maintain a stable price level.

If, however, some of the "liquidity preference" theorists are convinced that hoarding brought about by a low rate of return consequent on such taxation would tend to depression, they have open to them a very simple remedy. Let them *depart from the conspiracy of silence against the taxation of land values.* Let *them* become the *leaders* in attacking the prejudice that stands in the way of this reform. Let them *point out* to their considerable clientèle of readers that a tax appropriating more or, even, practically *all* of the annual rental value of land would not reduce by one iota the net per cent return on capital to those who save and make capital construction possible. Let *them* emphasize, *even though others do not,* that the extra revenue thus gained would make possible a large reduction in the taxation of capital, thus leaving to the investors in capital those larger per cent returns for the lack of which these "liquidity preference" theorists believe potential investors refrain from investing and thereby help to precipitate business depression.

IV

AMONG THE "EXPLANATIONS" for the depression of the Nineteen Thirties is the statement that the rate of increase in the population of the United Sates had slowed down and *therefore* the demand for new housing had slackened. Another and fundamentally identical alleged cause is that there was no *new* industry established in the Nineteen Thirties, such as the automobile industry, to provide employment.[14]

[14] See, for a discussion favoring both of these hypotheses on the cause of business depression, Alvin H. Hansen, "Fiscal Policy and Business Cycles," New York, Norton, 1941, Chapter I. With regard to the first of those mentioned above, that having to do with population growth, Hansen says in a footnote (p. 45):

"It has been argued that cessation of population growth should be favorable to employment, since the supply of new workers in the labor market would be reduced. But it is easy to show that population growth, if it occurs in a period of territorial expansion, raises the demand for labor more than it raises supply. Thus, the volume of extensive investment associated with the net addition of one worker involves capital outlays on a house, amounting to, say, $4,000, and outlays on plant and equipment amounting to an additional $4,000. Eight thousand dollars of investment represents a

There is a wealth of evidence to show that most human beings have enough unsatisfied wants so that, if for any reason they do not need or want goods of a particular kind, such as houses, they will buy other goods—more and better clothing, motor boats, electric refrigerators, musical instruments, books and newspapers, additional and better tables, chairs, rugs, etc., or even enlarge and beautify the houses they have. Or they will spend more in educating their children or invest more in the purchase of productive capital. Those who do *not* have any desire to spend money will, presumably, not work to earn money, and the quantity of goods produced to sell will therefore be lessened. If the population becomes smaller the volume of goods produced will presumably be smaller. In any case, the assumption that if and because men do not want more or larger houses, therefore they will probably spend less in any appreciable degree—*i.e.*, that they will have an appreciably greater tendency to *hoard* their money—and thereby bring a substantial decrease of demand for goods in general is *utterly gratuitous*. And in the absence of such an *assumption*, the entire argument has no significant relevancy.

It is the same with the argument in regard to the "new"

far greater effect on the demand for labor than the effect on supply of one additional man-year of labor."

Economists have many times insisted that demand is not merely desire but depends on purchasing power. Why does not Hansen tell us precisely how "one additional man-year of labor" provides the purchasing power for a demand amounting to $8,000?

There is, too, no sign of understanding, in the quoted passage, of how capital comes into existence through saving. Those who wish to invest in the construction of capital must save, *i.e.*, deny themselves present goods. What they might have spent for such present goods can then be spent for capital or for the construction of capital. There is here no increase in demand for goods in general but merely an increase in demand for capital balanced by a decrease in demand for consumable goods. Of course, an increase in the volume of circulating medium may increase the demand—at current prices—for goods in general and may thus bring about a rise in the price level.

It may, indeed, be easy to *say*, but certainly is *not* easy to *show*, "that population growth . . . . raises the demand for labor more than it raises the supply."

Perhaps it may be appropriate to add that demand for labor is commonly supposed, by economists, to have some relation to the productivity of the labor. Hansen seems to write, here, as if demand for labor depended on the housing and machinery "needs" of the laborers!

industry. Presumably such a "new" industry increases employment because people want to buy its product or products. But if the particular new products (*e.g.*, automobiles) had never been invented, are we to suppose that those who have bought these goods would not have spent the money for anything else? Would the money so spent have been merely laid away in safes or otherwise and thus have had no more effect on demand than if it did not exist?

Even if it be assumed that some previously unenjoyed product is so enticing as to make people much more eager to buy it than they would be to buy anything else, are we to suppose that they will not, for the most part, find the means to purchase it by economizing on, *i.e.*, manifesting a *decrease* of demand for, *other* goods? And if in their eagerness to buy they borrow from others, must not the lenders then decrease *their* purchases of goods which otherwise *they* might buy?[15]

Or it is intended to argue that when a "new industry" is introduced, a larger volume of bank credit is extended in proportion to bank reserves than there otherwise would be? Or that velocity of circulation is thereby increased? Just *how* and *why* is it supposed that the development of new industries saves us from depressions and on what basis is it concluded that not to have the new industries subjects us to greater risk of having depressions? If those who so argue do not mean to say that the lack of new industries tends to de-

[15] On pages 39 and 40 of his "Fiscal Policy and Business Cycles," Hansen compares the decade of the Nineteen Thirties with the fourth quarter of the nineteenth century "with its deep depressions of the Seventies and the Nineties." In a footnote (p. 39) he goes on to say:

"It was in this period, when the railroadization of the country was increasingly reaching a saturation point, that Colonel Carroll D. Wright, Commissioner of Labor, made his famous declaration with respect to the exhaustion of real investment opportunities. . . . The declining rôle of the railroad was, indeed, the most significant single fact for this period and offers the most convincing explanation for the chronic hard times, particularly of the decade of the nineties. . . . While others were stressing superficial aspects, Colonel Wright placed his finger upon the really significant cause of the world-wide stagnation."

Must one not assume from the above, that, in Professor Hansen's opinion, those who emphasize the influence of a substantially increasing and of a substantially decreasing volume of circulating medium in relation to production and trade, are "stressing superficial aspects"?

pression *by virtue* of somehow keeping down or reducing either the circulating medium or its velocity of circulation,[16] then what do or can they mean? And if they do mean this, why do they spend so much time attempting to trace depressions to so problematical an influence, while they stress so little as a cause the sharp and persistent credit restriction of the Federal Reserve system in 1928–1931, which tended so directly and clearly, as did similar credit restriction in 1919–1921, in the direction of reducing circulating medium and the demand for goods? *Why* must some economists *try so desperately* to trace depressions to causes which are so problematical, so relatively inconsequential and, sometimes, so fantastic, instead of emphasizing particularly a powerful cause, demonstrably capable, in conjunction with price, wage, rental and interest rigidities, of producing severe depression and clearly in operation prior to and even well after the onset of both of these business depressions?

It is as if, following a violent earthquake, the brick walls of

[16] Hansen says ("Fiscal Policy and Business Cycles," pp. 37–8):

"Thus, if technological developments and innovations tend to favor a rapid expansion in real investment, money incomes may be expected to rise, and the money supply and its utilization (MV) may be expected to adjust itself to these conditions. If, on the other hand, the underlying technological developments are unfavorable to a rapid expansion of real investment, money income will fail to keep pace with output and the secular trend of prices will be downward. Here again the money supply (M) and its utilization (V) adjust themselves to the demands of the underlying real factors."

Does this mean that with "technological developments and innovations," new gold mines will automatically be discovered, so that a country on the gold standard will have increased coinage? Or does it mean that the governments of countries on inconvertible paper standards will not only increase their issue of paper money but will time these increases to these "technological developments and innovations"? Or does it mean that there will automatically be additional extension of bank credit regardless of the sufficiency of bank reserves? Is not any of these suppositions rather gratuitous?

And how about the velocity of circulation of money (V)? Is it assumed that a bookkeeper, salesman or mechanic who receives (say) $50 a week and who has previously been spending his weekly wage or salary gradually so as to make it last until the next week's pay is due, will, because of "technological developments and innovations", begin spending each week's wage the first day or two after receiving it and will cease to worry about how his family will live for the remainder of the week? Or will corporations and other business units thus spend their funds more quickly rather than merely spend for new kinds of capital *instead of* increasing or replacing older kinds?

Without insisting that new ideas of ways to spend or invest money could never, under any circumstances, influence velocity of circulation at all, we can at least fairly ask for something more than the blythe assumption that "the money supply and its utilization (MV) may be expected to adjust itself to these conditions."

a tall building come crashing to the ground. There is lengthy discussion among men of learning as to the cause or causes of the building's fall. At first a few mention especially the earthquake. But more and more the learned articles and books are devoted to speculation as to whether great emphasis should not be placed on a fact noted by a few surviving bystanders. These bystanders had seen, just before the crash, a sparrow poised on the roof and had noted that the bird leaped into flight only about a second before the building began to collapse. After considering the testimony of these observers, some of the most noted of the professors conclude that the major cause—or one of the major causes—of the building's crash, was probably the backward pressure of the sparrow's legs as he leaped forward and upward from the roof!

But surely such writing by professional economists—if it be not ignored by the non-specialist reading public—must be a source of confusion and must work against rather than for the adoption of wise policy. Perhaps it would be better if more economists would pause, on occasion, from their interest in this or that latest formula or will-o-the-wisp of theory and ask themselves what, after all, economics is chiefly for.[17]

[17] It is important to point out, however, that not all economists have meekly followed the lead of the "prophets of a new economics." The late Henry C. Simons of the University of Chicago was one of their most able and persistent critics. See his articles in the *Journal of Political Economy*, "Hansen on Fiscal Policy," L (1942), pp. 161–96, and "The Beveridge Program: An Unsympathetic Interpretation," LIII (1945), pp. 212–33. Reference should be made, too, in this connection, especially to the recent book by George Terborgh, "The Bogey of Economic Maturity," published by the Machinery & Allied Products Institute (Chicago) in 1945.

In addition to the above references, I want to take the opportunity offered by this reprinting of my article, to refer particularly to the recent inductive studies of Dr. Clark A. Warburton of the Federal Deposit Insurance Corporation. The facts marshalled by Dr. Warburton appear to be consistent with the view presented in the present essay and to be inconsistent with the views herein criticized. See, especially, "Hansen and Fellner on Full Employment Policies" in *The American Economic Review*, Vol. XXXVIII, No. 1 (March, 1948); "Monetary Velocity and Monetary Policy" in *The Review of Economics and Statistics*, Vol. XXX, No. 4 (November, 1948); "Bank Reserves and Business Fluctuations" in the *Journal of the American Statistical Association*, Vol. III (December, 1948).