

BUSINESS INSTABILITY: CAUSE AND REMEDY

Talk by Dr. Edison H. Cramer, Chief of the Division of Research and Statistics, Federal Deposit Insurance Corporation, October 2, 1950, Milwaukee, Wisconsin

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For some time the attention of the entire nation has been focused on the conflict, in part a cold war and in part a hot one, between the communist bloc of nations and the rest of the world. This worldwide conflict has two important phases. In part it results from an attempt by one nation to extend its domination over the globe. All previous attempts of this sort have eventually failed, although some of them have been successful over wide areas for substantial periods of time. The other aspect of this great struggle is a conflict between two contrasting types of economic organization, the individualism and capitalism of Western Europe and the United States on the one hand, and the centralized governmental control of a totalitarian state on the other. This phase of the conflict is a rivalry between two very different methods of organizing people and of handling the capital and resources used in producing goods and services to meet national and individual needs.

If this worldwide conflict were solely a question as to what nation is to be the dominant power of the world the result would depend upon military planning and strategy and the ability to provide the implements of war. In view of the fact that the struggle involves far more than military dominance the final outcome will probably depend upon the question of whether private enterprise or centralized government proves to be the more acceptable method of organizing economic activity. This likelihood is strengthened by the fact that the leaders of the communist group of nations are convinced that capitalism is inherently unstable and that the economic system of the United States will be so weakened

by recurrent periods of inflation and depression that it will inevitably collapse. Because of this belief, the Soviet leaders are likely to depend primarily upon continuation of the cold war with the United States, combined with military campaigns by their satellites when favorable opportunities occur, rather than to initiate a worldwide hot war in the immediate future.

The belief that capitalism is inherently unstable and subject to frequent depression, while a communistic society is not, is held not only by communists but also by many economists who abhor communism. There are two important reasons for this belief. One of these is the historical fact that during the past two centuries the economy of the United States and that of Western Europe have both been subject to frequent breakdowns during which millions of people were without work in the midst of vast productive powers and unused resources and millions more found their incomes dwindling because of collapse of the prices of the goods which they were producing. The other reason for the belief that capitalism is inherently unstable has its roots in the difference between the mechanism of decision making and coordination in a centralized totalitarian system and in a competitive private enterprise system. In a totalitarian state basic plans and decisions are made by a few people and the means by which these plans and decisions are coordinated are obvious in the character of the governmental machinery. In a competitive private enterprise economy decisions regarding production plans and the operations of factories and other types of producing enterprises are made by a multitude of persons, either on their own account as individual businessmen or as officers of business enterprises. Isn't it inevitable, some people ask,

that these plans and decisions will be poorly coordinated and that they result from time to time in the kind of a business mess we call a depression?

The question does indeed arise as to how the multitude of decisions by hundreds of thousands of separate business enterprises are coordinated so that there is a reasonable degree of order in the economic system. To see how this coordination does take place we need to look at business arrangements for the purchase of materials, the hiring of labor, and the sale of goods and services. Those arrangements, or contracts, are made in terms of prices and promises to make payments in money. The prices represent the number of units of money, in the form of currency or of checks on a bank account, which will be paid for a given amount of materials or labor or a given quantity of goods or services. The system of prices which these contracts produce becomes a kind of impersonal central regulator of the economy. If businessmen make inappropriate decisions and base their contracts upon them they find that their goods remain unsold or can be sold only at a loss. They discover that types of goods which are comparatively scarce command relatively high prices. Consequently the prospect of making profits as a result of producing such goods acts as a force inducing businessmen to shift labor and materials from making other types of goods from which the prospective profits are less.

The prices which eventually govern these decisions of businessmen are those which individuals are willing to pay for the final products of the economy. As economists have often remarked, consumers cast their votes for some goods and services and against others as they go shopping

every day in the market places. Thus the choices and decisions not merely of business enterprises but of all the people, expressed as preferences in the market, produce a price system which becomes the governor or regulator of production.

As we think about the importance of the price system the question arises in our minds as to whether this intricate mechanism may sometimes get out of order. We know also from experience that in depression, as in a time of inflation, the price system does not seem to function well. Perhaps depression and inflation are results of a distorted price system. Certainly it is worth while to examine the hypothesis that the economic disorders of inflation and of depression are due to great disturbances in the price system.

In making an examination of this hypothesis we may start with the fundamental economic principle, the law of supply and demand, and ask the question: Is this principle applicable only to the various types of goods and services which are bought and sold in the economy, or is it applicable also to the circulating medium or money which is used in making payments and fulfilling contracts? The answer to the latter question is yes. When money is in great supply relative to the need for it, as measured in an appropriate manner, it tends to fall in value and each unit becomes worth less and less in buying goods and services; if money becomes scarce relative to the need, it tends to rise in value and fewer units will be required to buy a suit of clothes, an automobile, or a television set. That is to say, a decline in the value of money due to an excessive increase in its quantity is the same as a general rise in prices. This is what we call inflation. Similarly, a rise in the value

of money due to a decrease in its quantity is simply another way of describing a general fall or deflation of prices.

Neither inflation nor deflation occurs instantaneously. In each case some prices go up or down and this produces pressure on other prices. Moreover, many prices are fixed by contract or custom or for other reasons are rigid and do not move readily. This creates distortions in the price structure. Generally speaking, in inflation these distortions are such as to make business unusually profitable and hence to stimulate businessmen to feverish activity. Likewise, the distortions of the price structure during deflation tend to make business unprofitable, whereupon businessmen find it necessary or at least expedient to reduce their working forces, thus producing unemployment.

These remarks on the role of the price system as a governor or regulator of a private enterprise economy, and on the character and impact of inflation and deflation, lead us back to the problem of business instability. If the money supply, which nowadays consists primarily of bank deposits but also includes the currency which we carry around in our pockets, does not remain stable in quantity with a reasonable increase in line with the growth of the economy, occasional periods of inflation and boom on the one hand, and of deflation and depression on the other, appear to be inevitable. Many economists who have studied the operations of our banking and monetary system have concluded that the banking system has been responsible in the past for many erratic changes in the money supply, and that those changes in the quantity of money have been the basic cause of business instability. Consequently, they have concluded that maintenance of monetary stability with a reasonable rate of growth is the key to economic stability. I would like to quote here from two books published during the past few months.

Professor Lloyd W. Mints of the University of Chicago is the author of a recent book dealing specifically with the problem of monetary policy for a competitive society. "Monetary stabilization," Professor Mints says, "is needed as one of the rules of a competitive society. It is needed to prevent undue fluctuations in the expectations of the business community. For this purpose stability in the general level of prices is the essential requirement." 1/

Mr. Ralph G. Hawtrey is probably the foremost English economist who has studied the relation of banking and monetary policy to business instability. He has written several books dealing with this problem, and has recently rewritten a book on currency and credit which was first published more than thirty years ago. He closes the new edition of this book with these remarks: "Monetary stability is an essential condition of the survival of competitive private enterprise. Nowadays that economic system is challenged. The challenge ought to be met on its merits. It would be regrettable, not to say, contemptible, if the case for capitalism went by default because the monetary authorities of the world do not know how to rise to their responsibilities or to take advantage of their opportunities." 2/

But though economists who have studied the operations of the banking system have reached this conclusion, most of the economists who have been engaged in studying business fluctuations have paid very little attention to the role of changes in the quantity of money. Most business cycle theorists today assume that business booms and depressions originate

1/ Lloyd W. Mints, Monetary Policy for a Competitive Society (McGraw-Hill Book Co., 1950), page 171.

2/ R. G. Hawtrey, Currency and Credit, fourth edition, (Longmans, Green and Co., Ltd., 1950), page 435.

in forces outside of the banking system which impinge directly upon effective demand, and that changes in the quantity of bank deposits and currency in use are sequential results rather than causal factors in the ups and downs of business. Because of this emphasis, the economists who have engaged in large research projects in the study of business cycles have not made a careful examination of the factual data to see exactly what the record of the past shows with respect to changes in the quantity of money at business cycle peaks and troughs and during the intervening downswings and upswings.

Several years ago Clark Warburton, of the staff of the Division of Research and Statistics of the Federal Deposit Insurance Corporation, began to work on the problem of determining how much deviation from monetary stability there has been in the United States during the past thirty years. He thought we ought to know what an analysis of the record would show about the relationship of monetary stability and instability to business fluctuations. Mr. Warburton's starting point in this study was a combination of the two points of view which I have just described. In his initial hypothesis he did not assume that monetary instability is the initiating factor in business fluctuations. On the contrary, he assumed that business fluctuations of moderate intensity result from various other forces affecting the demand or supply of some important segment of the economy. Such changes in demand, he assumed, tend to raise or lower the value of products sold and thus to raise or lower prices, profits and wages in some parts of the economy, and that these effects then spread to other parts of the economy.

Since the force involved in these fluctuations was assumed to be outside of the banking and monetary system, it was also assumed that that force had no direct immediate effect on the quantity of bank deposits or supply of money. However, the reduced spending must be reflected either in a decline in the money supply, or in the rate of use of money; and it was desirable to find out which of these typically occurred in the early stages of a business recession. Further, it was plausible to assume that in a time of reduced spending, whatever the cause, some spending units would tend to reduce their indebtedness to banks and others would avoid borrowing which they might have done with better prospects. Consequently, a business recession was likely to be accompanied by a contraction in bank assets and therefore in their deposits. If this occurred, it would tend to make recovery from the recession difficult. The decline in the quantity of money, in view of customary habits of use of money, would make a decline in the general price level necessary, so that the downward price adjustments and discouragement to business in some segments of the economy would occur without any possibility of compensating upward adjustments in prices and encouragement to business in other segments.

Mr. Warburton's initial hypothesis continued with the assumption that shrinkage in the money supply accompanying an ordinary business recession should not be permitted. He argued that monetary contraction under this circumstance is not due to decisions of individuals or business enterprises to reduce their cash holdings (except momentarily as with any other use of money), but is an unwanted by-product of retirement of debt to banks, or perhaps inability to do so with a consequent charge-off by the banks. If the process of reduction of debt were not accompanied by its unintended result

of a shrinkage in cash balances we would have the accumulation of idle cash balances, which would show up statistically in a reduced rate of use of money in the early stage of a business recession. Accumulation of idle money during the downswing would tend to have an immediate effect upon the availability of credit and the rate of interest at which money could be borrowed by business and individuals, and would therefore facilitate a rapid readjustment to the nonmonetary conditions which had initiated the recession. That is to say, Warburton thought that the chief difference between moderate recessions and severe depressions might be the degree of monetary contraction which occurs in the downward phase of the cycle, and if so, this should show up in the statistical data. If the factual record supported this hypothesis, monetary policy directed toward maintenance of a normal money supply should prevent the recession phase of a business cycle from degenerating into a deep depression, and should facilitate rapid recovery.

To scrutinize the factual data relevant to this hypothesis, statistical series of the average outstanding quantity of money and of its rate of use were needed for periods sufficiently short to measure changes during the early and later parts of each business upswing and downswing. Also, a series was needed which would show the fluctuations in the amount of spending for final products of the economy. No suitable tabulations were then available for any of these series. When these tabulations were completed an estimate was made of the rate of growth in the quantity of money which was needed to maintain a stable price level in view of the average rate of increase in production over the years and of demonstrated long-run changes in the rate of use of money. Fluctuations in the quantity

and rate of use of money, relative to the trend lines, were then compared with business cycle peaks and troughs, and with business upswings and downswings as described in the publications of the National Bureau of Economic Research.

The results of Warburton's study conformed only in part with his initial hypothesis. The most significant results that he found were these: First, in almost all of the business cycle peaks and troughs of the past thirty years, corresponding peaks and troughs occurred in the quantity of money a few months prior to the business cycle turning points; second, in almost all of the cases peaks and troughs in the rate of use of money followed by several months the business cycle peaks and troughs; third, there was a highly significant relationship between the duration and degree of departure from trend in the quantity of money and the duration and amplitude of business upswings and downswings. In the case of the great depression, for example, the peak in the money supply was reached a year before the peak of business in the middle of 1929; and the subsequent decline in the quantity of money, except for a few brief interruptions, was continuous until the banking holiday in the spring of 1933. The degree of decline was over 40 percent, relative to the rate of growth estimated to have been necessary for the people of the country to have purchased the full output of the economy at a stable level of prices. The rate of use of money, on the other hand, did not reach its peak until several months after the 1929 peak in business. That is to say, the factual record suggests that changes in the quantity of money lead and thus appear to be an originating force, and changes in the rate of use of money lag and appear to be only an accentuating force, in the ups and downs of business.

When these results of examination of the factual data became evident, Warburton turned to the obvious question: If an unstable quantity of money is the leading factor in producing business fluctuations what force initiates the changes in the quantity of money? Since bank deposits form the bulk of the money supply this is a question of what forces affect bank operations and result in fluctuations in the amount of bank deposits. To examine this question Warburton studied the character of the limitations on bank operations, such as legal requirements regarding capital and reserves, and reviewed the theory of banking as developed during the past century. Without taking the time to go into details regarding the results of this phase of his investigation, much of which has been published in professional journals, I will simply say that he has uncovered what appears to me to be conclusive proof that the quantity of money need not be erratic. His conclusion is that the quantity of bank reserves is the dominant influence on bank deposits, since it is profitable for banks to maintain their operations close to the limit permitted by their reserve position; and that since 1917 the amount of reserves available to the banks is the result of Federal Reserve policy.

The mechanism through which the Federal Reserve System influences the amount of member bank reserves is that of changes in the volume of assets of the Federal Reserve banks. When the Federal Reserve banks acquire additional assets the effect is an increase in member bank reserve balances and when they dispose of assets the effect is a decrease in member bank reserve balances. Changes in other Federal Reserve bank liabilities, such as the amount of Federal Reserve notes in circulation, also affect member bank reserves. However, the Federal Reserve banks have enormous powers of

acquiring additional assets, or of relinquishing assets which they hold; and the amount actually acquired, except under rare circumstances, is dominantly influenced by the terms of acquisition and relinquishment set by the Federal Reserve authorities. In the history of the Federal Reserve system since 1917, the only exception to complete control by Federal Reserve authorities of the volume of assets of the Federal Reserve banks, and hence of the reserves of member banks, was the period of a few years following the change in the price of gold, when gold, or certificates of the Treasury representing gold, came to the Federal Reserve banks in very large volume and could not be relinquished by action of the Federal Reserve officials. Consequently, Warburton's study of the forces dominantly influencing the amount of bank reserves consisted of a review of the operations of the Federal Reserve banks since 1917, with special attention to the policies which produced the peaks and troughs, relative to a reasonable rate of growth, in effective bank reserves.

Between the two World Wars there were five downswings in business sufficiently severe to be labeled depressions by business cycle analysts; and there were, of course, an equal number of recoveries. Each of the periods of depression--1921, 1924, 1927, 1929-33, and 1937-38--was preceded by a peak and a downswing in effective bank reserves relative to the estimated needed rate of growth, and each of the recoveries by a trough and upswing in reserves. The publications of the Federal Reserve System show the character of the Federal Reserve policies which produced each of these changes in the amount of effective reserves. To describe these policies would take much more time than I can use here, but I would like to make some comments on postwar developments.

The theory that business fluctuations are the result of inappropriate variations in the quantity of bank reserves and that these variations in reserves result from Federal Reserve policies is supported by the course of events during and since the close of World War II. In 1942 Federal Reserve authorities announced that the System would provide the banks with all the reserves they might need as a result of increasing their holdings of Government obligations. During the war years the banks acquired a huge volume of Government obligations, and the amount of bank reserves and the quantity of bank deposits increased rapidly. Reserves continued to increase, though more slowly, for two years after V-J day. From the end of 1941 to the end of 1947 Federal Reserve bank assets nearly doubled, and member bank reserves, adjusted for changes in percentage requirements and other factors affecting their effectiveness as a base for deposit expansion, by about 60 percent. The money supply, measured by the Federal Reserve series of "adjusted deposits and currency," more than doubled, a rate of expansion greater than that in effective reserves being made possible because of excess reserves available in 1941. This great increase in the money supply led to some rise in prices during the war and to a rapid rise when wartime controls were removed. The wholesale price level rose about two-thirds and the consumers price index by about one-half from the first six months of 1942 to the first six months of 1948, representing the impact of the excess of monetary expansion over the growth of production.

In the latter half of 1947 and the early months of 1948 various measures were taken for the purpose of preventing any further increase in the money supply. These measures impinged on bank reserves. By the end of 1947 the expansion of bank reserves was halted and turned into contraction.

Between that date and the end of April 1949, the effective amount of bank reserves was reduced by 15 percent relative to the normal rate of growth. Bank deposits also declined substantially though not by so large a percentage. The price level turned down and business activity slackened in the fall of 1948, several months after the peak in reserves, repeating the typical sequence and lag which prevailed between the World Wars.

By the Spring of 1949 fears were arising that a serious postwar depression was at hand. At this point the Federal Reserve authorities reversed their pressure on reserves. Early in May they started a series of reductions in percentage reserve requirements, thus stopping the contraction in effective reserves and in deposits. In the summer and autumn business sentiment became more favorable, several of the leading indicators of revival appeared, and fear of a deep depression disappeared. The Federal Reserve authorities had stopped the postwar inflation and at the same time avoided a postwar depression sufficiently deep to be a serious threat to the economy.

Recently, as those of you who read the financial journals are aware, the Federal Reserve banks have engaged in a huge double-sided process of acquiring and relinquishing assets. On the one hand they acquired a large portion of the Government obligations which mature on September 15 and October 1, and therefore acquired the right and duty of subscribing to the refunding issues which the Treasury issued in their place. On the other hand, the Federal Reserve banks sold other Government obligations which they owned, consisting in part of long-term bonds and in part of bills and certificates maturing subsequent to October 1. This tremendous turnover of Government obligations owned by the Federal Reserve banks is the result

of a slight difference between the rate of interest which is to be paid on the new obligations and the rate of yield at which the Federal Reserve banks are offering to sell the various types of obligations which they previously owned.

With such a tremendous volume of purchases of Government obligations on one hand and of sales on the other the net results might very readily have a considerable impact on the amount of member bank reserves. However, it appears that the Federal Reserve banks are being successful in maintaining a high degree of stability in the aggregate amount of bank reserves. The figure for member bank reserves on September 20, the latest date available, was \$16.3 billion. This compares with an average of the same amount during the month of July and \$16.4 billion during August. It is about $3\frac{1}{2}$ percent larger than the figure for the corresponding date in September 1949, just after the present percentage reserve requirements went into effect, though there have been appreciable fluctuations in member bank reserves between that date and the present time.

If member bank reserves continue to remain reasonably stable, we can expect stability in the volume of bank assets and bank deposits, and hence in the money supply. Mr. Warburton predicts, and I agree with him, that if this stability is maintained during the next few months the upsurge in buying by consumers and speculators initiated by developments in Korea will subside. As consumers and speculators meet the commitments they have already incurred, they will find their cash balances abnormally low relative to their spendings and will begin to reduce their expenditures to a normal volume in order to replenish their cash. If the Federal Reserve authorities continue to hold bank reserves around the \$16 1/2 billion level, they will

have demonstrated their ability to prevent inflation, except for some temporary price fluctuations, even in the face of an increase in defense expenditures and in the government deficit.

With respect to the longer-run outlook, it has now been a long enough period of time since the peak in the money supply at the end of 1947 for the economy to become adjusted to the \$170 billion of "adjusted deposits and currency" in existence on that date and also at the present time. As soon as the present speculative flurry dies down, it would be an appropriate policy to resume a rate of growth at or close to the estimated normal, which is about 5 percent per year. For maintenance of prosperity and a stable price level we need a reasonable growth in bank deposits and with appropriate banking and monetary policies this will be achieved.

That is to say, an economic society based on competitive private business enterprise is not inherently unstable. On the contrary, competitive capitalism is an extremely flexible and adaptable type of economic organization. Its decentralization of decision-making is an aid in this adaptability. Adjustments to changing demands, to changing methods and techniques of production, and to changing sources of materials do not have to be funnelled through a single set of decision-makers. But there is one essential condition if this method of decision-making is to work well, and that is stability in the value of the monetary unit or level of prices of the output of the economy. All business decisions are made in terms of money, and instability in the value of the monetary unit creates vast uncertainties and upsets business planning.

Maintenance of monetary stability is a governmental function and the powers of accomplishing it have been given by Congress to the authorities who determine Federal Reserve policy. If these powers are appropriately exercised we will never again have a depression like that of the 1930's, and as time goes by our experience with continuous prosperity will show the world that we have eliminated the weakness of our economic system on which our enemies rely for our defeat in the cold war. This is the key to our victory in the cold war and to the survival of liberty, individualism, and private enterprise.