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BUSINESS CYCLES AND UNEMPLOYMENT

REPORT AND RECOMMENDATIONS

OF A COMMITTEE

OF THE PRESIDENT'S CONFERENCE ON UNEMPLOYMENT

INCLUDING

AN INVESTIGATION MADE UNDER THE AUSPICES OF THE NATIONAL BUREAU OF ECONOMIC RESEARCH

WITH A FOREWORD

BY

HERBERT HOOVER

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FOREWORD

The President's Conference on Unemployment which met in Washington in September, 1921, was called primarily to consider relief for four to five million unemployed resulting from the business slump of 1921. During the formulation of emergency measures, which subsequently proved successful in greatly alleviating the situation, the responsible business men, labor leaders, and economists of the Conference advanced the proposal that an exhaustive investigation should be made of the whole problem of unemployment and of methods of stabilizing business and industry so as to prevent the vast waves of suffering which result from the valleys in the so-called business cycle.

It was the view of the Conference that certain suggestions for controlling extremes of the business cycle so as to lessen the losses due to recurrent periods of unemployment were worthy of serious consideration and that in any event a thorough study of the business phenomena of booms and slumps would serve to advance public knowledge and stimulate thought toward constructive solution. Accordingly I appointed the following committee to undertake an investigation and report:

Owen D. Young, Chairman of the Board, General ElectricCo., Chairman; Joseph H. Defrees, Former President, U. S. Chamber of Commerce; Mary Van Kleeck, Russell Sage Foundation; Matthew Woll, Vice-president, American Federation of Labor; Clarence M. Woolley, President, American Radiator Co.; Edward Eyre Hunt, Secretary of the President's Conference on Unemployment, Secretary.

An exhaustive investigation was undertaken with the assistance of appropriations toward its cost from the Carnegie Foundation and with services contributed to the Committee by the National Bureau of Economic Research, the Russell Sage Foundation, the Federated American Engineering Societies, the U. S. Chamber of Commerce, the American Federation of Labor, the American Statistical Association, the American Economic Association, the Bureau of Railway Economics, the Department of Commerce, and a number of others.

The Committee has prepared the following short report after consideration of the facts and views developed. I am confident that it represents a definite advance in economic thought and offers practical constructive suggestions that should make for progress. A special volume will be issued at an early date, giving an exhaustive presentation of the facts and causes in relation to the business cycle and the views developed as to prevention and remedy.

Broadly, the business cycle is a constant recurrence of irregularly separated booms and slumps. The general conclusion of the Committee is that as the slumps are in the main due to the wastes, extravagance, speculation, inflation, over-expansion, and inefficiency in production developed during the booms, the strategic point of attack, therefore, is the reduction of these evils, mainly through the provision for such current economic information as will show the signs of danger, and its more general understanding and use by producers, distributors, and banks, inducing more constructive and safer policies. Furthermore, the Committee has developed some constructive suggestions as to the deferment of public work and construction work of large public-service corporations to periods of depression and unemployment, which, while in the nature of relief from evils already created, would tend both by their subtraction from production at the peak of the boom and addition of production in the valley of depression toward more even progress of business itself.

The report does not suggest panaceas or economic revolution but seeks to drive home the facts that the enlargement of judgment in individual business men as to the trend of business and consequent widened vision as to approaching dangers will greatly contribute to stability, and that the necessary information upon which such judgments can be based must be systematically recruited and distributed.

The investigation shows that many firms have pursued such policies and have come through the recent period of business disaster with success and stability, and that ignorance of determinable facts accounts for the disasters to many others.

The whole problem belongs to a vast category of issues which we must as a nation confront in the elimination of waste if we are to maintain and increase our high standards of living. No waste is greater than unemployment; no suffering is keener or more fraught with despair than that due to inability by those who wish to work to get jobs.

The public is indeed indebted to the Committee and to the very large group of its co-workers for the conduct of so able an investigation and the production of so much constructive thought. A constant feeling of the great human problem involved pervades the report and is in itself a tribute to the highest thought of American business.

HERBERT HOOVER.

WASHINGTON, D. C.
March 1, 1923.

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CHAPTER XXI

REPORT AND RECOMMENDATIONS OF THE COMMITTEE ON UNEMPLOYMENT AND BUSINESS CYCLES

QUESTIONS TO BE CONSIDERED

Can unemployment which results from recurrent business depression be reduced or prevented? Which of the proposals to relieve unemployment seem to offer prospects of practical service? What groups in the community can most effectively act?

These questions were forced upon the attention of the President's Conference on Unemployment when it met under Secretary Hoover's Chairmanship in Washington in September, 1921. Millions of wage-earners were out of work. The first responsibility of the Conference was to urge upon local communities plans to diminish suffering, but throughout the discussions it was clear that back of widespread unemployment were fundamental conditions which must be studied if more effective action were to be taken in the future than in the past. The depression of 1921 was obviously to some extent an aftermath of the great World War, but the War was not solely responsible. We were then in the midst of one of those periods of depression which inevitably follows abnormal activity. This upward and downward swing of business, recurring at intervals in the past century, has become known as the business cycle.

Before adjourning, the President's Conference on Unemployment provided for the appointment of a Committee to consider the underlying causes of recurrent depressions and specifically to analyze and present the more promising proposals for alleviating the extremes of the business cycle and reducing unemployment. To make this inquiry, Secretary Herbert Hoover, as Chairman of the Conference, appointed the Committee on Unemployment and Business Cycles. (See page xxxi.)

General business is now on the upward swing of the cycle, and unemployment has been greatly reduced. When business again declines men will be laid off and the problem of unemployment may again become serious. It will then be too late for any measures except relief for the unemployed unless we now address ourselves to the task of preventing, or at least reducing, these extreme fluctuations of business activity. Prevention as contrasted with relief is possible only through foresight.

The Committee on Unemployment and Business Cycles here presents to the public a preliminary discussion of the subject.

The Committee has been impressed with the scarcity of sound statistical and economic data regarding this fundamental problem. Extensive investigations and widespread public interest will undoubtedly be necessary before the business community will be able to deal adequately with the extremes of alternating booms and depressions. The Committee is confident that the destructive extremes of business cycles can in large measure be controlled.

If this report stimulates research and experiment by the various economic groups of this country in an effort to reduce periodic fluctuations in business and arouses them to cooperate with the Department of Commerce, the Department of Labor, and other agencies in the collection and distribution of any information they may require the Committee will feel that its work has been successful. Little in the way of definite and constructive programs can be advanced until the fundamental facts upon which action must be based are available in current and comparable form.

We hope that business organizations, banking associations, labor organizations, trade associations, and chambers of commerce, as well as individual business men and bankers, will consider and report back to us in detail upon these various proposals. (See page xxxii.)

Unless business men, bankers, and other economic groups at once begin investigation and study of these problems, leading to practical programs of action, solution will probably be attempted in ways unsound and unscientific.

WHAT IS THE BUSINESS CYCLE?

The Committee uses the term "business cycle" to describe the series of changes in business conditions which are characterized by an upward movement toward a boom, followed by a downward movement into depression.

Business men know that the term "business cycle" is too simple to describe accurately the complexity of the problems involved. In reality the name covers a long series of influences in which a more or less unknown part is played by the individual establishment, by the industry of which it is a part, by conditions in other industries, and by credit conditions and policies.

In thus defining the cycle we are eliminating from consideration seasonal changes in particular trades or the total fluctuations which they produce. It is necessary to limit the scope of this report, and for that reason we hope that the seasonal problems will be the subject of study by other groups.

For a similar reason we have not been able to report on the problems of distribution, marketing, and finance in their relation to land ownership and agriculture.

Although a variety of reasons have been assigned for the upward and downward movement of business which appears to have occurred at intervals in all industrial countries, the general opinion is that the influences which cause the business cycle are conditions within business itself, and that the most productive results in controlling it are likely to be obtained from a consideration of business rather than from efforts to explore remote considerations.

Analyses of past cycles of business show certain common tendencies. If we begin the analysis when business is reviving, in general the characteristic features are increased volume of manufacturing, rising stock exchange prices followed by rising commodity prices, then by business expansion and increased demand for credit from both business men and speculators. As the result of the advance of commodity prices, money rates stiffen and credit gradually becomes strained, and these conditions may be accompanied by a curtailment of credit for speculative purposes. Then stock exchange prices fall; for a while longer general business continues to increase unevenly, transportation facilities are overburdened and deliveries are delayed, the apparent shortage of goods is intensified by speculative buying and duplication of orders by merchants and other buyers until credit expansion nears its limit. Public confidence is then shaken, resulting in widespread cancellation of orders if the cycle is extreme. This is always followed by liquidation of inventories and sharp and irregular fall of prices. During the period of depression there is always more or less widespread unemployment.

The cycle which ended in the depression of 1921 was unusual both in the extent of the preceding expansion, in the severity of the depression, and in the amount of unemployment. For this reason it is significant for us to review some examples of business difficulties caused by the last great fluctuation of business.

A BUSINESS PROBLEM

In December, 1919, two manufacturers of silk went to their bank. One as a result of his study of business conditions—the degrees of overexpansion, inflation, and speculation—had decided that prosperity was beginning to assume the aspect of an unsafe boom. Although business was brisk and sales heavy, he told his bank that he did not propose to stock up during this period but that he would attempt to sell his goods with as rapid a turnover as possible.

The other manufacturer asked the bank for a large loan. Orders had been coming from his customers larger than those of any previous season, trade papers were emphasizing the scarcity of raw silk, traffic congestion made it seem imperative to increase his inventories, and he believed that it was necessary to expand in order to maintain his relative position in his trade. The bank gave him the loan because all the customary tests, such as the "two-to-one ratio" of quick assets to liabilities, usually relied upon to justify such an extension of credit, were met. Almost immediately the tide of prosperity turned in the silk industry, as the first manufacturer had predicted, and there came a severe drop in prices of both raw material and finished product. The second manufacturer found his factories stocked with high-priced raw material and with goods produced in the belief that good times and high prices would continue. The reduced value of his inventories made him unable to liquidate his loan, and his business was virtually bankrupt.

Was it wholly a defect in judgment upon the part of the second business man for which he alone was responsible? Did the bank use proper judgment? Did it have a responsibility which it did not exercise?

In the silk industry wholesale prices continued to rise until about February, 1920. Wholesalers and retailers talked of the great demand for silk and the great shortage of raw goods in the country. The men in the silk industry honestly believed that there was a lack of raw silk and that prices would continue to rise. The extent of the accumulation of speculative stocks was not realized in the trade. It was not until insurance companies discovered that the amount of silk which they had collectively insured was beyond their insurance limits that anyone understood that there was really an excess supply of silk in storage. Reacting to this news, all prices of silk dropped at once, and manufacturers, wholesalers, and retailers found themselves with huge inventories to liquidate. Manufacturers and wholesalers suffered from a general cancellation of orders, which still further added to their difficulties.

While the silk industry is peculiar in that most of the raw materials are imported, it shows the general developments leading to a depression market. It furnishes a striking example of the lack of information on the part of men within an industry as to the amount of stock in storage and the amount of stock in transit (which always increases during periods of business expansion), and, finally, of failure to take into consideration the great amount of speculative buying. The Committee finds that this lack of information is characteristic. Conditions in the silk industry could in this respect be duplicated in a large number of other industries.

It was not only manufacturers of silk who were faced with these problems in the early stages of the last business boom. In the autumn of 1919 the merchandise manager of a department store in New England began to make plans for the spring trade in one of his important lines. He knew the prices of raw and finished goods had been advancing steadily, and retailers had encountered difficulties in securing prompt deliveries. He was convinced that he must place his orders well in advance of his needs. His store, like that of other retailers, had sold an unprecedented amount of goods. Trade rumors appeared to indicate that the supply of raw materials was less than normal, and it was so difficult to secure deliveries that retailers duplicated orders with different manufacturers in order to be assured of the delivery of part of their requirements, The merchandise manager thus decided to place in the autumn an order for the full requirements of the anticipated spring trade in 1920, for the purpose of avoiding the loss of prestige which the store would face if it were unable to supply its customers. To finance its purchases the company negotiated a bank loan at a time when money rates were rising, when wholesale and retail prices of all commodities were tending upward, and when the rapid advance—although the manager did not know this fact—had led to a good deal of speculation in the goods he wished to buy. The loan was obtained, the order given, and the result, of course, was a heavy loss.

It should here be pointed out that the retailer must carry stocks on hand. He must expect to take some losses in a period of depression. Some retailers believe that it is wise to build up a reserve in a rising market, fixing prices on a replacement value; they believe that it is good business to take losses early in a falling market by the same process of determining prices by replacement values. If information were provided to enable the retailer to change his present habits and buy "from hand to mouth" at the top of the boom and in larger quantities in a period of depression, bank credits would be relieved and cancellations decreased. It is the natural tendency at present to overstock in boom times and to stop buying in a depression. This tendency is strengthened by the difficulty of obtaining deliveries in a period of boom.

Early in 1920 a manufacturer of pulp and writing paper contracted to buy a large supply of pulp wood in order that the company's own extensive timber lands might be reserved for later use. The large sums expended for this purpose were listed as assets on the balance sheet of the company. For the first half of 1920 the company did the largest business in its history. Early in the following autumn cancellations began to pour in, and orders for spring delivery declined 50 per cent. Despite the fact that the company seemed to be efficiently organized and had standardized its products it was thrown into bankruptcy because of this error in judgment which caused it to accumulate raw materials at the peak of the cycle.

The object of giving so much space in this brief preliminary report to the difficulties of the business men is, first, to show by these cases the complexity of the problem of business cycles and, second, to emphasize the intricate decisions which confront business managers in their daily activities.

It might be said that our examples prove, in the case of the manufacturers of silk goods at least, that it was the conservative manager who succeeded and that the second manager, in seeking larger profits, took unwarranted speculative risks which resulted in failure. This is by no means universally true. The following instance of two manufacturers in the shoe industry illustrates the difference between what may be readily recognized as a conservative policy in one period of the business cycle and what just as clearly becomes a speculative policy in the other extreme of the cycle.

The first manufacturer of shoes, well along in the period of expansion, received more than normal orders from his customers. He knew the industry was overexpanded but he lacked any basis for judging how to handle his business at this time. Supplies of leather were apparently very small; congested railroad conditions made it imperative to have his raw material shipped to him several weeks before it was usually necessary; prices of leather were rapidly rising. The men in the industry did not question the price at which leather could be purchased but seemed willing to pay any price for raw material laid down at the factory. Under these conditions the manufacturer followed what must have seemed to him a conservative policy by purchasing raw material enough to cover his orders. Then came the break in leather prices; cancellations poured in, and he was unable to liquidate and experienced an enormous loss on his inventory of raw material.

Another manufacturer, under the same market conditions and at the same stage of the business cycle, convinced himself through a study of conditions that his orders were inflated and that it would be unwise to cover with raw material. He cut his orders to 25 per cent of his requirements. Other executives in his plant and particularly his sales organization opposed this policy. They prophesied not only that he would have to cover at high prices but that he would probably not be able to secure raw material at all and consequently his relative position in the industry would be destroyed. After the break this shoe manufacturer was able to purchase raw material to fill his requirements at much reduced prices, and he was able to send his sales organization into the field with a line of shoes produced at low cost, in competition with his competitors who were attempting to liquidate high-priced inventories.

It was not because one of these managers was conservative that he was more successful in coping with the problem of cyclical losses. The distinction which the Committee would emphasize is that the manager who knew and acted with reference to the fundamental facts of the relationship of his particular business to his industry and who had a sound knowledge of general business conditions from study of statistical data of trade generally was able, to a large extent, through policies planned in 1919 and 1920, to avoid the difficulties of 1921, while the manager who ran his business without reference to such factors was gambling in his most important decisions.

Another reason for reviewing these examples is to bring out the differences among industries in their relation to the general business cycle. The instances cited are interesting because the collapse of silk prices came before the depression in the shoe industry, and both came before the slump in paper. It is also of interest to point out that the drop in silk prices was one of the first signs of the general business depression and that paper was one of the last commodities to feel its full effects. The study of trends of our industries should thus become a safeguard.

In dealing with these problems the banks are in a position of great importance. The banks should realize sooner than the typical manufacturer when credit strain is approaching and should be in a position to warn their customers of impending danger. One of the difficulties which makes the banks in this respect less effective than they should be is the competitive situation. The individual borrower never likes to be told by his bank that his request for a loan is not granted, and if his credit standing is high the bank is apt to allow doubtful loans because it fears the loss of the customer's good will and his business through refusing them. This difficulty can be avoided only by placing proper research information in the hands of the bank in such form that the bank may use it with its customers without danger of losing business. The banks must realize that the responsibility for the overexpansion of loans rests upon them rather than upon their borrowers. Expansion of bank credit is a necessary condition of expansion of business operations. When the resources of the banks reach an end, a sudden contraction of loans is always a factor—generally the most compelling factor—in bringing about a business collapse. To meet the varying needs of modern business, credit must be elastic. There should be provisions for expansion as well as contraction. But an overexpansion of credit may so increase the purchasing power of business men that it will merely result in enabling them to bid against one another for limited supplies of goods and material so as to force prices above what consumers are willing and able to pay. Bank credit often expands so rapidly that it lifts the buying or investment power of business men out of line with the general buying power of the community. Because of their strategic position the banks have an unusual duty and an exceptional opportunity to give sound information and counsel to business men.

A problem which business men faced in 1920 and 1921 was the widespread uncertainty caused by cancellation of orders. From one standpoint these cancellations were entirely unjustifiable. Legally the orders constituted contracts and should have been carried out. It is important, however, to consider why widespread cancellations occurred. Their extent was undoubtedly due to at least two causes, both intensified by the wide fluctuations in that particular cycle.

First, in the period of inflation of 1919 to 1920 an unusual and perhaps unprecedented delay in securing deliveries was caused by the breakdown of transportation facilities near the peak of the boom. Many business men not only placed orders earlier than usual but also duplicated them, or ordered in larger quantities, with the expectation of having deliveries scaled down. When the slump came they had strong temptations to cancel.

Second, price levels had been on such a high plane when orders were placed and the fall in prices was so violent that many business men faced the alternative of cancellation or bankruptcy. Under these conditions it was wiser for the seller to accept cancellation than to deliver material to a customer who could not pay.

These two circumstances account for the fact that cancellations played such an extraordinary part in this cycle. There is reason to believe that in mild swings of the cycle, when inflation does not bring about such excessive commitments and when drops in prices are less drastic, cancellations are less important. The problem, however, should receive the earnest consideration of business men and their associations.

Contracts for purchase of materials should contain definite and substantial financial penalties for cancellation. It is clearly undesirable that contracts should be considered subject to cancellation except under conditions specified in advance, with such penalties as may be fair to both parties. Insistence on this principle and the inclusion in contracts of substantial penalties for cancellation will tend to prevent duplication of orders, to lessen the tendency to place orders far ahead of immediate requirements, and to prevent speculative buying by men who when they order have no intention of completing the purchase if prices drop.

THE NEED FOR FACTS

From the illustrations of business experience which we have reviewed it is evident that knowledge of one's own business should be strengthened by knowledge of the conditions in the industry of which it is a part, and by information about current and future trends in general business conditions. The business man is placed thereby in a strong position to exercise judgment based on facts rather than on guesses, speculations, or approximations.

First, he must have available for his use current facts about general business conditions throughout the country and knowledge of the probable future trend of general business conditions.

Second, he must have the basic facts about his industry. Because his particular business is influenced by conditions affecting his entire industry, he must be in a position, with others in his industry, to study its peculiar industrial problems.

Third, he must secure enough facts about his own business to give him not merely statistics but a proper basis for judgment as to his general policies.

Fourth, he must inform himself in regard to the general credit situation and especially the attitude of his own bank toward extensions of loans.

METHODS OF CONTROLLING THE BUSINESS CYCLE

Any consideration of methods to control the business cycle naturally divides itself into two parts—first, methods of preventing excessive expansion, such as occurred in the year 1919 and 1920, and second, methods of reducing the extent of the decline and of alleviating the distress caused by the depression. To a considerable extent these two are connected and interrelated. Anything which controls expansion tends also to lessen depression. Extreme expansion leads business men to dangerous over-extension, which is followed by collapse, whereas more moderate swings of the cycle stop short of this dangerous condition, with the result that more business men are able to maintain their business in a condition fundamentally sound. In cycles where this is typical the recovery of business is much more rapid.

The problem which the Committee has been asked to analyze is the possible prevention of widespread unemployment through the control of extreme fluctuations of the business cycle. The suggested remedies that have been included in the analysis made by the Committee relate both to the direct prevention of expansion or inflation and to the prevention of unemployment. In the order of their discussion these proposed remedies are:

Control of credit expansion by banks generally.

Possible control of inflation by the Federal Reserve System.

Control by individual business men of the expansion of their own industries.

Control of public and private construction, including construction by public utilities, at or near the peak of the business cycle.

Construction of public works in the depression.

Unemployment reserve funds.

Federal and State employment bureaus.

We are not here including a discussion of programs for relief of the unemployed and their families through social and charitable organizations and other agencies of the community charged with the prevention of distress, not because we underrate the importance of such programs, but because programs of relief of the poverty due to unemployment are not within the scope of this investigation.

RECOMMENDATIONS

Recommendation I

Collection of Fundamental Data.—Obviously the primary point for assembling data bearing upon trends of business is in each separate establishment. Many business organizations to day maintain intimate and complete statistics as to their production, stocks, orders, consumption, employment, and other pertinent questions not only as of the present but in comparison with former periods. If, however, business men are to have the data necessary to form a judgment as to the trend of production and consumption in their own industries, and in other industries purchasing from them or selling to them, and to evaluate special influences that may affect productivity or consumption in business as a whole, they must be willing to contribute summaries of the data of their individual units to some common fund of information.

The first requisite in seeking such data is to assure the individual that the detailed facts about his business will not be divulged, except as these facts are included in a general total drawn from several sources. The second important point is that only the essential facts in simplest possible form are required.

In many industries the cooperation necessary to form a common pool of fundamental facts is made possible through trade associations to which current figures are reported by their members. In other industries such figures in whole or in part are supplied directly to Government bureaus. Some of these statistical services have existed over many years and have become incorporated into the daily business life of the country. They are not, however, sufficiently extensive to answer all needs.

In an endeavor to put in more available form the sum of information now current, and to add to it, Secretary Hoover has established in the Department of Commerce a monthly *SURVEY OF CURRENT BUSINESS* which summarizes the data available from all sources that bear upon this major problem of business trends. This survey comprises not only the information collected directly by the Department of Commerce, but also the crucial facts collected by other Government bureaus and the material brought together through cooperation within trade associations. To a considerable degree the survey of current business has now covered the range of industry. It is essential that the service should be maintained and expanded.

The greater part of the material presented by the Department of Commerce is based upon data furnished voluntarily either by industries or by trade associations. One of the difficulties in making such returns effective for their purpose is the refusal of a few firms to contribute to the common pool through either of these channels. Such refusal destroys the possibility of common knowledge in certain industries and seriously undermines the ability of business men in such industries to form proper judgments. It also decreases the area of knowledge of the currents of business as a whole necessary to each separate business.

The vast majority of business men have given enlightened cooperation in these efforts. But the minority who refuse to cooperate are doing injury to the business fabric as a whole. Reluctance to reveal facts to competitors is not a valid reason for refusal, since individual returns supplied to the Department of Commerce are protected by special statute and are not available in their individual form for any other purpose either of the Government or of business.

It happens that information which is regarded by many students of the business cycle as most important is conspicuously lacking, namely, the actual stocks of different commodities on hand, whether in the place of manufacture or in transit, or in wholesale or retail warehouses. The practical use of such information may be illustrated if the experience of 1920 and 1921 be recalled. Early in 1920 the prevailing impression was that available goods were inadequate, and that orders must be placed far ahead to insure deliveries. In the summer of 1921, on the other hand, it was commonly believed that the goods on hand exceeded the consumer's demand. All of the facts, however, indicate that early in 1920 there was an excessive supply of goods, a condition which led shortly to collapse, while in the summer of 1921 stocks were very low and the resulting spread between stocks produced and consumers' demand inevitably brought about the current upward turn in the business cycle.

What is evidently needed is an increase in the resources of the Department of Commerce and a larger degree of cooperation with the Department in coordinating and extending business information, so that business men and bankers may know promptly the facts about the rate of production measured in physical units, the stocks on hand and in transit, the trend of prices, the volume of sales, and the trend in money rates. There is great need also for recording data as to the speed of freight movements so as to show whether the output of farms and factories is being promptly distributed to the consumer or is being delayed in transit because of freight congestion. Such congestion results in stimulating and duplicating orders and increasing inventories. Reliable information as to the extent of these delays would be very significant. It is important to emphasize the need of promptness in publishing statistical data and the fact that the failure of individual business units to make prompt returns delays the whole.

Of the various data needed, statistics of employment are highly important and are being collected with increasing efficiency by the federal Bureau of Labor Statistics. Conditions in business are invariably reflected in the volume of employment. Employment statistics reflect the economic welfare of wage-earners and are information of the greatest social importance.

When the Conference on Unemployment met in Washington in 1921 the federal Bureau of Labor Statistics was collecting monthly from a limited number of industries data as to the total number on pay-rolls each month and the total wages paid, which indicate whether industries are carrying their normal forces of employees or whether men are being laid off. From the State of New York the federal bureau secured its reports through the State Department of Labor, which was collecting identical facts extensive enough to chart the course of employment in the state. Duplication was thus avoided and only one report was required of any industrial plant, while both state and nation got the benefit of the information. The same plan has been in effect in Wisconsin since 1920. Recently Illinois and Massachusetts have arranged for the same sort of cooperation with the federal bureau. Once the plan has been launched in New York, Wisconsin, Illinois, and Massachusetts business men welcome the information and make reports promptly. Other states should now cooperate and the resources of the federal Bureau of Labor Statistics should be made sufficient for adequate work.

Recommendation II

Larger Statistical Service.—The Committee recommends the expansion and standardization of the statistics now collected by state and federal bureaus, the publication of employment statistics by the federal Bureau of Labor Statistics, and the final summation and publication of all of these statistics by the Department of Commerce, in order that there may be promptly available a connected, uniform series of facts about the trend of business. It is important that agreements should be reached as to uniform definitions of terms and simplification of the material. Representatives of the various industries should aid Government bureaus in working out the questions to be asked and in securing the cooperation of their respective industries in establishing the habit of regular, prompt, and accurate reporting. It is the consensus of opinion of those who have most experience in the use of these periodical statistics that they should be as simple as possible and published promptly after they are collected.

With the exhaustive Census of Manufactures made by the Department of Commerce in five-year instead of two-year periods, it is possible annually to collect intermediate statistics of sufficient reliability by sampling methods, basing the ratio upon the five-year determinations, and to issue these figures promptly. Beyond this, monthly statistics of the same items are vital, although they need not be so exhaustive.

Expedition in publication is highly important, and while with the present limited resources of the Government departments and trade associations it is impossible to collect otherwise than by mail, it would be of the greatest possible value to business and commerce if the results of certain key industries could be collected by telegraph and published within the first ten days of each month; these to be followed by the more ample statistics collected by mail and relating to a larger spread and number of industries.

In collecting figures on stocks and production the following list of commodities has been suggested to the Committee by experts as most significant in showing the trend of the business cycle. Statistics of these commodities should be collected through a telegraphic service and should be issued immediately, as stated above. Later they should be published with more ample data in monthly publications, together with the statistics of many other industries which bear indirectly upon the question, all being finally related to the one-year and five-year periods. The list follows:

Raw wool and woolen textiles.

Raw cotton and cotton textiles.

Hides and leather and shoes.

Iron and steel and leading fabricated products, such as structural steel and standard tools.

Zinc, lead, and copper and leading products of each.

Bituminous coal.

The collection and dissemination of statistics must be current, periodic, and in comparable form for many industries. They should be uniform and continuous, and they should be collected officially, since complete data rather than samples are necessary, and no private organization could have the authority to secure without interruption this basic information. Moreover, uniformity is important, and hence it is desirable not to have the work scattered through several organizations.

Recommendation III

Research.—A primary necessity is the collection and dissemination of fundamental data. Following this, we need further development of special research into economic forces, into business currents, and into broad questions of economic method. Industries generally recognize the need of research in physical science. Laboratories have been equipped with large staffs of trained workers. A similar recognition of the importance of economic research and the interpretation of economic facts would be the beginning of better control of business conditions by business men.

Although more constructive and thorough research should be carried on by individual companies with reference to their own individual business and to the industry of which they are a part, and more extensive research information should be disseminated by the Government, there is need for investigations by financially disinterested and impartial research organizations through whose work the individual manager can "check" the results presented to him by his own research department. Companies which have developed research departments for physical science have already appreciated the need for outside impartial investigation of the same problems that are being studied within their own laboratories.

The business fraternity should recognize the value of such work and encourage both outside organizations and universities to go further in the investigation of economic subjects.

The forecasting of probable business trends is difficult and can never be undertaken successfully by any kind of public institution, except in a limited field. Business men must themselves form their own fundamental judgments when adequate data are furnished. Research as to the effect of different trends and economic forces is, however, a different problem from forecasting. Such research should be carried on continuously by the Government bureaus, because the data available to these bureaus are more extensive than those available to other institutions, which must depend upon published summaries of Government data.

Recommendation IV

Control of Credit Expansion by Banks.—The individuals banker, like the individual business man, may properly be asked to aliume some measure of responsibility. If only in his own interest, his policies should be determined by the general business situation as well as by the apparent soundness of the particular transactions his customers ask him to finance. The solvency of his customers is inextricably bound up with that of other business firms. The soundness of their transactions often depends upon whether or not the expansion of business is outrunning the purchasing power of consumers. To guide his policies the banker, like the business man, needs access to a large fund of knowledge about the general trend of business activities, and because he is a specialist in finance the banker has a peculiar obligation to give sound advice to his customers. One suggestion is that when prices are rising and business is expanding bankers should ask borrowers to maintain an increasing ratio of quick assets to current liabilities.

Before the establishment of the Federal Reserve System the banks often expanded their loans until their reserves were reduced to a dangerous point. Forced then to curtail credit drastically, their action had made more severe the reaction following a period of prosperity. It is generally recognized that in 1920 the resources of the Federal Reserve System enabled the banks to carry their customers through a difficult period and thus very likely prevented a panic. Much would have been gained if more of the banks had warned their customers of the impending financial stress.

The individual banks can render another service in the depression. Both the Reserve System and the banks protected customers to an extraordinary extent during the period of falling prices. But borrowing by individual banks from the Federal Reserve Banks during the last depression was new to the banks of this country, and many such banks had an uncomfortable feeling of inefficiency and weakness until their loans at the Reserve Banks were reduced to small amounts or were entirely eliminated. In many specific instances this undoubtedly resulted in their bringing pressure on customers to liquidate loans as early in the period of recovery as such liquidation was possible. And while in some ways liquidation was helpful, undoubtedly it sometimes resulted in complete or practically complete liquidation of businesses which with a little more time could have regained their feet. Fortunately a reasonably liberal policy in the depression stage of the last cycle was the general practice on the part of banks and of the Reserve System.

Recommendation V

Possible Control of Inflation by the Federal Reserve System.—A close parallel is usually observable between the cycle of business and the cycle of credit. While the relationship between the volume of credit and the volume of business and the movement of prices is not always simple to interpret it appears to be sufficiently close to make it a matter of first importance that the volume and the flow of credit should at all times be tested by the contribution which additions to the volume of credit make to the total of economic production. Additions to credits which cannot be economically validated by a commensurate effect in actual production are speculative, and as such should be subjected to control, so that business and industry can be maintained in a healthy state. Such control is primarily the responsibility of the banker and secondarily of our agencies of banking supervision.

Credit conditions are of major importance in the upward movement of the cycle and in precipitating the decline, so that the first and most important method of controlling the cycle and preventing excessive expansion should be found in the fundamentals of our banking situation. Control of expansion so that production is allowed to increase and business is actively stimulated to a proper degree, while expansion is checked at the stage when it becomes dangerous, is a fundamental principle already accepted by bankers.

The only automatic check upon the expansion of bank loans in a period of prosperity is the requirement of the law that the banks shall always maintain a certain specified minimum legal reserve against their current liabilities. But there should be an additional limitation due to the banker's own realization of his responsibility to the community in the issuance of additional credits. This is particularly important because under the Federal Reserve System the so-called automatic check upon the banker can be rendered ineffective through the replenishment of his reserve by borrowing from Federal Reserve Banks.

With the Federal Reserve as the chief agency for the supply of credit beyond the ordinary supply of the banks of the community, the problem requires wise and sagacious administration on the part of the Federal Reserve System, so that this most important function of the Federal Reserve System can be effectively performed. From the point of view of the economic welfare of the country the Federal Reserve authorities should be given every encouragement and support in the administration of the credit facilities of the System.

The Federal Reserve Banks now hold, as a result of the War, a much larger amount of gold than would suffice to support all of the credit which American industry and agriculture can possibly need on anything like present price levels. Much of this gold we are holding only temporarily—virtually as trustees for the world. With the return of more prosperous conditions in Europe a considerable part of this gold will naturally leave us. Meanwhile this excess gold might become the basis of a disastrous inflation of our domestic credit, which would be followed by an even more disastrous collapse when the gold goes out. It has been suggested that the Federal Reserve System should, if possible, set aside or earmark as a special reserve against future foreign demands that portion of their gold holdings which is considered by them now in excess of the proportion of the world's gold which this country should normally be expected to hold. Although it is important that credit should be available at the time of a crisis, it is also important for the general public to realize that the expansion of credit in times of "prosperity" should be guarded by the voluntary action of business men cautioned and advised by bankers, to the end that "prosperity" may be preserved and not destroyed by inflation, which in due course must precipitate depression and deflation, with their inevitable consequences of social and economic distress.

Our banking system represents a common pool of both investment and commercial capital, and for that reason the devices of European systems for the control of speculation are not applicable here to the same extent as they are abroad. A finer distinction between the two broad groups is desirable but is largely impracticable in the United States. The subject, however, warrants research and study. In any event the determination of the time when business passes from the area of economically legitimate hazard to the area of economically illegitimate hazard or when the proper use of capital for the expansion of production passes into the improper use for the pyramiding of prices requires a large development of economic statistical information and agencies for its interpretation.

In a government such as ours the most difficult question to solve from the very beginning has been how to centralize in individuals sufficient power to enable the Government machinery to function wisely and promptly and at the same time to impose such restraints and balances as to guard against autocratic or arbitrary exercise of such power. This is the problem which faces us in the development of the Federal Reserve System to its maximum usefulness, and it is a problem worthy of most careful and thorough study by bankers and associations of bankers.

Recommendation VI

Control by Business Men of the Expansion of Their Own Industries.—The Committee has seen numerous instances in which the individual business man, by conducting his business with reference to the business cycle, has avoided dangerous overextension of inventories and fixed capital which in many other instances resulted in unemployment and business failure during the cycle just past. It therefore believes that while the individual cannot in any large way influence the general situation or entirely avoid the losses incurred in periods of depression he can in most cases by foresight keep his business fundamentally sound.*

Few subjects in recent years have attracted more attention from business men than the stabilization of business operations. Various devices have been employed with varying success. Many of these have been ineffective because of failure to base the plans upon the fundamental fact that business policies should be determined with full recognition of their relation to the business cycle.

Planning production in advance and with reference to the business cycle, laying out extensions of plant and equipment ahead of immediate requirements with the object of carrying them out in periods of depression and carrying through such construction plans during periods of low prices in conformity with the long-time trend, the accumulation of financial reserves in prosperity in order to mark down inventories at the peak, and the maintenance of a long view of business problems rather than a short view will enable firms to make headway toward stabilization.

The firm which approaches a period of business depression in the strongest financial condition is most likely to be able to give its workers steady employment.

Recommendation VII

Control of Private and Public Construction at the Peak.—One method by which periods of expansion might in part be controlled is through the cessation and postponement of construction by the Government, railroads, public utilities, and private owners in boom periods when prices are high. Cessation or postponement of construction work is obviously wise in any such period and will tend to level the cycle.

* So far as construction is concerned, this topic is treated in the next section in connection with similar governmental projects.

Individual business men and corporations should consider the business cycle far more than they do in planning their construction work. The results for the farsighted firms that exercise this type of business judgment are most satisfactory. Reserves built up in periods of high earnings and expansion are then spent for construction during periods of depression. When this policy is more generally followed it will be of peculiar value, as it will tend to keep low the ratio of fixed investment to productive capacity, to the great advantage of industry.

There are difficulties, however, in the way of a widespread extension of this practice on the part of business men. In the first place, the tax situation even now naturally tends to make companies extravagant in maintenance charges in good times. Moreover, the business man whose business has developed to a point where the demand for his finished product is in excess of his capacity to produce is always beset by the arguments of his sales organization desiring to see plant capacity balanced with apparent selling capacity, and on the other hand by the arguments of the salesmen of construction companies who, like his own salesmen, assure him that construction costs in future will inevitably be higher than they are at present. While it is desirable, therefore, to postpone as many types of permanent construction work as possible until periods of depression, the real hope that this can be accomplished as a matter of wide policy is dependent on the possession by business men of data showing fundamental conditions with reference to periodic fluctuations.

Systematic accumulation of reserves by business men in times of prosperity for use in plant expansion and improvement in times of depression would, if widely adopted, be an excellent method of controlling the crest of the boom and ameliorating the depression. It has the advantage that it is a method which any business man may adopt to his individual advantage.

Holding back public works and private construction for periods of depression not only gives employment to large numbers of workers when it is most needed but creates a demand for raw materials for construction which in turn stimulates other industries to offer employment. It maintains the buying power of those directly or indirectly employed, it creates a market for goods, and it enables the workers directly or indirectly employed to buy the products of other industries. Finally, construction work in a period of industrial depression, when costs are lower, is economical.

The essential steps in any general program are to plan construction work, private or public, long in advance with reference to the cyclical movement of business, and in the case of public works to pass the necessary legislative appropriations when facts about the trend of business show that it is sound policy to spend money for such purposes.

If it were possible for a smaller percentage of public works projects to be undertaken in periods when private industry is active, so that more work might be done during periods when private industry is slack, the Government would not compete with private industry to so great an extent in times of prosperity and thus would not be a factor in the inflation of money rates, prices of materials, and employment.

The Committee calls attention to the need for careful drafting of laws to insure a policy of reserving public works projects, if this is to be done effectively. The need for fixing the responsibility for the preparation of such plans in advance, the importance of securing the release of the projects at the right time by legislation, and the provisions for financing should be considered with special relation to the obstacles, legal and others, which the particular public authority would have to overcome. While the difficulties are great, everything which can be accomplished in this way is valuable.

Recommendation VIII

Public Utilities.—The controlling factors in the management of public utilities and railroads differ obviously from private business, because of Government regulation of earnings and rates. So far as railroads and public utilities are concerned, both are likely to find their net earnings reduced in a period of high prices and high wages. This tends naturally to bring about a construction policy similar to the one which we have recommended above.

With reduced earnings and the high interest rates which are customary at the peak of inflation, the natural tendency of public utilities is to postpone improvements until net earnings are better and interest rates are lower. This is typically true in periods of low general prices.

In the interest both of the utilities and of the buying public it is obvious that the normal time to finance new construction or improvements in public utilities is in periods of depression, when interest charges are reasonable and costs of construction low, but the delays encountered at such times in obtaining the necessary authorizations by public regulating bodies may in many cases be such that the favorable money market is lost. This is a problem to be studied by public-service commissions and similar bodies, which can by prompt action meet this difficulty.

In so far as the managers of utilities and public-service commissioners can regulate construction in order to fill up the valleys and lower the peaks of the business cycle, they will aid in alleviating the extremes of the cycle, and by means of their economies they will keep their capital investment from unnecessary expansion, to the advantage both of the utilities and of the public.

Recommendation IX

Unemployment Reserve Funds.—Nothing is more demoralizing for wage-earners than the feeling of insecurity of employment. Unemployment and the fear of unemployment are powerful causes of discontent. Wage-earning men and women must meet responsibilities for the support of themselves and their families wholly from their earnings. Loss of employment not only eliminates income but lessens the ability of wage-earning men and women and their families to make purchases, thus intensifying the period of depression.

To provide reserve funds or savings during periods of prosperity from which the worker may draw during periods of compulsory unemployment is one of the important methods advocated as tending toward relieving the fluctuations of business. Such plans of cooperative provision for relief against unemployment are not primarily designed to decrease the amount of unemployment but to alleviate its evil effects.

The idea of employer, employee, or both contributing during periods of employment to a reserve fund under separate or joint control to help sustain the worker when unemployed in periods of depression, and to equalize and stabilize his purchasing capacity, merits consideration. It attacks one of the most vital of our industrial problems. The establishment of funds by the employer or by associated workers to take care of foreseen or unforeseen contingencies has proved advantageous in the past. Neither reserves against decline of inventory value set up by manufacturers nor unemployment benefits of trade unions are new things to American industrial life. The principle may well be extended.

In considering the principle upon which unemployment reserves should be based, the Committee finds that American experience with cooperative unemployment reserve funds is very scanty. The experimentation which has been carried on in this country is confined largely to trade unions and to the individual efforts of a few firms.

Experiments here and abroad in this important field serve principally to suggest interesting questions for discussion. Certain inherent difficulties immediately become apparent; one of them, as the Committee has already pointed out, is the lack of essential data to determine the amount of unemployment, not to mention the unemployment specifically due to the business cycle. Among the plans considered or tried are various forms of unemployment reserve funds organized by individual companies for their workers, or by whole industries for the entire group of workers engaged in them, or by groups of workers, or state or nation. Each has obvious difficulties.

Because of the large expense involved it appears fundamental to the success of such experiments that cyclical unemployment be reduced to its minimum before any general relief measures are attempted. Moreover, effective plans for accumulating general funds against periods of cyclical unemployment require large-scale organization and the solution of many complex problems of administration. On these accounts the Committee feels that it must wait upon the experience to be gained from varied experimentation in the organization of such plans before attempting to recommend a definite program.

The Committee cannot emphasize too strongly the importance of preventing undue expansion of the business cycle as brought out in earlier sections of this report, and this will also add to the possibility of securing a sound actuarial basis for unemployment reserves.

Recommendation X

Employment Bureaus.—A national system of employment bureaus was recommended by the President's Conference on Unemployment, and the Committee gives hearty approval to that recommendation. We do not regard an employment service as having a direct and immediate effect upon the business cycle. We do believe that if such employment bureaus are organized throughout the country their reports will show the demand for labor and the number of workers seeking positions and will therefore be another measure of business conditions. If employment bureaus are organized effectively enough to insure transfer from one position to another with the least possible loss of time, they will make labor more immediately available and thus prevent loss of production for the employer and loss of income for the wage-earners, thus helping to maintain the level of purchasing power. It is obvious that any measure which tends to maintain the level of purchasing power tends to stability in business.

In conclusion the Committee would reiterate its conviction that unless business men, bankers, and others who are responsible for policies and practices in industry begin without delay to study and to act in order to meet the problems of unemployment and business cycles, solutions which may prove to be fundamentally unsound will be attempted without the benefit of practical experience. No problem before the business world today offers a more inspiring challenge to sound industrial leadership.

Owen D. Young, *Chairman.*
Clarence M. Woolley.
Joseph H. Defrees.
Matthew Woll.
Mary Van Kleeck.
Edward Eyre Hunt, *Secretary.*

QUESTIONS FOR DISCUSSION

By way of summarizing the main problems which the Committee has had under consideration the following general questions are set forth for discussion and comment by such groups as may desire to cooperate with the Committee in a program of study and experiment.

1. To Business Men (including all managers of industries and wholesale and retail distributors):

Would you regard as practicable and effective for your industry the program suggested by the Committee, including more comprehensive periodic statistics of employment and business conditions; a more adequate plan of research, possibly developed by each industry as a whole in cooperation with universities or other research agencies; revision of banking practice to conform to business policies gradually built up on the basis of more facts developed through research; a cooperative plan throughout the industry for unemployment reserve funds; and the development of a nation-wide system of public employment bureaus? What other statistics do you require in the conduct of your business and from what other industries should they be secured to be of most value to you? What problems for economic research or special study is your industry concerned with?

What would you add to this outline and how would you modify it? What facilities for putting it into effect already exist in your own industry? What obstacles do you see in carrying it out, and how could they be removed?

2. To Bankers:

To what extent can the business cycle be affected or its consequences averted by bankers? How far is the possibility of action by bankers dependent upon a change in laws, and how far is it dependent upon the individual action of bankers upon the basis of a sound interpretation of statistics?

3. To Managers of Public Utilities and Public Service Commissioners:

To what extent can public utilities now plan their operations so as to finance construction when costs are low and resist the demands for extension when costs are high? What would be the effect of such a policy upon rates, and how can the obstacles in the way of carrying it out be removed?

4. To Wage-Earners:

Would the bad effects of unemployment be lessened by unemployment reserve funds? How can such reserve funds be best established? How are such funds best administered? Do you favor a nation-wide system of employment bureaus, and how can the public employment bureaus best serve the workers in your trade?

5. To Engineers:

To what extent can improvements in methods of production and organization of marketing in each industry relieve the business cycle? What are the difficulties now in the way of making these improvements and how can the difficulties be removed?

6. To Citizens' Organizations:

How can the influence of citizens be most effectively enlisted in backing the proposed program for the establishment of more adequate statistical services in state and federal bureaus and the planning and timing of public works; in support of policies in public utilities which will influence the business cycle; in encouraging the cooperative action of industries to provide unemployment reserve funds and in supporting permissive legislation for this purpose if it be necessary; in support of bankers, wage-earners, and business men in their efforts to adopt a sounder policy?

NOTE ON THE REPORT OF THE NATIONAL BUREAU OF ECONOMIC RESEARCH

The first act of the Committee after its appointment by Secretary Hoover was to ask the National Bureau of Economic Research to map out an investigation which would formulate present experience with unemployment and business cycles and so would assist the Committee in beginning its inquiry into these complex subjects. But the Committee desires to point out that it is in no way responsible as a Committee for the findings in the Bureau's report and that, in accordance with provisions in the Bureau's constitution, that organization in turn does not make itself responsible for the statements and recommendations of this Committee.

The report of the National Bureau of Economic Research is intended to furnish the Committee on Unemployment and Business Cycles and the public which the Committee seeks to interest, a statement showing—

1. Such explanations concerning the nature of business cycles and the fluctuations in employment as are necessary for understanding the problem.

2. The character and bearing of the leading devices which have been tried or proposed for mitigating unemployment through control over the fluctuations of business activity.

3. The conditions which must be considered in judging the probable effectiveness of these devices.

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Thomas S. Adams, Professor of Political Economy, Yale University, New Haven, Connecticut.

John B. Andrews, Secretary, American Association for Labor Legislation, New York.

George E. Barnett, Professor of Statistics, Johns Hopkins University, Baltimore, Maryland.

David Beecroft, Directing Editor, Class Journal Company, New York.

W. A. Berridge, Assistant Professor of Economics, Brown University, Providence, Rhode Island.

Anne Bezanson, Assistant Director, Department of Industrial Research, University of Pennsylvania, Philadelphia, Pennsylvania.

C. P. Biddle, Assistant Dean, Harvard School of Business Administration, Cambridge, Massachusetts.

Charles F. Boots, Legislative Drafting Fund, Columbia University, New York.

Ernest S. Bradford, Vice President, American Statistical Association, New York.

Paul F. Brissenden, Assistant Professor of Business Administration in Extension Teaching, Columbia University, New York.

Charles J. Bullock, Professor of Economics, Chairman of the Committee of Economic Research, Harvard University, Cambridge, Massachusetts.

V. E. Carroll, Editor, *Textile World*, New York.

Joseph P. Chamberlain, Director, Legislative Drafting Bureau, Columbia University, New York.

Wilson Compton, Secretary and Manager, National Lumber Manufacturers' Association, Washington, D. C.

Clifford B. Connelley, Pennsylvania State Commissioner of Labor and Industry, Harrisburg, Pennsylvania.

Melvin T. Copeland, Professor of Marketing and Director, Harvard Bureau of Business Research, Cambridge, Massachusetts.

Stuart M. Crocker, Assistant to Owen D. Young, Chairman of the Board, General Electric Company, New York.

Herbert J. Davenport, Professor of Economics, Cornell University, Ithaca, New York.

Donald K. David, Assistant Dean and Professor, Harvard School of Business Administration, Cambridge, Massachusetts.

Henry S. Dennison, President, Dennison Manufacturing Company, Framingham, Massachusetts.

Wallace B. Donham, Dean, Harvard School of Business Administration, Cambridge, Massachusetts.

John Donnan, Secretary, Southern Hardware Jobbers, Richmond, Virginia.

E. F. DuBrul, General Manager, National Machine Tool Builders' Association, Cincinnati, Ohio.

Richard T. Ely, Professor of Political Economy, University of Wisconsin, Madison, Wisconsin.

F. M. Feiker, Assistant to the President, McGraw-Hill Company, New York.

Frank A. Fetter, Professor of Political Economy, Princeton University, Princeton, New Jersey.

A. I. Findley, Editor, *Iron Age*, New York.

Irving Fisher, Professor of Political Economy, Yale University, New Haven, Connecticut.

Reginald L. Foster, Major, Quartermaster Corps, United States Army, Washington, D. C.

Edwin F. Gay, President, *New York Evening Post*, New York.

Elliott Goodwin, Vice President, United States Chamber of Commerce, Washington, D. C.

M. B. Hammond, Associate Professor of Economics, Ohio State University, Columbus, Ohio.

Alvin Hansen, Professor of Economics, University of Minnesota, Minneapolis, Minnesota.

Shelby M. Harrison, Director, Department of Surveys and Exhibits, Russell Sage Foundation, New York.

Ralph E. Heilman, Professor of Economics and Social Science, Northwestern University, Evanston, Illinois.

Jacob H. Hollander, Professor of Political Economy, Baltimore, Maryland.

Pierre Jay, Chairman Board of Directors, Federal Reserve Bank, New York.

Emory Johnson, Dean, Wharton School of Finance and Commerce, University of Pennsylvania, Philadelphia, Pennsylvania.

Vernon Kellogg, Secretary, National Reserach Council, Washington, D. C.

Willford I. King, National Bureau of Economic Research, New York.

Oswald W. Knauth, National Bureau of Economic Research, New York.

Mortimer Lane, Assistant Editor, *Survey of Current Business*, Bureau of the Census, Washington, D. C.

Frederick P. Lee, Legislative Draftsman, United States Senate, Washington, D. C.

Richard Lennihan, Assistant Director of the Harvard Bureau of Business Research, Cambridge, Massachusetts.

C. E. Lesher, Editor, *Coal Age*, New York City, New York.

Samuel McCune Lindsay, Professor of Social Legislation, Columbia University, New York.

Otto T. Mallery, Member, Pennsylvania State Industrial Board, Harrisburg, Pennsylvania.

L. C. Marshall, Professor of Economics, University of Chicago, Chicago, Illinois.

R. C. Marshall, Jr., General, Associated General Contractors of America, Washington, D. C.

Frederick R. Macaulay, National Bureau of Economic Research, New York.

E. W. McCullough, Manager, Fabricated Production Department, United States Chamber of Commerce, Washington, D. C.

M. P. McNair, Bureau of Business Research, Harvard University, Cambridge, Massachusetts.

John C. Merriam, President, Carnegie Institution, Washington, D. C.

Adolph C. Miller, Member Federal Reserve Board, Washington, D. C.

Harry A. Millis, Economist, University of Chicago, Chicago, Illinois.

Wesley C. Mitchell, National Bureau of Economic Research, New York.

Gilbert H. Montague, Member of the Bar, New York City.

Harold G. Moulton, Director, Institute of Economics, Washington, D. C.

Seaman F. Northrup, Director, Bureau of Industrial Relations, New York.

Julius H. Parmelee, Director, Bureau of Railway Economics, Washington, D. C.

Warren M. Persons, Professor of Business Economics, Editor of The Harvard Economic Service, Cambridge, Massachusetts.

Arthur L. Rice, Editor, *Power Plant Engineering*, Chicago, Illinois.

Stuart A. Rice, Department of Sociology, Columbia University, New York.

W. Z. Ripley, Professor of Political Economy, Harvard University, Cambridge, Massachusetts.

William A. Scott, Director, School of Commerce, University of Wisconsin, Madison, Wisconsin.

Henry R. Seager, Professor of Political Economy, Columbia University, New York.

Horace Secrist, Professor of Economics, Northwestern University, Evanston, Illinois.

Edwin R. A. Seligman, Professor of Political Economy, Columbia University, New York.

William M. Steuart, Director, Bureau of the Census, Washington, D. C.

Ethelbert Stewart, Director, Bureau of Labor Statistics, Washington, D. C.

Walter W. Stewart, Director, Division of Analysis and Research, Federal Reserve Board, Washington, D. C.

N. I. Stone, General Manager, Hickey-Freeman Company, Rochester, New York.

Frank W. Taussig, Professor of Political Economy, Harvard University, Cambridge, Massachusetts.

Sanford E. Thompson, The Thompson & Lichtner Company, Engineers, Boston, Massachusetts.

Homer B. Vanderblue, Professor of Business Economics, The Harvard Economic Service, Cambridge, Massachusetts.

Alexander Wall, Robert Morris Associates, Lansdowne, Pennsylvania.

L. W. Wallace, Executive Secretary, The Federated American Engineering Societies, Washington, D. C.

Joseph H. Willits, Head of Department of Geography and Industry, Wharton School of Finance and Commerce, University of Pennsylvania, Philadelphia, Pennsylvania.

Colonel Arthur Woods, New York.

Leo Wolman, Lecturer, New School for Social Research, New York.

Allyn A. Young, Professor of Economics, Harvard University, Cambridge, Massachusetts.

INVESTIGATION
MADE UNDER THE AUSPICES OF THE
NATIONAL BUREAU OF ECONOMIC RESEARCH

PREFATORY NOTE

"Business Cycles and Unemployment" is a special investigation made under the direction of the National Bureau of Economic Research. It was undertaken under circumstances of peculiar urgency which are explained in the Introduction, and which differentiate it rather sharply from the normal type of work which the Bureau is undertaking to do. But the general procedure established in the By-laws of the Bureau has been followed, in that the manuscript of each chapter has been submitted to the Directors for their approval. Many changes in the text have been made as a result of their suggestions and constructive criticisms. Such criticisms and remarks as it was found impossible to incorporate in the text are shown in footnotes.

Two general comments by directors are appended:

I have not been able to read nearly all of the manuscript, but have looked it over in a cursory way and read a good deal. I think the work is well conceived and well done, and will be a valuable contribution to the subject.

GEORGE E. ROBERTS.

As one of the directors of the National Bureau of Economic Research I approve the publication of the report on "Business Cycles and Unemployment" as it has been submitted to me in manuscript, in common with other directors of the Bureau. I feel constrained, however, to append a note to the effect that the study of conditions and events that has been made does not give adequate attention to fundamental economic motivations that are beyond control. I refer to such things as broad national enterprises that may prove to be mistakes, to deep rooted and widely extending alterations in the conditions of production and consumption, to general wars, and to changes in social conditions.

In illustration of my meaning I cite too premature building of railways in the West of the United States, the greatly increased production of silver by fortuitous discovery and improvements in the arts of mining and metallurgy that led eventually to the demonetization of silver, the Great War of 1914–18 with its consequential economic dislocations spreading all over the world, and the social disturbances and changes which confront us now. It is important not to confuse ordinary business cycles with the irregular undulations following some great upheaval of such nature.

The Great War of 1914–18 produced an economic cataclysm that enmeshed almost every human being in the civilized world. There will be no dissent from the statement that the world has not yet passed out of its shadow. It seems to me to be highly dangerous to convey any impression that the United States in 1921 simply passed through the depression of an ordinary business cycle.

WALTER R. INGALLS.

With these amendments, the report is approved by the Board of Directors, who are as follows:

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