To the Board of Directors:

At our annual meeting last February, I said that Secretary Hoover had asked the National Bureau of Economic Research to prepare a report upon Business Cycles and Unemployment for the use of a Standing Committee of the President's conference on Unemployment, and that he had applied to the Carnegie Corporation for a grant of $50,000 to aid the undertaking.

Two weeks after our meeting the grant was made and work given us to start work. The preparation of this report has been our largest single task in the past year.

The conditions under which this work was done forced us to depart from our usual procedure in two ways. First, we had to work against time. Only six months was allowed for preparing our manuscript, submitting it to the Directors for criticism, and handing a corrected draft to the Committee. Second, we had to enlist the help of fifteen writers who were not members of our regular staff - though two of them, Professor T. S. Adams and Dr. N. I. Stone, were members of the board, and one of them, Dr. Leo Wolman, has since joined the staff.

While we recognized that there were special reasons for setting a short time limit upon this investigation, we foresaw that it would prevent our doing the work with the thoroughness and finish at which
we aim. Then one is trying to find out something which is not known — and that is always the case in a scientific investigation — it is seldom possible to foretell just how much time the search will take. Our objections to working against time have been confirmed and strengthened by this experience. Through the strenuous efforts of our cooperators and the promptness of the Directors in reading the chapters submitted to them, we were enabled to hand a completed manuscript to the Committee's secretary on August 20th, the day set. We think that the job is a creditable one, considering the time at our disposal; but we hope it will seldom if ever be necessary to accept such working conditions again.

In our outside collaborators we were singularly fortunate. They prepared fifteen and our staff prepared six of the 21 chapters in the report. All of them did their best not only to complete their chapters promptly, but also to abide by our rule against making recommendations on matters of policy. Though the chief aim of the report was to discuss practical methods of mitigating cyclical unemployment and though several of the contributors held strong views concerning measures which ought to be adopted, one and all sought to maintain an attitude of strict impartiality. Quite naturally, the task of editing a report prepared by so many hands, most of whom knew little of the Bureau beyond what we could tell them in staff meetings and circular letters, was rather heavy. But it was facilitated by the consideration of the Directors on the one hand and on the other by the readiness of the contributors to accept suggestions and revisions.

The committee for which we were working consisted of Mr. Owen D. Young, of the General Electric Company, Chairman, Mr. Joseph H. Defrees,
a former president of the United States Chamber of Commerce, Miss Mary Van Kleeck of the Russell Sage Foundation, Mr. Matthew Woll, a vice president of the American Federation of Labor, and Mr. Clarence Mott Woolley, president of the American Radiator Company. Upon this Business Cycle Committee devolved the task of deciding what recommendations concerning matters of policy should be based upon our report. With the best of will to cooperate harmoniously, the members had much difficulty in framing and agreeing upon their recommendations. That task has taken nearly as much time to accomplish as was devoted to the preparation of our report. But at a meeting held January 27th the Business Cycle Committee revised and accepted a draft, subject to minor stylistic changes and the preparation of two or three new paragraphs on banking. The finished draft will be sent to the members of the committee for their final approval, and when this has been obtained the last bit of manuscript can go to press. Mr. Hunt, the Secretary of the Business Cycle Committee, thinks that not more than two or three weeks from the present date will be required for this last stage.

We have felt some concern at the length of the Committee's deliberations. It is not pleasant to do a rush job and then have it made public after a delay which suggests abundant time for finished work. During the months consumed by the Committee's work we have been able to make a few improvements in our chapters; but we could not rework the whole report for it had already been put into galley proofs, and we could not afford to spend much more money upon it. At present our report is in page proof, and the prospect is that the whole book, including the Committee's recommendations will be published within some six to eight weeks.
Two editions will be published. One edition for general circulation by the Committee will contain a foreword by Secretary Hoover, the Committee's recommendations covering some 30 or 40 pages, and our report of rather less than 500 pages. The second edition is made especially for us and will contain only our own report in a form similar to that used in our other publications. We shall circulate this edition ourselves, but probably enclose a separate pamphlet containing Secretary Hoover's foreword and the Committee's recommendation with every copy we send out.

Despite the difficulties which have attended the preparation of this report I think we have reason to be glad that we accepted Secretary Hoover's invitation to cooperate. It is a satisfaction to have contributed toward the effort to devise some method of mitigating the evils of cyclical unemployment. In doing this work we have surveyed a part of the field of business cycles which our Executive Committee had staked out for our next investigations before Secretary Hoover applied to us. And incidentally we have been able to collect some data which will improve our estimates of the size and distribution of the national income. All this has cost something over $18,000 of our own money, and about $34,400 contributed by the Business Cycle Committee, not including cost of printing. In addition we had the unpaid cooperation of the Russell Sage Foundation, the American Association for Labor Legislation, the Bureau of Railway Economics, the Federated Association of Engineering Societies, Professor T. S. Adams, Mr. Otto T. Mallery, and Mr. Gilbert H. Montague in preparing eight chapters of the report; the help of the Department of Agriculture in collecting questionnaires and of the Census Office in compiling tables from
them, the free use of the mails, and the assistance of several thousand correspondents of one kind and another in obtaining materials. The total value of the services given nearly equals the value of the services paid for.

Besides the main report we shall get a second publication from this investigation. In planning our survey of cyclical unemployment we found that nobody knew within a million or more how many men are thrown out of work in the United States by a business depression. The discrepancy among the estimates of the unemployed submitted to the President's Conference in October, 1921, emphasized this ignorance of a fundamental factor. The indexes of employment, such as that compiled by Dr. W. A. Berridge, were useful; but they professed to show no more than relative changes in the intensity of unemployment. A benchmark from which these fluctuations could be measured was needed. So we planned a survey of the number of persons at work each quarter from 1920 to March 1922.

Dr. King took charge of this work, devised a set of questionnaires, and secured the cooperation of three departments of the federal government, numerous commercial organizations and many private individuals. The result was a collection of data which enabled him to estimate the falling off in the number of employees, the changes in time worked, and in earnings from the peak of the boom to the trough of the depression with a closer approach to accuracy than they had ever been determined before. The leading results of this study were incorporated in a brief chapter of the report on Business Cycles and Unemployment; but the detailed figures seem so valuable that we think
they should be given to the public. When we have our next cyclical depression it will be of great help to know in what industries, what classes of establishments within each industry, and what parts of the country the evil is likely to be most serious. The Business Cycle Committee, agreeing with this view, will contribute half the expense of printing this separate volume which will be called "Employment, Hours, and Earnings in the United States, 1920-22". It will be published soon after "Business Cycles and Unemployment". The manuscript was approved by the Directors last summer and it requires only a final editing before going to the printer.

Besides preparing these two books soon to be published, we have this year published two books which were largely prepared last year. The first of these is volume II of "Income in the United States" - a laborious reference work which gives in considerable detail the data on which rest our estimates of the size and distribution of the national income in 1909-19. We did not anticipate that there would be much interest in this volume, outside a narrow circle of specialists. We are pleased to confess that we were mistaken. The number of people who care enough about the details of our estimates pay $5.00 for a cross between a census report and a treatise on statistical method shows that there is much wider interest in what we are doing than we had supposed.

The other book published during the year is Dr. Knauth's monograph on the "Distribution of Income by States in 1919". This volume also has been favorably received. Slender as it is, numerous business concerns and philanthropic agencies have found this first serious attempt
to show how purchasing power and giving power are distributed over the
country of value in planning their selling campaigns and "drives".

Beside contributing to the Bureau's publications, your staff has
endeavored to meet the increasing demands made upon it for expert
advice by various official bodies. Mr. Macauley has been called in
consultation by the Internal Revenue Bureau, Dr. King by the Depart-
ment of Agriculture and the Bureau of the Census, and all of us on
numerous occasions have been asked to help public and private bodies,
corporations and individuals who are doing statistical work, or to
address conventions on topics relating to the Bureau's investigations.

With the consent of the Executive Committee we have tried to meet
such demands, especially when they came from federal or state bureaus.
As large and rather critical consumers of statistics we have a special
interest in doing what we can to improve the quality of the output.
Anything that we can do this year to improve the compilation of income
tax data, the Census reports on wealth, debt and taxation, the Depart-
ment of Agriculture's reports of crops and farm values and the like
will give us better data for estimating national income in the future.
Moreover the recognition of the Bureau's standing implied by such re-
quests is gratifying. But if these requests increase much more, we
may be forced in self defense to adopt a less liberal policy in comply-
ing with them.

II PROGRANM FOR TIII PRESENT YEAR

When our work for the Business Cycle Committee was nearly done,
we drew up a program for research during the current year which was
submitted to and approved by the Executive Committee. This program
provides for further development along the two lines which the Bureau
has been following: namely, studies of the size and distribution of income, and studies of the business cycle.

Under the first heading we propose to bring our preceding estimates, which stopped with 1916 and 1919, as nearly down to date as the materials permit, and to revise the estimates for earlier years in the light of recent data. Dr. King has been giving most of his time for several months to revising and extending the estimate of sources of production. Since Dr. Knauth has been forced to leave our staff, we have put the corresponding work on the estimate by incomes received under the supervision of Mr. Macaulay. Miss Elizabeth W. Putnam, who assisted Dr. Knauth in the preparation of the original figures, is now collecting data and planning methods of testing and combining them. Meantime Dr. King and Mr. Macaulay are collaborating upon a method of making a prompt preliminary estimate of the size of the national income each year on the basis of such data as are published soon after the year closes.

We plan to use these fresh materials in a second edition of volume I, which should be published early next autumn. In revising that volume we hope to increase the range of its usefulness by showing several different ways in which the national income should be defined for specific purposes, and to give corresponding estimates of the aggregates. It will not be necessary to issue a second edition of volume II; additions to the special tables of that volume can be given in an appendix to the new edition of volume I.

We are also preparing a second edition of the monograph on the "Distribution of Income by States". The work is being done under
Dr. King's direction by Dr. Maurice Leven, formerly of the United States Public Health Service. Dr. Leven is to receive no compensation for his work beyond such credit as we may judge him entitled to and a royalty upon sales. The new edition should be ready for distribution late in the summer or early in the autumn.

In our other line, Business Cycles, we have three projects under way.

Mr. Macaulay has been studying certain technical problems in analyzing statistical data to isolate the cyclical fluctuations as nearly as may be—especially methods of finding seasonal variations. His chief constructive program is the study of interest rates and business cycles. Among the topics which he expects to cover are the relations among the fluctuations of different types of interest rates; the relations between interest rates and other economic factors in the business cycle; the possibility of predicting changes in interest rates; the use of interest rates for predicting other economic fluctuations, and noncyclical unique movements of interest rates. It is too early to say how long a time these researches will require.

To cover certain obscure connections between business cycles and labor problems we have enlisted the aid of Dr. Leo Wolman, who has had practical experience in dealing with the policies of labor organizations. Before the year is out, Dr. Wolman hopes to have completed three investigations dealing respectively with the relations between business cycles and the numbers of wage-earners organized in trade unions; the effect of business cycles upon trade-union policy; and cyclical fluctuations in the incomes of wage- and salary-earners.
My own share in the program is to write a treatise upon business cycles, similar in general plan and scope to the volume which I published ten years ago under that title, but better designed for use by business men and students. Instead of putting the statistical apparatus into the same volume with the analytic discussion, I plan to make a separate collection of statistical materials for the study of business cycles. In this collection the data will probably be arranged under the four phases of the cycle—prosperity, crisis, depression and revival. That is a new plan and one which I hope will prove not only convenient for future students but also suggestive of new ideas in the course of our own investigation. Mr. Willard Thorp has immediate charge of this compilation.

III CHANGES IN THE SCIENTIFIC STAFF

Last autumn the scientific staff suffered a heavy loss in the resignation of Dr. Oswald W. Knauth. It is no new thing for a man to be forced out of scientific work by the need of obtaining a larger income for his family than the salaries paid by universities and institutions for research. Dr. Knauth had a large share in preparing volumes I and II on the national income, and he was sole author of our report on the "Distribution of Income by States". We were counting on his active cooperation in preparing the new edition of volume I and in conducting our business cycle studies. His departure has left a gap which we cannot fill.

Of accessions to the regular staff I have already noted two—Dr. Leo Holman, Lecturer at the New School for Social Research, who is devoting part of his time to investigating the labor problems of
business cycles, and Mr. Willard Thorp, recently instructor in Amherst
College who is now giving us half time and will, we hope, presently
be giving full time to the compilation of statistics for the study of
business cycles. I may recall in this connection also the association
with us of Dr. Maurice Leven, who is preparing the second edition of
"Distribution of Income by States". Each of these men we chose for
his special capacity to do the work entrusted to him.

IV. THE QUESTION OF EXPANSION

At the present time, then, our scientific staff includes six men,
of whom only two are devoting their full time and energy to the Bureau.
We hope to expand later in the year by getting the full time of Mr.
Thorp and a larger share of Dr. Kolman's time. We also hope to in-
crease the scientific efficiency of our full-time workers by giving
them more research assistants.

We are not ambitious, however, to become a very large institution,
with a numerous staff, and with many different investigations con-
stantly under way. If we did pursue a policy of ambitious expansion
we might impose an intolerably heavy burden of reading upon the Direc-
tors; we would make the problem of financing the bureau a harassing
one, and we would run a risk of sacrificing quality of output to quan-
tity. To the Staff and, I think I may say, to the Executive Committee
also, it seems wiser to maintain a scale of operations not very much
larger than at present, keeping the organization flexible, and limit-
ing our undertakings to the establishing of facts bearing upon prob-
lems of vital social concern.
Plan for lessening the burden resting on Directors.

Even as matters stand, we are aware that membership in our Board of Directors is an onerous responsibility. Last summer in particular we had to send out a large amount of manuscript, not in the best of shape, and request that it be returned in a hurry. The Directors not only helped us to keep the time schedule imposed, but also improved the character of our report by many critical and constructive suggestions. To diminish their burden in the future, we shall try to put our manuscripts in better shape before they are sent out, and we plan to furnish Directors with brief synopses designed to aid them in reading. Of course we hope that the Directors will continue to give as close and as critical a scrutiny to all manuscripts as they can.

V. ACKNOWLEDGMENTS

As Director of Research I have the privilege of expressing on behalf of the Staff our heartiest thanks to the Board of Directors and to their Executive Committee for the active share they have taken in framing the Bureau's program and in preparing the Bureau's reports during the past year. Individually we learn a great deal from the criticisms which you make of our manuscripts. That the reports in their published form do not reveal your participation in larger measure is due to the fact that most of your suggestions get incorporated in the text, rather than in dissenting footnotes.

As a member of the Board of Directors, may I not also set on record the fact that during a year of difficult work the members of the Staff, one and all, have shown unfailing devotion to the Bureau's aims?

Respectfully submitted,

Wesley C. Mitchell,
Director of Research.