Annual Report of the Directors of Research

February 3, 1930

Survey of Recent Economic Changes

At the time of the last annual report the work of the special staff engaged by the National Bureau for the Survey of Recent Economic Changes was practically completed. After approval by the Directors, the findings of the National Bureau were printed together with the recommendations of the Sponsoring Committee, which in the meantime had taken from the title of the National Bureau's report its name of Committee on Recent Economic Changes. As is only too customary in such enterprises, the work had to be rapidly expedited through the press in order to receive publication before the close of May. There was scant time for the consideration by contributors of the suggestions of the Directors of the National Bureau or for the insertion of the Director's comments in the printed pages, but the book appeared upon the scheduled date and thanks are due not only to the printers but to the friendly cooperation of our Directors and contributors.

The report on Recent Economic Changes was favorably received on its first appearance; approximately five thousand copies have thus far been sold.

Study of Economic Tendencies

Several supplementary studies growing out of this survey of Recent Economic Changes have been undertaken by the National Bureau. Dr. Hills had indicated in his section on Price Movements a summary method of statistical comparison of contiguous short-time periods, and his proposal that this method should be
tested by more extended application was approved by the Executive Committee of the National Bureau and financial support was given by the Sponsoring Committee. This study of Economic Tendencies covers the pre-war years 1901-13 and the post-war years 1922-29 in four countries, the United States, Great Britain, Germany, and France. For each of these periods and for each of these countries the major statistical series have been gathered, covering information on such subjects as growth of population, supply and cost both of capital and of credit, profits, the technical equipment of industry and physical volume of production, volume of trade, wholesale and retail prices, employment, unemployment and wages. The material available permits the economic movements in the United States and Great Britain to be described in considerable detail; for the series utilized from these two countries number 1222 for the United States and 492 for the United Kingdom. But since the series which have been compiled and analyzed for Germany and France are fewer in number, 221 for Germany and 109 for France, the discussion of French and German economic movements will necessarily be less detailed. The investigations will show the direction, rate and stability of changes in the various economic activities and will compare the movement of different economic elements in the periods and countries studied. It is hoped that this report will be completed by the end of June, 1930.

Unemployment

In Dr. Wolman's contribution on Labor to the report on Recent Economic Changes there was included an interesting estimate of unemployment in the United States. This was put forward
as tentative, since the pressure of time did not permit a full analysis of the problem. Mr. Givens, who under Dr. Wolman's direction had made this estimate, has been engaged by the National Bureau on a part-time basis to make more intensive studies of employment and production series and to prepare a report which shall give a tested revision of the earlier figures and also a review of the various existing measures of unemployment.

Public Works and Unemployment

The National Bureau has also undertaken, at the request of the Sponsoring Committee, to make a reconnaissance study of Public Works and Unemployment. Dr. Wolman has taken charge of this investigation, in which he has been aided by the Department of Commerce and by special assistants. The first draft of the early chapters of this report have already been circulated among the Directors of the National Bureau, and the whole report, soon to be completed, after going through the regular process of critical reading by the staff of the National Bureau, will be sent out in due form to the Directors and to the members of the Sponsoring Committee.

Trend of Profits

In laying out the original program of section topics for the study of Recent Economic Changes it was proposed to include a special study of the fluctuations in profits since 1922, but here again the limitations of time made it impossible to do more than to treat this topic summarily in the section on National Income. Through the generous help of one of our Directors, and with the cooperation of the Institute of Accountants and, it is
hoped, of the Treasury Department, an investigation of Profits, to be made by Professor W. A. Paton of the University of Michigan and Professor Ralph Epstein of the University of Buffalo, has been authorized by the Executive Committee. If profit-making is the \textit{primum mobile} of our business age, then a detailed examination of a sample, adequate in number and character of concerns, by years and by industries, should be highly illuminating. It is expected that work on this study will begin during the coming summer.

\textbf{Wages and Labor Costs}

It was inevitable that the work on the survey of Recent Economic Changes, and particularly on its above-mentioned supplements, should delay the regular research program mapped out by Drs. Wolman and Mills. As soon as the report on public works and unemployment is finished, Dr. Wolman expects to resume the writing of his study on Wages and Labor Cost. All the material, with few gaps, is now collected, and this book, expected for 1929, should be completed before the end of 1930.

\textbf{Price Study}

Dr. Mills' staff has continued the compilation and tabulation of price statistics, for the comparison and combination in various ways of a considerable number of price groups. A beginning has also been made of a collection of foreign price quotations, to be analyzed along lines suggested by the treatment of the American price material. During the second half of 1930 Dr. Mills will take up his interrupted examination and interpretation of the American price groups. The first of the group studies to be published will compare the prices of agricultural and non-
agricultural products. The content of this investigation was indicated in last year's report of the directors of research.

Mechanization and Restriction of Immigration

Dr. Jerome, who had hoped to complete his work a year ago on mechanization in selected industries with special reference to the influence of restricted immigration, has been heavily burdened with his academic work at the University of Wisconsin and with the direction of the difficult task of collecting and analyzing the material for his study on output per hour. Several of the chapters of the Mechanization study, outlined in our last year's report, have already been submitted in first draft to the directors of research, and Dr. Jerome writes that, while he is disposed to refrain from too definite prophecy, he expects to complete the draft before his sailing for Europe on March 15th.

Output per Hour

Dr. Jerome has been especially anxious to press forward during 1929 his campaign for additional data from industrial plants on output per man-hour. Several of his former assistants in this study were again engaged during the summer. Mr. Ralph W. Marquis continued his collection of material from the Douglas fir section of the states of Washington and Oregon, whence he obtained schedules covering about 14 percent of the saw-mills and almost 40 percent of the output of Douglas fir in those states. Mr. Elmer C. Bratt and Mr. G. B. Sellery have been engaged in securing schedules from the sugar beet factories in the Michigan-Ohio district. The support of the United States Sugar Association
in this work is appreciated as a mark of its confidence in the National Bureau and its representatives. Information for periods of varying length is now at hand from nearly 80 per cent of the factories in this industry. Messrs. W. A. Neiswanger and Arnold Zempel spent most of their time in the cement industry, from which they have procured a satisfactory sample both in number (98 out of about 200 plants) and in distribution by size and type of plant. The bulk of the productivity data, however, falls in the years following 1919, when the Portland Cement Association began its encouragement of record-keeping on the man-hour basis.

This additional material, together with that acquired in the two preceding summers, is being analyzed and submitted for detailed criticism to executives in the industries studied. No further field-work on this project is planned by the National Bureau, for Dr. Jerome believes with the directors of research that, so far as the National Bureau is concerned, its contribution, under the grant of the Social Science Research Council, will have been made in the setting of critical and tested standards for this particular branch of inquiry. We believe that Dr. Jerome's report will contain facts of interest to economists as well as to the industries concerned, but it will have special value because of its pioneering technique in such industrial studies.

International Migration

In May, 1929, the first volume of International Migration Statistics came from the press. It contained an unrivalled compilation of data on migration to and from all the countries of the world for which such statistics exist. It had
also an admirable introduction by Dr. Ferenczi of the International Labor Office, who, under the supervision of Professor Willcox, was responsible for the impressive collection of figures. Professor Willcox has continued his revision of the chapters of the second volume, contributed by a number of foreign scholars, each dealing critically with the migration statistics of his own country. Of the 22 chapters, only 5 remain unrevised. There is therefore every reason to believe that the text of volume II will be submitted to the Directors of the National Bureau before the close of 1930.

Corporation Contributions to Community Welfare

At the request of a sponsoring committee of leading corporation executives, which undertook to finance a study of the contributions of corporations to community welfare organizations, on a budget set up by the National Bureau, Mr. Pierce Williams, assisted by Mr. Frederick E. Croxton, has been engaged during the past year in collecting, checking, and tabulating schedules furnished with willing cooperation by 129 community chests throughout the United States. To obtain so large a sample and to make sure that the information as to corporation giving was correctly entered has entailed much correspondence, painstaking care, and some slight additional time over that provided in the program. The information from the community chests, which naturally forms the major part of the available evidence, is now practically all tabulated. Supplementary data have been secured by field agents as to corporation contributions to welfare organizations which raise funds independently, such as current funds in cities—New York, Boston,
Chicago—where have no community chests, building funds, for which
the community chests do not hold themselves responsible, and Red
Cross disaster appeals such as those for the Japanese earthquake
of 1923 and the Mississippi River flood of 1927. Mr. Pierce Williams
has also interviewed corporation executives in selected cities in
order to obtain information which may supplement the records of the
community chests. The report will confine itself, in the main, to
the quantitative results of the investigation; its chief evidence
will show the present situation as to corporation contributions by
leading industries, and the trends in corporation support from 1924
to 1929 as revealed by figures for the 76 community chests in our	tabulations that have been in continuous operation since 1924.
With the existing data and with the inherent limitations of this
study, it will not be possible to give a complete picture of cor-
poration giving in the United States, either as to total sums or as
to minutely detailed dissection of evidence; but it is believed
that this report will provide a base-line for future measurement of
corporation contributions. It will certainly afford a sound basis
of fact for discussion concerning the grounds and necessities of
corporation support to community welfare activities.

Estimates of National Income

The latest of the National Bureau's studies, just de-
cribed, is scheduled to appear shortly after another contribution
from the earliest of our enterprises, the estimates of the National
Income, so long conducted by Dr. Willford I. King. His volume on
The National Income and its Purchasing Power has been approved by
the Directors of the National Bureau and has just come from the
press. It carries the estimates of national income, carefully revised, down to 1928. In accordance with the vote of the Directors, the National Bureau's concern with studies of the national income will not cease with Dr. King's withdrawal from full-time employment with the National Bureau. The remarkable collection of working-material for this purpose accumulated by the National Bureau will be maintained and its estimates continued. A further announcement regarding this important branch of the National Bureau's activities may be expected in next year's report.

Business Cycles

One of the major interests of the National Bureau, Professor Mitchell's investigation of Business Cycles, has made marked progress during the year just elapsed. Despite the many calls upon his time, Dr. Mitchell, with the able assistance of Dr. Kuznets, has further perfected the standard analysis of time-series, described in our last year's report and utilized in Recent Economic Changes. With the statistical data so analyzed now nearly all in hand, he plans to spend most of his time during 1930 in its utilization for the second volume of his general treatise on Business Cycles. Since, however, the analytical procedure, when completed, will have been applied to over 300 series from the United States, England, France and Germany, and since this statistical documentation and its technical interpretation will have grown to a considerable bulk, it may be expedient to publish the material by itself as volume two, concentrating in a third volume the general economic interpretation of the interwoven phenomena of business cycles.
Seasonal Variations

In connection with the statistical analysis of time-series upon which Dr. Kuznets has been engaged under Professor Mitchell's direction for the study of Business Cycles, Dr. Kuznets discovered an attractive opening for a supplementary analysis of seasonal variations. This project was approved by the Executive Committee and work has been proceeding on a study of the textile group, covering seasonal indices in production, stocks, shipments and orders. A preliminary report on this first group of industries, which is expected at an early date, will give some indication as to how far it may be desirable to pursue this interesting but experimental line of advance.

The Encyclopaedia of Statistical Series

Dr. Willard Thorp writes from Amherst that the 170 agricultural, 250 mining, and 600 manufacturing series, to be comprised in the first volume on production statistics, are now ready for the printer, and that the accompanying explanatory and critical text will be finished within a few months. A special fund must be secured to launch this enterprise, but we are confident that so invaluable a work of reference will not be lacking in support.

The Expansion of the National Bureau

The most signal development in the National Bureau's history of 1929 is due to the generous grant from the Rockefeller Foundation of such a proportion of a sum up to $75,000 a year for five years as may be matched by income of the National Bureau from other sources. This grant was most timely, for it came at a
turning point in the life of the National Bureau. Our inadequate and somewhat inaccessible housing had in any event to be vacated, since the old building was awaiting demolition. The new resources made possible not only the removal to the present more commodious and convenient quarters at 51 Madison Avenue, but also a more significant addition to the Bureau's usefulness in the foundation of a laboratory and technical library for quantitative economic research. The need of this organization of our resources had been strongly urged by Dr. Mills, whose price studies, also largely aided by the recent grant, urgently called for such research facilities. It was becoming evident also that the material accumulating in the hands of other members of the staff, such as the files of national income data, and the time-series gathered for the study of business cycles, which formed the basis of Dr. Thorp's great compilation, should gradually be brought together in a well-administered technical library and laboratory. There, properly catalogued and readily accessible to staff-members, the National Bureau's valuable collections would more fully serve the convenience of its collaborators. This plan, of course, should not involve any over-drastic or officious centralization, since all the required tools should always be at the immediate disposal of the worker. But with the steady amassing of documents at the headquarters of the National Bureau, and with the interlocking of the various projects in which its staff becomes engaged, the need must increasingly be felt for a more systematic organization and a greater accessibility of all its material. This need was briefly noted in our last annual report, and sooner than we expected
we are able to announce that the first steps have been taken toward meeting it. The nucleus consists of the enlarged investigation of prices, and Dr. Ralph W. Watkins has been called to the National Bureau to take charge, under Dr. Mill's general direction, of the research laboratory and library. A librarian has also been engaged cataloging books and preparing a detailed reference file, and data files are to be built up by Dr. Watkins.

Closely associated with enlarged working-space and laboratory facilities, and made possible by the additional funds, is another new undertaking initiated last year by the National Bureau. We refer to the invitation of a limited number of research associates to share the facilities of the National Bureau and to avail themselves of the counsel of its staff members. The invitation for the coming year is for three such research associates, who should be persons of maturity and accomplishment, interested primarily in quantitative studies. A number of applications have already been received, which will be submitted in due course to a committee composed of the National Bureau's Directors by University Appointment and one representative of the Social Science Research Council. The operation of this new application of the principle of inter-University cooperation, already practiced in the constitution of the National Bureau, will be watched with keen and sympathetic interest.

It is no exaggeration to say that the expansion of the National Bureau's activities, here indicated, definitely marks the beginning of a new stage in its progress. Its accomplishment in the past has been sober, governed by its regard for scientific standards and for the impartial attitude guaranteed
by its expressed aim and its constitution; yet in a time accused of garish superficiality, it has steadily grown in reputation and public confidence; it has manifested qualities which make for enduring and real success. This is a tribute not more to the National Bureau than to the healthful soundness and hopeful farsightedness of the public opinion which supports it. A special responsibility is thereby placed upon the National Bureau to meet worthily in the future the expectations which its past has engendered.

New Projects

Some major projects for future work are at present in process of formulation and preliminary discussion, but are not ripe for presentation to the Directors.

One minor but interesting study is about to be undertaken by the National Bureau at the request of the Committee on the Cost of Medical Care. This Committee, jointly with the Social Science Research Council, has furnished the funds required for a survey of Health Insurance in the United States. The investigation must depend primarily upon data furnished by the insurance companies, but other evidence from mutual benefit organizations, fraternal societies and trade-unions will be sought. Mr. Pierce Williams, of the staff of the National Bureau, will take charge of this investigation, for which his time will soon be freed by the completion of the study of corporation contributions to community welfare.

Dr. Wolman has suggested that Mr. Isador Lubin be enabled by the National Bureau to elaborate his study of public
expenditures for social services which he made for the Survey of Recent Economic Changes. Dr. Macaulay has proposed that when the text of his book on Interest Rates and Bond Yields is written, for which all the tables have, for some time past, been completed, he shall examine into the significance of brokers' loans during the period for which figures are available.

Publications - News Bulletins

Two books, already mentioned, have been published by the National Bureau during 1929. The first of these, in two volumes, was "Recent Economic Changes", of which the McGraw-Hill Book Company issued the trade edition, and of which the National Bureau took a subscriber's edition of 1500 copies. Mr. E. E. Hunt has prepared an abridged edition for popular sale. The second book was volume one of "International Migrations", a substantial volume of 1112 pages. Under the agreement with the International Labor Office, the National Bureau gave 300 copies of this work to the I.L.O. for distribution to the many Government offices and officials throughout the world who had contributed to the materials collected in this work of reference.

Six News Bulletins were issued during the year.

Bulletin No. 30 (Feb.10) included estimates, prepared by Dr. King, indicating the extent to which five large groups of wage earners had participated in the national income from 1909 to date.

Bulletin No. 31 (March 1) contained an article by Dr. Mitchell, entitled "Testing Business Cycles", which described the standard analysis which he is utilizing in his detailed examination of business cycles.
Bulletin No. 32 (June 10) brought up to date Dr. King's index of the cost of living of five classes of consumers.

Bulletin No. 33 (Sept. 16) summarized some of the results of Dr. Ferenczi's work on migration statistics.

Bulletin No. 34 (Nov. 8) contained an article by Dr. King on "Shifts in Income Concentration."

Bulletin No. 35 (Dec. 16) gave the preliminary estimate for the 1928 national income.

Thanks to the staff

It is with no merely perfunctory sense of obligation that the directors of research repeat their sincere thanks to all the members of the staff of the National Bureau. The work of the year has been arduous, including as it has the removal to the new quarters, and the readjustment of working plans in the scientific tasks of the National Bureau. All those who have worked for and with the National Bureau have met the expanding responsibilities of this period with more than ordinary competence, zeal and good-will.

Respectfully submitted,

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