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Volume Title: The National Bureau's Social Function

Volume Author/Editor: NBER

Volume Publisher: NBER

Volume URL: http://www.nber.org/books/unkn40-1

Publication Date: 1940

Chapter Title: A Record of 1939 and Plans for 1940

Chapter Author: Wesley C. Mitchell

Chapter URL: http://www.nber.org/chapters/c4472

Chapter pages in book: (p. 31 - 59)

# PART II

A Record of 1939 and Plans for 1940



# Income and Capital Formation

### NATIONAL INCOME

Simon Kuznets hopes to have the manuscript of National Income and its Composition ready for reading by the Directors this spring. It will include estimates of national income totals, allocated by industrial source and type of payment, for 1919-38, and indicate the wider problems they raise. The bulk of the tables and text makes expedient a division into two volumes. In the first Mr. Kuznets discusses the concept of national income and the basis of its apportionment, and analyzes the changes in national income as revealed by the estimates. In the second, which contains the detailed tables and a miscellany of supplementary estimates required for taking subsidiary steps in the main sequence, he describes the sources and coverage of the data, explains his methods, and appraises the reliability of the estimates. The foundation for preparing a comparable series before 1919 is laid in a comparison with W. I. King's estimates, a revision of which is being supervised by Lillian Epstein who will attempt to extend the series from 1909 to 1879.

### CAPITAL FORMATION

Bulletin 74 brought up to date (and revised for years beginning with 1933) the estimates of commodity flow and capital

formation published in Commodity Flow and Capital Formation, Volume One. Mr. Kuznets will spend much of his time this year on Volume Two.

William H. Shaw has prepared estimates of the output of both manufactured and non-manufactured finished commodities (classified into 44 commodity groups) and construction materials for the census year 1879 and annually since 1889. Export and import adjustments have been applied in order to determine the amounts destined for domestic consumption. Price indexes have been assembled with which to translate the values at manufacturers' or producers' current prices into values at constant prices. After describing the changes in commodity output, 1879-1939, in a Bulletin Mr. Shaw plans to assemble the available data on construction, distributive margins, inventories, and the balance of international payments. If usable estimates cannot be made, the materials and their implications will be briefly summarized.

### INCOME FROM INDEPENDENT PROFESSIONAL PRACTICE

Milton Friedman is completing a draft of the monograph on the incomes of physicians, dentists, lawyers, certified public accountants, and consulting engineers. The major remaining task is that of revision. Messrs. Kuznets and Friedman are much concerned how to present the material so that the findings of general interest will not be buried in the mass of technical analysis. The relations among incomes of physicians, the type of practice in which they engage, and the number of years they have been in practice; the differences in income of lawyers, accountants, and engineers practicing as individuals and as members of firms, and the variation in incomes of individual practitioners in successive years have been analyzed more fully than they were in Bulletin 72-3. Detailed study of regional and size-of-community differences in both average income and the distribution of income by size has suggested conclusions that may be valid for incomes in general as well as for the particular professional groups covered.

CONFERENCE ON RESEARCH IN NATIONAL INCOME AND WEALTH The fourth annual meeting of the Conference, at the National Bureau on April 21 and 22, 1939, was attended by 61 individuals representing over 30 organizations, including governmental agencies, universities, and private research institutions. The two chief topics discussed were the income questions proposed for the 1940 population census and the papers by individual students submitted to the Conference, which have been published in Volume Three of Studies in Income and Wealth. In contrast to the first two volumes its seven parts consider the problems of dividing national income and wealth into meaningful constituents rather than the interpretation and measurement of the totals themselves and deal more directly with actual statistical measurement. Three major allocations of the national totals are treated: among groups classified by size of income and wealth, among the various components of saving and expenditures, and among states.

Discussion of the proposed census questions on income centered about a report submitted by a subcommittee, and eventuated in a series of recommendations as to the wording and content of questions it would be desirable to include. A standing committee appointed by the Conference to advise with the Bureau of the Census prepared a report embodying the Conference's recommendation, and, at the request of the Bureau of the Census, held a meeting in Washington to review the results of the preliminary trial census taken during the late summer in several Indiana counties.

The survey of available data on the distribution of income by size, mentioned in the annual report for 1938, is actively in progress. Present plans call for reports on 14 bodies of data by individuals closely connected with them. So far 6 reports have been received; the other 8 are expected in the near future. Once all reports have been received, the committee in charge will edit them and prepare summary chapters.

The study of the 1936 Delaware income tax returns, with which the Conference has had intimate contact, is nearing completion. Funds provided by local sources and the Rocke-

feller Foundation have made possible the initiation of a tabulation of 1937 and 1938 returns on a sample basis. Some WPA assistance also has been secured. If this study can be carried out, and in addition, the returns for 1925-35 analyzed, we shall have for the first time a fairly long series of comparable data on the distribution of income by size covering all classes of the population, since Delaware requires returns from all income recipients, not merely from those with taxable income.

Results of the tabulation of Wisconsin income tax returns for 1929-36 have been published by the Wisconsin Tax Commission in an impressive series of volumes. A Rockefeller Foundation grant will be used for analytical studies, which the Conference will continue to aid in an advisory capacity.

The Minnesota Income Study, with which the Conference has had less intimate contact, has made good progress. Tabulation of state income tax and social security data is well advanced. The collection of income data by personal interview is finished and tabulation is beginning.

Connection with the Treasury Income Tax Study of 1936 federal income tax returns has been maintained. R. H. Crawford, formerly with the Department of Commerce, is Chief of the Technical Staff and reports to the Conference. In addition, several members of the Conference Executive Committee are also members of the Technical Advisory Committee of the Income Tax Study.

If the comparison of income estimates for various foreign countries, on which the Conference is co-operating with Professor Studenski, is published as one of our Studies in Income and Wealth, the committee of review may preface it with a discussion of problems arising in international comparisons of national income estimates.

In response to the Conference's efforts to encourage regional activity, the Southern Regional Committee of the Social Science Research Council plans to devote its annual conference in Chattanooga, March 9-11, to income and wealth. At one session of the meeting of the Southern Economic Association at Charleston, South Carolina, November 3-4, national

and regional measures of income were discussed. In the Far West a special committee has been set up by the Pacific Regional Committee of the Social Science Research Council to explore the possibilities of stimulating similar work.

The members of the Executive Committee of the Conference are Simon Kuznets, Chairman; M. A. Copeland, W. L. Crum, Hildegarde Kneeland, H. M. Groves, R. R. Nathan, O. C. Stine, and Milton Friedman, Secretary.

### Prices

The National Bureau began its study of prices with an inquiry which, though in some degree concerned with techniques of analysis, was primarily directed toward a definition of attributes of the prices of individual commodities and of the system of prices as a whole. Subsequent investigations have carried the inquiry into elements of the price system and their relations with non-price factors in the economy. With the creation of the Conference on Price Research the National Bureau's activities in this field were both broadened and more sharply focused. As a member of the Conference the National Bureau has had a part in a series of studies exploring the price problems of the bituminous coal, iron and steel, petroleum, textile, and automobile industries, and of distributive enterprises. During 1939 reports of three committees were published: Steel, Petroleum, and Textiles. That on Distributional Costs and Pricing Policies at Retail is being reviewed and edited.

With the completion of these reports the Conference's work turns in somewhat different directions. The decision to promote studies on cost-price relations, governmental price control, and business price policies had one immediate consequence: the initiation of a statistical analysis of cost behavior by Joel Dean, a Carnegie Associate. While undertaken as a National Bureau project it was planned to be conducted in close association with the Committee on Cost-Price Relations, of which E. S. Mason of Harvard University is Chairman. On Mr. Dean's appointment to the faculty of the University of

Chicago the seat of this investigation was shifted. It is being continued under the joint sponsorship of the National Bureau, the Cowlés Commission for Research in Economics, and the University of Chicago. First results will be submitted to the Directors of the National Bureau for publication in a Bulletin. The full results will constitute a monograph.

Mr. Dean's objective is to determine empirically the behavior of cost patterns of individual enterprises under diverse operating conditions. Determination of empirical cost functions is inviting because of the crucial role of cost functions in theoretical analysis and their practical importance to business management, and because of the dearth of inductive studies in this field. Enterprises representing a wide variety of industrial situations are included in the hope that more valid generalization can be made concerning cost behavior under diverse competitive conditions, and that more useful methods can be developed. Four studies have been substantially completed: (1) Leather belt manufacturer (belt and curry shops); (2) Department store (shoe, hosiery, and coat departments); (3) Furniture factory; (4) Hosiery mill (knitting mill, finishing plant). Three are partly done: a shoe store chain, the Chesapeake and Ohio, and the Norfolk and Western Railways. Negotiations are in progress to obtain data for other enter-

In investigating prices during business cycles numerous measurements used in *The Behavior of Prices* that are directly relevant to the issues faced in the general study of cycles are being brought up to date. Some modification would make them more directly comparable to those obtained through the application of the techniques used in the cycle work. Price series of major significance in cycle analysis are being checked and added to. Recent work by federal agencies and by private enterprises under the stimulus of the Temporary National Economic Committee investigations has made available many important new price series as well as information concerning discounts and allowances of various sorts that will aid materially in the interpretation of quoted prices for important

commodities. As a result, we shall have a fuller and more accurate record of the prices at which goods have changed hands in the United States and a more revealing set of group index numbers. The foreign record will be less satisfactory, but adequate, we believe, as a complement to the United States materials.

For several years the National Bureau has constructed a series of index numbers of commodity prices derived from a reclassification of the wholesale price quotations compiled by the federal Bureau of Labor Statistics. In our price studies measurements of price changes for durable and nondurable goods, goods intended for human consumption and for use in capital equipment, and for certain classes of goods for which index numbers are not constructed by federal agencies have proved highly useful. In our business-cycle studies measurements relating to commodity classifications having clear economic significance are especially valuable. How far we shall be able to go in exploiting the mass of materials available by months back to 1800 in Bureau of Labor Statistics files remains to be determined. Monthly measurements for 50 years, defining aspects of our price history never accurately portrayed before, would not only contribute substantially to the National Bureau study of business cycles but would also be useful for economists in general and business and governmental agencies.

### CONFERENCE ON PRICE RESEARCH

The mandate of the Committee on Cost-Price Relations and Price Determination, announced in last year's annual report, calls for study of the origin of pricing policies and pricing procedures, and of the processes of price determination, particularly prices set through the enforcement of private business policy and by the play of competitive forces. Within this area the Committee is interested in the forces and conditions, both internal and external to the business enterprise, that determine prices, rather than in the consequences for the economy as a whole of price policy and behavior. Why are prices what they are, how are prices made, what role do costs play

in explaining them, what other factors (such as demand shifts and elasticity, substitute competition, structure of markets and other aspects of business environment) influence the setting of prices? To ascertain the role played by costs in determining prices the Committee is examining the kinds of information about costs possessed by business men, the way costs behave in response to changes in size of firm, rate of output, and prices of input factors, and the relation between cost and price behavior. Since costs are merely part of the explanation of decisions concerning prices, the Committee will be led eventually into an analysis of demand considerations, and of market structure and industrial characteristics conditioning prices and determining the range of administrative discretion.

To replace Mr. Dean, who acted as executive secretary to the Committee, John T. Dunlop of Harvard University has been engaged. He will also assist Professor Mason.

With some modification of its program, the Committee on Bituminous Coal Prices has become the Committee on Governmental Price Regulation: Waldo E. Fisher, Chairman; John Bauer, S. P. Burke, J. M. Clark, H. N. Eavenson, W. P. Ellis, O. E. Kiessling, F. C. Mills, D. H. Wallace, Ralph Watkins. This Committee will examine the effects of control. It will take account of the relations of governmentally regulated prices and rates to prices set by private monopoly and by free competition, and of the influence of price regulation upon the allocation of resources and upon cyclical fluctuations in the utilization of resources. The first year will be devoted to (1) the experiment of the National Bituminous Coal Commission in regulating minimum prices of coal in the United States, including an examination of the impact of such regulation upon the displacement of coal by other fuels as well as the more economical utilization of coal by major consumers: (2) the attempts of foreign governments to regulate coal prices. especially the methods experimented with in England and Germany.

Charles M. James, a Carnegie Associate, is executive secre-

tary of the Committee and research assistant to Professor Fisher.

The Committee on Business Price Policies has not yet been set up but, as outlined by the Executive Committee, its functions will in some respects parallel those of the Committee on Governmental Price Regulation. Both will have to do with (1) conscious action in the determination of the prices at which goods change hands and services are rendered, as opposed to the action of competitive forces under free competition; (2) the manner in which productive resources are allocated and goods distributed in a system having free and controlled prices side by side; (3) the stability of economic processes under such conditions. Both will draw upon the results of the Committee on Cost-Price Relations and Price Determination and will in turn contribute to them.

These three committees do not, of course, cover the entire area of price research, but in the fields assigned to them arise some of the most pressing issues that center about prices and pricing procedures. In each field the Conference desires to set up an agency that will serve after the manner of a general staff, appraising the state of knowledge, co-ordinating activities, improving techniques, acting as liaison between universities, governmental agencies, and business organizations, and taking needed steps to remedy gaps in knowledge and deficiencies of data. Such steps would include the stimulation of research by individuals and institutions within or outside the Conference, and the conduct of research on strategically important problems by the Committee itself.

# Production and Productivity

Solomon Fabricant has succeeded in assembling so much material on production and productivity in manufacturing, 1899-1937, that it must be published in two volumes. Volume I will cover trends in the amount and character of production; Volume II, productivity. A National Bureau staff committee is now reading a draft of Volume I. Mr. Fabricant will

continue with the writing of Volume II after the manuscript of Volume I has been sent to the Directors.

What we learned about manufacturing suggested the desirability of parallel investigations into other branches of production. Upon the request of the National Bureau the Maurice and Laura Falk Foundation, which had made the grant for initiating the work on productivity in manufacturing, appropriated a further sum to survey data on physical output, employment, hours of labor, and capital investment in non-manufacturing industries. Harold Barger is in charge.

The committee under whose guidance these investigations are being conducted has changed somewhat since it was announced in the annual report for 1937. It is now composed of F. C. Mills, Chairman; Moses Abramovitz, A. F. Burns, and Leo Wolman.

### Labor

During 1939 Mr. Wolman's unit has tabulated the materials in the Weeks and Aldrich reports, Bureau of Labor documents, and several reports of state bureaus of statistics, mainly Pennsylvania and Massachusetts. Average wage rates from the two principal sources for the early period, 1860-80, the Weeks and Aldrich reports, have been drawn off, charted by industries, and their movements compared. Charts depicting wage rates in the cotton textile industry for 1860-1939, and in woolens for 1870-1939 have been made, and similar series for as many industries as possible will be constructed. From the various sources an attempt is being made to piece together a more or less continuous series of wage rates by industries for the longest possible period.

Since one of the most troublesome problems in long time wage series arises from the changing composition of the industrial sample, the wage rates of leading occupations in various industries have been studied separately and the behavior of wage rates of specific occupations as described by the Weeks and Aldrich reports compared. Series of common labor rates from 1840 to 1880, as reported by Weeks, and

from 1840 to 1891, as reported in the Aldrich data, are being charted. To these, such materials as we have on the movement of common labor rates since 1890 will be added. Within the next month or two similar series for other leading occupations will be constructed.

Thus Mr. Wolman is working with two sets of wage rates: by industry and occupation. In computing wage rates by industry he has sought to make them as comparable as possible by including in the average rate for each industry only those establishments for which a considerable and representative number of occupations is available. He hopes to fill some of the most serious gaps, which are longest in 1903-20. Some progress has been made in interpretation. Changes in the structure of wages are revealed by an analysis of wage differentials by industry, occupation, sex, and region. Explorations into the relation between wage rates and hourly earnings and between rates and production and productivity must be carried much further before they can be considered of value. Other work in this field, except for keeping up to date the files on union membership and representation elections, will be suspended until the manuscript on wage rates is completed.

# Business Cycles

Messrs. Mitchell and Burns have spent a good part of the year in extending the tests of the National Bureau's technique, improving its details, co-ordinating the inquiries undertaken by the collaborators on the business-cycle study, and supervising the computing staff, as well as putting the manuscript describing the method into final shape. It has now been mimeographed and will be submitted to the Directors before long.

Cyclical Behavior of Production will probably be the second of our Studies in Cyclical Behavior. A draft written by Mr. Mitchell is being revised and extended by Messrs. Wallis and Moore. Manuscripts on transportation by Mr. Mitchell and on construction by Mr. Burns are in an advanced stage of preparation, but must be brought up to date and revised.

Good progress has been made by Mr. Abramovitz on inventories and merchandising, by Mr. Mills on prices, and Mr. Wolman on wages. Promising beginnings have been made by Mr. Angell on monetary and banking processes, by Messrs. Morgenstern and Bennett on international factors in business cycles, and by Mr. Evans on the chartering of corporations.

By January 1, 1940, 1,160 series had been analyzed. The broad ranges of activity and the countries covered are shown herewith. The drop in the number analyzed during 1939 to 60 is explained by the time now devoted to special analyses and tabulations of old series.

Time Series the Cyclical Behavior of which has been Measured

	UNITED	GREAT			FOUR
PROCESS	STATES	BRITAIN	GERMANY	FRANCE	COUNTRIES
Production	192	25	25	22	264
Construction	130	20	15	15	180
Transportation	52	10	4	7	73
Prices	99	21	10	7	137
Stocks	52	1	0	0	53
Merchandising	37	0	0	0	37
Foreign Trade	12	12	4	8	<b>3</b> 6
Personal Incomes	108	8	5	2	123
Profits and Losses	40	0	1	0	41
Savings and Investments	13	6	2	2	23
Security Markets	14	9	1	3	27
Volume of Transactions	24	1	4	5	34
Interest Rates	26	4	3	3	36
Money and Banking	73	14	4	5	96
TOTAL	872	131	78	79	1,160

# Trends and Causes of Changes in Basic Agricultural-Industrial Relationships

The joint study by the Bureau of Agricultural Economics of the United States Department of Agriculture and the National Bureau was continued during 1939. Revised and brought up to date, the basic statistical series will be published as a Department of Agriculture Technical Bulletin under the title Gross Farm Income, Indexes of Farm Production and of Farm Prices in the United States, 1869-1937, by Frederick Strauss

and Louis H. Bean. The first part will contain series on gross farm income from total agricultural production and from production in individual farm branches for both crop and calendar years; the second, indexes of farm production and of prices received by farmers for agricultural products as a whole and for such groups of farm products as are needed for comparisons with non-agricultural data. The continuous series on gross farm income covering nearly seventy years are intended chiefly for use in long term analyses and as supplements to the income data the Bureau of Agricultural Economics is now preparing. Bulletin 78, the last number of the 1939 series, was based partly upon these long time series on gross farm income.

Mr. Strauss has begun an analysis of changing trends in farm income, production, and prices but since he has been engaged in special work for the Office of Foreign Agricultural Relations of the Department of Agriculture and is still on leave from the joint study, this report cannot be expected before the end of 1940. The preparatory statistical work is completed, and the report will appear as a Department of Agriculture Bulletin.

## Financial Research

#### COMMITTEE ON RESEARCH IN FINANCE

The Committee on Research in Finance appointed by the National Bureau to have charge of this program is composed of W. W. Riefler, Chairman; R. A. Young, Secretary; W. J. Carson, Thomas Jefferson Coolidge, David Friday, E. A. Goldenweiser, F. Cyril James, Wesley C. Mitchell, Shepard Morgan, D. S. Thompson, R. B. Warren, J. H. Williams, Leo Wolman, Donald Woodward; and has five consultants: B. H. Beckhart, R. R. Hunter, Walter Lichtenstein, J. H. Riddle, and G. B. Roberts. The Committee advises individual research workers, co-ordinates various phases of the program, and provides for such subcommittees on projects as may be needed. Members are requested to read manuscripts, make criticisms and suggestions to the central staff and to authors, and recom-

mendations to the National Bureau for publication. Research is supervised by a central staff, of which Mr. Young is Director, and R. J. Saulnier, an associate member. Funds for the program are derived from grants by the Rockefeller Foundation and the Board of Trustees of the Banking Research Fund of the Association of Reserve City Bankers.

### ADVISORY CONFERENCE ON RESEARCH IN FINANCE

Through the Advisory Conference on Research in Finance the National Bureau benefits in formulating research plans by the imagination and wide experience of competent men in the financial field. The Conference advises concerning the inauguration of projects and examines proposals made by the National Bureau. Between meetings it functions through special committees on the various projects. Members of the Conference are: Thomas Jefferson Coolidge, Chairman, Old Colony Trust Company, Boston; Chairman; F. Cyril James, Principal and Vice-Chancellor, McGill University; Secretary.

National Bureau representatives: W. J. Carson, David Friday, G. M. Harrison, Wesley C. Mitchell, Shepard Morgan, Leo Wolman, R. A. Young

Members from Universities: B. H. Beckhart and R. W. Robey, Columbia; J. F. Ebersole, Gottfried Haberler, A. H. Hansen, O. M. W. Sprague, and J. H. Williams, Harvard; Laurence Lunden, Minnesota; Oskar Morgenstern, Princeton; Marcus Nadler, New York University; Hans Neisser, Pennsylvania; W. W. Riefler and R. B. Warren, Institute for Advanced Study; Jacob Viner and T. O. Yntema, Chicago; L. L. Watkins, Michigan; R. B. Westerfield, Yale; F. F. Hill, Cornell (formerly Governor, Farm Credit Administration)

Members from Governmental Agencies: M. A. Copeland, Executive Secretary, Central Statistical Board; C. C. Davis, E. A. Goldenweiser, and Ronald Ranson, Board of Governors of the Federal Reserve System; R. W. Goldsmith, Economist, Securities and Exchange Commission; W. H. Husband, Home

Owners Loan Corporation; E. H. Leete, New York State Banking Department; D. S. Thompson, Chief, Division of Research and Statistics, Federal Deposit Insurance Corporation; C. B. Upham, Deputy Comptroller of the Currency

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Members from Savings Banks: J. A. Broderick, President, East River Savings Bank, New York; H. S. Sherman, President, Society for Savings, Cleveland Other Members: J. M. Barker, Vice-President, Sears Roebuck and Company; C. I. Barnard, President, New Jersey Bell Telephone Company; J. Herbert Case, R. W. Pressprich and Company; L. W. Douglas, President, Mutual Life Insurance Company; M. A. Linton, President, Provident Mutual Life Insurance Company; F. H. Neeley, Vice-President, Rich's, Inc., Atlanta; Chairman, Federal Reserve Bank of Atlanta; J. J. Schroeder, Secretary, Association of Reserve City Bankers; Donald Woodward, Mutual Life Insurance Company

### CONSUMER INSTALMENT FINANCING PROJECT

The first project among those recommended in the Report of the Exploratory Committee on Financial Research was launched in February 1938. Separate studies have been made of the principal agencies of consumer instalment finance: (1) Personal Finance Companies and their Credit Practices, by R. A. Young; (2) Sales Finance Companies and their Credit Practices, by W. C. Plummer and R. A. Young; (3) Industrial Banking Companies as Agencies of Consumer Instalment Credit, by R. J. Saulnier; (4) Commercial Banks as Agencies of Consumer Instalment Credit, by J. M. Chapman; (5) Government Agencies of Consumer Instalment Credit, by J. D. Coppock. Each study is complete in itself, and describes how the institution functions, the consumer market it serves, its credit practices and standards, the legal regulations to which it is subject, and the competitive influences affecting its operations. The first report was published in January; the fifth is in press; the others are in manuscript at various stages.

In addition to these institutional studies five aspects of consumer instalment financing are being investigated. In collaboration with the Division of Consumer Credit Studies of the Russell Sage Foundation and the Marketing Research Division of the Bureau of Foreign and Domestic Commerce, instalment credit granted, or repayments and outstandings, have been estimated for automobile dealers, department and furniture stores, appliance dealers, personal finance companies, industrial banking companies and personal loan depart-

ments of commercial banks, monthly since 1929. Some estimates have been carried back to 1926. Duncan Holthausen, who, together with Rolf Nugent and Malcolm Merriam, has been in charge of this study, is joining the Bureau of Foreign and Domestic Commerce, which is to continue the estimates currently.

Bulletin 76-7 presented an analysis of 1935-36 data on sales finance credit from the family expenditure schedules of the nation-wide Consumer Purchases Study, a WPA project under the auspices of the Bureau of Home Economics, the Bureau of Labor Statistics, and the National Resources Committee. The final report, now in press, was prepared by Blanche Bernstein and covers charge account and cash loan as well as instalment debt.

There is a dearth of information about methods of appraising the creditworthiness of applicants for consumer financing—a matter important to credit grantors. To fill this gap, samples of 'good' and 'bad' credit transactions obtained from several private organizations—commercial and industrial banks, automobile and personal finance companies—were analyzed under the direction of David Durand. Some borrower characteristics that are definitely related to poor credit were found. One purpose of the analysis was to determine whether a statistical approach to credit problems, particularly an approach using efficient sampling methods, is possible. Some results have already been submitted for criticism, and a full report is now being written.

The influence of legal enactments and regulations on the development of consumer instalment financing institutions is being studied by Nathan Isaacs of the Harvard Graduate School of Business Administration.

The capstone study of the project, consumer instalment financing in relation to economic stability, by Gottfried Haberler of Harvard University, seeks to determine how this form of credit accelerates and decelerates business activity during expansions and contractions, and how its fluctuations affect banking.

In response to requests from readers of the manuscripts so far completed, the results of the several studies will be summarized to give a comprehensive view of the entire field of consumer instalment credit and assess its social and economic significance.

### COOPERATION IN RESEARCH

The project has benefited greatly from the generosity of many individuals and organizations, both public and private. Numerous personal and sales finance and industrial banking companies have given the staff access to unpublished records, allowed it to consult with their officers and experts, and assembled data for its use. Several trade associations have cooperated in questionnaires to ascertain the consumer credit practices of their members. Some 1,200 commercial banks having personal loan departments responded to questionnaires, several of which called for elaborate detail, and 21 large banks compiled information at considerable expense especially for this project. Federal and state agencies made available the technical knowledge of their experts; the central and project staffs have been able, in turn, to cooperate with these agencies in devising a procedure for obtaining from banks and sales finance companies information concerning certain consumer financing activities.

At the request of the Conference the Treasury Income Tax Study is tabulating profits of sales and personal finance companies and industrial banks, classified in various ways for three years since 1929. The staff has cooperated with the Bureau of the Census in preparing for the collection of data on instalment credit in the next Census of Business, and with the Department of Commerce in providing for current estimates of consumer instalment credit.

### CORPORATE BOND STUDY

In May 1938 Chairman Crowley of the Federal Deposit Insurance Corporation suggested to the National Bureau that since a study of corporate bonds would deal with subjects of broad

implications and develop materials of great importance to an understanding of the economic and financial system generally, it could best be conducted as an independent inquiry under the financial research program. He said that the Federal Deposit Insurance Corporation would sponsor a WPA project in New York to provide the necessary clerical help and would cooperate in assembling the data, if the National Bureau would provide technical supervision and arrange for the participation of other governmental agencies—the Office of the Comptroller of the Currency, the Board of Governors of the Federal Reserve System, and the Securities and Exchange Commission—and the four private financial advisory services—Fitch Investors Service, Moody's Investors Service, Poor's Publishing Company, and Standard Statistics Company.

The cooperation of all these agencies was obtained, as well as that of the Interstate Commerce Commission, the Banking Department of the State of New York, and the Federal Reserve Bank of New York. The Central Statistical Board agreed to undertake the classification of bond obligors by industry. The project was planned in a preliminary way during the summer of 1938, with the active participation of most of these agencies. An application for funds submitted by the Federal Deposit Insurance Corporation to the Work Projects Administration was approved on December 30, 1938. From the data compiled the project is attempting to supply information concerning:

- a) Corporate financing and yields of corporate bonds since 1900; experience with bond ratings over the period for which they have been available, particularly since 1920
- b) The use of the capital market by corporations that borrowed, the types of security, the usual period to maturity, the purposes of borrowing, and possibly the net cost of funds
- c) Average bond yields over a long period, by industry, maturity, and quality of issue, and the trend of interest rates
- d) Standards for investments in corporate bonds by banks and other investing institutions
- e) Loss experience from investments in various classes of corporate bonds when held to maturity, and the way in which ratings

by private agencies have served as a guide for such investments f) The relative merits, as indices of bond quality, of market prices, of agency ratings, and of legal lists.

Investigation of many problems arising in the analysis of corporate bond yields has also been initiated, including preliminary tabulations of market data past and present, in order to determine the most effective methods of compiling data for analyzing bond yields.

The project is administered under the general direction of the National Bureau's Committee on the Corporate Bond Study: W. W. Riefler, Chairman; W. J. Carson; R. W. Goldsmith, Securities and Exchange Commission; H. V. Roelse, Federal Reserve Bank of New York; Woodlief Thomas, Board of Governors of the Federal Reserve System; D. S. Thompson, Federal Deposit Insurance Corporation; Donald Woodward, Research Assistant to the President, Mutual Life Insurance Company; R. A. Young; W. L. Leonard, Central Statistical Board. Technical consultants to the Committee are: E. C. Olsen, Fitch Investors Service; E. L. Vogelius, Moody's Investors Service; Leslie Drew, Poor's Publishing Company; Henry Bodwell, Standard Statistics Company. Details of planning, directing, and supervising are handled by a staff of seven assigned to the project by the participating organizations; M. W. Brethouwer, Director; H. G. Fraine, Associate Director.

TRENDS IN THE FINANCIAL STRUCTURE OF AMERICAN BUSINESS. The third project under the financial research program, trends in the financial structure of American business, was started in January. In balance sheet items of a sample of large, middle-size, and small firms for selected pairs of years since 1899 trends in the cash and working capital position of business and in the composition of capital sources—equity capital, short and long term debt—will be traced. The flow of funds will be followed during the last twenty years through representative enterprises. Upon the basis of samples of financial

data covering large industrial and trading corporations, small manufacturing corporations, and business firms that have applied to the Federal Reserve Banks for industrial loans, the nature of adjustments to business requirements and the extent to which capital and credit demands have been met by substitute financial sources will be ascertained. These two parts of the study are expected to indicate the bearing of such factors as industry, size of enterprise, amount, regularity, and reinvestment of profits, maturity of enterprise, type of assets, and financial practice with respect to cash balances, inventories, depreciation, and maintenance upon the character of business demands for outside financial accommodation.

The third part will analyze the policies and practices current today in contrast to a decade ago in lending, investment, and borrowing: the types of loan and investment banks favor, the financial conditions giving rise to borrowing, and business capital demands in relation to the liquidity needs of banks.

# Conference on Research in Fiscal Policy

The Exploratory Committee on Research in Fiscal Policy, after two years of planning a comprehensive program of research in fiscal policy with emphasis upon the effects of its various aspects upon the economy, became more permanent in the autumn of 1939 as the Conference on Research in Fiscal Policy. The members are: W. L. Crum, Harvard University; Roy Blough, Division of Tax Research, Treasury Department; J. C. Bonbright, R. M. Haig, and Roswell Magill, Columbia University; W. Randolph Burgess, National City Bank of New York; L. W. Douglas, Mutual Life Insurance Company; H. M. Groves, University of Wisconsin; A. H. Hansen and D. T. Smith, Harvard University: Clarence Heer. University of North Carolina; A. W. Marget, University of Minnesota; George O. May, Price, Waterhouse and Company; Jacob Viner, University of Chicago; R. B. Warren, Institute for Advanced Study; J. H. Williams, Federal Reserve Bank of New York and Harvard University.

Its tentative plans, announced in the annual report for

1939, were disrupted by the war. The dubious prospect of securing the key personnel for such extensive and time-consuming investigations as had been projected, over a sufficiently long period to ensure completion under continuing leadership, led the Conference to recommend to the National Bureau that funds be sought for four projects that could be done quickly, and for planning a fifth. The Executive Committee of the National Bureau voted to undertake promptly the quest for funds for two; A, The Relation of Income as Determined for Tax Purposes to Income as Determined for Other Purposes; B, Financing the Federal Debt, with special emphasis upon the Effects on the Banking System; and for planning a third, C, Economic Classification of Federal Expenditures.

Considerable progress has been made in arranging for the conduct of Project A. It is expected to be under a directing committee of distinguished specialists in accounting, law, and taxation of which D. T. Smith will be Chairman. Selection of key personnel for Project B is less advanced. Preliminary steps for planning Project C are in the hands of a Committee: R. B. Warren, Chairman; Jacob Viner and Gordon Keith.

## Research Associates

The Carnegie Corporation made another appropriation for research associates in 1939. Moses Abramovitz was continued on leave from Harvard University; G. H. Evans, Jr. is on leave from Johns Hopkins University; Charles M. James from the Industrial Research Department of the Wharton School, University of Pennsylvania; Geoffrey H. Moore from Rutgers University; and W. Allen Wallis from Stanford University.

## Universities-National Bureau Committee

The Universities-National Bureau Committee, the expenses of which are met mainly by a grant from the Carnegie Corporation, met at 'Hillside', the National Bureau's workshop on the Hudson, on October 14, 1939 and listened to the annual accounting of its four wards: the Conferences on National

Income and Wealth, Prices, Financial Research, and Fiscal Policy. J. D. Black of Harvard University was elected Chairman, and J. Frederic Dewhurst of the Twentieth Century Fund, Secretary. To acquaint the Committee with regional research R. L. Kozelka had been invited to describe a study sponsored by the Industrial Trends Committee of the Minnesota Resources Commission in cooperation with the School of Business Administration, University of Minnesota, and E. H. Hoover, research relating to industrial location at the University of Michigan. J. S. Davis told of regional studies at Stanford and the University of California; and J. B. Woosley, representing the University of North Carolina, told of localization of industry studies in the South.

Desire on the part of the members to be more active in furthering the objectives for which the Committee was formed led to meetings of the few who could easily come to New York in November 1939 and January 1940. Fortunately Mr. Davis was able to attend the second meeting, which issued in plans to canvass the participating universities to learn their ideas concerning the lines of research the Committee may usefully promote. Before the next meeting of the Committee the Chairman is to circulate a digest of the returns so that members may come prepared to discuss a program of action.

#### Publications

The long-suffering subscribers of the National Bureau received four books in one package as a belated Christmas present—for which they had long since paid generously. Four books are now in press. The International Gold Standard Reinterpreted, by William Adams Brown, Jr., is a two-volume work covering the post-War period. The pre-War part of the study of the international gold standard, sponsored by Brown University, is being prepared by Carel Jan Smit and A. G. Silverman. Residential Real Estate, Its Economic Position as shown by Values, Rents, Family Incomes, Financing, and Construction, together with Estimates for All Real Estate, by D. L. Wickens, presents results supplementing those published in

Bulletins 65 and 75 as well as the basic data. It is an outcome of the elaborate investigation of real estate financing and economic stability undertaken at the request of the Social Science Research Council's Committee on Credit and Banking, and carried on with its support. Government Agencies of Consumer Instalment Credit, by J. D. Coppock, and The Pattern of Consumer Debt, 1935-1936, by Blanche Bernstein, are number five and six respectively in the consumer instalment financing series, prepared under the direction of the Advisory Conference on Research in Finance. These studies, of which there will probably be ten, are being issued as they are completed, not in the order in which they are listed in the series.

The other books we hope to publish this year have been mentioned under the various projects. The five Bulletins scheduled for 1940 bear the tentative titles: Changes in the Output of Finished Commodities since 1879; Analyses of Costs in Individual Enterprises; Productivity in Manufacturing Industries; Wages and Employment in the United States since 1914; Consumer Instalment Financing.

### PUBLICATIONS OF THE

### NATIONAL BUREAU OF ECONOMIC RESEARCH

Contributors of \$25 or more a year to the National Bureau (deductible from Federal income tax) receive all publications before they are released to the public. Teachers in recognized educational institutions, members of scientific societies or of private non-profit research agencies may become Associates by contributing \$5 annually. No others are eligible. Associates receive 5 issues of the Bulletin and are entitled to buy copies of National Bureau books at a one-third discount.

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#### Financial Research Program

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### Conference on Research in National Income and Wealth

STUDIES IN INCOME AND WEALTH, Vol. I (1937), 368 pp., \$2.50; Vol. II (1938), 342 pp., \$3.00; Vol. III (1939), 500 pp., \$3.50; Vols. I-III to gether, \$7.50

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NATIONAL BUREAU OF ECONOMIC RESEARCH 1819 BROADWAY, NEW YORK

EUROPEAN AGENT: MACMILLAN & CO., LTD. ST. MARTIN'S STREET, LONDON, W. C. 2