

the Price Conference. The other members are A. R. Burns (Columbia University); Aryness Joy (Bureau of Labor Statistics); E. G. Nourse; F. C. Mills; D. H. Wallace; and T. O. Yntema.

BLS-WPA Project on Wholesale Prices

Under the supervision of the United States Bureau of Labor Statistics, a WPA group is compiling index numbers of wholesale prices by months since 1890 for numerous new commodity classes. Many intricate problems of classification, weighting, etc. are involved. At the request of the Bureau of Labor Statistics, the Chairman of the Price Conference appointed a technical advisory committee consisting of F. C. Mills, Chairman; M. A. Copeland; H. B. Arthur (Swift and Company); and R. H. Whitman (R. H. Macy and Company) to consult with it.

Financial Research

THE PROGRAM of Financial Research is conducted under the general direction of the National Bureau's Committee on Research in Finance, which is responsible for formulating policies, determining the scope of projects, and criticizing reports. The Committee also advises individual investigators, coordinates activities, and appoints such sub-committees as may be needed. It functions through a Central Research Staff consisting of Winfield W. Riefler, Chairman (Institute for Advanced Study), William J. Carson, Ralph A. Young, Secretary of the Committee and Director of the Financial Research Program, and R. J. Saulnier of the research staff. The Central Research Staff plans details of projects, reviews methods, tests preliminary findings, and reviews manuscripts before they are submitted to the Committee on Research in Finance and the Directors of the National Bureau. It also maintains an inven-

tory of financial research studies and keeps in touch with financial research conducted under the auspices of other agencies, public and private, in order to facilitate cooperative arrangements in whatever areas they can be most fruitful.

CONSUMER INSTALMENT FINANCING PROJECT

Most of the research under the Consumer Instalment Financing Project was finished by January 1940. The eight monographs issued are listed on the second page of National Bureau publications at the end of this report. The present status of the four to be published this year may be briefly indicated.

Consumer Instalment Credit and Economic Fluctuations, by Gottfried Haberler, is being circulated in mimeographed form. The investigation of national monetary and banking policy that is being conducted by the Senate (Wagner) Committee on Banking and Currency makes this book especially timely. The Committee asked the Board of Governors of the Federal Reserve System: "Do you consider the expansion of instalment selling which has taken place during the past twenty years to have been an important factor determining fluctuations in the level of employment? If so, in what way?" This is essentially the question Mr. Haberler treats, but he covers cash loan instalment credit as well as instalment credit originating in retail sales.

Nathan Isaacs has analyzed all statutory provisions bearing directly and indirectly upon consumer instalment financing and drafted a preliminary text on reciprocal relationships between these statutory provisions and operating problems. Unusual academic demands have retarded revision of *The Legal Framework of Consumer Instalment Financing*.

The Operating Experience of Consumer Instalment Credit Agencies, 1929, 1933 and 1936, which was added to our schedule only last spring, is being prepared from tabulations of the principal items in the financial statements of 202 sales

finance companies, 152 personal Finance companies, and 153 industrial banking companies. These items are from income tax returns, tabulated for our use by the staff of the Treasury-WPA Income Tax Study. Far richer and more extensive than we had expected, they afford a basis for comparing instalment credit agencies of different sizes with commercial banks in respect of sources and uses of funds, expenses of operation (interest, charge-offs, etc.), sources and stability of income, and rates of income on total assets and owner's capital.

Since an analyst trained in the interpretation of banking statistics was essential, we requested the Federal Deposit Insurance Corporation to lend a member of its staff on a cooperative basis. It complied by releasing Ernst A. Dauer for six weeks of full-time and approximately eight months of part-time work. His report will be subject to the approval of the FDIC as well as of the National Bureau.

The entire project could not be summarized until the several studies were substantially completed. Under the title *The Business of Consumer Instalment Financing*, an effort is being made to cover, briefly and simply, the Area of Consumer Instalment Credit; the Instalment Debtor—His Social and Economic Characteristics; the Institutional Setting—Economic, Legal, Social; the Operating Practices of Instalment Credit Agencies; the Credit Principles of Instalment Financing; Consumer Instalment Credit and Economic Stability.

CORPORATE BOND PROJECT

The Corporate Bond Project, sponsored by the Federal Deposit Insurance Corporation and carried on under the supervision of the National Bureau with the participation of several public agencies and private financial services, is nearing completion. By June 30 when the WPA appropriation and other arrangements in support of its activities end, four bodies of

basic investment data for 1900-38 will have been assembled and organized for analysis, and it is hoped that a fifth will have been recorded:

- 1) Corporate bond offerings by year, industry, and such characteristics as size and maturity of issue, and coupon rate (approximately 25,000 bonds)
- 2) Characteristics of bonds at the time of issue and extinguishment, such as market prices, yields expected and realized, ratings, earnings of obligors, and legal status (approximately 4,700 bonds)
- 3) Number and amount of defaults, industries in which defaults have occurred, types of default and of settlement, and realized yields on defaulted bonds (approximately 1,000 bonds)
- 4) Prices, realized yields, ratings, and outstanding amounts of approximately 2,500 bonds by years and longer periods
- 5) Monthly price and yield data for approximately 200 high and low grade bonds

The project is very much a cooperative undertaking. The WPA appropriated funds for materials and clerical labor; the National Bureau provided for supervision and machine tabulations; Standard Statistics Company, Poor's Publishing Company (now Standard and Poor's Corporation), Fitch Investors Service, and Moody's Investors Service supplied manuals and data and put their technical experts at our disposal for consultation. The Federal Deposit Insurance Corporation, Board of Governors of the Federal Reserve System, Comptroller of the Currency, Securities and Exchange Commission, Federal Reserve Bank of New York, and the Central Statistical Board (now the Division of Statistical Standards, Bureau of the Budget) appropriated funds to pay the salaries of technical experts assigned to the project on a full- or part-time basis and other expenses.

The sponsor and cooperating agencies have provided the

following present and past staff members for the Project: M. W. Brethouwer (Federal Deposit Insurance Corporation), Director; H. G. Fraine (Securities and Exchange Commission and Indiana University), Associate Director; Lewis Dembitz and F. C. Dirks (Board of Governors of the Federal Reserve System); David Durand (Institute for Advanced Study); William Hayes and H. F. Pflieger (Comptroller of the Currency); W. Braddock Hickman (Carnegie Associate of the National Bureau); G. P. Hitchings (Federal Reserve Bank of New York); Rose Director and S. Grant Saunders (National Bureau).

Arrangements have been made to retain part of the sponsors' supervisory staff over the summer, to put all data into form for analysis and to organize the operating records for subsequent use. Several steps have been taken, with the cooperation of the Institute for Advanced Study, looking toward analytic studies. The Institute has appointed David Durand to work on technical statistical problems, and W. Braddock Hickman to review the investment performance of bonds in the legal lists of Massachusetts and other states, with the aim of testing the value of such lists for guiding trust and institutional investors. The Central Research Staff is planning to assign S. Grant Saunders, research assistant of the financial research staff, to study fluctuations in the monthly volume of corporate bond offerings classified by industry and by such characteristics as size, coupon rate, and term to maturity, 1900-38.

The cooperating agencies will have access to all final tabulations for such analyses as each may care to make. Many phases of investment credit, hitherto closed to investigation because data have been lacking, are now open: the cyclical behavior of corporate bond offerings, investment values, and long-term interest rates; the role of risk in fixing market interest rates; the trustworthiness of various criteria of invest-

ment performance, e.g., market price, legal listing, agency rating, corporate earnings; the value, for assuring safety, of sinking funds, and of type and seniority of security; the characteristics of bond defaults and the questions that confront investors when default occurs; the effects of market fluctuations on investment experience.

FINANCIAL STRUCTURE PROJECT

The Financial Structure Project is at present divided into two main parts. Since the materials for Part I, Changes in the Financial Requirements of American Business Enterprise, 1900-40, have perforce been drawn from sources of different accounting and statistical consistency, they cannot be treated as a whole until separate analysis has revealed the significance of the several samples. We have therefore undertaken seven experimental studies, all of which should be completed in preliminary form within six to eight months.

The Credit and Capital Structure of Incorporated Business, 1937, by Walter Chudnowsky

How do corporations differing in size, age, and profitability, and belonging to different industries vary with respect to average liquidity position, and use of short-term, long-term, or *equity financing*? Do small corporations tend on the average to use more trade credit to finance current operations than large corporations, or more credit on payables to banks and other financial institutions? Is the proportion of short-term financing more directly related to business holdings of inventories or to other business characteristics?

From corporate income tax returns in *Statistics of Income* or in the *Statistics of Income Source Book* (on file at the Bureau of Internal Revenue in Washington) and supplementary data from the Securities and Exchange Commission's *Survey of American Listed Corporations*, the publications of

Dun & Bradstreet, Inc., the financial statement tabulations of the Robert Morris Associates, and several special compilations by our staff, we hope to get answers that will enable us to interpret the more fragmentary data gathered in our other studies.

Changes in the Capital and Credit Structure of Incorporated Enterprise, 1900-40, by Sidney S. Alexander

To establish long-term changes in the credit and capital structure of incorporated enterprises Mr. Alexander is examining samples of financial statements from (a) between 200 and 300 large corporations from Moody's *Manuals* for 1907-08, 1910-11, 1920-21, 1926-27; from 500 to 600 large corporations for 1937-38, from the Securities and Exchange Commission; (b) approximately 400 small and medium-size Massachusetts corporations for 1903-04, 1907-08, 1910-11, 1915, 1918, 1920-21, 1926-27, 1929, 1933, and 1937-38, compiled with the cooperation of the Massachusetts Commissioner of Taxation from the Massachusetts files of *Certificates of Condition of Corporations*; (c) approximately 350 small and medium-size Wisconsin corporations for 1918, 1920-21, 1926-27, 1929, 1933, and 1937-38, compiled with the cooperation of the Wisconsin Commissioner of Taxation from the Wisconsin files of corporate income tax returns. To supplement these selected observation-year data, annual samples of financial statement items have been assembled from the same sources covering (a) 75 large industrial corporations, 1906-39 (Moody's); (b) 75 small and medium-size industrial corporations, 1903-39 (Massachusetts); (c) 120 small and medium-size industrial corporations, 1916-40 (Wisconsin). With the cooperation of the Robert Morris Associates, an annual sample of financial statements for about 40 medium-size retail and wholesale firms, 1916-40, is being supplied by credit officers of banks from their files.

Credit Requirements of Small Manufacturing Firms in Five Industries, 1926-36, by C. L. Merwin, Jr.

Recent discussion of the financial needs of small firms, particularly for new financing facilities, led to the choice of the third sample—1,200 small manufacturing firms (each with assets approximating \$250,000 or less in 1926) in the baking, men's clothing, furniture, stone and clay, and machine tool industries. It includes firms manufacturing consumers' perishable, semi-durable, and durable goods, as well as producers' durable goods. The tabulations were made from corporate income tax returns by the Treasury-WPA Income Tax Study staff for the Department of Commerce.

Capital and Credit Requirements of Medium-size 'Marginal' Business Firms in Twelve Industries, 1926-36, by C. L. Merwin, Jr.

To get at the roots of the financial difficulties of firms Mr. Merwin is studying also financial statements of three hundred firms, in twelve industries, that applied for loans from the Federal Reserve Banks of New York and Philadelphia. The tabulations were made with the collaboration of the two agencies, and are being analyzed separately because of their common source and because the firms represented had a common need for special accommodation during the recovery period 1934-36. To check this sample Mr. Merwin is using information on the industry and size breakdown of firms obtaining industrial loans from the twelve Federal Reserve Banks, recently compiled by the Research Division of the Board of Governors of the Federal Reserve System.

Financial Requirements of Medium-size Wisconsin Firms in Twelve Industries, 1916-39, by Sidney S. Alexander

While collecting financial statement data for observation years from the corporate income tax files of the Wisconsin Com-

missioner of Taxation, for use in the second study outlined above, we obtained balance sheets and income accounts for 120 firms that have been in business since 1916 in twelve Wisconsin industries. Since consistent data of this type are seldom available for as many as twenty-four years, these materials offer an exceptional opportunity to study cyclical changes in the sources and uses of corporate funds, as well as in the capital and credit structure of business enterprises.

Financial Requirements of Large Business Firms in Fifteen Industries, 1920-40, A. R. Koch

To discover how the financial requirements of large business firms have changed since 1920, how industrial characteristics affect financial needs, and how the degree of integration affects the amount and character of their demand for outside financing, Mr. Koch is examining a sample of 100 to 125 large industrial and mercantile firms selected from Moody's *Manuals* by our staff and the Division of Research and Statistics of the Board of Governors of the Federal Reserve System. A supplementary tabulation covering twenty-five large department stores is being prepared with the collaboration of the Harvard Bureau of Business Research from financial statements assembled over the past twenty years for its department store cost studies. Pearson Hunt, of the faculty of the Harvard Graduate School of Business Administration, is working with Mr. Koch on this sample.

The Comprehensive Summary

Our present schedule calls for bringing to a close all seven studies by autumn. The volume based upon these supporting parts should be started during the summer and be approaching completion by the end of the year.

Cooperation with the American Institute of Accountants

To make sure that our interpretation of this rich and varied

body of accounting data meets the highest standards of the accounting profession, the National Bureau requested the American Institute of Accountants to appoint a committee to advise concerning methods of analysis and criticize manuscripts. Accordingly the Institute named Maurice E. Peloubet, Chairman (Pogson, Peloubet & Co.); Charles H. Towns (Loomis, Suffern and Fernald); Charles J. Cox (West, Flint & Co.).

Part II of the Financial Structure Project, Contemporary Relations between Business Enterprises and Financial Institutions, is being conducted by R. J. Saulnier of Barnard College, Columbia University, and Neil Jacoby of the School of Business, University of Chicago. The first of its four sections is a statistical analysis directed toward the question: from what sources are business firms now obtaining short- and intermediate-term credit, and how do financing practices vary with the size of an industry, its profitability, geographical location, and organizational form (incorporated or unincorporated)? In collaboration with Dun & Bradstreet, Inc., we are analyzing a sample of 7,000 to 10,000 of their credit reports in 50 to 60 industries for the year ending June 30, 1940. Covering both unincorporated and incorporated firms extensively, and giving nearly as adequate information for small and medium-size as for large firms, it is admirably suited for drawing a cross-section of current business demands for credit.

The second section of the study deals with the position of the business loan as a commercial bank asset and will be directed toward the question: what are banks doing currently to adapt their financial services to changing demands for business credit? By means of interviews and questionnaires we are examining the special lending practices developed in recent years by banks, such as term lending, factoring accounts receivable, financing instalment sales of industrial equipment,

cash instalment lending for business purposes, and lending on insurance policies—in fact, all types of lending practice that can be viewed as adaptations of loan policy and methods to recent changes in business demands for banking accommodation.

The third section analyzes the financial services of institutions other than commercial banks for comparison with those furnished by commercial banks. The Dun & Bradstreet compilations will show how frequently business firms discount accounts receivable, obtain credit on chattel mortgages and sales liens, and use factoring or finance companies as sources of credit. Materials on insurance companies, investment trusts, government lending agencies, and consumer cash-lending agencies will be derived from public documents, published studies, and direct inquiry.

Utilizing the results of the first three sections, the final section will assess the functioning of the commercial banking system as a source of business credit in relation to the trends in demands revealed by Part I and to such current financial changes as the shifting of debt from business enterprises to consumers and the increase in non-banking credit facilities on which business firms can draw.

PLANS FOR FUTURE RESEARCH

The Central Research Staff has decided that any new plans should focus on investment credit, exploiting the Corporate Bond Project tabulations. A coordinated plan must await agreement of the cooperating agencies concerning the specific analyses each is interested in conducting and the exchange of results. Meanwhile, the Committee on Research in Finance has recommended to the National Bureau that an investigation of the relation of commercial banks to the investment market be proposed to the Board of Trustees of the Banking Research Fund of the Association of Reserve City Bankers.

ADVISORY CONFERENCE ON RESEARCH IN FINANCE

The Advisory Conference on Research in Finance functions as a liaison group to help bridge the gap that too often exists between research and practical business experience. Among its seventy-two members are scholars, business and banking executives, and specialists from governmental agencies whose background and experience have greatly enriched the Financial Research Program. The Conference reviews going research in finance and advises on inaugurating new studies. At the same time, it serves to keep members and the organizations they represent in close touch with the Program and with other financial research, thus familiarizing a much larger group with current research in the field.

The second annual meeting of the Conference, in Washington, D. C., November 14-15, 1940, was attended by thirty-seven of its members and thirty-nine guests from universities, governmental agencies, and private organizations. At the first session the three projects of the Financial Research Program were outlined by members of the financial research staff; Donald B. Woodward, Research Assistant to the President, Mutual Life Insurance Company, sketched analytical uses to which the corporate bond tabulations might be put; and W. L. Crum, Chairman of the Conference on Research in Fiscal Policy, reported on the fiscal policy program. At the second session papers on the role of research in policy making were presented by Ronald Ransom, Vice-Chairman, Board of Governors of the Federal Reserve System; Edward Elliott, Vice-President, Security-First National Bank of Los Angeles; and Stacy May, Director, Bureau of Research and Statistics of the Advisory Commission on National Defense. At the third session Woodlief Thomas, Assistant Director, Division of Research and Statistics, Board of Governors of the Federal Reserve System, Cyril B. Upham, Deputy Comptroller

