

## NEW STUDIES

The large and persistent deficits registered in the United States balance of payments during the last five years have aroused concern that this country's prices may be out of line with those of its competitors. In its most general formulation, the view that United States prices are too high does not rely on statistical evidence of differences in prices or price movements at home and abroad, but only on the fact of the deficit itself. By this test—whatever the relative magnitude of past inflation indicated by international comparisons extending back to some base period—United States prices are at a level higher than would be compatible with the growth in its foreign commitments and the increase in the productive power and financial discipline of its competitors.

It is important but difficult to proceed beyond this very broad statement and to form a judgment as to how serious the disparity between United States and foreign prices may be. Actual export price quotations from both home and foreign sources are few and difficult to compare, especially for the highly fabricated and differentiated products in which we are most interested. More information is available on relative price changes as measured by the various price indexes compiled in each country. These indexes are also subject, however, to serious deficiencies, particularly with respect to their international comparability, and, of course, they do not provide any basis for judging whether U.S. prices are higher or lower than foreign prices at any point of time.

With the assistance of a grant from the National Science Foundation, the National Bureau has embarked on a study of comparative domestic and foreign prices which, it is hoped, will throw more light on this vital aspect of our international economic position. This investigation is being conducted by Irving Kravis, Robert Lipsey, and Philip Bourque. A report on the first stage of their work is given in Part IV, Section 5.

Public interest in economic forecasting has grown rapidly in recent years. The boldness of economic forecasters, also, seems to have

## PART III

### Activities During 1962

become greater. These are sound and useful developments if, but only if, confidence in such forecasts is justified. How good or poor have the forecasts of responsible agencies or individuals been in fact? What degree of boldness or caution seems warranted by this record? Are differences in the dependability of forecasts related to differences in methodology? Is it likely that the more successful forecasting techniques can be improved upon? If so, what approaches seem most promising?

To answer these and similar questions, plans for a study of short-term economic forecasting have been drawn up, and grants to finance the study have been assured by several companies. Victor Zarnowitz of the University of Chicago is taking charge of the investigation. Jon Cunnyngham, presently with the Bureau of the Census, and others will be associated with him.

One of the first tasks will be to compile a record of authentic forecasts of economic activity (which in different contexts will mean general business conditions, industrial production, gross national product, disposable income, employment, federal revenues and expenditures, plant and equipment investment, etc.) made by government agencies, private institutions, and individuals. Each set of forecasts will be examined for their dependability, as forecasts of change as well as of level of activity. Careful attention will be given to the stage of the business cycle when the forecasts were made, since this is likely to have some bearing on the degree of success attained. Other facts that have contributed to the success or failure of forecasts will be assessed, by differentiating forecasts according to their time span, according to the degree of their specificity, according to the assumptions surrounding them, and, most important of all, according to the kind of methodology that was used by the forecasters. Out of this phase of the investigation we would hope to suggest some improvements in the approach to forecasting. Finally, the study will consider means whereby both the value and the limitations of economic forecasts can be brought continuously to public notice.

The National Bureau's studies of urban mortgage financing, published in the early

1950's, were concerned in part with the factors determining lending risk or credit quality. The vast expansion in residential mortgage loans in recent years and the changes that have occurred in lending terms and procedures make it desirable to bring the earlier analysis up to date. A new study of the relationship between loan terms, borrower characteristics, and loan experience on residential mortgages will be undertaken as part of the quality of credit investigation, under the direction of James Earley. Financial support for the project is being provided by grants from the Mortgage Bankers Association, the United States Savings and Loan League, and the National Association of Mutual Savings Banks.

In connection with the study of tax policies for economic growth, plans for two conferences have been formulated. They are briefly described by Norman Ture in Section 1 of Part IV.

#### RESEARCH UNDER WAY

Reports by members of the staff on their research during 1962 are presented in Part IV. The findings briefly mentioned there have not yet undergone the full critical review accorded the National Bureau's studies and are therefore tentative.

#### STUDIES COMPLETED

Seventeen reports on research conducted by the staff have been published since January 1, 1962, and six are in or about to go to press.<sup>1</sup> The titles and authors of these reports are listed below, together with those of reports that will soon be ready for review by the Board. For a list of conference reports, see the next section.

---

<sup>1</sup>A complete list of publications begins on page 102.

INTERNATIONAL ECONOMIC RELATIONS

*Problems of the United States as World Trader and Banker*, by Hal B. Lary (Studies in International Economic Relations 1, 1963, xvi + 175 pp., \$4.50). Examines the elements of strength and weakness in the United States balance of payments. Discusses various ways of dealing with the current and future situation and identifies problems for further research.

*Price and Quantity Trends in the Foreign Trade of the United States*, by Robert E. Lipsey (Studies in International Economic Relations 2, 1963, xviii + 475 pp., \$10.00). Relates U.S. export and import trends over the past four decades to changes in the domestic economy and in the trade of other countries. The history of U.S. foreign trade for this period is reviewed in the light new NBER indexes.

FINANCE

*Dividends Under the Income Tax*, by Daniel M. Holland (Fiscal Studies 7, 1962, xvii + 189 pp., \$4.50). Deals with the importance of dividends in personal and taxable income, the degree to which dividend receipts have shown up on tax returns, the "double taxation" of dividends, and the differential taxation of corporate earnings, as well as recent methods to provide income tax relief for stockholders.

*The Postwar Rise in the Velocity of Money: A Sectoral Analysis*, by Richard T. Selden (Occasional Paper 78, 1962, iv + 68 pp., \$1.00). Examines the shift in the trend of money turnover—called velocity of circulation—by sectors of the economy: geographic, business, household, government;

and finds that money has been circulating through the economy at an increasingly rapid rate since World War II.

*The United States Savings Bond Program in the Postwar Period*, by George Hanc (Occasional Paper 81, 1962, xiv + 108 pp., \$1.50). Analyzes the objectives and techniques of the savings bond program, its role in individuals' financial saving, and its significance for federal debt management.

*The Quality of Bank Loans: A Study of Bank Examination Records*, by Albert M. Wojniolower (Occasional Paper 82, 1962, xiv + 74 pp., \$1.50). Measures the quality of bank credit by the ratings of bank loans made by bank examiners. The examination process and the meaning of examiner criticism of loans are discussed. Criticism rates are shown to be related to subsequent loan experience, as well as to the general business situation.

*Cost of Providing Consumer Credit: A Study of Four Major Types of Financial Institutions*, by Paul Smith (Occasional Paper 83, 1962, vi + 26 pp., \$0.50). Investigates the operations of consumer finance companies, sales finance companies, commercial banks, and credit unions. Finds wide variations in the cost of providing consumer credit, which are attributed primarily to differences in the risks assumed and in the types of credit supplied.

BUSINESS CYCLES

*Postwar Cycles in Manufacturers' Inventories*, by Thomas M. Stanback, Jr. (Studies in Business Cycles 11, 1962, xiv + 146 pp., \$2.00). Analyzes the behavior of manufacturers' stocks of finished goods, goods in process, and purchased materials during postwar business cycles. Explains why inventory movements have continued to play a major role in business recessions, despite the fact that stocks are smaller relative to sales.

*Unfilled Orders, Prices Changes, and Business Fluctuations*, by Victor Zarnowitz (Occasional Paper 84, 1962, iv + 28 pp., \$0.75). Discusses fluctuations in the ratio of unfilled orders to shipments and the correlation between price changes and backlog changes. Unpredictable fluctuations in demand appear to be a main cause of the wide swings in unfilled orders.

#### WEALTH

*The Share of Top Wealth-Holders in National Wealth, 1922-56*, by Robert J. Lampman (General Series 74, 1962, xxvii + 286 pp., \$6.50). Offers new information on the numbers, characteristics, and investments of American wealth-holders. Measures the concentration of wealth-holding and its changes over recent years.

*The National Wealth of the United States in the Postwar Period*, by Raymond W. Goldsmith (Studies in Capital Formation and Financing 10, 1962, xxix + 434 pp., \$12.50). Contains the only comprehensive, detailed estimates of U.S. national wealth and its components presently available. Includes a comparison of the structure of U.S. national wealth with that of other countries. The appendixes provide detailed statistics of the components of national wealth and their derivation.

#### SOVIET ECONOMIC GROWTH

*Growth of Industrial Production in the Soviet Union*, by G. Warren Nutter (General Series 75, 1962, xxvii + 706 pp., \$15.00). An exhaustive study of industrial growth in Russia since the founding of the USSR in 1917, based on a thorough check and cross-check of available statistics on individual commodities and industries. Considers expansion of the labor force and of population in relation to industrial output. Soviet

growth is compared with that of the United States, and the uncertainties attached to such comparisons are shown.

*Freight Transportation in the Soviet Union, Including Comparisons with the United States*, by Ernest W. Williams, Jr. (General Series 76, 1962, xxi + 221 pp., \$4.50). This study discloses major shifts in the volume of freight traffic handled by different forms of transport in the Soviet Union and the United States. In the former, overwhelming reliance is placed on railroads for intercity freight transportation, whereas in the latter the role of the railroads has declined and the importance of other forms of transport has increased.

*Small-Scale Industry in the Soviet Union*, by Adam Kaufman (Occasional Paper 80, 1962, xvi + 95 pp., \$2.00). This report studies the almost complete absorption of small-scale by large-scale industry in the Soviet Union between 1913 and 1933, and its effect on the interpretation of growth in large-scale production. As a case study of the major structural changes experienced by an economy in the process of rapid industrialization, the report may help provide an understanding of the problems encountered by underdeveloped countries.

#### OTHER

*The American Baby Boom in Historical Perspective*, by Richard A. Easterlin (Occasional Paper 79, 1962, iv + 60 pp., \$1.00). Suggests that the marked postwar increase in births may be part of a long succession of major population fluctuations rather than an abrupt reversal of a long-term downtrend, as commonly considered. The report presents data on the U.S. birth rate from the middle of the nineteenth century and relates the swings in this rate to economic and other factors.

*Diversification and Integration in American Industry*, by Michael Gort (General Series

77, 1962, xxi + 238 pp., \$5.00). Provides the first comprehensive view of the inter-industry structure of the large diversified enterprise. Shows that firms are increasing the number and types of their products at an accelerating rate and that this diversification by large firms has facilitated the flow of capital into these industries and has thus contributed to their growth.

*The Interpolation of Time Series by Related Series*, by Milton Friedman (Technical Paper 16, 1962, iv + 29 pp., \$0.75). Provides a method of interpolation that improves on current practice by taking account of the correlation between the movements of the given series and the related series.

#### REPORTS IN PRESS

*A Monetary History of the United States, 1867-1960*, by Milton Friedman and Anna J. Schwartz (Studies in Business Cycles 12).

*Studies in the National Balance Sheet of the United States*, by Raymond W. Goldsmith and Robert E. Lipsey (Studies in Capital Formation and Financing 11).

*Capital and Rates of Return in Manufacturing Industries*, by George J. Stigler (General Series 78).

#### REPORTS SOON TO GO TO PRESS

"Evidences of Long Swings in Aggregate Construction Since the Civil War," by Moses Abramovitz (Occasional Paper 85).

"The Flow of Capital Funds in the Postwar Economy," by Raymond W. Goldsmith (Studies in Capital Formation and Financing 12).

"Business and Professional Income Under the Income Tax," by C. Harry Kahn (Fiscal Studies 8).

#### REPORTS SOON TO BE SUBMITTED FOR APPROVAL

"Determinants and Effects of Changes in the Stock of Money, 1875-1955," by Phillip Cagan (Studies in Business Cycles).

"American Residential Building, 1840-1939," by Manuel Gottlieb (Technical Paper).

"Anticipations and Purchases: An Analysis of Consumer Behavior," by F. Thomas Juster (General Series).

"The Cyclical Behavior of the Term Structure of Interest Rates," by Reuben A. Kessel (Occasional Paper).

"Corporate Sources and Uses of Funds," by David Meiselman and Eli Shapiro (Technical Paper).

"Consumer Credit Finance Charges: Rate Information and Quotation," by Wallace P. Mors (Studies in Consumer Instalment Financing 12).

"The Quality of Trade Credit," by Martin H. Seiden (Occasional Paper).

"Trends and Cycles in the Commercial Paper Market," by Richard T. Selden (Occasional Paper).

"New-Automobile Finance Rates, 1924-62," by Robert P. Shay (Occasional Paper).

"Consumer Credit Costs at Four Major Types of Financial Institutions, 1949-59" by Paul F. Smith (Studies in Consumer Instalment Financing 11).

"Measuring Transactions Between World Areas," by Herbert B. Woolley (Studies in International Economic Relations 3).

"Orders and Production in Manufacturing Industries: A Cyclical Analysis," by Victor Zarnowitz (Studies in Business Cycles).

## CONFERENCES ON RESEARCH

Besides the research conducted by its own staff, the National Bureau from time to time arranges special conferences and also sponsors two continuing groups that plan and organize conferences on research. University, government, and other specialists in particular fields participate in these conferences. They are invited to prepare papers growing out of their own research, and to discuss those prepared by others. The revised papers are, in most instances, submitted to the National Bureau for publication in conference proceedings volumes. A list of the volumes published last year or in press, together with future scheduled conferences, follows. The special conferences on tax policies for economic growth and the current activities of the two conference-organizing groups are described below.

### CONFERENCE PROCEEDINGS PUBLISHED SINCE JANUARY 1, 1962

*The Rate and Direction of Inventive Activity: Economic and Social Factors* (Special Conference 13, 1962, xi + 635 pp., \$12.50). This volume covers problems of definition and measurement, theory and macro-quantitative analysis, case studies, nonmarket factors, efficiency in research and development, and welfare economics and inventive activity.

*The Flow-of-Funds Approach to Social Accounting* (Studies in Income and Wealth 26, 1962, x + 487 pp., \$12.50). Contains thirteen papers dealing with the integration of social accounting systems, the use of flow-of-funds data and their applications to the analysis of financial and economic conditions, and problems of availability and techniques.

*Aspects of Labor Economics* (Special Conference 14, 1962, xxii + 349 pp., \$7.50). The papers in this volume deal with aspects of market organization or structure, relative wage differentials among categories of the labor force, the functioning of labor markets in the United States, the application of the consumption theory to the problem of labor supply, and the morphology of labor protest.

*Investment in Human Beings* (Special Conference 15, 1962, 157 pp., \$1.25). Contains eight papers presented at a Universities-National Bureau exploratory conference. Capital investment in human beings is shown to change the usual measure of the amount of savings and capital formation, as well as the structure of wages and salaries.

*The State of Monetary Economics* (Special Conference 16, 1963, 152 pp., \$2.00). Contains theoretical and empirical papers examining the demand for money and other assets from a portfolio approach, the role of money in economic growth and fluctuations, and the use of monetary controls.

*Philanthropy and Public Policy* (1962, x + 145 pp., \$2.50). This exploratory report contains seven papers and a summary of the proceedings of a conference held in the summer of 1961. Sponsored by the National Bureau and the Merrill Center for Economics, the conference was organized to examine the economic aspects of philanthropy, with special emphasis on policy.

### CONFERENCE PROCEEDINGS IN PREPARATION FOR PRESS

"Income Shares" (Income and Wealth 27).

"Models of Income Determination" (Income and Wealth 28).

"Transportation Economics" (Special Conference 17).

## CONFERENCES BEING ARRANGED

Components and Sources of Output Growth, 1840-1920, Conference on Research in Income and Wealth, September 4-5, 1963.

Role of Direct and Indirect Taxes in the Federal Revenue System, conference sponsored jointly by the National Bureau and the Brookings Institution, October 1963.

Foreign Tax Policies and Economic Growth, conference sponsored jointly by the National Bureau and the Brookings Institution, December 1963.

Further details on the latter two conferences are given below and in Norman Ture's report in Part IV.

### CONFERENCE ON RESEARCH IN INCOME AND WEALTH

The proceedings of the April 1961 Conference on Income Shares and of the February 1962 Conference on Models of Income Determination are being prepared for press.

The next session will be a joint meeting with the Economic History Association to be held at Chapel Hill, North Carolina, on September 4 and 5, 1963. The Planning Committee for this meeting on Components and Sources of Output Growth, 1840-1920, consists of William N. Parker (chairman), Richard A. Easterlin, and Raymond W. Goldsmith. The papers to be presented are:

"Growth of the National Product," Robert E. Gallman, University of North Carolina.

"Relative Price Movements," Dorothy S. Brady, University of Pennsylvania.

"Distribution of the Labor Force," Stanley Lebergott, Wesleyan University.

#### *Resource Industries*

I. "Agriculture," William N. Parker, Yale University.

II. "Coal and Metallic Minerals," Orris C. Herfindahl, Resources for the Future, Inc.

III. "Petroleum," Harold F. Williamson, Northwestern University, and Ralph Andreano, Earlham College.

#### *Construction and Manufacturing*

I. "Construction," Manuel Gottlieb, University of Wisconsin, Milwaukee.

II. "Textiles," Paul F. McGouldrick, Federal Reserve Board.

III. "Machinery," Duncan McDougall and Nathan Rosenberg, Purdue University, and Ross M. Robertson, Indiana University.

IV. "Iron and Steel," Henry W. Broude, Yale University.

#### *Transport*

I. "Railroads," Albert Fishlow, University of California, and Paul H. Cootner, Massachusetts Institute of Technology.

II. "Inland Shipping," Harvey H. Segal, New York University.

III. "Ocean Shipping," Douglass C. North and Stanley Rosen, University of Washington.

Plans for a session on the Industrial Composition of Income and Product are being formulated by a committee consisting of John W. Kendrick (chairman), Jack Alterman, Martin L. Marimont, Milton Moss, and John P. Powelson.

Members of the Executive Committee are Charles F. Schwartz (chairman), Irwin Friend, Simon A. Goldberg, Raymond W. Goldsmith, George Jaszi, John W. Kendrick, John B. Lansing, Stanley Lebergott, Tibor Scitovsky, Louis Weiner, and Mildred E. Courtney (secretary).

UNIVERSITIES-NATIONAL BUREAU COMMITTEE  
FOR ECONOMIC RESEARCH

Four special-conference proceedings volumes have been published since January 1, 1962 (see list above). The Conference on Monetary Economics was held at the Carnegie Institute of Technology on April 13 and 14, 1962, with George Leland Bach of the host institution as chairman. The annual meeting of the Universities-National Bureau Committee was held in conjunction with the conference.

The Conference on Transportation Economics was held on April 26 and 27, 1963, at Northwestern University, with John R. Meyer, Harvard University, as chairman, and Leon M. Moses, of the host institution, as conference secretary.

Thirty-two universities offering graduate work in economics and emphasizing research, together with the National Bureau, are represented on the Committee. The participating universities are:

Buffalo	Daniel Hamberg
California, Berkeley	Sherman J. Maisel
California, Los Angeles	Harold M. Somers
Carnegie Institute of Technology	Kalman Cohen
Chicago	H. Gregg Lewis
Columbia	Harold Barger
Cornell	Chandler Morse
Duke	Joseph J. Spengler
Harvard	John R. Meyer
Illinois	V Lewis Bassie
Indiana	Louis Shere
Iowa State	Karl A. Fox
Johns Hopkins	Carl F. Christ
Massachusetts Institute of Technology	Albert Ando
McGill	Earl F. Beach
Michigan	William Haber
Minnesota	James M. Henderson
New School for Social Research	Hans Neisser
New York	Jules Backman
North Carolina	Henry A. Latané
Northwestern	Richard B. Heflebower
Pennsylvania	Richard A. Easterlin

Princeton  
Queen's  
Stanford  
Texas  
Toronto  
Vanderbilt  
Virginia  
Washington  
Wisconsin  
Yale

Richard A. Musgrave  
T. M. Brown  
Moses Abramovitz  
Stephen L. McDonald  
D. C. MacGregor  
Rendigs Fels  
G. Warren Nutter  
Douglass C. North  
James S. Earley  
Richard Ruggles

Other members of the Committee include Raymond T. Bowman, G. A. Elliott, Martin R. Gainsbrugh, Edgar M. Hoover, Walter S. Salant, Herbert Stein, and George J. Stigler, members at large; and Solomon Fabricant, representing the National Bureau of Economic Research.

The members of the Executive Committee are Rendigs Fels (chairman), Carl F. Christ (vice-chairman), Earl F. Beach, Solomon Fabricant, Douglass C. North, and Walter S. Salant. Robert P. Shay is secretary.

**VISITORS TO THE  
NATIONAL BUREAU**

Economists, businessmen, government officials, and students visit the National Bureau to inquire about the Bureau's methods of work, organization, and research findings. Often they come from foreign countries. During 1962, individuals visited the National Bureau from some fifteen countries: Australia, Austria, Canada, France, Great Britain, India, Japan, Norway, Pakistan, Poland, Union of South Africa, USSR, United Arab Republic, West Germany, and Yugoslavia.

**DIRECTORS, OFFICERS,  
AND RESEARCH STAFF**

At the 1963 Annual Meeting of the National Bureau T. V. Houser was elected Member at Large of the Board of Directors. Francis M. Boddy was elected a Member and Director by

Appointment of the University of Minnesota. Theodore O. Yntema was elected a Member and Director by Appointment of the Committee for Economic Development. Nathaniel Goldfinger was elected a Member and Director by Appointment of the American Federation of Labor and Congress of Industrial Organizations. Jacob Viner was elected Director Emeritus.

Officers elected for 1963 were Albert J. Hettinger, Jr., Chairman; Arthur F. Burns, President; Frank W. Fetter, Vice-President; Donald B. Woodward, Treasurer; Solomon Fabricant, Director of Research; Geoffrey H. Moore and Hal B. Lary, Associate Directors of Research; and William J. Carson, Executive Director and Secretary.

Oswald W. Knauth, a Director Emeritus, died on July 13, 1962. A memorial resolution passed by the Executive Committee stated in part:

Mr. Knauth was one of the first members of the research staff of the National Bureau and served in this capacity from 1920 until 1922. Subsequently he was elected a member of the Board of Directors and served in this capacity from 1930 until 1960, when he was elected Director Emeritus.

As a member of the research staff, he was co-author of the National Bureau's first two reports, *Income in the United States: Its Amount and Distribution, 1909-1919: I, Summary* (1921), and II, *Detailed Report* (1922); and author of *Distribution of Income by States in 1919* and of *Statistical Indexes of Business Conditions and Their Uses* (1923).

As a member of the Board of Directors, Mr. Knauth played an important part in shaping the Bureau's program of research. His practical grasp of economic issues and their importance and his ability to present them clearly and effectively made him an invaluable member of the Board and wise counselor to members of the staff.

He served for many years as a member of the Executive Committee and of the Finance Committee of the Board of Directors. He was Chairman of the Board in 1934 and 1935 and President of the Board in 1932 and 1933; he was Recording Secretary from 1920 to 1931.

Directors, officers, and members of the staff always found him helpful in considering problems on which they were working, and valued his suggestions highly. His contacts and associ-

ations with business and industry and others were helpful in advancing understanding of the National Bureau's program of research and of the importance of its findings in private and public policy-making, and in thus broadening the support of the National Bureau.

Willford I. King, a former member of the research staff, died on October 17, 1962. A memorial resolution passed by the Executive Committee stated in part:

Mr. King was one of the first members of the research staff of the National Bureau and served in this capacity from 1920 to 1930.

He was co-author of the National Bureau's first two reports, *Income in the United States: Its Amount and Distribution, 1909-1919: I, Summary* (1921), and II, *Detailed Report* (1922); co-author of *The Economic Losses Caused by Business Cycles* (1923); author of *Employment Hours and Earnings in Prosperity and Depression, United States, 1920-1922* (1923); of *Changes in Employment in the Principal Industrial Fields, January 1, 1920 to March 31, 1922* (1923); of *Trends in Philanthropy: A Study in a Typical American City* (1928); of *The National Income and Its Purchasing Power* (1930).

Mr. King's active participation in the work of the staff over the first decade of the National Bureau's history contributed greatly to the research program. His wisdom and skills always added much to the investigations in which he and other members of the staff were engaged . . . He . . . advanced the work of the National Bureau and of economics and statistics generally.

Irving Kravis, University of Pennsylvania; Victor R. Fuchs; Albert Fishlow, University of California; and Victor Zarnowitz, University of Chicago, were appointed members of the research staff. Kravis is conducting a study of comparative prices and price trends in the United States and selected foreign countries. Fuchs is exploring possible studies in productivity, structure of industry, and economic growth. Fishlow joined the staff in February 1963 to participate in the investment in education study. Zarnowitz is taking charge of the study of short-term economic forecasting.

Philip J. Bourque joined the staff on leave of absence from the University of Washington to participate in the study of comparative prices and price trends.

The custom for members of the research staff to address seminars held for the research assistants, many of whom are graduate students in economics and related subjects, was continued in 1962. These seminars, arranged by Ralph L. Nelson and Charlotte Boschan, covered such diverse subjects as unincorporated enterprise under the income tax, discrimination and the incidence of unemployment, holidays and the average work week, interpretation of survey data and testing of hypotheses, and unemployment differentials.

The National Bureau's research program benefits from the voluntary services of many individuals and groups. The Board of Directors governs its policies, selects its officers, and diligently reviews each report before publication. Several advisory committees aid in the planning of specific research projects and review the progress of the investigations. The Universities-National Bureau Committee for Economic Research and the Conference on Research in Income and Wealth plan and organize conferences, securing the cooperation of many specialists on the subjects selected. Finally, many individuals who are no longer on the research staff nevertheless undertake to revise or otherwise complete reports that will in due course be published by the National Bureau. All these collaborators, who in the aggregate far outnumber the National Bureau's own personnel, play a vital part in each year's achievement.

A note about each of the authors of National Bureau studies completed during 1962 or in process is given at the end of Part IV. Of the sixty-six individuals listed there, fifty-two are faculty members at twenty-six universities and colleges in the United States.

## **FINANCES AND SOURCES OF SUPPORT**

During 1962 the National Bureau spent \$1,139,149 on its research operations. Approximately 52 per cent of the expenditures was financed from general funds, 41 per cent from

grants for special studies, and 7 per cent from publication sales and miscellaneous sources.

Several new grants were received during the year. The National Science Foundation made a grant for a study of comparative domestic and foreign prices and price trends. The Mortgage Bankers Association, the United States Savings and Loan League, and the National Association of Mutual Savings Banks each made a grant for the study of mortgage credit quality. Several companies authorized financial support for a study of short-term forecasting.

Grants and contributions in support of the work of the National Bureau come from many sources, among them philanthropic foundations, business associations, public agencies, companies, labor organizations, and individuals. In addition, many thousands of dollars of services that do not enter its books of account are contributed to the National Bureau's work.

Philanthropic foundations whose grants supported studies planned, carried on, or completed in 1962 include the Carnegie Corporation, the Maurice and Laura Falk Foundation, the Ford Foundation, the Merrill Foundation for Advancement of Financial Knowledge, the Reim Foundation, the Rockefeller Foundation, the Rockefeller Brothers Fund, the Russell Sage Foundation, the Scherman Foundation, the Alfred P. Sloan Foundation, and the Foundation for Research in Economic Growth.

Business associations and other organizations providing funds for specific studies include the Life Insurance Association of America, the Mortgage Bankers Association, the United States Savings and Loan League, the National Association of Mutual Savings Banks, and the Commission on Money and Credit. Federal agencies that provided support for certain projects were the Board of Governors of the Federal Reserve System and the National Science Foundation. The National Committee on Government Finance, through the Brookings Institution, is cooperating with the National Bureau in sponsoring two research conferences on tax policies for economic growth.

Cash contributions and subscriptions for general support of the National Bureau's re-

search program from companies, labor organizations, individuals, libraries, and the like totaled \$303,378 in 1962, about a fourth of the total budget. In addition, several companies are aiding in the support of specific studies.

Particularly important among contributions of services in 1962 was donation of electronic computing machine time by the International Business Machines Corporation and the Socony

Mobil Oil Company, and contributions by many companies, banks, and public agencies of data and research materials for use by the National Bureau in its investigations.

Information on how to make cash contributions to the support of the National Bureau and how to obtain its publications is given on page 113. A full list of publications appears on pages 102-112.

