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NATIONAL BUREAU OF ECONOMIC RESEARCH

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june 1970

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NATIONAL BUREAU  
report



NATIONAL BUREAU OF ECONOMIC RESEARCH, INC. NEW YORK, N. Y. 10016

To mark the advent of its Fiftieth Anniversary year, the National Bureau held a reception and dinner at the Waldorf-Astoria Hotel on Friday, February 27, 1970. During the evening the Bureau was honored to receive the following message from the President of the United States:

**FIFTIETH  
ANNIVERSARY  
DINNER**

At a time when we insist more than ever that crucial economic decisions for Government and business policy be based on accurate and timely information, it is fitting to pay tribute to the research organization that has contributed so much to economic knowledge in America. So my special congratulations are addressed to the members of the National Bureau of Economic Research on your 50 remarkable years of pioneering development in economic statistics and techniques of analysis.

Your outstanding spirit of public service began with your illustrious founder, Wesley Clair Mitchell, and has continued to this day. I am pleased that my Administration has been able to draw on the talents of your former Director of Research, President and Chairman of the Board and my good friend, Arthur Burns, as well as on those of your former Director of Research, Geoffrey Moore.

It is particularly fitting that as part of your Golden Anniversary you have chosen to honor Dr. Burns who, for so many years, guided your work, and who best exemplifies the constructive contributions you have made to better government and to a sounder economy. I know that in his new and important assignment as Chairman of the Board of Governors of the Federal Reserve System, Dr. Burns will continue to bring credit to both us and your own illustrious reputations.

As I salute your past accomplishments, I particularly look upon them as evidence that you will continue to give your best efforts to the increasingly complex problems of this new decade. The need for better economic and social statistics has never been so great. And the opportunity for your members to make another distinguished mark in our nation's history is unsurpassed. I know that you will seize it enthusiastically and that America and the world will continue to benefit from your work.

*from left to right*  
*Hal B. Lary*  
*Douglas H. Eldridge*  
*Victor R. Fuchs*  
*Theodore O. Yntema*  
*Walter W. Heller*  
*John R. Meyer*  
*Wassily W. Leontief*  
*George P. Shultz*  
*Arthur F. Burns*  
*Geoffrey H. Moore*  
*Solomon Fabricant*



The Bureau was also gratified to receive the following telegram from former Vice President Hubert H. Humphrey:

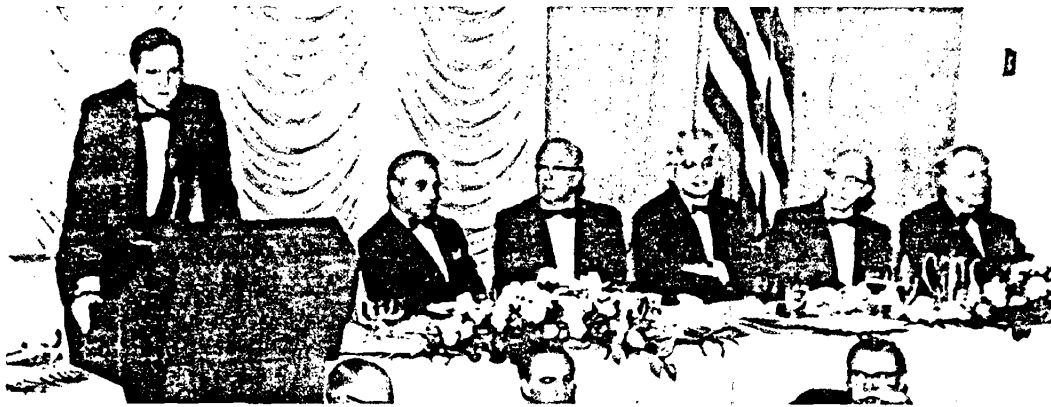
In your five decades of creative economic research, you have not only set high standards of objectivity and excellence for the economic profession but also provided many of the quantitative tools that permit economic practitioners and policy makers to ply their trade.

For these and other achievements, you deserve the country's gratitude and congratulations on your 50th Anniversary.

Both statements reflect the belief that the Bureau's research achievements have been and will continue to be in the national interest — a fact in which all who are associated with the Bureau take great pride.

Approximately five hundred guests, including prominent economists, business and Government leaders, attended the dinner. George P. Shultz, Secretary of Labor, and Wassily W. Leontief, President of the American Economic Association and Henry Lee, Professor of Economics at Harvard University, were the featured speakers of the evening. Walter W. Heller, Vice Chairman of the Bureau's Board of Directors, presided over the program, which also included remarks by Theodore O. Yntema, Chairman of the Board, and John R. Meyer, President of the Bureau.

The Fiftieth Anniversary dinner provided a unique opportunity to make known many of the contributions which the Bureau has made to Government, industry, labor, and society in general. Responsibility for many of these contributions can be traced directly to the men who guided the Bureau through much of its first half century: Wesley C. Mitchell, Arthur F. Burns, Solomon Fabricant, and Geoffrey H. Moore. Upon the death of Wesley Mitchell, in 1948, Burns, Fabricant, and Moore, at times jointly and at other times individually, guided the research program until 1968 when John R. Meyer assumed responsibility for the Bureau's direction. At the dinner, tribute was paid to Arthur Burns, who was guest of honor, and to Solomon Fabricant and Geoffrey Moore for their many contributions to the Bureau's development.



With its Fiftieth Anniversary dinner the National Bureau wished to acknowledge the contributions of all those who generously gave their time, effort, and support to the Bureau throughout its first half century of research.

The Bureau will continue the commemoration of its Fiftieth Anniversary with a series of colloquia.

The colloquia are designed to bring selected business and Government leaders together with economists for the purpose of examining policy and research issues relevant to the economic areas of particular Bureau interest and involvement: business cycles, public expenditures and taxation, finance and money markets, industrial organization, human capital, and economic growth. Papers surveying research that has been done in each of these areas, and discussing the focus of possible future research, will provide the principal basis for the colloquia discussions. The survey papers will be prepared by those listed as principal speakers in the "Calendar of Events for the Anniversary Year" (see the page that follows). Each principal speaker will begin his particular session with a brief presentation, leading directly into a discussion of policy issues and directions for future research within the area. One or two guest discussants and the audience will also participate in the discussion.

A conference entitled "The Future of Economic Research" will conclude the Anniversary celebration. Simon Kuznets, who has agreed to deliver the principal address at this conference, will focus his remarks on the directions that empirical and quantitative economic research will take in the future.

The colloquia survey papers and Dr. Kuznets' presentation will form the nucleus of an Anniversary series of publications. This series will also include volumes which review past research efforts and discuss possible future advances to be made in the area under investigation. The first book released in the Anniversary series was *The Business Cycle in a Changing World*, by Arthur F. Burns. It will soon be joined by *The Design of Economic Accounts*, by Nancy and Richard Ruggles.

FIFTIETH  
ANNIVERSARY  
YEAR

6/11/70

## COLLOQUIA SERIES

CALENDAR OF  
EVENTS FOR THE  
FIFTIETH  
ANNIVERSARY  
YEAR OF THE  
NATIONAL BUREAU  
OF ECONOMIC  
RESEARCH

Thursday, September 24, 1970  
New York, New York

Business Cycles  
Papers will be presented by Geoffrey  
H. Moore, Victor Zarnowitz, and Ilse  
Mintz, in conjunction with Yoel  
Haitovsky and Neil Wallace.

Among the topics to be covered  
will be the relative reliability of dif-  
ferent economic forecasting tech-  
niques, the behavior of prices at  
different stages of the business  
cycle, evaluation of the effective-  
ness of monetary and fiscal policy,  
and the definition of the business  
cycle under modern conditions of  
economic growth.

Friday, October 9, 1970  
Madison, Wisconsin

Public Expenditures and Taxation  
Carl S. Shoup, principal speaker

Thursday, October 22, 1970  
New York, New York

Finance and Money Markets  
John Lintner, principal speaker

Thursday, November 5, 1970  
Chicago, Illinois

Industrial Organization  
Ronald H. Coase, principal speaker

Tuesday, November 17, 1970  
Atlanta, Georgia

Human Capital  
Theodore W. Shultz, principal speaker

Thursday, December 10, 1970  
San Francisco, California

Economic Growth  
James Tobin and William Nordhaus,  
principal speakers

## CONFERENCE

Friday, April 23, 1971  
Boston, Massachusetts

The Future of Economic Research  
Simon Kuznets, principal speaker

**The Seasonal Variation of Interest Rates**

Stanley Diller

Price: \$4.50, 112 pp.

Published: April 24, 1970

NEW PUBLICATIONS

In this NBER examination of variations in interest rates, Stanley Diller finds considerable evidence of seasonal movements in both long- and short-term rates during the period 1955-60. Variations in the seasonal patterns of both money supply and government borrowing have contributed, he finds, to the rise and subsequent decline in the size of the seasonal swing.

The author demonstrates the ways in which the incidence and extent of the seasonal in Treasury bill rates are related to the seasonal amplitude of money supply and total bills outstanding. The amplitude of the seasonal pattern of money supply somewhat declined during the period of high seasonality in interest rates, pointing to an inverse relationship between the seasonal in these two variables. The seasonal amplitude of total bills outstanding varied in a manner quite similar to that of Treasury bill rates, suggesting a positive relationship between borrowing and interest rates.

**Dating Postwar Business Cycles: Methods and Their Application to Western Germany, 1950-67**

Ilse Mintz

Price \$3.75, 111 pp.

Published: April 24, 1970

Since World War II, most European economies do not seem (on the surface) to have experienced the alternate rise and fall in economic activity observed in previous times. In the United States, more than eight years have passed since the last business cycle turning point was identified by the NBER.

This study of the German economy clearly reveals that cycles, albeit milder ones, continue to manifest themselves. Ilse Mintz shows that, despite its strong upward trend, the German economy experienced three and one-half well-marked cycles in the period from 1950 to 1967.

Two different statistical techniques are applied to the twenty-one German indicators on which the study is based. One method adjusts the indicators for their long-run trends and identifies cycles in the adjusted series. The other method focuses on rates of growth and defines business cycles as alternations of periods of relatively rapid and slow growth. The two methods yield similar results which enable Mrs. Mintz to firmly establish a German business chronology from 1951 to 1967. The volume includes a discussion of the author's own methodology and the results obtained by her.

**Errors in Provisional Estimates of Gross National Product**

Rosanne Cole

Price: \$6.00, 109 pp.

Published: May 6, 1970

Policy makers in business and government rely upon estimates of gross national product in order to evaluate business conditions and predict the future course of the economy. Many of these policy makers use provisional estimates of

GNP in their forecasts because they do not have time to wait for revisions that might result in more accurate statistics.

Rosanne Cole explores the nature of the differences between provisional and revised estimates of GNP, as well as their relative accuracy. The question of whether or not revisions actually improve the accuracy of GNP estimates has not been explicitly considered in other studies. In this report, which discusses measurement error in the estimation of GNP, the author finds that each successive revision of the figures acts to improve accuracy by eliminating extrapolation errors.

In addition to examining the value of successive revisions of GNP estimates for a specific year, Miss Cole has reviewed GNP figures from 1947 to 1963, focusing on errors in estimating cyclical changes and long-term rates of growth, and the degree to which preliminary estimates have improved in accuracy during the postwar period.

This book, the latest in a series of NBER publications on short-term forecasting, also deals with errors in major components of GNP and in quarterly data, and presents an error model which illustrates the type of error GNP estimates may contain, as well as some of the properties of those errors.

#### **Home Mortgage Delinquency and Foreclosures**

John P. Herzog and James S. Earley

Price: \$7.50, 192 pp.

Delinquency and foreclosure of home mortgage loans have risen substantially since 1957, causing considerable concern among mortgage lenders. This National Bureau study evaluates the significance of various loan and borrower characteristics with regard to the increased incidence of delinquency and foreclosure.

The report uses sample data supplied by three major home mortgage holders – the Mortgage Bankers Association, The National Association of Mutual Savings Banks, and the U.S. Savings and Loan League. It is nationwide in scope and examines a total of 13,000 conventional, FHA, and VA mortgage loans made since 1946.

Herzog and Earley analyze various loan-and-borrower characteristics in order to determine their individual relationship to the risk of delinquency and foreclosure. The variables they examine include: loan purpose, the presence or absence of junior financing, loan-to-value ratio, loan type, initial maturity of loan, and borrower age and occupation.

#### **Monetary Statistics of the United States: Estimates, Sources, Methods**

Milton Friedman and Anna J. Schwartz

Price: \$15.00, 648 pp.

Together with the authors' earlier *A Monetary History of the United States, 1867-1960*, the present study forms part of what will eventually be a series of five volumes devoted to the study of the quantity of money in the United States. While the previous volume analyzed the role of changes in the money stock in the nation's history, this book provides a compendium of estimates of the quantity of money in the United States, together with a thorough treatment of the historical background, the sources of data, and the techniques for the

construction of estimates of the quantity of money at any given time.

As a preliminary to their main discussion, the authors establish a working definition of money, reviewing every major contribution to the understanding of this question, and critically examining various alternatives. In a historical survey they explore the work that has been done in the field of monetary estimates since the beginning of the Republic, evaluating, in the process, the basic source data available to modern statisticians for these early periods. The final section of the book contains the authors' estimates of the money stock, together with subsidiary series and breakdowns of deposit estimates.

#### **The Behavior of Industrial Prices**

George J. Stigler and James K. Kindahl

Price: \$7.50, 220 pp.

This unusually comprehensive study presents an entirely new kind of industrial price index based on procedures and sources of data that differ from those used by the Bureau of Labor Statistics.

While the Bureau of Labor Statistics obtains from the sellers of the products a few well-defined "typical" prices, the prices for the new index are obtained from the buyers and combine the diverse prices into one index. In short, the BLS lets the well-defined product represent the class of product, while the NBER index combines the prices paid by buyers for similar products within the class. There are other differences, too; for example, the authors, refusing to believe that there is only one price in a market at a given time, have used an average of seventeen reports per price series, compared with the two to three reports per commodity used by the BLS.

The resulting indexes were compared over the ten-year period from 1957 to 1966 for cyclical responsiveness, trend, and short-run fluctuation.

#### **The Value of Time in Passenger Transportation: The Demand for Air Travel**

Reuben Gronau

Price: \$4.00, 96 pp.

Although this study confines itself to the issue of passenger demands for air transportation, it has important implications for the more general problem of the effect of time limitations on economic behavior. The paper examines the ways in which the price of time affects the choice between air transportation and other modes of travel, as well as the related question of the various ways that differing groups estimate the value of their time. In conclusion, it considers the application of the price of time to several problems currently facing policy makers in transportation, most importantly the impact of the new supersonic plane and the increases in train speed.

Hal B. Lary and Robert E. Lipsey were elected Vice Presidents — Research by the Executive Committee of the National Bureau on February 16, 1970. The committee also elected Mrs. Joan R. Tron to the position of Director of Publications. The elections of Mr. Lary and Mrs. Tron to their new positions became effective immediately. Mr. Lipsey will assume his position July 1, 1970.

**STAFF CHANGES  
AND  
APPOINTMENTS**

**Edward K. Smith**, Chairman of the Department of Economics, Colorado State University and formerly Deputy Assistant Secretary for Economic Policy, U.S. Department of Commerce, succeeds Donald Shoup as Vice President – Research Services and Planning. Mr. Smith will join NBER in the early part of July, 1970.

**Mr. Thomas D. Flynn** was elected Treasurer of the National Bureau upon the resignation of Donald B. Woodward, at the meeting of the Board of Directors on April 27, 1970. Mr. Woodward had held the position of Treasurer since 1962. **Douglas H. Eldridge** was elected Assistant Treasurer.

**Lee S. Friedman**, now a research assistant at the National Bureau in New Haven, will be working with John Bossons and Raymond Goldsmith on joint distribution of income and wealth. Mr. Friedman, who graduated *cum laude* from Dartmouth College in 1968, is working on his doctorate in economics at Yale University.

**Mrs. Ruth LaPan** was appointed Coordinator of Support Services on April 1, 1970, following the resignation of Miss Martha Hoopman.

**Miss Beatrice Nielsen** was appointed supervisor of the Manuscript Production Department.

**STAFF ACTIVITIES** The President of the National Bureau, John R. Meyer, has recently been appointed to the research advisory committees of three organizations: National Planning Association, the American Association of Advertising Agencies, and the Committee for Economic Development. At the Yale University National Alumni meeting held in Seattle, in mid-March, John Meyer spoke on "The Social and Economic Environment." He also attended a conference on "Urban Land Economics" at the Lincoln School of Public Finance in Claremont, California. In early April, he traveled to Rome to attend the Technological Diffusion Conference and to speak at the Development Planning Center. In May, he will address a McGraw-Hill conference on capital expenditures to be held in New York City.

"Microdata, Economic Research, and the Production of Economic Knowledge" is the title of a paper presented by F. Thomas Juster at the Annual Meeting of the American Economic Association, December 27-30, 1969. Dr. Juster spoke at a session on "Basic Data for Policy and Public Decisions: Technical Aspects." At the invitation of Eastern Airlines, Dr. Juster attended their Economic Forum/Advisory Council meeting, held February 26-March 1, in San Juan, Puerto Rico. Dr. Juster was elected to the Bloomfield (New Jersey) Board of Education in February.

**Victor R. Fuchs**, Vice President – Research, has been working intensively on the economics of health, and speaks regularly on various aspects of the subject. "The Economics of Health and Medical Care" was the topic of an address Dr. Fuchs gave to the New England Hospital Assembly in October. In early November, he addressed the International Labour Office Conference in Geneva, Switzerland, on "The Role of Services in Employment Expansion in Developing Countries." At New York University, Dr. Fuchs spoke to the School of Commerce Dean's Day Program on "Economics in a Post-Industrial Society." He also served as a discussant at the American Association for the Advancement of Science Sympo-

sium in Boston on "Some Notes on the Optimum Size of Population, With Special Reference to Health." On November 10, 1969, an interview with Dr. Fuchs entitled "Let's Make Volkswagen Medicine Compulsory" was published in *Medical Economics*. Another interview on "The Economics of Health Care in the '70's" was published in the January 1, 1970, issue of *Hospitals*. Several articles written by Dr. Fuchs, Elizabeth Rand, and Bonnie Garrett have been published recently. They include: "The Manpower Gap Re-examined," in the *New England Journal of Medicine* (February 5, 1970), and "The Distribution of Earnings in Health and other Industries," in *Journal of Human Resources* (now in press).

Tax reforms and related problems have been discussed by Carl S. Shoup in the last few months. In November 1969, Dr. Shoup spoke at Dalhousie University in Halifax, Nova Scotia, on "Tax Reform in the United States." In January, he delivered an address at the International Tax Conference in Nassau, Bahamas, on "The General Problem of Tax Reform." Back in New York, Dr. Shoup has been working with John R. Meyer and John Bossons on a tax substitution research proposal, and has done preliminary work on his paper to be delivered at the NBER fall colloquium on public finance.

Hal B. Lary, Vice President - Research, attended a conference on Trade Policies in the Atlantic Area at the Ditchley Foundation in England. The conference was held December 5-8, 1969. Mr. Lary presented a paper at the first session on likely trends in trade problems and policies.

The Massachusetts Legislature and the Boston City Council invited John F. Kain to testify at committee hearings on rent control. Dr. Kain's lecture to students on "Rampant Schizophrenia, the Case of City and Regional Planning" took place at a conference on City Planning Education. At Wheaton College, Norton, Massachusetts, his subject was "Theories of Residential Location and Realities of Race." At Cornell University, Dr. Kain gave his paper (co-authored by John Quigley) on "Housing Market Discrimination, Homeownership, and Savings Behavior." He also spoke at a conference on "Research Problems and Developments in Urban Land Economics and Land Taxation." The conference was held at Claremont Men's College in California. In addition to these activities, Dr. Kain has participated in several Urban Coalition meetings on housing.

Work on transportation by Mahlon R. Straszheim has resulted in several papers which he recently presented. He spoke on "Pricing International Air Service: Oligopoly Models and the Role of State Influence" at the International Symposium on Transportation Pricing, American University, in June 1969. In October, he presented his paper, entitled "The Federal Mass Transit Capital Grant Program," at the Transportation Research Forum in Washington, D.C. At the American Economic Association meetings last December, Dr. Straszheim spoke on "Airport Congestion and its Solution: Investment, Pricing, and Scheduling Adaptations." The above papers are in mimeograph form and are available from the author by writing to the Department of Economics, Harvard University, 1737 Cambridge Street, Room 509, Cambridge, Massachusetts.

Irving Silver, a member of the Bureau's urban studies research staff, presented a paper at the Conference on Urban Land Economics (sponsored by the John C.

Lincoln Institute) at the University of Hartford in Connecticut, November 15, 1969. The paper is now in press and will be available from the author after publication.

Robert J. Gordon has made several trips from the University of Chicago to the East Coast to participate in meetings and conferences. On November 13, he spoke at Harvard University on "Theoretical Issues in Capital Goods Deflation," and on the following two days he was a discussant of a paper by L. R. Klein and G. Fromm on "Brookings Model Simulations" at the NBER conference on econometric models and business cycles. In New York, in December 1969, Dr. Gordon presented a paper on "Problems in Predicting the Rate of Inflation," and was a discussant for a paper on "Forecasting and Policy Evaluation Using Large-Scale Econometric Models," by L. R. Klein. "Labor Market Models and the Rate of Inflation" was the topic of a talk he gave at Princeton on February 26, and on March 28, Dr. Gordon participated in a meeting on econometric models at the U.S. Treasury.

"The Analysis of Tax Substitutions" was the topic of a seminar attended by John Bossons last March at the University of Western Ontario. The following day, he gave a public lecture on "The Economic Price of the White Paper Tax Reform Proposals - Is it Avoidable?" At the Canadian Tax Foundation Annual Conference, in Montreal, March 23, 1970, he presented a paper on "The Effect of Tax Rates and Allowances on the Impact of Tax Reform." Mr. Bossons was appointed Visiting Professor of Economics at Yale University for the spring semester of 1970.

Lewis Solmon, a research fellow at the National Bureau from Purdue University, has accepted a position in the department of economics at City University of New York. He will assume his new job in September 1970.

Solomon Fabricant attended a conference on industrial economics organized by the Hungarian Academy of Sciences, in Budapest, in mid-April. He delivered a paper on "Labor Productivity under American Capitalism: The Case of the United States."

**AVAILABLE PAPERS** The following papers by Bureau staff members have recently become available at the National Bureau in either reprint or mimeographed form. Kindly address requests for copies of the reprints to the Publications Department - unless otherwise specified - and to the authors for the mimeographed papers.

#### Reprints

Fuchs, Victor R., "Can the Traditional Practice of Medicine Survive?", *Archives of Internal Medicine*, Vol. 125, January 1970.

Lipsev, Robert E., and Weiss, Merle Y., "The Relation of U.S. Manufacturing Abroad to U.S. Exports: A Framework for Analysis," American Statistical Association Meeting, August 20, 1969.

Nadiri, M. I., "The Determinants of Trade Credit in the U.S. Total Manufacturing Sector," *Econometrica*, Vol. 37, No.3, July 1969.

\_\_\_\_\_, and Eisner, Robert, "Neoclassical Theory of Investment Behavior: A Comment," reprinted from *The Review of Economics and Statistics*, Vol. LII, No. 2, May 1970.

\* Shoup, Carl S., "Effect of Sales Taxation on Risk-Taking," *Finanz-und-Politik im Umbruch*, Heinz Haller and Horst Claus Recktenwald, eds., Mainz: Hase & Koehler, 1969.

\_\_\_\_\_, "Comments on the Paper by André Laurent, 'L' Harmonisation des régimes de sécurité sociale dans la Communauté Economique Europeene,'" *Finances Publiques et Sécurité Sociale*, Institut Internationale de Finances Publiques, Conference at Turin, September 1968.

\_\_\_\_\_, and Head, John G., "Public Goods, Private Goods, and Ambiguous Goods," *Economic Journal*, September 1969.

Welch, F., "Education in Production," *The Journal of Political Economy*. Vol.78, No. 1, January/February 1970.

\* Note: A limited supply of these reprints is available from the author, 512 Fayerweather, Columbia University, New York, N.Y. 10027.

#### Mimeographed Papers

Bossons, John, "Integration vs. Dividend Deductibility," October 1969.

\_\_\_\_\_, "Evaluating the Substitution of a Value-Added Tax for the Corporate Profits Tax," January 1970.

\_\_\_\_\_, "The Effect of Tax Rates and Allowances on the Impact of Tax Reform: The White Paper Proposals vs. An Alternative," March 1970.

Fiedler, Edgar R., "The Structure of Profits," Conference Board Record, March 1970.

Gordon, Robert J., "Notes on Money, Income, and Gramlich," March 1970.

\_\_\_\_\_, "The Recent Acceleration in the Rate of Inflation," April 1970.

\_\_\_\_\_, "Problems in Predicting the Rate of Inflation," April 1970.

Juster, F. Thomas, "Microdata, Economic Research, and the Production of Economic Knowledge," December 1969.

Kain, John F., "Computer Version of How a City Works," review of Jay W. Forrester's *Urban Dynamics*, *Fortune*, November, 1969.

\_\_\_\_\_, "Rampant Schizophrenia: The Case of City and Regional Planning," *Journal of the American Institute of Planners*, forthcoming.

\_\_\_\_\_, and Quigley, John M., "Measuring the Value of Housing Quality," *Journal of American Statistical Association*, June 1970.

\_\_\_\_\_, "Housing Market Discrimination, Homeownership and Savings Behavior," presented at AEA meetings and published as Harvard Program on

Regional and Urban Economics Discussion Paper No. 58. \*

\_\_\_\_\_, "Evaluating the Quality of the Residential Environment," *Environment and Planning*, Vol.2. 1969.

Straszheim, Mahlon R., "Airline Profitability, Financing, and Public Regulation," *The Transportation Journal*, Summer 1969.

\*Harvard Program on Regional and Urban Economics Discussion Papers are available from Professor Kain's office, 235 Littauer Center, Harvard University, Cambridge, Massachusetts 02138.

The reprints and mimeographed papers, listed under the name of R. A. Gordon of the University of California in the December 1969 issue of the NBER Report, were written by Robert J. Gordon of the University of Chicago. We regret the error.

**NEWS NOTES** Jimmy Hayes, the actor from the NBER manuscript department, recently returned from California, where he recreated his Off-Broadway role in the Los Angeles Production of the play, "A Black Quartet."

Members of the Staff and their associates regretfully noted the death of Mr. George Soule on April 14, 1970. He had been elected Director at Large at the Executive Committee Meeting on October 11, 1922. He served as Director at Large through March 1967. Mr. Soule was elected Director Emeritus in March 1967, served as Vice President in 1934 and 1935, as President in 1936 and 1937, and as Chairman of the Board in 1938 and 1939.

**National Bureau Report** and supplements thereto have been exempted from the rules governing submission of manuscripts to, and critical review by, the Board of Directors of the National Bureau. Each issue, however, is reviewed and accepted for publication by the Research Committee of the Bureau and a standing committee of the Board.

**National Bureau of Economic Research** is a private, nonprofit organization founded in 1920 as a center for independent and impartial economic research. In the belief that such research can contribute significantly to the sound treatment of economic problems, it has sought to conduct its activities under conditions that safeguard the scientific nature of the findings and that help make them authoritative and acceptable to persons of different interests and opinions. The National Bureau is supported in part by grants from philanthropic foundations and business associations for particular studies, in part by investment income on capital-sum grants, and in part by unrestricted contributions and subscriptions from companies, banks, labor organizations, foundations, and individuals.

Further information regarding contributions and subscriptions may be obtained from the office of the Vice President - Administration.

**OFFICERS:** Arthur F. Burns, *Honorary Chairman*; Theodore O. Yntema, *Chairman*; Walter W. Heller, *Vice Chairman*; John R. Meyer, *President*; Thomas D. Flynn *Treasurer*; Victor R. Fuchs, *Vice President - Research*; F. Thomas Juster, *Vice President - Research*; Hal B. Lary, *Vice President - Research*; Douglas H. Eldridge, *Vice President - Administration*; Joan R. Tron; *Director of Publications*.

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