

RAYM

ULNIER and NEIL H. JACOBY

# Financing Equipment For Commercial and Industrial Enterprise

Financial Research Program  
*Studies in Business Financing*

NATIONAL BUREAU OF ECONOMIC RESEARCH

**\$1.50**

**FINANCING EQUIPMENT FOR COM-  
MERCIAL AND INDUSTRIAL  
ENTERPRISE**

Mechanization of industry and competitive pressure on business to modernize equipment has led to important changes in financing techniques. One of the most striking examples of these is the growth of instalment financing of equipment purchases, described in this report.

Before the United States entered the war, instalment equipment financing had reached substantial proportions and was growing markedly. Instalment equipment receivables held at the end of 1941 are estimated at around a billion dollars.

Enterprises in the service, retail trade and manufacturing industries are extensive users of equipment financing. A wide variety of equipment is acquired on this basis. Examples are hotel, restaurant and store fixtures, equipment for barber shops, beauty shops, medical and dental offices, farm, factory and transportation equipment.

Commercial finance companies pioneered this financing method but commercial banks are now increasingly active in the field. A special survey conducted by the National Bureau of Economic Research in June 1941 indicates the extent of commercial bank participation in this type of lending.

The authors provide a detailed analysis of credit standards, characteristics of contracts, down payments, repossession practices, credit losses, etc. They find that equipment financing incorporates

**FINANCIAL RESEARCH PROGRAM OF THE  
NATIONAL BUREAU OF ECONOMIC RESEARCH**

*Studies in Business Financing* 7

# NATIONAL BUREAU OF ECONOMIC RESEARCH

---

## OFFICERS

W. L. CRUM, *Chairman*  
N. I. STONE, *President*  
C. REINOLD NOYES, *Vice-President*  
GEORGE B. ROBERTS, *Treasurer*  
W. J. CARSON, *Executive Director*  
MARTHA ANDERSON, *Editor*

## DIRECTORS AT LARGE

CHESTER I. BARNARD, *President, New Jersey Bell Telephone Company*  
DAVID FRIDAY, *Consulting Economist*  
OSWALD W. KNAUTH, *New York City*  
H. W. LAIDLER, *Executive Director, League for Industrial Democracy*  
SHEPARD MORGAN, *Vice-President, Chase National Bank*  
GEORGE B. ROBERTS, *Vice-President, National City Bank*  
BEARDSLEY RUMML, *Treasurer, R. H. Macy and Company*  
HARRY SCHERMAN, *President, Book-of-the-Month Club*  
GEORGE SOULE, *Director, The Labor Bureau, Inc.*  
N. I. STONE, *Consulting Economist*  
LEO WOLMAN, *Columbia University*

## DIRECTORS BY UNIVERSITY APPOINTMENT

E. W. BAKKE, *Yale*  
C. C. BALDERSTON, *Pennsylvania*  
W. L. CRUM, *Harvard*  
E. E. DAY, *Cornell*  
GUY STANTON FORD, *Minnesota*  
H. M. GROVES, *Wisconsin*  
CLARENCE HEER, *North Carolina*  
WESLEY C. MITCHELL, *Columbia*  
T. O. YNTEMA, *Chicago*

## DIRECTORS APPOINTED BY OTHER ORGANIZATIONS

PERCIVAL F. BRUNDAGE, *American Institute of Accountants*  
BORIS SHISHKIN, *American Federation of Labor*  
C. REINOLD NOYES, *American Economic Association*  
W. I. MYERS, *American Farm Economic Association*  
FREDERICK C. MILLS, *American Statistical Association*

## RESEARCH STAFF

WESLEY C. MITCHELL, *Director*  
MOSES ABRAMOVITZ  
ARTHUR F. BURNS  
SOLOMON FABRICANT  
MILTON FRIEDMAN  
THOR HULTGREN  
SIMON KUZNETS  
FREDERICK C. MILLS  
GEOFFREY H. MOORE  
RAYMOND J. SAULNIER  
LEO WOLMAN  
RALPH A. YOUNG

## Relation of the Directors to the Work of the National Bureau of Economic Research

---

1. The object of the National Bureau of Economic Research is to ascertain and to present to the public important economic facts and their interpretation in a scientific and impartial manner. The Board of Directors is charged with the responsibility of ensuring that the work of the Bureau is carried on in strict conformity with this object.

2. To this end the Board of Directors shall appoint one or more Directors of Research.

3. The Director or Directors of Research shall submit to the members of the Board, or to its Executive Committee, for their formal adoption, all specific proposals concerning researches to be instituted.

4. No report shall be published until the Director or Directors of Research shall have submitted to the Board a summary drawing attention to the character of the data and their utilization in the report, the nature and treatment of the problems involved, the main conclusions and such other information as in their opinion would serve to determine the suitability of the report for publication in accordance with the principles of the Bureau.

5. A copy of any manuscript proposed for publication shall also be submitted to each member of the Board. For each manuscript to be so submitted a special committee shall be appointed by the President, or at his designation by the Executive Director, consisting of three Directors selected as nearly as may be one from each general division of the Board. The names of the special manuscript committee shall be stated to each Director when the summary and report described in paragraph (4) are sent him. It shall be the duty of each member of the committee to read the manuscript. If each member of the special committee signifies his approval within thirty days, the manuscript may be published. If each member of the special committee has not signified his approval within thirty days of the transmittal of the report and manuscript, the Director of Research shall then notify each member of the Board, requesting approval or disapproval of publication, and thirty additional days shall be granted for this purpose. The manuscript shall then not be published unless at least a majority of the entire Board and a two-thirds majority of those members of the Board who shall have voted on the proposal within the time fixed for the receipt of votes on the publication proposed shall have approved.

6. No manuscript may be published, though approved by each member of the special committee, until forty-five days have elapsed from the transmittal of the summary and report. The interval is allowed for the receipt of any memorandum of dissent or reservation, together with a brief statement of his reasons, that any member may wish to express; and such memorandum of dissent or reservation shall be published with the manuscript if he so desires. Publication does not, however, imply that each member of the Board has read the manuscript, or that either members of the Board in general, or of the special committee, have passed upon its validity in every detail.

7. A copy of this resolution shall, unless otherwise determined by the Board, be printed in each copy of every National Bureau book.

*(Resolution adopted October 25, 1926, and Revised  
February 6, 1933 and February 24, 1941)*

## Financial Research Program: Committee

---

In the conduct of this and other studies under its program of research in finance the National Bureau of Economic Research has benefited from the advice and guidance of its Committee on Research in Finance. The functions of this committee are to review and supervise the specific research plans of the staff of the Financial Research Program.

**RALPH A. YOUNG**, Chairman pro tempore—*University of Pennsylvania; Director, Financial Research Program*

**RAYMOND J. SAULNIER**, Secretary—*Barnard College, Columbia University; Research Staff, National Bureau of Economic Research*

**WILLIAM J. CARSON**—*University of Pennsylvania; Executive Director, National Bureau of Economic Research*

**DAVID FRIDAY**—*Consulting Economist; Director, National Bureau of Economic Research*

**E. A. GOLDENWEISER**—*Director, Division of Research and Statistics, Board of Governors of the Federal Reserve System*

**F. CYRIL JAMES**—*Principal and Vice Chancellor, McGill University*

**WALTER L. MITCHELL, JR.**—*Director of Surveys, Research and Statistical Division, Dun & Bradstreet, Inc.*

**WESLEY C. MITCHELL**—*Columbia University; Director of Research, National Bureau of Economic Research*

**SHEPARD MORGAN**—*Vice-President, Chase National Bank; Director, National Bureau of Economic Research*

**WOODLIEF THOMAS**—*Assistant Director, Division of Research and Statistics, Board of Governors of the Federal Reserve System*

**DONALD S. THOMPSON**—*Chief, Division of Research and Statistics, Federal Deposit Insurance Corporation*

**ROBERT B. WARREN**—*Institute for Advanced Study*

**JOHN H. WILLIAMS**—*Dean, Littauer School, Harvard University; Vice-President, Federal Reserve Bank of New York*

**LEO WOLMAN**—*Columbia University; Research Staff, National Bureau of Economic Research*

**DONALD B. WOODWARD**—*Research Assistant to the President, Mutual Life Insurance Company of New York*

RAYMOND J. SAULNIER and NEIL H. JACOBY

FINANCING EQUIPMENT  
FOR COMMERCIAL AND  
INDUSTRIAL ENTERPRISE

Financial Research Program

*Studies in Business Financing*, 5

NATIONAL BUREAU OF ECONOMIC RESEARCH

**COPYRIGHT, 1944, BY NATIONAL BUREAU OF ECONOMIC RESEARCH, INC.  
1819 BROADWAY, NEW YORK 1, N. Y. ALL RIGHTS RESERVED**

**PRINTED IN THE UNITED STATES OF AMERICA BY  
THE HADDON CRAFTSMEN, INC., SCRANTON, PENNA.**





## *Preface*

THE BUSINESS FINANCING PROJECT, of which this study is a part, is the second major investigation to be initiated under the National Bureau's Financial Research Program, with the support of grants from the Association of Reserve City Bankers and the Rockefeller Foundation. Work on the project began early in 1940, with three major objectives: first, to trace from business accounting records the structural and cyclical changes that have occurred in the financial organization of business enterprise since the turn of the present century; second, to determine the cross-sectional pattern for recent years of business credit demands; and third, to describe the adaptations that financing institutions providing short- and medium-term credit have made over the past decade in response to changing demands for their services.

Research activities have been carried on under two main divisions: one, entitled "Changes in the Financial Structure of Business Enterprise, 1900-1940," is concerned primarily with the first objective; the other, "Contemporary Relations between Business Enterprise and Financial Institutions," is devoted specifically to the second and third objectives. Under each division a number of technical studies have been developed from special primary materials, the findings of which are to be the basis of broader interpretive studies. Under the second division of the project, two of the technical studies, *Term Lending to Business*, and *Accounts Receivable Financing*, have already been published. The present volume, *Financing Equipment for Commercial and Industrial Enterprise*, will be followed by a study covering business loans made on the security of field warehouse receipts.

Each of the four investigations of special lending techniques has a common pattern of treatment: (a) development of the financing technique; (b) size and organization of the market; (c) charac-

teristics of the credit services; (d) methods of credit extensions; and (e) income, costs and profitability. Their preparation has required extensive interviews with officers of specialized financing agencies and commercial banks in the main lending centers east of the Mississippi; their statistical basis has been provided by special tabulations and questionnaire replies prepared by financial institutions representative of all regions of the country. We wish to acknowledge our obligation to these officers for their generous help, as well as to the financial agencies that cooperated in supplying special statistical information. The present study has gained much, also, from the cooperation of some 150 manufacturers of commercial and industrial equipment who responded to a detailed questionnaire concerning their instalment selling activities.

The changing demands of business for short- and medium-term credit have produced two major types of adaptations on the supply side of the business financing market. The first of these is the marked change that has come about in the lending policies and techniques of commercial banks; the second is the growth of non-bank lending agencies specially organized to meet these newer credit needs. The rapidity with which these adaptations have been made is perhaps responsible for the fact that little is known of their character and extent; whatever the reason, it seems clear that there is inadequate understanding of recent changes in the functioning of commercial banks as business financing agencies, and still less understanding of the part played by non-bank agencies in the business credit market.

The financing of instalment purchases of income-producing equipment is one of the most interesting of these developments in lending practices, both because it represents a new activity for commercial banks and because it is an area in which non-bank agencies have played a major role. The purpose of this study is to trace the development of the financing technique; to discuss its practice by both banks and commercial finance companies, to show the characteristics of the business enterprises using this method of financing, and to describe its procedures and operating results.

RALPH A. YOUNG

December, 1943

*Director, Financial Research Program*

## *Authors' Acknowledgments*

THE AUTHORS HAVE BEEN ASSISTED in the conduct of this study by a considerable number of people, all of whom have given most generously of their time and experience. Chief among these are Ralph A. Young, Director of the Financial Research Program, and Winfield W. Riefler of the Institute for Advanced Study, who participated in the planning of the study and followed its development with close attention. Their knowledge of the field of finance and of financial research methods has been a major support on which the authors have leaned heavily at all times. It is a pleasure to acknowledge this obligation and to express our gratitude, not only for their technical counsel but also for the personal encouragement they have given us at every stage of the investigation. Stanley L. Miller, formerly a member of the staff of the Financial Research Program, collected a substantial part of the data, participated in field interviews and prepared drafts for several sections of the manuscript. The authors are pleased to acknowledge with gratitude Mr. Miller's contributions to the study.

The officers of a large number of banks and commercial finance companies contributed to the investigation in two important ways; first, by providing special statistical tabulations and answering questionnaires concerning their equipment financing activities and, second, by giving the authors, through lengthy interviews, the benefit of their intimate knowledge of the problems and techniques of this special financing procedure. Without their cooperation it would have been impossible satisfactorily to complete the investigation. The authors wish to take this opportunity to express their sincere appreciation.

We wish also to express our thanks to the staffs of the National Credit Office, Inc., and Dun & Bradstreet, Inc., for assistance in assembling information at various points in the study. Members

*Authors' Acknowledgments*

of the examining division of the Office of the Comptroller of the Currency, the Board of Governors of the Federal Reserve System, the Federal Reserve Bank of New York and the Federal Deposit Insurance Corporation have discussed certain aspects of equipment financing with the authors and we are very grateful to them for their generous assistance.

Editorial responsibility for the manuscript has been carried with great skill by Lorine Pruette, assisted by Renée S. Courtney. The authors wish to express to both their very sincere appreciation for the many contributions they have made to the organization of the study and the readability of the text.

**RAYMOND J. SAULNIER**

*Financial Research Program  
and*

*Barnard College, Columbia University*

**NEIL H. JACOBY**

*Financial Research Program  
and*

*University of Chicago*

## *Table of Contents*

PREFACE	vii
AUTHORS' ACKNOWLEDGMENTS	ix
LIST OF TABLES	xii
LIST OF CHARTS	xiii
SUMMARY OF FINDINGS	1
1. DEFINITION OF EQUIPMENT FINANCING	(10-14)
Distinguishing Features of Equipment Financing	11
Types of Equipment Financing Arrangements	12
2. DEVELOPMENT OF EQUIPMENT FINANCING	(15-26)
3. QUANTITATIVE MEASURES	(27-44)
Commercial Finance Companies	28
Commercial Banks	30
Life Insurance Companies	36
Manufacturers and Distributors	40
4. EQUIPMENT FINANCING MARKET	(45-55)
Types of Equipment Financed	45
Types of Concerns Acquiring Equipment on an Instalment	
Payment Basis	49
Sources of Instalment Equipment Receivables	52
5. CHARACTERISTICS OF CREDITS	(56-71)
Face Amount of Contracts	57

Down Payment Provisions	59
Term of Contract	61
Repayment Provisions	62
Instalment Equipment Credit Extended by Commercial Banks	64
Additional Services Offered by Financing Agencies	69
<b>6. OPERATING METHODS, CHARGES AND CREDIT EXPERI- ENCE</b>	<b>(72-84)</b>
Credit Analysis and Standards	72
Equipment as Collateral Security	72
The Vendor of Equipment	74
The Buyer of Equipment	75
Supervision of Accounts	76
Establishment of Lien	77
Recourse Arrangements	78
Customer Charges	80
Credit Experience	82
<b>7. EQUIPMENT FINANCING: AN ADAPTATION IN LENDING PRACTICE</b>	<b>(85-89)</b>
<b>APPENDIX A—QUESTIONNAIRE SURVEY</b>	<b>(90-91)</b>
<b>INDEX</b>	<b>(92-93)</b>

### *List of Tables*

1. Commercial Banks Participating in Equipment Financing, 1941	31
2. Instalment Equipment Paper in Amount, and as a Percent of Total Loans, as of Mid-1941, by Deposit Size of Bank, Size of Population Center and Region in Which Bank is Located	34
3. Instalment Equipment Loans in Amount, and as a Percent of Total Loans, as of Mid-1941, by Deposit Size of Bank, Size of Population Center and Region in Which Bank is Located	35
4. Instalment Equipment Financing by Reporting Commercial Banks and Estimates for All Commercial Banks, at End of 1940	37
5. Number of Manufacturing Companies Reporting Instalment Sales and Non-Instalment Sales, by Type of Product	41
6. Percentage Distribution of Note Holdings of a Commercial Finance Company, 1936, 1938-40, by Type of Equipment Financed	48

**Table of Contents**

**xiii**

7. Total Number of Reporting Concerns and Percent Using Equipment Financing Facilities, by Main Industry Groups, Size of Concern and Credit Rating	51
8. Contract Amounts in Equipment Financing, by Type of Equipment	57
9. Average Amount of Direct Equipment Loans Made by Commercial Banks, by Deposit Size of Bank, Size of Population Center and Region in Which Bank is Located	67
10. Average Amount of Commercial Bank Equipment Loan Balances of Manufacturers and Distributors, by Deposit Size of Bank, Size of Population Center and Region in Which Bank is Located	68

**List of Charts**

1. Approximate Percentage of Banks Engaged in Equipment Financing, by Class of Bank	33
2. Percent of Concerns in Specified Industry, Size and Credit-Rating Classes Using Equipment Financing Facilities	53
3. Average Amount of Commercial Bank Equipment Loan Balances of Buyers and of Manufacturers and Distributors, by Class of Bank	66

# A

## *Questionnaire Survey*

IN AN EFFORT TO DETERMINE the frequency with which commercial banks of different sizes and locations participated in instalment equipment financing, and to determine the quantitative importance of this type of financing, the National Bureau of Economic Research conducted a questionnaire survey of a sample of about 800 insured commercial banks in the late summer of 1941. The banks included in the sample were selected in the following manner from the list of 13,492 banks with deposits insured by the Federal Deposit Insurance Corporation as of August 1, 1941. All banks were grouped and coded according to the size of the center of population in which the bank's main office was located, as follows: banks in centers of population of less than 10,000; 10,000 to 50,000; 50,000 to 100,000; 100,000 to 500,000; 500,000 and over. A questionnaire was sent to every 36th bank of those located in centers of population of less than 10,000, to every 9th bank in cities of from 10,000 to 50,000 population and to every 3rd bank of those remaining. This produced a total sample of approximately 800 banks; of these, 274 returned questionnaires that proved usable for tabulation. Banks were grouped and sampled in this fashion because there was reason to believe, as was borne out by the results of the survey, that equipment financing is conducted more frequently in the larger cities than in smaller places. Since costs prohibited sampling all banks with equal intensity it was decided to strengthen the survey for those banks believed to be most active in this type of financing.

Of the 274 banks that returned usable questionnaires 183 were not engaged in equipment financing. This fact itself suggests that the survey results are not biased by any significant tendency for only those banks engaging in this type of financing to return questionnaires. Furthermore, the 274 returns represent rather substantial proportions of all banks in the more important groups. Thus, while we had returns from only 1 out of every 143 banks in centers of population of less than 10,000 we had returns from 1 out of every 32 banks in cities of from 10,000 to 50,000 population and from 1 out of every 6 banks in all cities with population of 50,000 and over. The approximate percentages of the number of banks of different deposit sizes covered was as follows: .7 percent of banks with deposits of \$1 million or less; 3 percent of banks with deposits of \$1 million to \$5 million; 15 percent of banks with deposits of \$5 million to \$50 million; 66 percent of all banks with deposits of over \$50 million. Finally, the regional coverage of the survey varied from 1 out of every 23 banks in the Pacific states to 1 out of every 138 banks in



the West South Central states. Data on all banks which were used in taking these ratios of responding banks to all banks are from the *Annual Report* of the Federal Deposit Insurance Corporation for the year ending December 31, 1940, pp. 116-17 and 164-65.

While there are certain types of banks which were represented in the sample only in very small proportions, the total sample represents the replies of banks doing a substantial part of the total commercial lending business of the country. As is shown in Table 4 of the text, the total loans and discounts of the banks responding to our questionnaire amounted to approximately 16 percent of the total loans and discounts of all insured commercial banks. In this same table it is shown that banks with deposits of over \$50 million accounted for 50 percent of all instalment equipment financing conducted by commercial banks and that our sample covered 25 percent of the total loans and discounts of banks in this size class.

The questionnaire which was distributed to banks consisted of the following questions:

1. Do you at the present time engage in *financing manufacturers or distributors selling* industrial or commercial equipment by acquiring from them instalment paper arising from the sale of such equipment?
  - (a) ("Yes" or "No") \_\_\_\_\_
  - (b) If "Yes," state the *number of sellers of such equipment* which you are now financing in this way. \_\_\_\_\_
  - (c) If "Yes," state the *approximate total amount of your outstanding advances* secured by such commercial or industrial equipment.  
\$ \_\_\_\_\_ as of \_\_\_\_\_ (a recent date)
2. Do you at the present time engage in *financing business concerns purchasing* industrial or commercial equipment by making instalment loans to these purchasers, secured by such equipment?
  - (a) ("Yes" or "No") \_\_\_\_\_
  - (b) If "Yes," state the *number of business concerns* which you are now financing in this way. \_\_\_\_\_
  - (c) If "Yes," state the *approximate total amount of your outstanding advances* secured by such equipment.  
\$ \_\_\_\_\_ as of \_\_\_\_\_ (a recent date)

## *Index*

- AMERICAN BUSINESS CREDIT CORPORATION**—28, 29.  
**ANCILLARY SERVICES**—20, 69-71.  
**ACCOUNTS RECEIVABLE FINANCING**—86.
- BANKERS COMMERCIAL CORPORATION**—28, 29.  
**BUYER**—Credit Appraisal of, 75-76.
- CERTIFICATE OF COMPLETION**—73.  
**CHARGES**—80-82.  
**COLLATERAL SECURITY**—72-74.  
**COMMERCIAL BANK EQUIPMENT FINANCING**—24-25; Volume Estimates, 30-36; Frequency of, 30-35; Relative Importance of, 35-36.  
**COMMERCIAL BANKS**—Instalment Equipment Loans by, 64-67; Discounting of Contracts by, 67-69.  
**COMMERCIAL CREDIT COMPANY**—28, 47-48.  
**COMMERCIAL INVESTMENT TRUST CORPORATION**—28.  
**COMPETITIVE RELATIONSHIPS**—89-90.  
**CONTRACTS**—Face Amount, 57-59; Down Payment Provisions, 59-61; Term, 61-62; Repayment Provisions, 62-64.  
**CONTRACT LENGTH**—61-62.  
**CREDIT APPRAISAL**—16, 72-76.  
**CREDIT LINE**—75.  
**CREDIT LOSSES**—82-84.  
**CREDIT UTILITY COMPANY, INC.**—28, 29.  
**CUSTOMERS' RESERVE**—79-80.
- DISTRIBUTORS**—Equipment Financing by, 42-43.  
**DOWN PAYMENTS**—59-61.  
**DUN AND BRADSTREET, INC.**—16, 50-52.
- EQUIPMENT**—Types Financed, 45-48.  
**EQUIPMENT FINANCING**—Definition of, 10-11; Distinguishing Features, 11-12; Types of, 12-13; Technological Change and, 15-16; Development, 15-17; Estimates of Volume, 27-44; Concerns Using, 49-52; As Adaptation of Lending Practice, 85-87; Adaptability to Small Business Needs, 88.
- EQUIPMENT FINANCING ACCOUNTS**—Supervision of, 76-77.  
**EQUIPMENT FINANCING AGENCIES**—Development of, 17-20.  
**EQUIPMENT TRUST CERTIFICATES**—12, 36, 87.
- FACE AMOUNTS OF CONTRACTS**—57-59.  
**FEDERAL DEPOSIT INSURANCE CORPORATION**—91.  
**FINANCE COMPANY OF AMERICA AT BALTIMORE**—28, 29.
- GENERAL MOTORS ACCEPTANCE CORPORATION**—28.
- HELLER, WALTER E., AND COMPANY**—28, 29.
- INSTALMENT EQUIPMENT SALES**—By Classes of Manufacturers, 40-42.  
**INSURANCE**—80-81.
- JACOBY, NEIL H.**—14n, 38n, 39n.  
**JEROME, HARRY**—16n.
- KAYSEN, CARL**—50n.
- LEWIS, H. B.**—47-48, 59n.  
**LIEN**—Establishment of, 77-78.  
**LIFE INSURANCE COMPANIES**—Estimates of Financing Volume, 36-40.
- MANUFACTURER AND DISTRIBUTOR**—Credit Appraisal of, 74-75.

*Index*

93

MANUFACTURERS—Estimates of Financing Volume by, 40-42.

MANUFACTURERS' FINANCING SUBSIDIARIES—19-20, 25.

MASS FINANCING—87.

MITCHELL, W. L., JR.—16n.

RATE QUOTATIONS—Form of, 80-82.

RECOURSE—74-75, 78-80.

REPAYMENT SCHEDULES—62-64.

REPOSSESSION—73-74.

SAULNIER, R. J.—14n, 38n, 39n.

SOURCES OF FINANCING—52-55.

TERM LENDING—13-14.

VOLUME ESTIMATES—Summary, 43-44.

**SOME RECENT BOOKS PUBLISHED BY THE  
NATIONAL BUREAU OF ECONOMIC RESEARCH**

**CONFERENCE ON RESEARCH IN FISCAL POLICY**

FISCAL PLANNING FOR TOTAL WAR (1942)  
*W. L. Crum, J. F. Fennelly, L. H. Seltzer* 361 pp., \$3.00

**FINANCIAL RESEARCH PROGRAM**

9 CONSUMER INSTALMENT CREDIT AND ECONOMIC FLUCTUATIONS (1942)  
*Gottfried Haberler* 230 pp., \$2.50

**III STUDIES IN BUSINESS FINANCING**

TERM LENDING TO BUSINESS (1942)  
*Neil H. Jacoby and R. J. Saulnier* 163 pp., \$2.00

FINANCING SMALL CORPORATIONS IN FIVE MANUFACTURING INDUSTRIES, 1926-36  
(1942)

*Charles L. Merwin* 172 pp., \$1.50

ACCOUNTS RECEIVABLE FINANCING (1943)  
*R. J. Saulnier and Neil H. Jacoby* 157 pp., \$2.00

THE FINANCING OF LARGE CORPORATIONS, 1920-39 (1943)  
*Albert R. Koch* 141 pp., \$1.50

FINANCING EQUIPMENT FOR COMMERCIAL AND INDUSTRIAL ENTERPRISE (1943)  
*R. J. Saulnier and Neil H. Jacoby* 95 pp., \$1.50

FINANCING INVENTORY ON FIELD WAREHOUSE RECEIPTS (1943)  
*Neil H. Jacoby and R. J. Saulnier* (in press)

**CONFERENCE ON PRICE RESEARCH**

COST BEHAVIOR AND PRICE POLICY (1943)  
*Committee on Price Determination* 353 pp., \$3.00

**CONFERENCE ON RESEARCH IN INCOME AND WEALTH**

**STUDIES IN INCOME AND WEALTH**

Vol. IV: OUTLAY AND INCOME IN THE UNITED STATES, 1921-1938 (1942)  
*Harold Barger* 391 pp., \$2.50

Vol. V: INCOME SIZE DISTRIBUTIONS IN THE UNITED STATES,  
PART I (1943) 131 pp., \$1.00

**OTHER NATIONAL BUREAU BOOKS IN PRINT**

10 BUSINESS CYCLES: THE PROBLEM AND ITS SETTING (1927)  
*Wesley C. Mitchell* 489 pp., \$5.00

24 STRATEGIC FACTORS IN BUSINESS CYCLES (1934)  
*J. Maurice Clark* 238 pp., \$1.50

25 GERMAN BUSINESS CYCLES, 1924-1933 (1934)  
*C. T. Schmidt* 288 pp., \$2.50

26 INDUSTRIAL PROFITS IN THE UNITED STATES (1934)  
*R. C. Epstein* 678 pp., \$5.00

27 MECHANIZATION IN INDUSTRY (1934)  
*Harry Jerome* 484 pp., \$3.50

29 PUBLIC WORKS IN PROSPERITY AND DEPRESSION (1935)  
*A. D. Gayer* 460 pp., \$3.00

30 EBB AND FLOW IN TRADE UNIONISM (1936)  
*Leo Wolman* 251 pp., \$2.50

- 31 PRICES IN RECESSION AND RECOVERY (1936)  
*Frederick C. Mills* 561 pp., \$4.00
- 32 NATIONAL INCOME AND CAPITAL FORMATION, 1919-1935 (1937)  
*Simon Kuznets* 100 pp., 8 $\frac{1}{4}$  x 11 $\frac{3}{4}$ , \$1.50
- 33 SOME THEORETICAL PROBLEMS SUGGESTED BY THE MOVEMENTS OF INTEREST RATES,  
BOND YIELDS AND STOCK PRICES IN THE UNITED STATES SINCE 1856 (1938)  
*F. R. Macaulay* 586 pp., \$5.00  
The Social Sciences and the Unknown Future, a reprint of the introductory chapter to Dr. Macaulay's volume: 35 cents; in orders of 10 or more, 25 cents.
- 37 THE INTERNATIONAL GOLD STANDARD REINTERPRETED, 1914-1934 (1940)  
*William Adams Brown, Jr.* 2 vol., 1420 pp., \$12.00
- 38 RESIDENTIAL REAL ESTATE, ITS ECONOMIC POSITION AS SHOWN BY VALUES, RENTS,  
FAMILY INCOMES, FINANCING, AND CONSTRUCTION, TOGETHER WITH ESTIMATES FOR  
ALL REAL ESTATE (1941)  
*D. L. Wickens* 320 pp., 8 $\frac{1}{4}$  x 11 $\frac{3}{4}$ , \$3.50
- 39 THE OUTPUT OF MANUFACTURING INDUSTRIES, 1899-1937 (1940)  
*Solomon Fabricant* 700 pp., \$4.50
- 40 NATIONAL INCOME AND ITS COMPOSITION, 1919-1938 (1941)  
*Simon Kuznets* 2 vol., 980 pp., \$5.00
- 41 EMPLOYMENT IN MANUFACTURING, 1899-1939: AN ANALYSIS OF ITS RELATION TO  
THE VOLUME OF PRODUCTION (1942)  
*Solomon Fabricant* 370 pp., \$3.00
- 42 AMERICAN AGRICULTURE, 1899-1939: A STUDY OF OUTPUT, EMPLOYMENT AND  
PRODUCTIVITY (1942)  
*Harold Barger and Hans H. Landsberg* 435 pp., \$3.00

---

NATIONAL BUREAU OF ECONOMIC RESEARCH

1819 Broadway, New York, N. Y.

European Agent: Macmillan & Co., Ltd.,

St. Martin's Street, London, W.C.2

one of the now well-established principles of medium-term credit—repayment of debt on a prescheduled basis out of a flow of income as earned.

Of special interest at this time is the potential usefulness of this financing method in the postwar period, when industrial concerns of all sizes will be faced with problems of reconversion and commercial establishments will need to replace and modernize equipment.

95 pp.

10 Tables

3 Charts

---

### *The Authors*

Raymond J. Saulnier is Assistant Professor of Economics at Barnard College, Columbia University. He is the author of "Contemporary Monetary Theory" and "Industrial Banking Companies and Their Credit Practices," the latter one of the studies in Consumer Instalment Financing published by the National Bureau of Economic Research. Dr. Saulnier has been a member of the Financial Research Staff of the National Bureau since 1938.

Neil H. Jacoby is the Secretary of the University of Chicago and Professor of Finance in the School of Business. He was formerly engaged in investment banking in Chicago. As a member of the Illinois State Department of Finance he had charge of drafting the rules and regulations for the state sales tax. He is the author of "Retail Sales Taxation" and widely known as a participant in the University of Chicago Round Table. Dr. Jacoby has been associated with the Financial Research Program of the National Bureau of Economic Research since February 1940.

# **STUDIES**

**in**

## **BUSINESS FINANCING**

Early in 1940 the National Bureau of Economic Research, as part of its Financial Research Program, began the study of changes in the financial structure and behavior of American business since the beginning of the century. This study, known as the Business Financing Project, has been conducted under grants from the Association of Reserve City Bankers and the Rockefeller Foundation.

**FINANCING EQUIPMENT FOR COMMERCIAL AND INDUSTRIAL ENTERPRISE** is the third of four volumes prepared by Dr. Raymond J. Saulnier and Dr. Neil H. Jacoby, as part of the National Bureau's series, *Studies in Business Financing*. Two of these studies, **TERM LENDING TO BUSINESS** and **ACCOUNTS RECEIVABLE FINANCING** have been released. The fourth volume, **FINANCING INVENTORY ON FIELD WAREHOUSE RECEIPTS**, is to follow. Other studies include *The Financing of Large Corporations*, by Dr. Albert R. Koch, and *Financing Small Corporations*, by Dr. Charles L. Merwin.