

NEIL H. JACOBY and RAYMOND J. SAULNIER

# Term Lending to Business

X: 6.73.N4

H2

61768

Financial Research Program  
*Studies in Business Financing*

NATIONAL BUREAU OF ECONOMIC RESEARCH

### ***Term Lending to Business***

This volume is an account of an important development in the financing of business. In 1934 term loans were insignificant as bank assets; by 1940 they had increased to major proportions. By 1942 term loans were playing an important part in the financing of war production.

Term loans fall within the medium-term credit market, defined as including credits of from one to fifteen years' duration. Commercial banks, life insurance companies, the Reconstruction Finance Corporation, and the Federal Reserve banks serve this market.

*Term Lending to Business* makes a critical examination of term lending, its market, the credit standards and practices relevant to it, its use by borrowers, and its problems for lending institutions.

### ***Studies in Business Financing***

*Term Lending to Business* is the first in a new series on 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.

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

*Studies in Business Financing, 1*

# NATIONAL BUREAU OF ECONOMIC RESEARCH

---

## OFFICERS

W. LEONARD CRUM, *Chairman*  
N. I. STONE, *President*  
C. REINOLD NOYES, *Vice-President*  
SHEPARD MORGAN, *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, *President, Associated Dry Goods Corporation*  
H. W. LAIDLER, *Executive Director, League for Industrial Democracy*  
SHEPARD MORGAN, *Vice-President, Chase National Bank*  
GEORGE E. ROBERTS, *Economic Adviser, National City Bank*  
BEARDSLEY RUMI, *Treasurer, R. H. Macy and Company*  
STANLEY RUTTENBERG, *Economic Division, Congress of Industrial Organizations*  
HARRY SCHERMAN, *President, Book-of-the-Month Club*  
GEORGE SOULE, *Director, The Labor Bureau, Inc.*  
N. I. STONE, *Consulting Economist*

## DIRECTORS BY UNIVERSITY APPOINTMENT

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

## DIRECTORS APPOINTED BY OTHER ORGANIZATIONS

PERCIVAL F. BRUNDAGE, *American Institute of Accountants*  
SPENCER MILLER, JR., *American Federation of Labor*  
C. REINOLD NOYES, *American Economic Association*  
WINFIELD W. RIEFLER, *American Statistical Association*

## RESEARCH STAFF

WESLEY C. MITCHELL, <i>Director</i>	
MOSES ABRAMOVITZ	FREDERICK R. MACAULAY
ARTHUR F. BURNS	FREDERICK C. MILLS
SOLOMON FABRICANT	GEOFFREY H. MOORE
MILTON FRIEDMAN	RAYMOND J. SAULNIER
THOR HULTGREN	LEO WOLMAN
SIMON KUZNETS	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. The membership includes:

- WINFIELD W. RIEFLER, Chairman—*Institute for Advanced Study*  
RALPH A. YOUNG, Secretary—*University of Pennsylvania; Director, Financial Research Program*  
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 and Bradstreet, Inc.*  
WESLEY C. MITCHELL—*Columbia University; Director of Research, National Bureau of Economic Research*  
SHEPARD MORGAN—*Vice-President, Chase National Bank; Treasurer, National Bureau of Economic Research*  
RAYMOND J. SAULNIER—*Barnard College, Columbia University; Research Staff, 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—*Littauer School, Harvard University; Vice-President, Federal Reserve Bank of New York*  
LEO WOLMAN—*Columbia University; Research Staff, National Bureau of Economic Research*  
DONALD WOODWARD—*Research Assistant to the President, Mutual Life Insurance Company of New York*

NEIL H. JACOBY and RAYMOND J. SAULNIER

TERM  
LENDING TO  
BUSINESS

Financial Research Program

*Studies in Business Financing*, 1

NATIONAL BUREAU OF ECONOMIC RESEARCH

**COPYRIGHT, 1942, BY NATIONAL BUREAU OF ECONOMIC RESEARCH, INC.  
1319 BROADWAY, NEW YORK, N. Y. ALL RIGHTS RESERVED**

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



## *Preface*

EARLY IN 1940 the National Bureau of Economic Research, under its Financial Research Program, inaugurated a series of technical studies of the financing of American business. Research activities were supported by grants from the Association of Reserve City Bankers and the Rockefeller Foundation. *Term Lending to Business* is the first publication of the Business Financing Project.

The objectives of this project have been threefold: 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.

Work on these objectives was organized into two divisions, one entitled "Changes in the Financing of American Business Enterprise, 1900-1940," concerned primarily with the first objective; the other division, "Contemporary Relations Between Business Enterprise and Financial Institutions," devoted specifically to the second and third objectives.

The collection and analysis of many primary materials has been required for each of the project's divisions, and has made necessary the preparation of a number of special technical studies. Two volumes are now being prepared, on the basis of findings in the technical studies, to provide a broad analysis of the results of the investigation. This volume is one of five technical studies developed under the second division

of the work. Others to be published later will deal with the market pattern of business credit, accounts receivable financing, field warehousing, and instalment financing of commercial and industrial equipment.

Despite the number of institutions now supplying funds to business concerns, and the variety of methods which they employ, a good deal of the literature on banking, including most of the textbooks used in American universities, fails to give an accurate and realistic treatment of the structure and functioning of the supply side of the market for short- and medium-term business credits. In part, this is due to the rapidity with which the market structure has changed. Consequently, the five technical studies mentioned above may be viewed collectively as contributing to our knowledge of major adaptations that the banking system has in recent years made to the changed demands of business for credit.

One of the more important and well-recognized of the adaptations made during the past decade is the term loan. The purpose of this study is to trace the development of this type of business credit, to describe the characteristics of the market wherein term loans are made, to state and appraise the methods whereby lenders seek to limit their risks, and to analyze factors affecting the position of such credits in the American economy. In addition to published financial information, data were secured by Dr. Jacoby and Dr. Saulnier through personal interviews with a large number of loan officers of lending agencies in leading financial centers of the United States and officials of bank supervisory agencies, and through the circulation of a detailed statistical questionnaire dealing with the characteristics of medium-term credit among banks whose officers have memberships in the Association of Reserve City Bankers and among a group of large life insurance companies.

The cooperation that the collaborators have received from officers of commercial banks, insurance companies, Dun and Bradstreet, Inc., the Board of Governors of the Federal Reserve System, the Federal Reserve Banks of New York,

*Preface*

ix

Philadelphia and Chicago, the Federal Deposit Insurance Corporation, the Office of the Comptroller of the Currency, and the Reconstruction Finance Corporation has been cordial and helpful. We are deeply indebted to the officials and to the agencies represented for the information and materials that they so generously provided. Without such assistance, this study would have been much less comprehensive and adequate.

One of the authors of this study, Dr. Neil H. Jacoby served as a member of the research staff of the National Bureau of Economic Research on leave of absence generously granted by the University of Chicago. The National Bureau takes this opportunity to express its appreciation to the University of Chicago.

RALPH A. YOUNG

*Director, Financial Research Program*

July 1942

## *Authors' Acknowledgments*

FIRST AMONG THE MANY ACKNOWLEDGMENTS that the authors gladly make to persons who contributed to the formulation and conduct of this study are those to Ralph A. Young, Director of the Financial Research Program, and to Winfield W. Riefler, Chairman of the National Bureau's Advisory Committee on Research in Finance. Their helpful guidance and criticism, particularly in broad questions of interpretation, have materially contributed to the value of the study.

The authors are grateful to the commercial banks represented in the Association of Reserve City Bankers, and to the five largest life insurance companies, for the time they have willingly given to the preparation of the quantitative data on their medium-term business loans that provide the main statistical basis of the present study. Special thanks are due also to the many officers of commercial banks and life insurance companies who have given generously and patiently of their time in interviews that have enabled the authors to obtain the qualitative information indispensable to the proper interpretation of the statistical materials. Officials of public agencies, especially of the Board of Governors of the Federal Reserve System, the several Federal Reserve banks, the Reconstruction Finance Corporation, and the Federal Deposit Insurance Corporation, have not only made available hitherto unpublished information, but have furnished valuable counsel on the planning of the research work.

Dr. Lorine Pruette has added sharpness to the discussion and lightened the task of the reader by her careful editing of the manuscript.

NEIL H. JACOBY  
RAYMOND J. SAULNIER  
*Financial Research Program*

## *Table of Contents*

PREFACE	vii
AUTHORS' ACKNOWLEDGMENTS	x
LIST OF TABLES	xv
LIST OF CHARTS	xvii
SUMMARY OF FINDINGS	1
1. DEFINITION OF A TERM LOAN	(9-14)
Term Loans Are a Form of Business Credit	9
Term Loans Involve a Direct Relation Between Borrower and Lender	10
Term Loans Are Credits Extended for More Than One Year	12
2. DEVELOPMENT OF TERM LENDING	(15-28)
Relative Growth in Demand for Medium-Term Business Credit Since 1933	15
Reduction in Returns Obtainable by Banks from Investment in Alternative Media	21
Facilitating Activities of Public Credit and Supervisory Agencies	22
3. MARKET FOR MEDIUM-TERM BUSINESS CREDIT	(29-46)
Annual Volume of Term Loan and Private Placement Credit Extended, 1934-40	29

Term Loan Credit Outstanding at Year-Ends, 1934-40	32
Number of Institutions Extending Medium-Term Credit	32
Number of Borrowers	34
Size of Borrowers	35
Size of Loans	37
Industries of Borrowers	39
Division of Risks Among Term Lending Institutions	42
<b>4. CHARACTERISTICS OF TERM LOANS</b>	<b>(47-72)</b>
Term Loans of Commercial Banks	47
<i>Term of Loan</i>	47
<i>Security Taken</i>	49
<i>Use of Funds by Borrowers</i>	51
<i>Repayment Provisions</i>	53
Medium-Term Securities Privately Purchased by Life Insurance Companies	56
<i>Term of Loan</i>	56
<i>Security Taken</i>	57
<i>Use of Funds by Borrowers</i>	58
<i>Repayment Provisions</i>	58
Business Loans of the Reconstruction Finance Cor- poration	59
<i>Term of Loan</i>	59
<i>Security Taken</i>	61
<i>Use of Funds by Borrowers</i>	61
<i>Repayment Provisions</i>	62
Industrial Loans of the Federal Reserve Banks	63
<i>Term of Loan</i>	63
<i>Security Taken</i>	63
<i>Use of Funds by Borrowers</i>	65
<i>Repayment Provisions</i>	66
Changes in Term Loan Characteristics and Lending Practices Since 1934	66
<i>Shifts in Term of Loans</i>	67
<i>Shifts in Size of Loans</i>	67

<i>Shifts in Size of Borrowers</i>	68
<i>Shifts in Use of Funds by Borrowers</i>	68
<i>Shifts in Industry of Borrowers</i>	69
<i>Shifts in Security Taken</i>	69
<i>Shifts in the Taking of Commitments</i>	70
<i>Shifts in Methods of Repayment</i>	70
<i>Shifts in the Splitting of Loans</i>	71
<i>Summary of Changes</i>	71
5. PRACTICES AND TECHNIQUES OF TERM LENDING (73-101)	
Organization and Personnel	73
Methods of Acquiring Loans	75
Formation of Loan Agreements	76
<i>Provisions Relating to Use of Funds</i>	77
<i>Provisions Concerning the Incurring of Indebtedness</i>	77
<i>Provisions Concerning Financial Conditions</i>	78
<i>Provisions Concerning Management</i>	78
<i>Provisions Concerning Books and Records</i>	79
<i>Provisions Pertaining to Acceleration of the Debt</i>	79
<i>Provisions Respecting Collateral Security</i>	79
Credit Standards	80
<i>Commercial Banks</i>	80
<i>Life Insurance Companies</i>	84
<i>Reconstruction Finance Corporation</i>	86
<i>Federal Reserve Banks</i>	87
Credit Appraisal Methods	89
Supervising Active Term Loans	95
Relation of Term Loans to Other Assets of Commercial Banks	96
Diversification of Term Loans	99
Term Loan Reserves	100
6. INTEREST RATES AND COSTS IN TERM LENDING (102-112)	
Interest Rates Charged for Term Loans	102
Costs of Term Lending	108
Profitability of Term Lending	110

<b>7. TERM LENDING IN DEFENSE AND WAR</b>	<b>(113-131)</b>
Scope of War Financing	113
Definition of War Credit	115
Institutions Making Defense and War Loans to Business	116
Term Lending of Commercial Banks in Defense and War	119
War Term Lending of Public Agencies	122
Credit Standards and Procedures in Defense and War Financing	126
<b>APPENDIX A—THE COMMERCIAL BANK TERM LOAN SAMPLE AND ESTIMATES MADE THEREFROM</b>	<b>(135-140)</b>
Character of the Sample	136
Estimate of Term Loans Outstanding of All Commercial Banks During Recent Years	137
Estimate of the Annual Volume of Term Loans Made by Commercial Banks During Recent Years	139
<b>APPENDIX B—THE SAMPLE OF SECURITIES PRIVATELY PURCHASED BY LIFE INSURANCE COMPANIES AND ESTIMATES MADE THEREFROM</b>	<b>(143-147)</b>
Character of the Sample	143
Estimate of the Annual Volume of Medium-Term Issues Privately Purchased by Life Insurance Companies During Recent Years	144
Estimate of Medium-Term Private Placement Credit of Life Insurance Companies Outstanding at the Ends of Recent Years	146
<b>APPENDIX C—SUPPLEMENTARY TABLES</b>	<b>(151-156)</b>
<b>INDEX</b>	<b>157</b>



## *List of Tables*

1. Medium-Term Business Credit of Term Lending Institutions: Annual Disbursements and Year-End Outstandings, 1934-40
2. Percentage of Term Credit of Term Lending Institutions Outstanding at December 31, 1940, Extended With and Without Cooperation of Other Lenders 45
3. Number and Original Amount of Term Loans Held by 99 Commercial Banks About June 30, 1941, by Term at Time of Making 48
4. Number and Original Amount of Term Loans Held by 99 Commercial Banks About June 30, 1941, by Type of Security 50
5. Number and Original Amount of Term Loans Held by 99 Commercial Banks About June 30, 1941, by Use of Funds 52
6. Number and Original Amount of Term Loans Held by 99 Commercial Banks About June 30, 1941, by Industry and Use of Funds 54
7. Number and Original Amount of Term Loans Held by 99 Commercial Banks About June 30, 1941, by Type of Repayment Schedule 55
8. Privately Purchased Securities of Medium Term, Held by 5 Life Insurance Companies at December 31, 1940, by Term at Time of Acquisition and by Type of Security 57
9. Privately Purchased Securities of Medium Term, Held by 5 Life Insurance Companies at December 31, 1940, by Method of Repayment and Year of Maturity 59
10. Number and Amount of Samples of RFC Business Loans Requested and Approved, by Term of Loan to Maturity 60
11. Number and Amount of Industrial Advances of Federal Reserve Banks to May 31, 1935, by Principal Type of Security 64
12. Classification of 50 Commercial Banks by Size and by Percentage of Term Loans to Total Loans and Discounts 97
13. Percentage Distribution of the Number and Amount of Term Loans Made at Different Rates of Interest by Commercial Banks in 19 Cities During Selected Periods From March 16, 1939 Through March 15, 1942 103
14. Percentage Distribution of the Number and Amount of Medium-Term Issues Privately Purchased by 5 Life Insurance Companies During 1937-40 at Different Effective Rates of Interest, and Held on December 31, 1940 106
15. Percentage Distribution of the Total Number and Amount of Defense Contracts Assigned to Different Types of Lending Institutions, February 27, 1941, to January 29, 1942 118

16. Number and Amount of Defense Loans Held by Weekly Reporting Member Banks at April 30, 1941, by Term at Time of Making	120
17. Number and Amount of Defense Loans Authorized by the Reconstruction Finance Corporation to September 13, 1941, by Use of Funds, by Size of Loan and by Type of Product or Service of Borrower	125
A-1. Total Assets and Loans and Discounts of 99 Banks Cooperating in the Term Loan Study, and of Weekly Reporting, Federal Reserve Member, and All Insured Commercial Banks in the United States, at December 31, 1940	136
B-1. Estimated Amount of Medium-Term Securities Annually Purchased Privately by Life Insurance Companies, 1935-40	146
C-1. Percentage Distribution of the Number and Aggregate Amount of Medium-Term Loans Made by Term Lending Institutions, by Total Assets of Borrower	151
C-2. Percentage Distribution of the Number and Aggregate Amount of Medium-Term Loans Made by Term Lending Institutions, by Industry of Borrower	152
C-3. Percentage Distribution of the Number and Aggregate Amount of Medium-Term Loans Made by Term Lending Institutions, by Size of Loan	154
C-4. Number and Estimated Amount of Defense Contracts Assigned, February 27, 1941 to January 29, 1942	155
C-5. Average Amount of Defense Contracts Assigned to Different Types of Lending Institutions, February 27, 1941 to January 29, 1942	155
C-6. Defense Term Loans Held by Weekly Reporting Member Banks of the Federal Reserve System at April 30, 1941, by Use of Funds, by Type of Repayment Provision, and by Assignment or Non-Assignment of Government Claims	156

## *List of Charts*

- |   |     |
|---|-----|
| I. Percentage Distribution of the Number and Amount of Medium-Term Loans Made by Term Lending Institutions, by Total Assets of Borrower | 36  |
| II. Percentage Distribution of the Number and Amount of Medium-Term Loans Made by Term Lending Institutions, by Size of Loan            | 38  |
| III. Percentage Distribution of the Number and Amount of Medium-Term Loans Made by Term Lending Institutions, by Industry of Borrower   | 40  |
| IV. Interest Rates per Annum Charged on Term Loans to Business by Commercial Banks in 19 Cities, by Selected Periods, 1939-42           | 105 |

FINANCIAL RESEARCH PROGRAM OF THE  
NATIONAL BUREAU OF ECONOMIC RESEARCH

*Term Lending to Business*

## *Summary of Findings*

A "TERM LOAN" IS A LOAN to a business enterprise that is repayable, according to agreement between borrower and lender, after the lapse of more than one year. Such loans fall within the "medium-term" credit market, which is defined for purposes of this study to include credits that run for more than one but not more than fifteen years. Since 1933 four types of financial institutions have directly extended medium-term credit, so-defined, to American business enterprises on a broad scale—commercial banks, life insurance companies, the Reconstruction Finance Corporation and Federal Reserve banks. Findings of broad significance arising from a study of the present-day market for medium-term business credit are:

1. Term loans by banks and private purchases of medium-term bonds or notes by insurance companies have experienced enormous growth and have tended to displace short-term loans and public issues of securities through investment bankers as methods of business financing. At the end of 1940 term loans comprised nearly a third of the commercial and industrial loans and about 12 percent of all loans held by commercial banks.

2. Private financial institutions are dominant in this field of credit, the operations of the public agencies being minor in scope and non-competitive in nature.

3. Term loans have been a method of financing comparatively large businesses. The public agencies' borrowers were much smaller than those of banks or insurance companies, but even so, more than half the number of loans granted by public agencies were made to concerns with total assets of over \$100,000.

4. Term lending institutions have devised new standards and procedures for appraising credits, in order to determine whether a borrower can amortize a loan out of available incoming cash.

### *Causes of Growth*

Term lending experienced remarkable growth after 1933 as a result of an expansion in business demand for medium-term loans relative to the demand for short- or long-dated credit or equity capital, and because of the increased ability and willingness of financial institutions to supply such credit. It was given impetus by business demands for funds to modernize or re-equip plants and to effect savings through the refunding of outstanding debts at lower interest rates. The supply of medium-term credit expanded in consequence of a number of developments: growing excess reserves in banks, lower yields from high-grade bond investments, broader access to Federal Reserve credit facilities, deposit insurance, the example of long-term amortized mortgage loan insurance offered by FHA, revised practices of bank examination, changes in the public regulation of bank investments, the Securities Act of 1933, and the lending operations of public agencies.

### *Structure of the Market*

The annual volume of term loans made by commercial banks has risen steadily in recent years: \$217 million in 1938, \$827 million in 1939, and \$1,352 million in 1940. Estimates of the medium-term business credit of all institutions outstanding at year-end indicate a similar growth: \$1,081 million in 1937, \$1,547 million in 1938, \$2,271 million in 1939, and \$3,199 million in 1940. At the end of 1940 commercial banks held an estimated \$2,162 million of term loans, life insurance companies held about \$900 million of medium-term bonds and notes privately acquired from issuers, the Reconstruction Finance Corporation had outstanding business loans of \$121 million, and the Federal Reserve banks held outstandings of somewhat less than \$16 million.

Twenty-six large life insurance companies and possibly as many as 2,900 commercial banks located throughout the United States held some medium-term loans at the end of 1940, term lending being concentrated among banks with deposits of \$10 million or more located in the larger centers of population. These private institutions had made term loans to about 3,800 business enterprises up to the end of 1940, while the public institutions had granted term credit to approximately 11,000 concerns. In total, it is possible that about 10 percent of the more than 130,000 businesses in the United States with total assets of \$100,000 or more have obtained medium-term credit.

Marked differences are found between the private and public lending agencies both in size of borrowers and in average amount of term loan. Insurance companies acquired medium-term bonds only from the larger companies, those with total assets of \$1 million or more; only 4 percent of the amount of commercial bank credit went to borrowers whose total assets were less than \$1 million; on the other hand, 19 percent of the amount of RFC loans and 27 percent of the amount of Reserve bank loans were made to borrowers whose total assets were less than \$1 million. The average term loan of insurance companies was \$3.8 million and of commercial banks \$664,000, in sharp contrast to the average loan authorization of \$56,000 for the RFC and \$73,000 for Reserve banks.

There are also significant differences in the industries of concerns whose credit needs were met by different term lending institutions. Manufacturing concerns accounted for a larger percentage of the credit extended by each type of agency than did any other major industrial class. But public utilities, mining and extraction (including oil production) and financing concerns combined received nearly 60 percent of commercial bank term credit and over 45 percent of insurance company credit. Loans to manufacturing, wholesaling, retailing and construction concerns were relatively more important in the portfolios of the public than of the private agencies.

There is a high degree of cooperation among term lending institutions, nearly 68 percent of the amount of bank term loans and about 55 percent of insurance company and Reserve bank term credit being split with several institutions. Less than 16 percent of RFC business credit was participated in by other lenders. Cooperation in term lending performs an economic function parallel to that of the underwriting syndicate in investment banking.

#### *Term Loan Characteristics*

Loans made by each type of lending institution have their own characteristics, but loans of the private agencies resemble each other more closely than they resemble loans of either public agency.

#### *Term*

Although more loans of commercial banks have terms of five than any other number of years, about 30 percent of the number and 49 percent of the amount of these loans have terms exceeding five years. Few loans have terms of more than ten years. Maturities of RFC loans are generally similar to those of commercial banks, while Reserve bank loans, legally limited to five years, for the most part run less than three years. Insurance companies advance longer credits than other institutions, only 15 percent of the amount having terms of five years or less, and over half the amount maturing after ten years.

#### *Use of Funds by Borrowers*

A third of the amount of bank term loans provides borrowers solely with new money, principally for working capital or machinery and equipment. About 54 percent is used exclusively for refunding purposes, chiefly to retire bonds. Medium-term credit of insurance companies appears to have a similar pattern of use. Reserve bank advances are limited by statute to working capital purposes, but RFC loans have enabled



borrowers to finance capital expenditures or refund outstanding debt as well as to increase working capital.

*Collateral Security*

Only a third of the amount of bank and insurance company loans are collaterally secured, stocks and bonds or machinery and equipment in the case of bank loans and real estate in the case of insurance companies being taken most frequently on secured loans. In contrast, practically all RFC loans and 83 percent of the amount of Reserve bank credits are secured, usually by a combination of the borrowers' assets. Such security has been considered necessary by the public agencies to protect their interests in granting credit to concerns presumably unable to obtain financing from other sources.

*Repayment Provisions*

About 72 percent of the number and 57 percent of the amount of bank term loans, and about 25 percent of the amount of insurance company medium-term credits, are repayable in equal instalments. Nearly all the remaining loans mature in single amounts or have relatively large final payments ("balloon" notes). In contrast, practically all RFC and Reserve bank loans are repayable in equal monthly, quarterly, semi-annual or annual instalments, because of the necessity of gearing repayment closely to the abilities of financially-straitened borrowers to "throw off" cash. In many instances, instalment payments are a certain percentage of sales or net income before depreciation.

*Changes in Bank Term Loan  
Characteristics and Lending Practices*

No marked change has occurred since 1934 in term, size of borrowers or size of loans made by banks. Such changes in industry of borrower as have occurred have been dictated mainly by conditions of demand for credit, durable goods industries becoming more important borrowers during cyclical

upswings. However, banks are tending to dispense with collateral security, to insist upon amortization of loans in equal instalments, to split loans among several lenders, and to increase the proportion of credit devoted to business expansion.

### *Term Lending Operations of Banks*

Few banks have set up separate organizations to handle term loans, but they have frequently employed personnel trained in long-term investment credits and have assigned the task of credit analysis to analytical units connected with bond or trust departments.

Term loans are generally accompanied by agreements, "tailor-made" to fit the circumstances of each borrower, containing restrictions on the borrower's indebtedness, requiring maintenance of certain minimum financial conditions, subjecting management personnel and capital expenditures to control of the lender, requiring the keeping of accurate books and records, providing for acceleration of the debt under certain circumstances, and specifying any collateral security that may be required.

Credit standards applied by banks relate mainly to the earning power of a business, whereas those of the RFC and Reserve banks necessarily lay relatively greater stress upon collateral security. In determining whether applicants meet their credit standards, all agencies conduct thorough investigations and prepare analyses both of financial statements over the past seven or more years and of the efficiency of the applicant's production facilities and marketing methods in relation to those of other concerns in the industry.

Term loans at the end of 1940 formed 22 percent of all loans held by 50 large commercial banks, and 30 percent or more of all loans held by five of the largest banks. They comprised well over half of the commercial and industrial loans held by these 50 institutions. The industrial character of its territory and the attitudes and training of its personnel are crucial factors in determining the amount of term loans a bank

can develop. Given these factors, bankers consider the stability of their deposits, the ratio of capital to deposits, and the quality and maturities of other assets, in determining what proportion of total assets should take the form of term loans. Few, if any, banks have set up special term loan reserves against which losses may be charged, although the occurrence of loss is a recognized contingency. Banks infrequently lend individual borrowers up to the legal limit, preferring to split very large loans with other institutions.

### *Interest Rates and Costs in Term Lending*

Interest rates charged by private institutions for medium-term credit have been much lower and more variable than those of the public institutions. The average bank rate varied between 2 and 3 percent during 1940 and stood at 2.16 percent at the end of 1941. Yet a larger *number* of loans carried 5 to 6 percent rates than any other rate, the higher rates on these small loans reflecting the larger costs of loan administration per dollar of funds advanced. To limit these costs, many banks will not make term loans of less than \$50,000 or \$100,000. For the most part, medium-term issues privately purchased by insurance companies have yielded 2 to 3 percent. In contrast, rates of all Federal Reserve banks have varied within a range of 3½ to 6 percent, while the standard rate of the RFC has been 5 percent, a few loans carrying 4 or 6 percent.

Compared with the loan rates of the private institutions, these rates have not as fully reflected differences in the risks and maturities of loans and the costs of administering them. That they have been low, relative to the risks assumed and the costs of loan administration, is indicated by the possibility of ultimate loss on RFC business loans as a whole, and the failure of Reserve banks to realize any considerable net income from industrial advances. The profitability of term lending to banks or insurance companies cannot be accurately determined from the data on hand.

*Term Lending in Defense and War*

The rapidly expanding war production program has been paralleled by a sharp increase in war lending activities. By the end of 1941 the total loans of Federal Reserve member banks had risen by 30 percent over mid-1940; between February 1941 and January 1942 the number of loans made to finance war production, and secured by assignments of government contracts, increased by about six times. Commercial banks have made about 90 percent of these contract assignment loans, the RFC about 5 percent and other agencies the remainder. That part of the war program that has required the construction of specialized plants and the creation of reserves of essential raw materials has been financed to a large extent by the RFC through its subsidiary corporations. Up to March 1942, these corporations had made commitments, including actual advances of cash, totaling nearly \$10 billion.

Necessarily, many loans made to finance war contracts have been term loans. The war program has not, however, altered the proportion of term loans to all business loans made; this proportion remains, as in pre-war conditions, at about 21 percent. However, marked changes have occurred in certain of the characteristics of term loans. Up to mid-1941 all war term loans were new money loans. A further notable change has been the extension of term credits of smaller size, presumably to smaller business concerns. Finally, such term lending places less emphasis on collateral security and more emphasis on the term loan agreement as a means of stipulating risk-limiting conditions.

## *Definition of a Term Loan*

AN UNDERSTANDING OF THE SEVERAL essential elements of a term loan is necessary in order to appreciate fully the important and unique position that such loans have come to occupy in the business credit market of the United States. The basic elements that define a term loan are: (1) credit extended to a *business* concern; (2) a direct relationship between borrower and lender; (3) provision at time of making the loan that some part of the principal is repayable *after* the passage of one year.<sup>1</sup> While particular types of collateral security, repayment provisions, uses of funds by borrowers or loan agreements may be associated with term loans, none of these are essential characteristics.

### *Term Loans Are a Form of Business Credit*

The fact that term loans are credits extended to business concerns serves to differentiate them from many other types of loans, also having terms of more than one year; that are made by commercial banks, insurance companies and other financial institutions. The salient factor is that the term lender usually appraises the probabilities of financial success of a *business enterprise* in judging the likelihood of repayment of the loan at maturity. Thus the definition of term loans excludes consumer loans, where attention is focused on the moral and financial worth of an individual—who is not necessarily an entrepreneur. Also excluded are loans to individuals secured by mortgages on residential property. In making loans

<sup>1</sup> Some writers would add that a "term loan" is amortized out according to a prescribed plan. Although the majority of term loans are repaid in instalments, it appears unwise to limit the definition in this way for reasons stated subsequently.

of this type the lender customarily looks to the value of the pledged property. In contrast, even where term loans to businesses are collaterally secured by real estate or other property, the lender generally looks mainly (or exclusively) to the earning power of the business rather than to the value of pledged property to protect himself against loss. The collateral security given by a business concern is usually of a specialized type that cannot be liquidated by the lender to realize any certain amount in case of default.

*Term Loans Involve  
a Direct Relation Between Borrower and Lender*

The circumstance that term loans involve a direct relationship between borrower and lender serves to distinguish them from corporate bonds and debentures sold to investment bankers for public distribution. Although such securities generally mature more than one year after date of issuance, and are like term loans in this respect, there is no direct relationship between the borrowing enterprise and its creditors. Almost invariably these bonds or debentures are accompanied by trust indentures requiring the appointment of trustees to act for all security holders. In all likelihood individual security holders are unknown to the borrower. The term loan is unique in being a medium-term credit, usually accompanied by a formal loan agreement between borrower and lender, but retaining that direct and intimate connection between business concern and financing agency that has always been associated with the business loan activities of commercial banks.

“Private placements” of corporate securities with insurance companies and other institutional investors resemble term loans more closely than they resemble publicly marketed debt securities. Private placements may involve use of the same legal forms as those employed in the traditional investment banking operation but they dispense with registration under the Securities Act of 1933, and short-circuit underwriters and security dealers who perform the function of breaking up

large loans into small units for wide distribution. The steady trend toward institutionalization of savings, together with the application of stricter controls (reflected in higher costs) of public distribution of securities, have led many concerns to "wholesale" their debt securities directly to the large investing agencies. While securities privately placed by business corporations generally mature after longer periods than do term loans, and in fact "straddle" the medium-term and long-term business credit markets, it would be illogical to differentiate medium-term private placements from term loans. Both media compete in the same credit market.

Term loans are closely related to, but are to be differentiated from, purchases by banks of instalment contracts arising from the sale of commercial and industrial equipment. The bulk of such instalment paper pays out over periods exceeding a year, and in a sense reflects the extension of term credit to the buyer of the equipment as well as to the seller who transfers the contract to the bank. There are a number of reasons why it is inadvisable to regard the acquisition of such instalment contracts by a bank as term lending. First, the majority of these credits are secured not only by the particular income-producing equipment involved and by the name of the buyer, but also by the name of the seller, thus producing a credit appraisal problem different from that usually encountered in term lending.<sup>2</sup> Second, instalment financing of income-producing equipment often involves use of financing plans under which many buyers purchase equipment from a single seller upon identical terms—a feature not characteristic of term loans. Third, bankers have extreme practical difficulties, in the records of their personal loan or time sales financing depart-

<sup>2</sup> A minor fraction of instalment paper arising from the sale of commercial and industrial equipment is sold to banks and finance companies by the manufacturers or distributors *without* recourse. In such cases the lender is protected only by the promise of the buyer to pay the debt and the right to repossess the equipment in case of default. It must be conceded that there is no real distinction between the credit problem posed for a bank purchasing such a contract and the credit problem raised when a bank makes a term loan to a buyer of equipment, repayable in instalments and secured by title to the equipment purchased with the proceeds of the loan.

ments, in separating contracts pertaining to consumer goods from those relating to commercial and industrial equipment, only the latter of which constitute business credits. Finally, and most important, even in the case of nonrecourse paper the credit relationship between the ultimate borrower—the purchaser of the equipment—and the lender is not usually established directly, as is true of term lending, but is established through the seller as an intermediary. For all of these reasons it is inadvisable to classify purchases of contracts as term loans.<sup>3</sup>

*Term Loans Are Credits  
Extended for More Than One Year*

The force of defining term loans to include only credits with maturities at time of making *more* than a year distant is obviously to exclude loans the proceeds of which may be used by the borrower to finance *only* short-period expansions in his operations. The traditional theory of American commercial banking has sanctioned certain relationships of banks to business enterprises which exclude extension of term loans. This traditional theory, largely evolved out of the experience of British banking during the nineteenth century, held that commercial bank credit would be extended in the form of short-term notes, given by borrowers to procure funds for manufacturing or holding commodities for sale during temporary peaks in activity, such as seasonal expansions. Equity capital or funds borrowed on long term were expected to satisfy all the fixed capital requirements of a business concern, as well as to provide minimum working capital needs at seasonal low points in inventory holding or productive operations.

The early regulations of the Federal Reserve Board concerning the kinds of loans upon which member banks could get Reserve bank credit reflected this philosophy. It was a

<sup>3</sup> For further treatment of this type of business financing, see forthcoming publication of the National Bureau of Economic Research (Financial Research Program), *Instalment Financing of Commercial and Industrial Equipment*, by Raymond J. Saulnier and Neil H. Jacoby.



natural concomitant of this theory that the banker expected an annual "clean-up" or extinction of indebtedness during the seasonal nadir in the borrower's operations. This, in theory, provided an annual test of the borrower's ability to achieve financial independence of the bank, and gave assurance that the bank was, in fact, financing only temporary expansions and was not permitting its funds to become part of the "permanent" capital of the business.

While it is generally recognized that the breach between this theory and American banking practice has steadily widened, the theory has usually been honored *in form* in the business loan activities of commercial banks. Bankers continued to take demand, 90-day, or six-month notes from borrowers, with a full expectation on the part of both parties that these obligations could not be discharged at maturity (without great inconvenience or embarrassment to the borrower) and would be renewed at their due dates.<sup>4</sup> Business concerns faithfully continued to extinguish their indebtedness during a short period each year at one bank by borrowing on short term at other institutions, thus preserving the fiction of the annual "clean-up." This had at least the limited value of showing that the borrower could get credit from another institution.

Only with the advent of the term loan during the 1930's was there a definite break with the orthodox theory of commercial banking relationships with business enterprise. For the first time there was a frank recognition by both debtors and creditors that, *de facto*, many business debts would not terminate within a year, that the proceeds of loans would not be used wholly to finance short-lived expansions but would be devoted to the acquisition of fixed assets, the long-term

<sup>4</sup> Tangible evidence of this well-recognized practice is presented in a study entitled *Long Term Loans of Iowa Banks*, by Fred L. Garlock, pp. 296-99. (Research Bulletin No. 129, Agricultural Experiment Station, Iowa State College, Ames, Iowa, 1930.) The prevailing practice of a sample of Iowa banks was to date notes with six-month maturities but the actual average terms of their credits ranged from ten to thirty-two months during the years 1914-24. There was a tendency for the actual average maturity of loans to increase during this period.

expansion of working capital or the refunding of long-term debt. Since a loan to be repaid more than one year after date of creation could not be considered to provide merely seasonal working capital, a one-year term establishes the line of demarcation between term loans and the traditional short-term business loans.<sup>5</sup> Although there is difference in opinion concerning the appropriate distinction between medium-term and long-term business credit, for purposes of the present study fifteen years will be considered as the outer margin of medium-term loans. Loans and private placements of debt securities having terms of more than one and not more than fifteen years are the "medium-term" business credits with which we are concerned.<sup>6</sup>

<sup>5</sup> This limitation also applies to loans contracted in order to finance business transactions consummated in less than a year although not necessarily of a seasonal nature.

<sup>6</sup> Strictly speaking, any loan maturing on a definite date possesses a term and might be called a "term" loan, in distinction from a demand loan or a perpetual obligation. But the phrase "term loan" has acquired a well-accepted connotation in the financial community as an intermediate-term business credit, and this common usage is followed herein.

# 2

## *Development of Term Lending*

BECAUSE THE FORCES THAT brought about the emergence of term lending about 1933 are almost inextricably connected with the factors that nourished its growth during ensuing years, it would be illogical to separate the problems of origin and development. An accurate view of the major processes at work in the business credit market since 1933 may be achieved by grouping the numerous events bearing on term lending into the following categories:

1. Factors causing a relative growth in the demand by American business enterprises for medium-term credit, and especially for term loans as opposed to short- or long-dated loans or equity capital.

2. Factors relatively reducing the incomes that lending or investing agencies could obtain, for any degree of risk assumption, by extending credits of other types than term loans.

3. Changes in public regulation and supervision of lending agencies of a nature that permitted them to enter the field of medium-term business credit with more assurance.

Obviously the first group of factors concerns the demand side of the market while the second and third relate to the supply of business credit.

### *Relative Growth in Demand for Medium-Term Business Credit Since 1933*

The evidence points to the conclusion that at least since 1933 there has been a relative shift of demand by business enterprises from equity financing to debt financing, as a result of the relatively unfavorable terms on which common stocks and, to a

lesser degree, preferred stocks could be sold. The preference for creditorship that developed in the United States following 1929 has served to increase the percentage spread between yields of common stocks and yields of high-grade bonds far beyond previous American experience or that of the industrialized nations of Europe.<sup>1</sup> Unquestionably this is one of the influences behind recent changes in the ways in which business is financed. Entrepreneurs themselves undoubtedly preferred to avoid debt and were willing to offer sizable premiums to purchasers of equity securities, but the comparatively large disadvantages of procuring funds by selling equities as against contracting loans worked to overcome this preference.

Apart from this basic tendency to shift from equity to debt financing, strong economic and institutional forces have been in operation to increase, both in form and in fact, entrepreneurial preferences for medium-term debt. The protracted industrial revival which (with occasional interruptions) developed after 1932 found many concerns with deteriorated plant and equipment and in a straitened working capital position as a result of the operating losses experienced during the downswing. These concerns required additional funds, and a majority found it advantageous to borrow them. At the same time, businessmen were vividly aware of the pressure that had been put upon them by commercial banks during the contraction period of 1929-32 to liquidate their short-term obligations. As a rule these credits originally had been extended with a realization by both banker and business executive that the funds would be used to finance industrial operations of a type that would not conveniently permit of complete liquidation at their legal dates of maturity. The runs on banks during the banking crisis compelled bank managements to convert assets into cash at as rapid a rate as possi-

<sup>1</sup> See, for example, the treatment of this phenomenon in G. Colm and F. Lehmann, *Economic Consequences of Recent American Tax Policy* (Supplement I of *Social Research*, 1938) and by Albert G. Hart in his remarks before the annual conference of the American Statistical Association, Chicago, December 1940. A. Wilfred May has given a provocative analysis of the salient facts in his article entitled "American and European Valuations of Equity Capital," in *American Economic Review* (December 1939).

ble, even at the cost of severe embarrassment or insolvency of their business debtors.

It is therefore understandable that the business community faced the 1933-37 period of upswing with a desire to avoid the short-term commitments that had only recently wrought such difficulties for them. There was an expanded demand for credit, but not for the traditional form of short-term banking credit.<sup>2</sup> In short, the great depression following 1929 heightened the weaknesses latent in the old business credit forms. Term loans developed partly in recognition of the need for rewriting credit terms to conform more closely to the economic nature of the underlying business transactions, thus protecting the economy from the shock of sudden enforcement of unsuitable credit terms.

The rejuvenated demand for money to modernize, reorganize or renovate plant and equipment and to finance expanding productive activities, taken together with the aversion of business management for short-dated bank loans, would normally have caused an increase in the demand for credit from investment bankers. In the absence of other forces, this would have led to an increase in the quantity of publicly offered corporate bonds and debentures. But to a significant degree the expanding credit demand was prevented from expressing itself in that form. One cause was regulation of the securities markets imposed by the Securities Act of 1933. This law placed considerable burdens upon issuers, underwriters, and experts participating in the preparation of registration

<sup>2</sup> One manifestation of this attitude is the effort exerted by business management to minimize the amount of short-term debt revealed on balance sheets. In accordance with accepted accounting practices only debts due in less than one year need be carried in the "current liabilities" section of the balance sheet, other indebtedness being grouped with "capital" items. Trade suppliers as well as financial institutions usually give great weight to the "current" position of a business in judging its credit. Consequently, one ancillary cause of the increase in demand for term loans, as opposed to traditional short-term banking credits, has been the fact that the term borrower need show those instalments of the loan that are due within one year as a "current" liability. This factor has also exerted some influence on methods of accounts receivable financing during recent years. See forthcoming publication of the National Bureau of Economic Research (Financial Research Program), *Accounts Receivable Financing*, by Raymond J. Saulnier and Neil H. Jacoby.

statements and prospectuses. The expenses of securing elaborate data and of preparing and filing registration statements were large. Combined, they greatly increased the costs of obtaining credit from the public through investment bankers, especially for those issues of less than \$10 million which account for the largest amount of term loans made by commercial banks.<sup>3</sup> From the point of view of social welfare these costs may have been wisely imposed. Despite them, there was a considerable expansion in the amount of corporate debt securities underwritten after 1933. Nonetheless, the Act channeled some part of the demand for business credit away from public issues, and directed it toward loans that could be negotiated without the comparatively high costs and relative inflexibility of public flotation. The term loan was well adapted to meet this changed demand, as was the private placement of securities by issuers directly with investing institutions.<sup>4</sup>

Business concerns securing funds through private sales of debt securities (instead of public offerings) eliminate or reduce a number of expenses in addition to costs of registration under the Securities Act. Among the savings are underwriters' commissions (unless fees are paid third parties for bringing issuers and purchasers together), costs of advertising, costs of printing registration statements and prospectuses, outlays for engraving certificates, transfer taxes, costs of listing issues on securities exchanges, and costs of maintaining facilities for transferring securities. Greater speed in financing and more expeditious modification of loan indentures to meet changed circumstances of borrowers are additional, and im-

<sup>3</sup> The cost of flotation for underwritten bond issues during 1938-39 dropped consistently from 7.5 percent for issues under \$1 million to 3.4 percent for issues of from \$1 million to \$5 million, to 2.8 percent for issues of from \$5 million to \$20 million, and to 2.4 percent for issues of \$20 million and over. See Securities and Exchange Commission, *Cost of Flotation for Registered Securities, 1938-1939* (Washington, 1941) p. 4.

<sup>4</sup> Purchase of corporate securities directly from issuers without registration has been estimated to comprise 44 percent of the total dollar amount of domestic and foreign corporate issues during 1940. See House Committee on Interstate and Foreign Commerce, 77th Congress, 1st Session, *Hearings on H.R. 4344, H.R. 5065 and H.R. 5832* (Washington, 1941) Part II, p. 366. However, it is likely that term loans of substantial amount are included in the "direct purchases" upon which the percentage is based. See p. 528.

portant, advantages of private placements and term loans over public offerings of securities.<sup>5</sup> Finally, the issuing corporation avoids public disclosure of corporate affairs, and its directors escape potential civil liabilities under the Securities Act. It is not unlikely that these factors are even more important than the cost of public offerings of securities in explaining the growth of term lending and direct financing.

The major disadvantage of a private placement, from the point of view of an issuing concern, is lack of broad marketability. This precludes the occasional repurchase of securities at advantageous prices in the open market. However, lack of marketability is not a critical disadvantage to the institution holding a private placement. It appears that the SEC will permit a holder subsequently to dispose of such an issue without registration, providing disposition is not made to so many buyers as to constitute a public offering, and does not occur so soon after private purchase as to deprive the issue of the character of an "investment" by the reselling institution.<sup>6</sup> In fact, in order to provide for the contingency of resale, the formal features of marketability are generally preserved in an issue privately placed, such as provision for exchange of engraved bonds of smaller denomination for the bonds of larger denomination given at time of original purchase, and provision for registration of the issue on securities exchanges under certain conditions. A broader consideration is that the merit which public marketability has possessed, both to issuers and purchasers of corporate securities, has become steadily less through time as a result of "thinner" securities markets and the institutionalization of the investment process.

A number of other forces came into play during or after

<sup>5</sup> Churchill Rodgers, "Purchase by Life Insurance Companies of Securities Privately Offered," *Harvard Law Review*, Vol. LII, No. 5 (March 1939).

<sup>6</sup> During June 1941, Equitable Life Assurance Society of the United States purchased \$35,393,000 of first mortgage  $3\frac{3}{4}$  percent bonds due 1971 of the New York State Electric and Gas Corporation. Less than four months later, on September 22, 1941, Equitable sold a block of \$10,000,000 of this issue to "not more than twenty other institutional investors" through Salomon Brothers and Hutzler, as agents. See *New York Times*, September 23, 1941.

1933 that have tended to increase the demand for medium-term credit. These included the following:

1. The sharp decline in interest rates has resulted in much term borrowing from commercial banks to refund outstanding bonds or debentures sold during past years when much higher interest rates obtained. Many industrial concerns sold long-term debt securities during the 1920's to yield 5 to 8 percent per annum, and were able to pay them off with the proceeds of term loans contracted at from 2 to 4 percent per annum. The quantitative importance of this factor is indicated by the evidence that a third of the number of term loans, accounting for more than half of the amount of term credit, have been used *solely* by borrowers for repayment of debt or retirement of preferred stocks. Since the incentive for such term borrowing will partially disappear when interest rates stop falling, refunding is a less reliable basis for a continued high volume of term lending than is the acquisition by business of new fixed or working capital. But refunding consistently played a role from 1933 through 1940.

2. The growing weight of corporate taxation has reduced net income available for the internal financing of expansion and has made it increasingly difficult for borrowers to discharge outstanding debt according to original schedule. The rates of the Federal tax on corporate net income have risen substantially since 1933. Surtaxes on undistributed net incomes were effective during 1936 and 1937. Beginning in 1940, taxes were laid on "excess profits" in an effort to prevent the high level of industrial activity generated by the national defense effort from producing large business profits. The combined effect of these levies has been to cause expanding businesses to seek term loans, and to compel indebted businesses to use money procured from term borrowing to refund debts that could not be canceled through the application of retained profits. Many concerns have, therefore, not only sought term credit, but have experienced a decline in their ability to get out of debt. Business taxation is an influence



likely to condition the demand for term loans for many years to come.

3. Relatively growing labor costs have given impetus to the installation of labor-saving machinery and equipment or the reorganization of productive facilities, thus increasing the demand for funds to finance these operations. One result of the labor organization movement that developed throughout the United States with such strength after 1933 was an increase in the cost of labor relative to the costs of other productive factors.<sup>7</sup> In many industries, including the textile, paper, and bituminous coal industries, management has met this situation by the substitution of machinery for human labor, often offsetting higher labor costs or even reducing average unit costs of production. Term loans have been peculiarly adapted to finance the acquisition of machinery or the reorganization of facilities because it is often possible to compute the annual dollar savings accruing therefrom and to gear the amortization schedule of the loan to these savings.

*Reduction in Returns Obtainable  
by Banks from Investment in Alternative Media*

On the supply side of the business credit market, the salient question to be answered is: What factors caused business financing agencies, especially commercial banks, to be able and willing to meet the demands for term loans that expanded so rapidly after 1933? The answer is to be found, first, in the increase in funds in the hands of commercial banks and other investing institutions, not investible in alternative assets with yields as attractive as those of term loans; and second, in the actions of public financing agencies and regulatory bodies that enabled private credit-granting agencies to enter the field of term credits with more assurance.

Underlying the expansion in the supply of term credit has been the phenomenal increase since 1932 in the excess re-

<sup>7</sup>The increase in labor costs is, of course, measured very incompletely by the rise in wage rates. Fully as important in many instances are the costs of slow-downs or shut-downs as a result of labor disputes and the cost of managerial time devoted to problems of labor relations.

serves of commercial banks. Since 1934, excess reserves have rarely been less than \$2 billion, except during 1937, and they rose to well over \$6 billion during 1940. This expansion occurred despite substantial increases in legal reserve requirements. Investible funds in the hands of life insurance companies also have grown steadily in this period.

Concurrently with the immense expansion of the supply of funds available for lending by the principal private institutions participating in the term loan market, there has been a marked reduction in the rates of return that these institutions could earn by placing their funds in other media. Average yields of United States Treasury obligations and of high-grade corporate bonds have fallen precipitously since 1933. Call loans collateralized by securities have earned only 1 percent per annum for a number of years. Sharp curtailment has occurred in the demand for loans collateralized by marketable securities, resulting in part from the increased margin requirements imposed by the Federal Reserve authorities under the Banking Act of 1935. Although personal loans and consumer instalment financing have provided broadening avenues for profitable employment of bank funds, the potential magnitude of such uses has not nearly matched the amount of idle bank funds awaiting employment. All these factors have swollen the supply of funds available for term loans.

#### *Facilitating Activities of Public Credit and Supervisory Agencies*

Despite the emergence of broad demands for term loans after 1933, and a concomitant increase in the *ability* of commercial banks to meet them, it is improbable that the subsequent burst of term lending by commercial banks would have materialized had there not been inaugurated certain public institutions and changes in bank supervisory policy. These greatly increased, if they did not actually create, a *willingness* of the commercial banking system to make term loans in volume. Among them the following factors were significant:

1. Under several Acts of Congress the ability of member banks of the Federal Reserve System to obtain cash from Federal Reserve banks for items in their portfolios was greatly expanded. In consequence, banks could make loans maturing in three, five, or more years with less risk of becoming frozen. After their experiences of 1930-33, when the rush of the public to obtain cash had compelled many banks rapidly to liquidate loans and investments upon the best terms they could get, bankers were exceedingly sensitive to the need for liquidity in their loans and investments. Moved by the events of these years, Congress successively broadened the ability of banks in time of monetary stringency to rediscount or to obtain advances upon the pledge of banking assets. Without detailing these changes, it is sufficient to observe that by the end of 1933 member banks could obtain cash for any sound asset held by them.<sup>8</sup> There can be no doubt that this broadening of the rediscount and advance powers of the Federal Reserve banks exerted an important although unmeasurable influence upon commercial banks toward the extension of credits which, in case of a sudden rush to liquidity by the public, could be turned into cash by other means than by collection from the borrowers.

2. The inauguration in 1933 of deposit insurance by the Federal Deposit Insurance Corporation tended to produce a similar change in bankers' attitudes toward term loans but for a different reason.<sup>9</sup> It was believed that the existence of insurance would minimize the likelihood of widespread and sudden runs by depositors for cash. It may be that greater stability in the deposits of small banks is reflected in greater stability of their deposits in correspondent banks located in larger cities. Whether or not well founded, this belief of bankers that deposit insurance increased the stability of deposits would *per se* have increased the willingness of banks to make longer

<sup>8</sup> The legislation accomplishing these reforms includes the following: Act of February 27, 1932 (47 Stat. 56, ch. 58); Act of February 3, 1933 (47 Stat. 794, ch. 34); Act of March 9, 1933 (48 Stat. 1, ch. 1); Act of August 23, 1935 (49 Stat. 684, ch. 614).

<sup>9</sup> Act of June 16, 1933 (Banking Act of 1933) 48 Stat. 162, ch. 89.

term loans, even without the privilege of cashing them at the Federal Reserve banks in case of need.<sup>10</sup> As it was, deposit insurance fortified the influence of the broadened Reserve bank credit facilities.

3. The activities of the Federal Reserve banks and of the Reconstruction Finance Corporation in making term loans directly to business concerns helped set the stage for action by private financing agencies in these fields. It would be incorrect to say that the public agencies originated term lending, for there is evidence that a number of commercial banks made term loans prior to June 1934, at which time both Federal Reserve banks and the RFC were equipped with industrial loan powers.<sup>11</sup> But indubitably the actions of these agencies educated many commercial banks in the techniques of making term loans. They also facilitated the extension of bank term credits by offering to, and taking from, commercial banks participations in term loans, and by assuming substantial proportions of the credit risks through the taking of commitments on loans made by private agencies. The quantitative importance of the Federal Reserve banks and the RFC in the development of term lending is not adequately measured by the volume of term loans disbursed relative to those of commercial banks. Judged only by this standard, their influence has been comparatively small. Up to the end of 1940 the aggregate volume of business credit disbursed by Federal Reserve banks and the RFC was in the neighborhood of \$300 million, only a small fraction of an indicated term loan volume

<sup>10</sup> In passing, it may be noted that the deposit insurance premium of 1/12 percent per annum of the average amount of deposits held by a bank has become a considerable item of expense, especially to the larger city banks. By preventing deposits from being costless to banks, the premium has put some pressure on bankers to translate cash into earning assets, including term loans. Although it is impossible to evaluate the influence of deposit insurance upon term lending in quantitative terms, discussion of the subject with many bank loan officers indicates that this influence has not been negligible in importance.

<sup>11</sup> These powers were granted by the addition of Section 13b of the Federal Reserve Act, Act of June 19, 1934 (48 Stat. 1105, ch. 653), and by the amendment of Section 5d of the Reconstruction Finance Corporation Act, Act of June 19, 1934 (48 Stat. 1108).

of commercial banks of at least \$2.5 billion up to that date.<sup>12</sup> Yet it is highly probable that the familiarity with medium-term loans gained by commercial bankers through observation of, or participation in, term credits extended by the two public agencies was directly responsible for a very large volume of term lending on their part.

4. The inauguration of real estate mortgage insurance during 1934 by the Federal Housing Administration must also be counted as an influence that tended to expand the supply of term loan credit.<sup>13</sup> Only mortgage loans that conformed to the specifications of the FHA were eligible for insurance. The essential innovation wrought by FHA, in defining credits eligible for insurance, was to substitute a definite predetermined plan of amortizing a long-term loan for the former plan of making a medium-term loan without specific amortization features and with the expectation of renewal. In short, the FHA was primarily responsible for bringing about a change in the nature of real estate mortgage credit parallel in its significance to the adaptation made by commercial banks from the traditional short-term business loan to the medium-term loan. Since nearly all commercial banks acquired experience with insured FHA loans after 1934, there was undoubtedly some carry-over to the business loan market of knowledge gained in the real estate mortgage loan market. Bankers became more acutely aware of the fact that terms of loans could often be safely extended beyond traditional limits if amounts of debts were systematically reduced in accordance with the income and expenditure pattern of the borrower.<sup>14</sup> Term lending may be viewed as part of a basic

<sup>12</sup> See Table 1 and Appendix A.

<sup>13</sup> See National Housing Act, approved June 27, 1934. Public, No. 479, 73d Congress (48 Stat. 1246).

<sup>14</sup> Somewhat similar to the FHA real estate mortgage insurance program in its effect upon term lending was the provision of Federal ship mortgage insurance by the United States Maritime Commission under the Merchant Marine Act of 1936, Title XI. Briefly, this permits the Maritime Commission to insure repayment of a loan secured by a mortgage on a Federal ship which is being constructed, reconditioned or repaired with the proceeds of the loan. Terms of such insured mortgage loans may not exceed 20 years. The influence of this legislation upon private financing of ship construction and repair has been

transition now occurring in American banking, a transition whose keystone is the development of loans made on an amortization basis, with the borrower looking primarily to the income received by the debtor for repayment.

5. Revised policies and methods of bank examination have increased the supply of funds available for term loans. For some time prior to 1934 the practice was general among Federal and state supervisory authorities of classifying criticized loans in three categories: "estimated loss," "doubtful," and "slow." There is evidence that some bank examiners habitually classified loans which were not strictly of a seasonal character as "slow," regardless of their soundness and the certainty of their ultimate collection. They put pressure on banks to liquidate slow loans that were outstanding, and discouraged banks from lending to business concerns in any other way than through the traditional short-term note payable in entirety at maturity.<sup>15</sup> Although a recommendation was adopted at a joint bank examiners' conference in September 1934 to clarify the slow classification so as to *exclude* therefrom loans reasonably certain of payment, whatever their maturities, it was not until June 1938 that an agreement was adopted by the examining agencies to discontinue use of the slow classification altogether.<sup>16</sup> Commercial bankers have since scored examiners, in individual cases, for failing to adhere to the principles of the examination agreement, and for continuing to criticize capital and other long-term loans *per se*,

<sup>15</sup> Investigators of the Secretary of the Treasury reported this condition in the Seventh Federal Reserve District during 1934, and stated: "There appears to be sufficient evidence to indicate that the smaller banks have a considerable fear of examiners and that their lending policies are thereby directly restricted." Charles O. Hardy and Jacob Viner, *Report on the Availability of Bank Credit in the Seventh Federal Reserve District*, submitted to the Secretary of the Treasury (Washington, 1935) p. 20.

<sup>16</sup> See Federal Deposit Insurance Corporation, *Annual Report, 1938*, pp. 61-64.

---

comparatively slight up to the present time, mainly because the financing agency can obtain a contract of insurance only upon a completed ship, and until the ship is in service the only security of the bank consists of an incomplete ship plus the performance bond of the construction company. See United States Maritime Commission, *Federal Ship Mortgage Insurance under Title XI, Merchant Marine Act, 1936, As Amended*, "Rules and Regulations" (Washington, 1939).

irrespective of the certainty of their ultimate repayment.<sup>17</sup> Nevertheless, 1934 marked a definite pronouncement of policy, and appears also to have witnessed the beginning of a gradual change in the operating practices of bank examination, a change tending to remove a disability under which term lending had labored.

6. Changes in the public regulation of commercial bank investments have also affected the supply of term loans. The unprecedented decline in market prices of all but the highest-grade corporate bonds after 1929 led bankers to look with disfavor upon bonds and notes of mediocre quality, or upon small issues of debt securities subject to wide price variations. This operated to increase their ability to make term loans. Moreover, accepted bank examination practices in valuing marketable securities tended to increase their willingness to do so. Securities were valued at market prices for national banks up to 1936 and for all state banks up to 1938. Any deficiency in current market value below cost, at time of examination, was regarded as "estimated loss" and required to be written off. This procedure placed the capital position of a bank subject to the vagaries of changes in interest rates, speculative fervor, and other erratic influences not always related to long-term values of security holdings. Especially was this true of securities not of top quality. Consequently many bankers came to prefer to extend credit in the form of term loans, which did not carry the threat of rapid and erratic revaluation. During 1938 Federal and state supervisory authorities adopted a uniform procedure for valuing securities which mitigated, but did not entirely remove, the disability under which security purchases labored as compared with term loans. Roughly, this procedure called for the valuation of high-grade securities at cost,<sup>18</sup> and of lower-grade securities not in default at average market prices during the preceding eighteen months.

<sup>17</sup> See *The Answers of the American Bankers Association* in reply to a questionnaire of the U. S. Senate Committee on Banking and Currency (Research Council, American Bankers Association, New York, April 1941) p. 42.

<sup>18</sup> Less amortization of premium, if any.

The expansive effect this action normally would have had on the volume of bank purchases of corporate securities was, however, more than offset by the adoption during 1938 of another regulation regarding commercial bank investments. As applied in practice by most bank examiners, this regulation prohibited banks from purchasing corporate securities not placed in the four highest rating groups by the security rating services. As a result, small concerns which do not find it profitable to market securities publicly and larger enterprises whose financial circumstances do not earn acceptable ratings for their securities are precluded from obtaining bank credit through security issuance. The natural consequence was to increase the supply of term loan credit to such firms in these classes as could meet bank credit standards for loans. While essentially unmeasurable, this influence on the volume of term lending has undoubtedly been significant. In summary, the *net* effect of changes in the regulation of bank investments since 1933 has undoubtedly been to augment the supply of term loan credit.



# 3

## *Market for Medium-Term Business Credit*

FOUR TYPES OF FINANCIAL institutions extend medium-term credit directly to American business enterprises on a large scale. Among private financing agencies the commercial banks and life insurance companies advance such credits. Within the field of public institutions, the Federal Reserve banks and the Reconstruction Finance Corporation are active.<sup>1</sup> What has been the magnitude of term loan operations of each of these types of agencies during recent years? What has been the number and size of loans they have made? What are the characteristics of business enterprises borrowing from them, including size and industry?

### *Annual Volume of Term Loan and Private Placement Credit Extended, 1934-40*

A measure of the annual volume of term loans actually disbursed to business concerns during each year of the period 1934-40 by the four principal agencies supplying medium-term credit is contained in Table 1. The figures are estimates of money annually disbursed by commercial banks, insurance companies, Federal Reserve banks and the Reconstruction Finance Corporation, rather than amount of credit "lines" granted or loans approved, which are less significant measures of the comparative importance of the four agencies.

<sup>1</sup> A number of savings banks have made term loans to business concerns. At least one large investment company with public distribution of its shares has made term loans, and a few of the larger instalment financing concerns have also entered the field. Among government agencies, the United States Maritime Commission, the Export-Import Bank of Washington, and the Commodity Credit Corporation have advanced special types of short- and medium-term credit to businesses. But the operations of these agencies have either been highly specialized or of such minor magnitude that they are not considered herein.

Table 1—MEDIUM-TERM BUSINESS CREDIT OF TERM LENDING INSTITUTIONS: ANNUAL DISBURSEMENTS AND YEAR-END OUTSTANDINGS, 1934-40 (in millions)

Year Ending December 31	Federal Reserve Banks <sup>a</sup>	RFC <sup>b</sup>	Life In- surance Companies <sup>c</sup>	Commercial Banks <sup>d</sup>	Total
1934					
Disbursements	\$14.9	\$6.7	•	•	
Outstandings	14.9	6.6	•	•	
1935					
Disbursements	27.3	35.7	\$54	•	
Outstandings	41.3	40.0	•	•	
1936					
Disbursements	6.2	32.3	80	•	
Outstandings	32.7	63.6	•	•	
1937					
Disbursements	3.6	23.3	155	•	
Outstandings	27.4	74.8	152	\$827	\$1,081.2
1938					
Disbursements	6.0	52.5	167	217	442.5
Outstandings	30.0	107.7	319	1,083	1,539.7
1939					
Disbursements	3.9	54.1	203	827	1,080.0
Outstandings	24.7	130.6	520	1,596	2,271.3
1940					
Disbursements	2.3	28.2	379	1,352	1,761.5
Outstandings	15.5	121.3	900	2,162	3,198.8
Total					
DISBURSEMENTS	\$64.2	\$232.8	\$1,038 <sup>f</sup>	\$2,396 <sup>g</sup>	\$3,284.0

<sup>a</sup> Annual disbursements are based on a special tabulation furnished by the Board of Governors of the Federal Reserve System. Figure for 1934 covers a six-month period ending January 2, 1935. Outstandings include participations purchased, but not commitments. See *Federal Reserve Bulletin* (June 1941) p. 547.

<sup>b</sup> Outstandings include participations purchased, but not commitments. For 1940, national defense loans are excluded. Data are compiled from Reconstruction Finance Corporation, *Quarterly Reports*.

<sup>c</sup> Estimated from data compiled by the Securities and Exchange Commission, and tabulations of the National Bureau of Economic Research. See Appendix B.

<sup>d</sup> Estimated from data collected by the National Bureau of Economic Research. See Appendix A.

<sup>e</sup> Not estimated because of inadequacies of data.

<sup>f</sup> Excludes 1934.

<sup>g</sup> Excludes 1934-37.

Two striking facts are indicated with respect to annual disbursements. First, an extremely rapid rate of growth occurred in the total annual volume of medium-term business credit granted during recent years. Second, a position of overwhelming importance in the medium-term credit market is occupied by private financial institutions. Although incomplete data preclude reliable estimates of annual loan volumes of the

private agencies during the earlier years of the period, in the three years 1938-40 the rate of growth of their credit disbursements was not far from 100 percent per annum. During these three years alone, term loans made by commercial banks were about \$2.4 billion, and the medium-term credit extended by insurance companies through private purchase of securities from issuers and mortgage loans made to business enterprises was \$749 million. In comparison, the business loans disbursed by the Federal Reserve banks and the RFC were almost trifling in magnitude, the loan volume of the public agencies combined amounting to only about 5 percent of that of the private institutions during 1938-40.

There is some evidence that insurance companies entered the medium-term business loan market through private acquisitions of securities from issuers some years before commercial banks inaugurated term lending around 1933. However, by 1938 medium-term bank credit had definitely surpassed insurance company credit in annual volume. The Federal Reserve banks and the RFC promptly exercised the business lending powers granted them in June 1934. The Reserve banks disbursed a maximum amount of credit in 1935, while the RFC maximum was reached in 1939. It is significant that Federal Reserve banks disbursed a larger amount of business loans during the initial year, 1934, than did the RFC. The explanation is doubtless that at the inception of the direct business loan program Reserve banks were already equipped with trained personnel and channels of acquisition of term loans, factors the RFC required time to develop. Although the loan volume of the Corporation has greatly surpassed that of the Reserve banks in every year after 1934, the loan programs of the public agencies have not displayed the dynamic features of those of the private institutions.

Annual volumes of loans disbursed do not, of course, adequately express the importance of the roles played by the Reserve banks and the RFC in the medium-term business credit market. These agencies—limited by statute to loans made to

companies unable to obtain credit from normal banking sources—have also made commitments to take up term loans made by commercial banks, thus making it possible for many bank loans to be created or increased in amount. More important, they have stimulated term lending by private agencies by devising “bankable” credit arrangements which, in many instances, have enabled borrowers to secure loans from commercial banks.

### *Term Loan Credit Outstanding at Year-Ends, 1934-40*

The dominant position of commercial banks in the medium-term business credit market is evidenced in even more striking manner by a comparison of the year-end term credit outstandings of each of the four groups of lending institutions. At the end of 1940, commercial banks accounted for an estimated \$2,162 million, or about two-thirds, of a total of \$3,199 million of medium-term business credit outstanding. The Reserve banks and the RFC had only about 4 percent as much due from business concerns as had commercial banks and insurance companies. Although commercial bank term loans outstanding have shown remarkable growth, Table 1 indicates that the year-to-year rate of growth in medium-term private placements outstanding has outstripped that of the other agencies. It should be observed that some commercial banks located in leading financial centers have also participated in the direct purchase of securities from issuing corporations, so that the role of the commercial bank in the medium-term business credit market is even more important than is indicated by the figures in this table.<sup>2</sup>

### *Number of Institutions Extending Medium-Term Credit*

In addition to the RFC and the 12 Federal Reserve banks, medium-term business credit was available at the end of 1940 from at least 26 legal reserve life insurance companies and, according to a rough estimate, from a maximum of 2,900 commercial banks. The large life insurance companies not only purchase securities privately from issuing concerns, but, in

<sup>2</sup> See House Committee on Interstate and Foreign Commerce, 77th Congress, 1st Session, *Hearings on H.R. 4344, H.R. 5065 and H.R. 5832* (Washington, 1941) Part II, pp. 370, 459.

addition, at least three insurance companies are actively engaged in making mortgage loans to business concerns secured by their real estate or equipment. No doubt some of the mortgage loans of insurance companies that are secured by residences, apartment buildings or other "general purpose" property are, in fact, used for business financing. The magnitude of this source of business credit cannot be determined from the records of insurance companies, which generally look solely to the value of the property to liquidate the loan. The figures of Table 1 very likely understate the magnitude of life insurance company participation in the medium-term business credit market.

The rough estimate of 2,900 commercial banks engaged in term lending is made by assuming that 82 percent of all large banks (having deposits of \$10 million or more) make term loans, that 40 percent of medium-sized banks (with deposits of \$1 million to \$10 million) engage in term lending, and that no small bank (deposits of less than \$1 million) does so.<sup>3</sup> Considerable confidence may be placed in the assumption regarding the frequency with which large banks engage in term lending. Information obtained from the approximately 400 weekly reporting member banks indicates that 84 percent held some term loans in April 1939,<sup>4</sup> and 82 percent of a sample of 99 large banks responding to a questionnaire circulated by the National Bureau of Economic Research at the middle of 1941 held a significant volume of term loans.<sup>5</sup> It is also fairly clear that term lending by banks with deposits of less than \$1 million must be rare, since the legal loan limit on national banks of this size is about \$10,000—an amount normally too small to warrant the relatively large costs of making and servicing term loans. With regard to medium-sized banks, a survey made by the Superintendent of Banks of New York

<sup>3</sup> Some 13,500 insured commercial banks were examined during 1940, of which 546 had deposits of \$10 million or more, 4,168 had deposits of \$1 million to \$10 million, and the remainder had deposits of less than \$1 million. See Federal Deposit Insurance Corporation, *Annual Report, 1940*, pp. 162-63.

<sup>4</sup> *Federal Reserve Bulletin* (July 1939) p. 560.

<sup>5</sup> See Appendix A.

at the end of 1939 indicated that 43 percent of all state banks outside New York City (most of which are medium-sized institutions) had extended term credits.<sup>6</sup> If, as seems probable, this survey included instalment contracts purchased, there is some overstatement of the percentage of these banks making term loans as defined in the present study. All evidence indicates that the frequency with which banks make term loans increases rapidly with size of bank.

### *Number of Borrowers*

The number of business enterprises that have obtained medium-term credit from Reserve banks and the RFC is nearly three times as large as the number that have secured such loans from commercial banks and insurance companies. Obviously the public agencies have dealt with much smaller concerns. To the end of 1940 the RFC had authorized loans to 7,917 business enterprises aggregating \$446.6 million, and had disbursed \$239.5 million. The average loan authorization was therefore \$56,410 and the average loan disbursement was \$30,255.<sup>7</sup> Up to the same date the Reserve banks had approved 2,908 applications for loans aggregating \$212.5 million, or an average amount approved of \$73,078. Nearly 11,000 businesses have received medium-term credit from the public agencies. It is unlikely that, up to the end of 1940, more than 3,800 concerns had borrowed from commercial banks on a term basis,<sup>8</sup> or that more than 270 businesses had privately placed their medium-term securities with insurance companies.<sup>9</sup>

It is worthy of note that commercial banks and life insur-

<sup>6</sup> *Annual Report of the Superintendent of Banks for the year ending December 31, 1939* (Albany, New York, 1940) pp. 6-7.

<sup>7</sup> Disbursements were not made to all concerns to which loans were authorized. As the number of enterprises actually receiving loans is not available, average disbursement has been calculated by dividing total disbursements by the number of concerns for which loans were authorized.

<sup>8</sup> Derived by dividing estimated total loan volume of \$2.4 billion for 1938-40 (see Table 1) by \$644,000, the average original amount of term loans held by a sample of 99 commercial banks at mid-1941. See Appendix A.

<sup>9</sup> Derived by dividing estimated total loan volume of \$1,038 million for 1935-40 (see Table 1) by \$3.8 million, the average amount of all issues privately purchased by a sample of five life insurance companies, and held at the end of 1940. See Appendix B.

ance companies have far from exhausted their potential medium-term loan market. While it seems unlikely that private agencies can profitably make term loans to the smallest corporations, there are more than 130,000 business corporations with total assets exceeding \$100,000. Apparently, up to the end of 1940, only about 10 percent of these had obtained medium-term loans from any institution.<sup>10</sup>

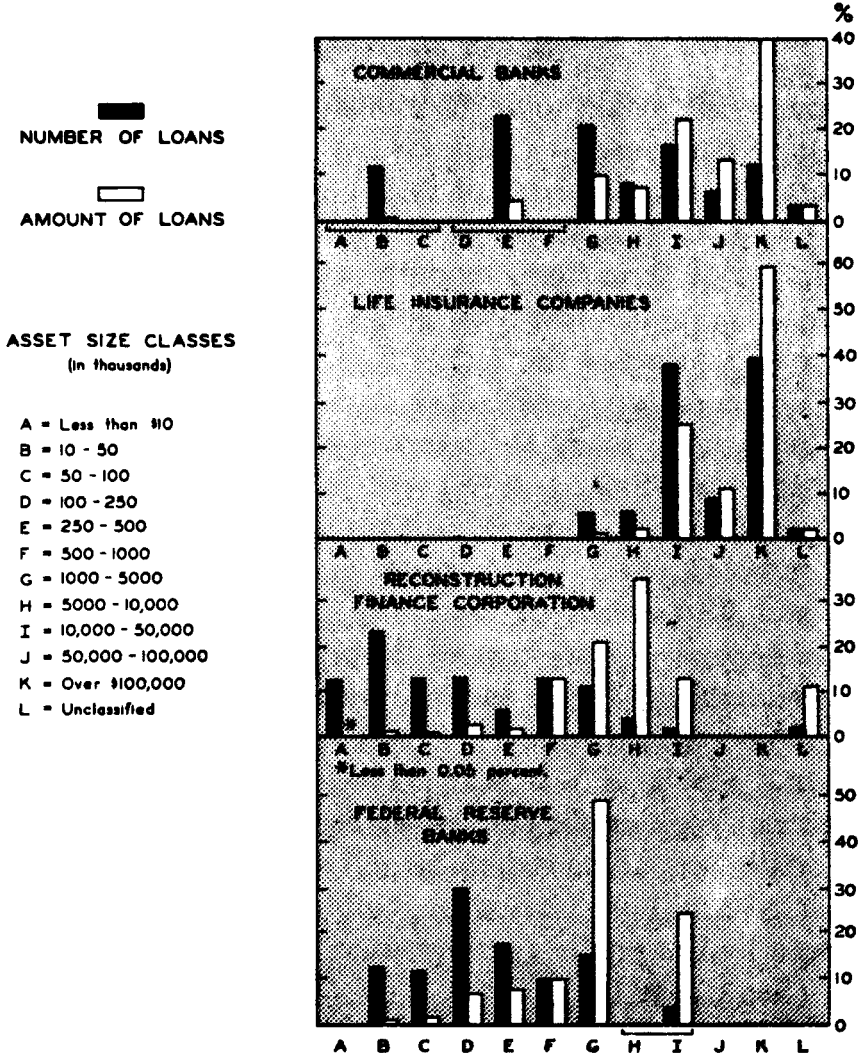
### *Size of Borrowers*

Commercial bank and insurance company medium-term loans have been made to business enterprises that are, in general, vastly larger in terms of total assets than those receiving credit from Reserve banks or the RFC. Sixty-two percent of the number of term loans made by commercial banks and 98 percent of the medium-term loans of insurance companies went to borrowers with assets of \$1 million and over, while only 19 percent of the Reserve bank and 17 percent of the RFC loans were made to concerns of this size. In terms of aggregate amounts of credit extended, the comparison is equally striking. Borrowers with total assets of \$1 million or more received nearly 93 percent of commercial bank term loans and 98 percent of insurance company credit, but accounted for only 73 percent of the amount of industrial loans approved by the Reserve banks and 69 percent of those of the RFC. Commercial bank term credit hardly touched businesses with total assets of less than \$100,000. More than half of commercial bank credit and 70 percent of life insurance company credit was advanced to large concerns with total assets of over \$50 million. Only a negligible fraction of the money advanced by the public agencies went to these very large concerns. (See Chart I.)

Definitely, medium-term credit extended by private agencies has not been a vehicle for financing "small" business enter-

<sup>10</sup> *Statistics of Income for 1937* (p. 26) reported that 127,943 corporations with assets of \$100,000 and over submitted balance sheets. To this should be added those corporations of this size class that filed corporation income tax returns but did not submit balance sheets, as well as business concerns that did not file returns at all.

## PERCENTAGE DISTRIBUTION OF THE NUMBER AND AMOUNT OF MEDIUM-TERM LOANS MADE BY TERM LENDING INSTITUTIONS, BY TOTAL ASSETS OF BORROWER<sup>©</sup>



<sup>©</sup> For data, see Appendix Table C-1



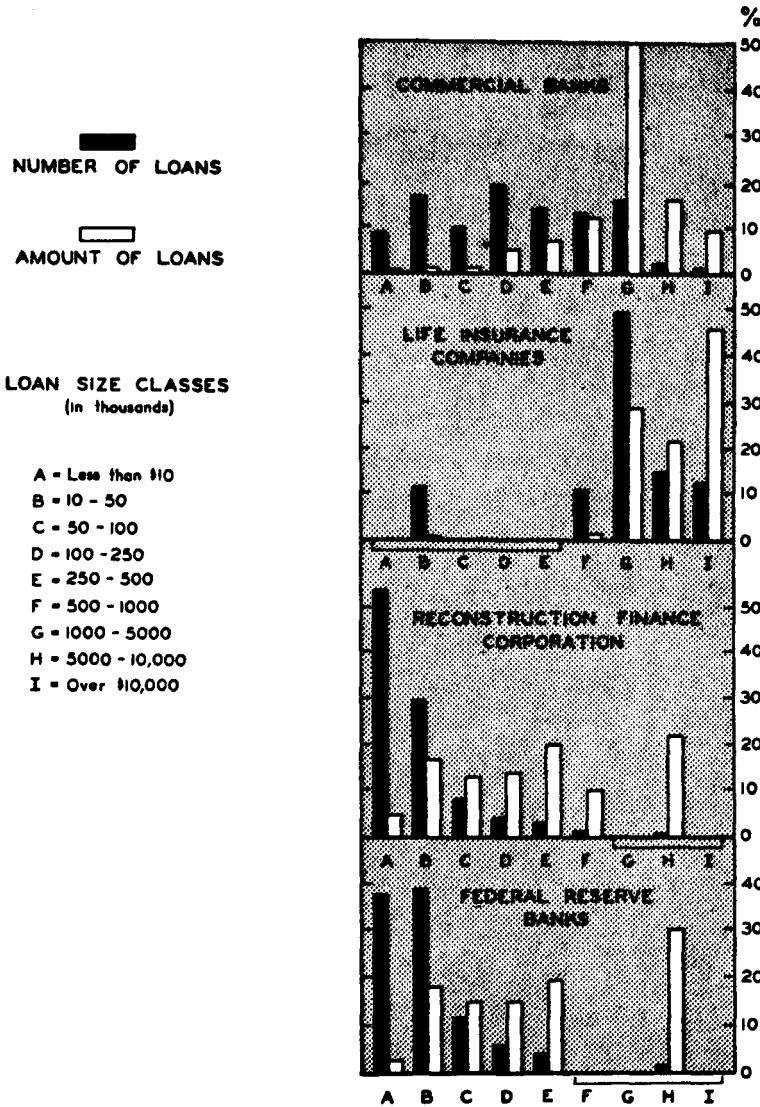
prises. Even the public agencies have advanced little credit to concerns with total assets of less than \$100,000. Private agencies have financed large concerns—those with assets of over \$10 million—through medium-term credit extensions, while the public agencies have loaned money to businesses of intermediate size. It is broadly accurate to say that the public and the private lending agencies have not competed in the same sections of the medium-term business credit market.

### *Size of Loans*

Distributions of loans by size of borrower and by size of loan are closely correlated, reflecting the obvious fact that small loans tend to be made to small concerns and large loans to larger enterprises. But in many respects the character of the credit market served by a financing institution is more accurately described by the size of its loans than by the total assets of its borrowers. The balance-sheet value of total assets is often a misleading indicator of the real current "size" of a business, because it may reflect the amount of historical investment rather than the present market value of all assets.

Chart II shows the percentage distribution of the total number and amount of medium-term loans made by the different lending agencies, according to size of loan. The largest *number* of loans made by banks fell within the \$100,000-250,000 group, while the largest number of loans made by insurance companies fell in the \$1-5 million category. In contrast, the modal loan of Reserve banks was in the \$10,000-50,000 group, and the modal loan of the RFC was less than \$10,000. The largest *amount* of credit in any loan-size class extended by commercial banks was represented by loans of \$1-5 million; for insurance companies the comparable class was over \$10 million, for Reserve banks and the RFC \$250,000-500,000. While practically no commercial bank or insurance company medium-term credit took the form of loans of less than \$50,000, about 21 percent of Reserve bank and RFC loans were in this class. At the other extreme, only 12 percent of the medium-term issues held by insurance companies were less

PERCENTAGE DISTRIBUTION OF THE NUMBER AND AMOUNT OF MEDIUM-TERM LOANS MADE BY TERM LENDING INSTITUTIONS, BY SIZE OF LOAN ©



© For data, see Appendix Table C-3

than \$500,000 and these collectively accounted for less than 1 percent of all insurance company credit.<sup>11</sup>

When it is recalled that between one-half and two-thirds of the amount of commercial bank, insurance company and Federal Reserve bank loans are divided among several institutions, and that the tabulations show the amounts held by *single* agencies, it is clear that the true size of the loans in which these agencies participated is understated in comparison with loans of the RFC, which were less frequently split. The data on size of loan tend to confirm the view that, to a substantial degree, the public and private lending agencies served business enterprises of quite different sizes. In ascending order of size of loans stand the RFC, Federal Reserve banks, commercial banks and life insurance companies, with a rather marked gap between the Reserve banks and commercial banks.

### *Industries of Borrowers*

Manufacturing concerns have comprised the most important industrial category of borrowers from all term lending institutions. The public utility industry (including transportation and communication) constitutes the second largest category of borrowers. This industry has been a notably heavy borrower in past years, and a major part of the funds secured were used for the refunding of outstanding debt.

Chart III shows that there have been significant differences in the industries served by the different types of agencies. Mining and extraction (including oil production) and finance are the next two industries in order of importance as bank term borrowers; finance was also a very important source of securities purchased privately by life insurance companies. Mining and extraction, finance and public utilities accounted

<sup>11</sup> It should be noted that the insurance company and commercial bank loans analyzed were those held on December 31, 1940 and June 30, 1941 respectively, whereas the Reserve bank and RFC samples were of loans approved at various dates. The latter samples were relatively small but are believed to be representative in view of the agreement of the percentages with partial figures on size of loans cited by Jesse H. Jones in Reconstruction Finance Corporation, *Seven-Year Report* (1939) p. 19.

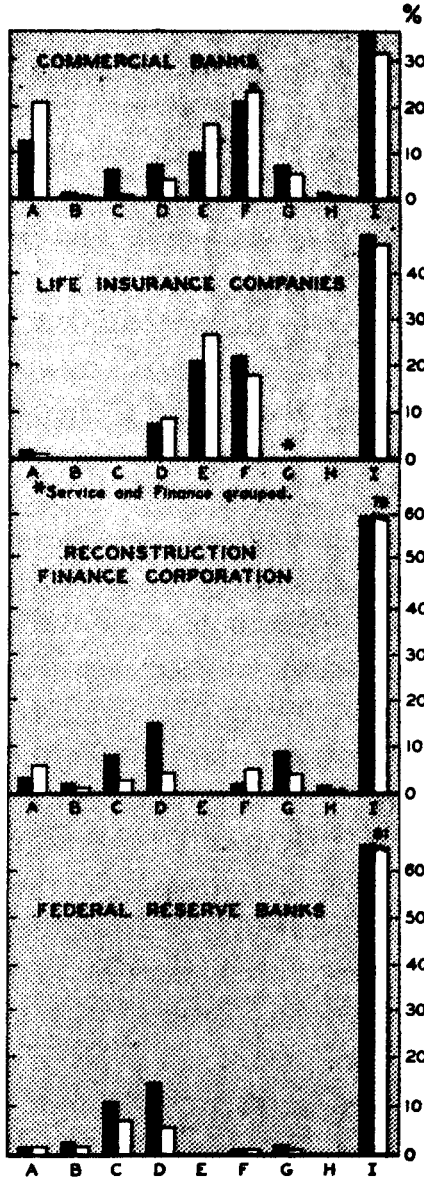
PERCENTAGE DISTRIBUTION OF THE NUMBER AND AMOUNT OF MEDIUM-TERM LOANS MADE BY TERM LENDING INSTITUTIONS, BY INDUSTRY OF BORROWER ©

■ NUMBER OF LOANS

□ AMOUNT OF LOANS

INDUSTRIAL CLASSES

- A = Mining and extraction
- B = Construction
- C = Wholesale trade
- D = Retail trade
- E = Finance
- F = Public utilities and transportation
- G = Service
- H = Agriculture, forestry and fishing
- I = Manufacturing



© For data, see Appendix Table C-2

for nearly 43 percent of the number of bank term loans and 44 percent of insurance company loans. These industries were relatively unimportant borrowers from the Reserve banks or the RFC. On the other hand, wholesale and retail concerns obtained about a quarter of the number of loans of the public agencies; retailing was also a comparatively important category of borrowers from the private institutions. Both retailers and wholesalers were especially important debtors of the Reserve banks, probably because the latter institutions have been restricted to the making of loans for working capital purposes and trading concerns have relatively greater need for this type of financing. Excepting manufacturing concerns, retailing concerns provided the largest number of borrowers from the RFC of all the industrial categories, although this agency was not restricted to the making of working capital loans but could lend for plant improvement, expansion or refunding of outstanding debt.

Although manufacturing concerns collectively accounted for the largest fraction of the number of loans made by any type of agency, the number of loans made to them was relatively a much smaller component of the term loan portfolios of commercial banks than of other term lending institutions. Within the major industrial division of manufacturing, concerns making food products, lumber and timber products, and textile mill products were, in order, relatively more numerous borrowers from Reserve banks and the RFC than were businesses engaged in other pursuits. Manufacturers borrowing from commercial banks were more diversified, but food and food products, iron and steel, and machinery concerns were comparatively numerous users of term credit.

The industrial division of the *amount* of medium-term credit extended was generally similar to that of the *number* of loans made. Nearly 60 percent of all bank medium-term credit has gone to mining and extraction (including oil production), public utility, and financing concerns, and only about 31 percent to manufacturing concerns of all kinds. Manufacturing enterprises received a somewhat larger fraction of

insurance company than of bank term credit. In contrast, nearly 78 percent of the amount of RFC loans were disbursed to manufacturing concerns, among which manufacturers of textile products, lumber and timber products, and transportation equipment were most important. Manufacturing accounts for 81 percent of Reserve bank loans, with transportation equipment, iron and steel products, lumber and timber products the chief borrowing concerns.

It therefore appears that the industrial as well as size characteristics of businesses obtaining medium-term credit from commercial banks differ to a substantial degree from those of Reserve bank and RFC borrowers. The latter agencies have specialized in the manufacturing and trading concerns; the former in extractive, public utility and financing enterprises. It should be pointed out, however, that the volume of term loan credit extended to manufacturing enterprises by private agencies is greater in amount than that provided by public agencies and that this is supplemented by short-term loans of different types.

#### *Division of Risks Among Term Lending Institutions*

A very significant feature of the market for medium-term business credit is the large extent to which the risks of non-repayment of individual loans are divided among lenders. The principle of reducing the probability of large losses through diversification of risks has, of course, been long recognized and widely applied in financial activity. It finds expression in the National Bank Act, which limits loans to individual borrowers to 10 percent of the capital and surplus of a bank. In making short-term business loans, commercial banks have often divided the total credits required by their customers among correspondent banks. In the field of long-term business credit, the investment banking mechanism has made it possible for concerns requiring large sums of money to assemble this through the sale of securities to many creditors. Each creditor was able to reduce the chance that he

would suffer large losses by purchasing comparatively small amounts of securities from each of many obligors.

Medium-term loans to business concerns are probably split much more frequently than short-term credits. They are typically of larger amount, and apart from this they carry more uncertainty as a result of their longer maturities. Moreover, term loans lack the risk-limiting features of divisibility into small units and broad marketability of publicly issued securities. On a broader scale than has been customary with short-term loans, medium-term loans have therefore been made with the cooperation of several lenders. A borrowing concern may procure its total credit requirements by negotiating a number of separate loans with each of several institutions. An originating institution may sell participations to other agencies in a single loan made by it. Finally, an originating institution may accept commitments from other agencies to take over part of its loan upon request.

The industrial loan powers conferred upon the Federal Reserve banks and the RFC during June 1934 provided for the sharing of medium-term credit risks with other institutions. From the beginning, Reserve banks were empowered to purchase participations of up to 80 percent of the amounts of loans made by commercial banks, or to make commitments to take over a maximum of 80 percent of such loans.<sup>12</sup> The RFC was also granted authority to make loans in cooperation with other lending institutions, by the purchase of participations or the giving of agreements to purchase participations, subject only to such conditions as it chose to prescribe.<sup>13</sup>

Both agencies have sold participations to banks in loans originated by them and have taken guarantees from banks with respect to parts of such loans. Since each of the public institutions is supposed not to extend credit to businesses able to obtain private financing, a determined effort has been made to secure the cooperation of private lenders in cases where

<sup>12</sup> Section 13b of the Federal Reserve Act, Act of June 19, 1934 (48 Stat. 1105, ch. 653).

<sup>13</sup> Section 5d of the Reconstruction Finance Corporation Act, Act of June 19, 1934.

the latter agencies are unwilling to advance funds alone. While the splitting of loans between banks or insurance companies has represented an endeavor to spread risks, these efforts of the public agencies have been motivated by the desire to comply with the statutes governing their industrial lending activities.

When the RFC has committed itself to purchase participations in loans made by banks it has charged an amount for such "take-out" agreements varying with the proportion of the total loan on which the bank bears the risk. Prior to April 1, 1939, the RFC charged the bank 2 percent per annum interest on the bank's portion of a loan in which the bank's participation was from 10 to 25 percent of the loan, 1½ percent when the bank's participation ranged from 25 to 50 percent of the loan, and 1 percent in cases where the bank held 50 percent or more of the loan. On April 1, 1939, these charges were reduced to 1 percent, ¾ percent and ½ percent respectively.<sup>14</sup> Consequently, a bank might shift to the RFC the risk of loss on as much as 90 percent of a term loan bearing 4 percent interest by paying to the RFC one-quarter of the interest income and netting 3 percent. The failure of private lending agencies to avail themselves on a wide scale of this apparently inexpensive form of credit insurance is not easily explained. It may be that commercial banks have believed that the risks of loss on the fractions of RFC insured loans they would hold are too great to be offset by the income, that costs of servicing such loans are too large, or that the presence of "substandard" loans in the bank's portfolio might cause a deterioration of credit standards.

Nearly 40 percent of the number and 68 percent of the original amount of term loans held by commercial banks at the middle of 1941 represented credits extended in cooperation with other lending agencies. About 55 percent of the amount of medium-term securities purchased privately by insurance companies from issuers and held at the end of 1940

<sup>14</sup> See Reconstruction Finance Corporation, *Circular No. 15*, revised (Washington, 1940).



represented issues in which two or more companies participated. It is significant that a far smaller fraction of the outstanding term credit of the RFC has been granted in cooperation with other lending agencies than is true of the Reserve banks. The data presented in Table 2 indicate that 84 percent of RFC business credit outstanding at the end of 1940 was granted without cooperation, whereas only 44 percent of Reserve bank credit outstanding was in this classification. This may indicate that the quality of the Reserve bank credits was such as to make participation more attractive to banks—a conclusion suggested by the larger size of Reserve bank loans and the greater size of their borrowing concerns, noted

*Table 2*—PERCENTAGE OF TERM CREDIT OF TERM LENDING INSTITUTIONS OUSTANDING AT DECEMBER 31, 1940, EXTENDED WITH AND WITHOUT COOPERATION OF OTHER LENDERS

	<i>Percentage of Credit Outstanding</i>			
	Federal Reserve Banks <sup>a</sup>	RFC <sup>b</sup>	Commercial Banks <sup>c</sup>	Life Insurance Companies <sup>d</sup>
With cooperation	55.9	15.8	67.5	54.8
Without cooperation	44.1	84.2	32.5	45.2
TOTAL	100.0	100.0	100.0	100.0

<sup>a</sup> Total outstandings defined as "advances outstanding" of \$9,152,000 plus "participations outstanding" of \$6,386,000 plus "commitments outstanding" of \$5,226,000 in loans of other agencies. Credit "with cooperation" is the sum of the last two items, and "without cooperation" represents the first item. See *Federal Reserve Bulletin* (August 1941) p. 757.

<sup>b</sup> Total outstandings defined as "loans to business enterprises outstanding" of \$111,876,000, plus "purchases of participations" outstanding of \$6,263,000 plus "commitments to purchase participations" from financial institutions outstanding of \$2,500,000 plus "agreements to purchase participations" from financial institutions of \$12,283,000. Credit "with cooperation" defined as sum of the last three items, and "without cooperation" represents the first item. See Reconstruction Finance Corporation, *Quarterly Report*, Fourth Quarter, 1940, pp. 9, 13.

<sup>c</sup> Total outstandings represents the original amount of all term loans held by a National Bureau sample of 99 banks on or around June 30, 1941. Credit "with cooperation" represents original amounts of loans split with other institutions, and "without cooperation" represents loans not split.

<sup>d</sup> Total outstandings represents original amounts of securities purchased privately from issuers by a National Bureau sample of five large insurance companies, and held at December 31, 1940. Credit "with cooperation" represents issues with respect to which other agencies participated, and "without cooperation" represents credits advanced by one institution.

previously. It may also reflect the closer organic relationship of the Reserve banks to commercial banks.

The magnitude of risk division among commercial banks with respect to term loans is surprising. When splitting has occurred, it has been to an overwhelming degree with other banks, or with other banks and insurance companies. Of the term loans that were split, division with one other bank was most frequent, and loans split with four or less other banks comprised 72 percent of the number and 64 percent of the original amount of all split loans. But many loans have been split with an intricate network of other institutions, one loan being divided among 58 banks. Analysis of this risk-limiting practice does not reveal any correlation with the industry of the borrower or the term of the loan. Apparently, banks are as likely to split loans of one as of another industry and loans of long term as of shorter term. As would be expected, the tendency is to split loans of large size, the average amount of a split term loan being over \$1 million while that of a non-split loan was about \$400,000.

The prime motive behind splitting is clearly to distribute risks, and, in many cases, to comply with national and state banking laws. Viewed in broader perspective, cooperation among commercial banks in extending medium-term business credit is a technique parallel in its economic function to that of the underwriting syndicate in investment banking. It reduces the probability of disastrous losses to an individual lender, while making possible financial transactions of greater magnitude than a single lending institution could undertake. Its extension among small banks could form one method of introducing medium-term credit into local enterprises located in those small communities in which term credit is not presently available.

## *Characteristics of Term Loans*

ATTENTION IS NOW FOCUSED directly upon term loans as business credit transactions, rather than upon the financial institutions and the business concerns which comprise the demand and supply sides of the market. What are the maturities of loans at time of making, the nature of security taken by lenders, the uses of funds by borrowers, the types of repayment provisions? In approaching these questions it is well to bear in mind that the Reserve banks and the Reconstruction Finance Corporation have not been free, as have the private term lending institutions, to make loans of any kind. Their loans have had to conform to statutory prescriptions, the most important of which was that credit should not be available from private agencies.

### *Term Loans of Commercial Banks<sup>1</sup>*

#### *Term of Loan*

It is significant that, of the loans held by commercial banks at the middle of 1941, about 30 percent of the number and 49 percent of the original amounts had terms *exceeding* five years at time of making. This indicates that the self-imposed rule of policy followed by a majority of commercial banks not to make term loans with maturities more than three, four, or five years distant has often been violated. Similar to the business loans of the RFC, however, a greater number and amount of bank term credits had terms of five years than of any other number of years, and there was also a concentration on three-year terms. Table 3 shows that ten years is a

<sup>1</sup>This section is based upon analysis of term loans held around June 30, 1941 by a National Bureau sample of 99 large commercial banks. See Appendix A for description of the data and of estimates made therefrom.

**Table 3—NUMBER AND ORIGINAL AMOUNT OF TERM LOANS HELD BY 99 COMMERCIAL BANKS ABOUT JUNE 30, 1941, BY TERM AT TIME OF MAKING\* (dollar figures in thousands)**

Term at Time of Making	Number of Loans		Original Amount of Loans	
	Number	Percent	Amount	Percent
1 year	67	2.6	\$17,839	1.1
2 years	268	10.3	60,435	3.6
3 years	403	15.5	157,508	9.4
4 years	188	7.2	104,525	6.2
5 years	868	33.3	489,690	29.2
6 years	196	7.5	180,651	10.7
7 years	159	6.1	170,620	10.2
8 years	115	4.4	101,838	6.1
9 years	32	1.2	35,351	2.1
10 years	261	10.0	330,613	19.6
Over 10 years	17	.7	9,879	.6
No information	33	1.2	20,303	1.2
<b>TOTAL</b>	<b>2,607</b>	<b>100.0</b>	<b>\$1,679,252</b>	<b>100.0</b>

\* National Bureau sample of 99 commercial banks. Excludes "revolving" term loans  
See Appendix A.

virtual maximum for bank term credit, with less than 1 percent of the number and amount of loans having terms exceeding this. The majority of longer term loans were for refunding purposes, and new money loans have tended to have shorter maturities.

Certain correlations have been observed between the term at time of making of loans analyzed and the industries of borrowers. The largest number of oil production loans had terms of three years, although the largest amount of credit extended to this industry had a ten-year term. Longer terms were of more than average significance in the retail trade, public utility, tobacco products, and lumber industries. Shorter than average terms were found in the construction industry. To some extent, terms have been shorter in those industries subject to a high degree of cyclical fluctuation in earning power than in industries not so subject, but there are numerous exceptions to this generalization.

There is also some evidence of positive correlation between the size of loans and their term to maturity. Within every category of loan size there was a larger number of loans representing a larger amount of credit with five-year terms than with terms of any other number of years, *excepting* loans under \$10,000 and loans over \$10 million. Among loans of less than \$10,000, two- and three-year terms were comparatively important, and among loans over \$10 million those with terms of ten years bulked largest in the aggregate. This phenomenon probably has two explanations: First, other things being equal, borrowers are able to repay smaller loans in a shorter period of time than they are able to repay larger loans; second, if other influences are held constant, banks make smaller loans to smaller businesses and seek to limit the inherently greater risks carried by these credits through a shortening of terms.

#### *Security Taken*

Table 4 shows that 56 percent of the number of bank term loans were secured, but secured loans represented only a third of the original amounts of credit extended. As would be expected, the typical secured loan was smaller than the average unsecured loan, because it was made to a smaller than average business and probably involved greater risk to the lender. Averages, of course, conceal a great deal of variation between individual concerns of all sizes. Although commercial bankers commonly hold that their real assurance of repayment lies in the agreement of the borrower to restrict his conduct in certain ways, in the majority of cases they have not relied solely upon the sanctions provided by loan agreements.

Unlike the RFC, commercial banks have usually taken pledges or assignments of *one type* of asset rather than of combinations of assets. Only a fourth of the number and a fifth of the amount of secured term loans were secured by a combination of the borrowing concern's assets. While ma-

**Table 4—NUMBER AND ORIGINAL AMOUNT OF TERM LOANS HELD BY 99 COMMERCIAL BANKS ABOUT JUNE 30, 1941, BY TYPE OF SECURITY\* (dollar figures in thousands)**

Type of Security	Number of Loans		Original Amount of Loans	
	Number	Percent	Amount	Percent
<b>ALL LOANS</b>				
Unsecured	1,140	43.7	\$1,117,393	66.5
Secured	1,459	56.0	558,738	33.3
No information	8	.3	3,121	.2
<b>TOTAL</b>	<b>2,607</b>	<b>100.0</b>	<b>\$1,679,252</b>	<b>100.0</b>
<b>SECURED LOANS</b>				
Real estate other than plant only	68	4.7	\$10,315	1.8
Plant (including leaseholds) only	286	19.6	48,525	8.7
Machinery and equipment only	379	26.0	75,753	13.6
Assignment of government claims only	33	2.3	32,316	5.8
Receivables only	15	1.0	7,225	1.3
Inventories only	55	3.8	30,758	5.5
Stocks and bonds only	180	12.3	209,951	37.6
Life insurance only	44	3.0	7,890	1.4
Assignment of other claims only	51	3.5	14,246	2.5
Combinations of assets	348	23.8	121,759	21.8
<b>TOTAL</b>	<b>1,459</b>	<b>100.0</b>	<b>\$558,738</b>	<b>100.0</b>

\* National Bureau sample of 99 commercial banks. Excludes "revolving" term loans. See Appendix A.

achinery and equipment was offered most frequently as collateral security for term credit, with plant and stocks and bonds running next in importance, stocks and bonds collateralized a larger *amount* of secured term credit than did any other type of asset. The comparative infrequency with which real estate was pledged suggests that commercial banks tend to place little reliance upon the liquidation values of special-purpose properties, and wish to avoid the restrictions (surrounding national banks especially) with regard to loans secured by real estate. Inventories or accounts receivable are infrequently used to collateralize medium-term credit. Such

assets usually are pledged by business concerns to obtain short-term credit extended under special techniques.<sup>2</sup>

Another type of collateral security that may be taken by a term lender is the endorsement or guarantee of the debt by other entities than the borrowing concern, either officers, stockholders, parent companies or other persons. Evidently this has not been a device generally employed by commercial banks to increase the probability of payment of their term loans, for only about 18 percent of the number of loans, comprising a mere 6 percent of original amounts, were endorsed or guaranteed. The average size of endorsed loans was much smaller than that of nonendorsed loans. This doubtless reflects the efforts of banks to lessen the greater risks normally attached to smaller loans made to enterprises of less than average size.

#### *Use of Funds by Borrowers*

Almost 55 percent of the number of term loans made by banks were reported used solely to provide new money for expansion, although such loans comprised less than one-third of the original amounts of all loans held by banks at mid-1941. Although only 33 percent of the number of loans were expected to be used solely for retirement of obligations, these loans constituted 54 percent of all term credit. The amount of term loans used for refunding purposes is not surprising, in view of the comparatively large costs of financing through the securities markets as well as falling interest rates. On the average, refunding loans were more than twice as large as new money loans, more than a million dollars as compared with \$402,000. About 12 percent of the number and amount of loans were used by borrowers *both* for new money and refunding purposes in undetermined proportions. Evidently term loans are generally contracted to finance special business programs, otherwise it would not have been possible for bankers

<sup>2</sup> See forthcoming publications, National Bureau of Economic Research (Financial Research Program), *Accounts Receivable Financing*, by Raymond J. Saulnier and Neil H. Jacoby and *Field Warehousing and Its Relation to Business Financing*, by Neil H. Jacoby and Raymond J. Saulnier.

to report an exclusive use for more than 87 percent of the loans.

With respect to the new money loans, the data in Table 5 indicate that about 30 percent of the number and nearly 50 percent of the amount were used solely to increase working capital of borrowers. Another 30 percent of the number of loans provided machinery and equipment. Loans to finance plant construction and to acquire various combinations of assets were comparatively less important. Of the loans used entirely for retirement, nearly 37 percent of the number and

**Table 5—NUMBER AND ORIGINAL AMOUNT OF TERM LOANS HELD BY 99 COMMERCIAL BANKS ABOUT JUNE 30, 1941, BY USE OF FUNDS\*** (*dollar figures in thousands*)

Use of Funds	Number of Loans		Original Amount of Loans	
	Number	Percent	Amount	Percent
<b>ALL LOANS</b>				
New money only	1,421	54.5	\$531,467	31.6
Retirement only	861	33.0	908,463	54.1
Combinations of new money and retirement	288	11.1	206,475	12.3
No information	37	1.4	32,847	2.0
<b>TOTAL</b>	<b>2,607</b>	<b>100.0</b>	<b>\$1,679,252</b>	<b>100.0</b>
<b>NEW MONEY LOANS</b>				
Plant only	347	24.4	\$79,347	14.9
Machinery and equipment only	430	30.3	95,879	18.0
Working capital only	402	28.3	262,024	49.3
Other single purposes only	23	1.6	14,773	2.8
Combinations of purposes	219	15.4	79,444	15.0
<b>TOTAL</b>	<b>1,421</b>	<b>100.0</b>	<b>\$531,467</b>	<b>100.0</b>
<b>RETIREMENT LOANS</b>				
Bonds only	316	36.7	\$426,755	47.0
Bank debt only	163	18.9	132,645	14.6
Other debt only	194	22.5	161,224	17.7
Combinations of debt	89	10.4	100,747	11.1
Preferred stocks only	48	5.6	28,716	3.2
Other combinations	51	5.9	58,376	6.4
<b>TOTAL</b>	<b>861</b>	<b>100.0</b>	<b>\$908,463</b>	<b>100.0</b>

\* National Bureau sample of 99 commercial banks. Excludes "revolving" term loans. See Appendix A.



47 percent of the amount were devoted to the retirement of outstanding bonds. This striking fact illustrates the extent to which the bank term loan has encroached upon security marketing through the investment banking mechanism. Refunding of bank debt and other debt, taken together with bond refunding, accounted for nearly four-fifths of all refunding loans, the retirement of preferred stock or of a combination of obligations being of minor importance.

There have been rather sharp industrial variations in the uses of funds by borrowing concerns. The *number* of loans made solely to provide new money to the borrower was larger in all major industrial groups than the number of credits extended for refunding or for a complex of uses, except in finance where refunding loans were most frequent in number. The *amount* of credit advanced for retirement purposes exceeded the amount of credit for new money in all major industrial groups excepting wholesale trade, construction, and agriculture, forestry and fishing. Data on use of term loans by major and minor industrial groups are given in Table 6.

#### *Repayment Provisions*

To an important degree commercial bank term loans are repaid in equal or approximately equal instalments. Nearly 72 percent of the number and 56 percent of the original amounts of all loans held by banks at mid-1941 were so dischargeable. Even so, the schedule of equal instalments appears to have less vogue among the term credits of commercial banks than among loans of the Reserve banks and the RFC. About 7 percent of the number and over 11 percent of the amount of bank loans were repayable in one lump sum at maturity, and another 17 percent of the number and 29 percent of the original amounts had a "balloon" final payment. Loans with balloon payments were larger on the average than those repayable in one lump sum; and loans with either of these types of repayment provisions were larger than those repayable in equal instalments. Term loans with balloon payments closely resemble corporate bond issues with sinking funds usually

**Table 6—NUMBER AND ORIGINAL AMOUNT OF TERM LOANS HELD BY 99 COMMERCIAL BANKS ABOUT JUNE 30, 1941, BY INDUSTRY AND USE OF FUNDS<sup>a</sup> (dollar figures in millions)**

Industry	New Money Only		Retirement Only		Combinations of Purposes <sup>b</sup>		All Loans	
	No.	Amount	No.	Amount	No.	Amount	No.	Amount
Oil production	146	\$86.3	42	\$101.4	38	\$62.7	226	\$259.4
Other mining and extraction	34	15.6	33	77.0	14	14.1	81	106.7
Construction	12	3.1	4	.1	2	.5	18	3.7
Wholesale trade	95	6.7	29	3.9	19	2.5	143	13.1
Retail trade	111	20.9	56	34.5	23	11.9	190	67.3
Finance	94	63.1	149	188.7	15	13.6	258	265.4
Pub. util., transp. and communication	328	127.4	176	219.0	35	36.8	539	383.2
Service	108	15.8	55	36.3	23	13.0	186	65.1
Agriculture, forestry and fishing	26	.6	3	.2	3	1.2	32	2.0
Government	2	1.1	3	9.1	..	..	5	10.2
Manufacturing	465	190.9	311	238.3	153	83.0	929	512.2
Food and products	77	26.2	33	12.7	21	7.8	131	46.7
Tobacco products	5	5.3	10	32.1	..	..	15	37.4
Textile mill products	22	2.5	12	9.5	9	6.3	43	18.3
Wearing apparel	10	2.5	4	3.2	2	.8	16	6.5
Lumber and timber	3	.7	12	6.9	7	1.1	22	8.7
Furniture and fin. lumber	9	2.6	6	.7	5	.5	20	3.8
Paper and pulp	40	14.9	33	41.6	11	10.5	84	67.0
Printing and publishing	38	12.5	34	12.1	12	3.2	84	27.8
Chemicals	25	20.1	15	10.1	5	.7	45	30.9
Petroleum and coal prod.	5	1.0	4	2.1	..	..	9	3.1
Rubber and products	6	1.5	13	13.9	1	.2	20	15.6
Leather and products	4	1.1	5	1.8	..	..	9	2.9
Stone, clay, glass	11	5.4	17	5.8	5	1.2	33	12.4
Iron and steel mills	35	19.1	40	39.5	19	13.0	94	71.6
Transportation equipment	39	34.0	4	.5	3	1.8	46	36.3
Non-ferrous metals	10	1.5	6	6.2	6	2.2	22	9.9
Electrical machinery	18	3.3	6	2.2	4	1.4	28	6.9
Other machinery	43	10.5	19	8.6	15	5.5	77	24.6
Autos and auto. equip.	18	4.1	9	2.8	7	5.5	34	12.4
Miscellaneous and not allocable	47	22.1	29	26.0	21	21.3	97	69.4
<b>TOTAL</b>	<b>1,421</b>	<b>\$531.5</b>	<b>861</b>	<b>\$908.5</b>	<b>325</b>	<b>\$239.3</b>	<b>2,607</b>	<b>\$1,679.3</b>

<sup>a</sup> National Bureau sample of loans made by 99 commercial banks. Excludes "revolving" term loans. See Appendix A.

<sup>b</sup> Includes loans for which no information was given.

designed to extinguish not more than two-thirds of outstanding debt before maturity, leaving the final payment as a sort of balloon. Hence it is probable that a business concern for which the making of a term loan was an alternative to a public offering of securities adapted this common feature of public corporate bond issues to its term loans. The additional risk to the lender of balloon or lump sum repayments as against amortization through equal instalments should not be overlooked. The insignificant fraction of bank term loans that is indicated by Table 7 to be repayable in accordance with net or gross income of the borrower was smaller than for Reserve bank or RFC loans. This may be interpreted as an indication that commercial banks dealt with a group of enterprises whose abilities to make repayment were so much more favorable that it was not necessary to gear the discharge of debt so carefully to the business fortunes of the debtor. However, repayment in accordance with net or gross income is likely to be more important than is indicated by the data, because such a method is often subsidiary or alternative to other methods specified in loan agreements.

Table 7—NUMBER AND ORIGINAL AMOUNT OF TERM LOANS HELD BY 99 COMMERCIAL BANKS ABOUT JUNE 30, 1941, BY TYPE OF REPAYMENT SCHEDULE\* (dollar figures in thousands)

Type of Repayment Schedule	Number of Loans		Original Amount of Loans	
	Number	Percent	Amount	Percent
One sum at maturity	180	6.9	\$191,242	11.4
Equal, or approximately equal, instalments	1,866	71.6	945,845	56.3
Larger final payment	449	17.2	481,177	28.7
In accordance with net or gross income	8	.3	5,205	.3
Other methods	72	2.8	40,209	2.4
No information	32	1.2	15,574	.9
<b>TOTAL</b>	<b>2,607</b>	<b>100.0</b>	<b>\$1,679,252</b>	<b>100.0</b>

\* National Bureau sample of 99 commercial banks. Excludes "revolving" term loans. See Appendix A.

**Medium-Term Securities**  
**Privately Purchased by Life Insurance Companies**

**Term of Loan**

It has already been observed that the corporate bonds and notes purchased privately from issuers by life insurance companies are for the most part long-term credits, outside the area marked out for study. On a definition of medium-term credit as running for 15 years or less, approximately 75 percent of the amount of all private placements would be excluded.<sup>3</sup> If medium-term credit is limited to that with terms of 10 years or less, then 88 percent of the amounts of all private placements purchased by insurance companies are excluded. No matter how the medium-term business credit market is defined, insurance company loans are of much greater average term than those of commercial banks or public agencies. With respect to length of credit, they have stood on the one extremity of the market, just as the Reserve banks have occupied the other end, with commercial banks and the RFC in an intermediate position. Table 8 indicates that less than 16 percent of the number and 15 percent of the amount of all privately purchased issues having terms of 15 years or under matured five years or less after date of issuance. Well over half the amount of credit carried a term of more than ten years. A tendency exists to concentrate maturities on five, ten and fifteen-year periods after issuance. Insurance companies have occasionally split loans running over ten years with commercial banks, taking that part repayable after ten years and leaving to banks the shorter maturities of the loan. This type of financial cooperation does not appear to have developed far. Only 46 loans (originally amounting to \$65.6 million), out of the 2,764 term loans held by 99 large commercial banks at the middle of 1941, had been split with insurance companies alone or with other banks *and* insurance companies.

<sup>3</sup> See Appendix B for method of estimation.

Table 8—PRIVATELY PURCHASED SECURITIES OF MEDIUM TERM, HELD BY 5 LIFE INSURANCE COMPANIES AT DECEMBER 31, 1940, BY TERM AT TIME OF ACQUISITION AND BY TYPE OF SECURITY<sup>a</sup> (dollar figures in thousands)

	Number of Issues		Amount of Issues	
	Number	Percent	Amount	Percent
TERM AT TIME OF ACQUISITION				
Less than 5 years	23	10.6	\$74,288	9.0
5 years	11	5.1	45,447	5.5
6-9 years inclusive	44	20.3	143,210	17.4
10 years	42	19.4	150,104	18.2
11-14 years inclusive	32	14.7	116,918	14.2
15 years	65	29.9	294,142	35.7
TOTAL	217	100.0	\$824,109	100.0
TYPE OF SECURITY				
Unsecured	131	60.4	\$547,928	66.5
Secured	86	39.6	276,181	33.5
Lien on real estate <sup>b</sup>	60	27.6	166,975	20.3
Lien on equipment <sup>c</sup>	23	10.6	80,296	9.7
Other liens <sup>d</sup>	3	1.4	28,910	3.5
TOTAL	217	100.0	\$824,109	100.0

<sup>a</sup> National Bureau sample of holdings of 5 life insurance companies. See Appendix B. Term at time of acquisition is regarded as identical with term at time of issuance.

<sup>b</sup> Includes first mortgages or first liens, or both, on real estate. Also includes first mortgage and collateral trust notes, and second mortgages.

<sup>c</sup> Includes first mortgages or first liens on equipment, and equipment trust certificates.

<sup>d</sup> Includes combinations of security, preferred ship mortgages, and collateral trust notes.

### Security Taken

Concerns that have placed their securities privately with life insurance companies have nearly all been prime credit risks—corporations of regional or national scope. It is a normal consequence that over 60 percent of the issues, comprising about two-thirds of the original amounts of credit, have been unsecured. Among secured loans, Table 8 shows that first liens or mortgages on real estate have been the most important type of security, with liens on equipment next in frequency of use. In instances where security has been taken from public utility and manufacturing concerns, it has been most frequent

to take first mortgages on fixed assets, or to collateralize the loan with stocks and bonds, or both. Credits advanced to railroad companies have been secured in the main by liens on equipment, often established through the creation of equipment trusts, although the chattel mortgage is growing in importance as a security device.

#### *Use of Funds by Borrowers*

While there are no quantitative data available to measure the way in which concerns privately disposing of issues to insurance companies have utilized the loan proceeds, it is likely that the pattern of use is similar to that of bank term loans. That is, the bulk of credit has gone to retire or refund outstanding obligations. Yet it is clear that some part of private placements has provided money for business expansion. Railroad equipment trust issues are definitely within this category.

#### *Repayment Provisions*

Only about one-quarter of the number and amount of medium-term securities privately acquired by life insurance companies have carried serial maturities, and thus have been similar to term loans of commercial banks and public agencies with respect to repayment provisions. Table 9 indicates that the majority of these medium-term issues are legally repayable in lump sums at maturity, although sinking funds have occasionally been provided for in purchase agreements. By and large, securities privately placed appear to have carried repayment arrangements substantially similar to those of publicly marketed securities. Such arrangements have differed from those associated with commercial bank term loans in that a much smaller proportion of private placement credits have provided for regular schedules of payments, completely amortizing debts at their maturity dates. Other factors being the same, the risks of nonrepayment of privately placed issues have therefore been greater.

Table 9—PRIVATELY PURCHASED SECURITIES OF MEDIUM TERM, HELD BY 5 LIFE INSURANCE COMPANIES AT DECEMBER 31, 1940, BY METHOD OF REPAYMENT AND YEAR OF MATURITY<sup>a</sup> (dollar figures in thousands)

Method of Repayment and Year of Maturity	Number of Issues		Amount Outstanding	
	Number	Percent	Amount	Percent
Serial maturities	58	26.7	\$174,674	23.0
Single maturity	159	73.3	586,333	77.0
Prior to 1945	29	13.4	105,628	13.9
1945 to 1950	55	25.3	189,642	24.9
1950 to 1955	60	27.7	217,327	28.5
During 1955	15	6.9	73,736	9.7
TOTAL	217	100.0	\$761,007	100.0

<sup>a</sup> National Bureau sample of holdings of 5 life insurance companies. See Appendix B.

### *Business Loans of the Reconstruction Finance Corporation<sup>4</sup>*

#### *Term of Loan*

The RFC has been bound by no statutory limitation on term of business loans. The Corporation has announced that the repayment program is to be set up in such a way as not to restrict the development of business or impair the working capital of the borrower during the life of the loan. The most definite specification regarding term has been:<sup>5</sup>

For established industries whose need is principally for shorter term credit, loans usually should be repaid within five years or less. When loans are primarily to finance capital expenditures, a longer repayment program may be considered.

In view of the fact that about 13 percent of the number and half the amount of loans approved have had terms exceeding five years, it seems reasonable to infer that a substantial frac-

<sup>4</sup> This section is based mainly upon a study by the authors of review committee reports in the files of the RFC pertaining to a random sample of 40 loans approved and 40 loan applications rejected.

<sup>5</sup> Reconstruction Finance Corporation, *Circular No. 13*, revised, "Information Regarding Loans to Business Enterprises" (Washington, 1938).

Table 10—NUMBER AND AMOUNT OF SAMPLES OF RFC BUSINESS LOANS REQUESTED AND APPROVED, BY TERM OF LOAN TO MATURITY (*dollar figures in thousands*)

Term of Loan to Maturity	LOANS REQUESTED <sup>a</sup>				LOANS APPROVED <sup>b</sup>			
	Number		Amount		Number		Amount	
	Num-ber	Per-cent	Amount	Per-cent	Num-ber	Per-cent	Amount	Per-cent
Less than 1 year	1	1.0	\$2	.0	2	3.7	\$27	.3
1 year	1	1.0	1	.0	2	3.7	151	1.5
2 years	4	3.9	19	.2	4	7.4	9	.1
3 years	8	7.8	1,478	12.8	11	20.4	2,188	21.1
4 years	2	1.9	92	.8	7	12.9	314	3.0
5 years	51	49.5	4,543	39.4	21	38.9	2,376	22.9
6-7 years	7	6.8	1,867	16.2	3	5.6	224	2.2
8-9 years	6	5.8	111	1.0	2	3.7	315	3.0
10 years	20	19.4	1,970	17.1	2	3.7	4,775	45.9
Over 10 years	3	2.9	1,446	12.5	..	..	..	..
<b>TOTAL</b>	<b>103</b>	<b>100.0</b>	<b>\$11,529</b>	<b>100.0</b>	<b>54</b>	<b>100.0</b>	<b>\$10,379</b>	<b>100.0</b>

<sup>a</sup> National Bureau sample of 103 applications for loans.

<sup>b</sup> National Bureau sample of 54 approved loan applications.

tion of RFC credit has been intended to finance capital expenditures or to refund outstanding debt. The figures contained in Table 10 reflect a concentration upon three and five years in term of loans approved. Even more significant is the fact that term of loans requested by applicants considerably exceeded the length of term granted. No less than 35 percent of a number of applicants, collectively applying for nearly half of all requested RFC credit, wanted terms of more than five years. This may be interpreted as evidence that the fundamental need of many applicants was for equity capital or longer term credit than the RFC felt able to extend. Any analysis of RFC loans by term at time of making must be recognized as of limited significance, because of the almost continuous modification of loan agreements by the Corporation in order to cure defaults, to postpone foreclosure proceedings, or to meet changed circumstances of the borrower. This flexi-



bility of term loans has been noted previously. Although the Corporation generally pared down requested terms in approving loans, RFC credit has been of longer term than that of the Reserve banks.

*Security Taken*

A significant difference between commercial bank and RFC term loans is that practically all RFC business loans have been secured. It was considered necessary to obtain first liens on real estate and equipment, and other creditors were asked to subrogate their claims through "stand-by" agreements. The pledge of inventories through a field warehousing arrangement was frequently required. Assignments of accounts receivable were often taken. The cash surrender value of life insurance policies on the lives of partners, principal officers or stockholders was frequently required to be pledged, or in cases where no policies were in existence, the principals of the borrower were sometimes required to procure them. Personal endorsements of the loan by principal officers or stockholders with "outside" financial strength were often obtained. In many instances several, and in some cases all, of these types of security were taken on individual loans. Since the RFC Act did not require security but stated that business loans should be "of such sound value, or so secured, as reasonably to assure retirement or repayment," it is plain that the Corporation dealt with borrowers whose financial statements did not warrant unsecured credit, that is, with the "marginal" borrowers whose credit needs the RFC loan program was designed to fulfill.

*Use of Funds by Borrowers*

The RFC has been restricted by the legal requirement that loans shall be made for the purpose of "maintaining or promoting the economic stability of the country or encouraging the employment of labor." The Corporation announced that it would make loans for the hiring of labor, the purchase of

materials and machinery, the financing of industrial construction, the establishment of new business enterprises or the expansion of existing concerns. Its intention has not been to lend money primarily to enable a borrower to pay existing indebtedness, although a portion of the proceeds of a loan may be so utilized.<sup>6</sup> Although no analysis of loans by borrowers' intended use of funds is available, review of a sample of cases indicates that, while the bulk of funds provided borrowers with new money, rather substantial fractions—in some instances more than 50 percent—of individual loans have been used to discharge previous debts. But such uses would be quite consistent with law, if it could be shown that withholding of RFC credit would have resulted in a discontinuance of operations by the unfortunate applicant. It is a naive but frequent error to argue that refunding loans never affect employment or business activity.

#### *Repayment Provisions*

Like the credits of the Federal Reserve banks, nearly all of the RFC business loans have been repayable in a number of instalments, not always equal in amount. A majority of the loans were intended to be discharged in monthly, rather than in quarterly, semi-annual or annual instalments. This probably reflects the close control that the lender to financially straitened concerns necessarily must exercise, also the desire of lenders in a new and untried field to take precautions to protect their position. A significant feature of the plans of repayment was that many called for fixed dollar amounts or certain amounts per unit of product sold, whichever was greater. These schedules represented efforts to scale the discharge of indebtedness roughly in accordance with the ability of the debtors. Some loan agreements contained the so-called "fifty percent clause," which requires the debtor to pay stated instalments or 50 percent of earnings before depreciation and Federal income taxes, whichever is greater.

<sup>6</sup> Reconstruction Finance Corporation, *Circular No. 13*, revised.

*Industrial Loans of the Federal Reserve Banks<sup>7</sup>**Term of Loan*

By law the term of Reserve bank loans to business enterprises has been limited to five years. That this limitation on maximum term of loans has narrowed the market for Reserve bank business credit is evidenced by the fact that loans comprising half of the amount of commercial bank and RFC term credit have maturities exceeding this length. Such evidence as is available indicates that the bulk of Reserve bank loans, in number and amount, have matured at two to five years. A few credits have been extended for periods of six or nine months, and thus do not fall within the category of term loans. But the large number of renewals of loans that were not discharged in accordance with existing schedules limits the significance of any tabulation of loans according to term. Indeed, a basic characteristic of all term lending is the need for rescheduling the payments of loans in the light of debtors' changing circumstances. The longer life of term credits necessitates estimation of borrowers' needs for funds and of their ability to repay loans, and such estimates are perforce revised through time. During 1941 the repayment provisions of many term loans made to prime business concerns required relaxation as a result of the strain put on their working capital by the high productive activity of the period.

*Security Taken*

The Federal Reserve Act provided that industrial advances should be made upon "a reasonable and sound basis," leaving the banks free to determine whether or not to take collateral security on their industrial loans. The fact that few loans have been unsecured indicates that the character of borrowers from Reserve banks has been different from that of term

<sup>7</sup> This section draws upon a study of the National Bureau of Economic Research (Financial Research Program), *Capital and Credit Requirements of Federal Reserve Bank Industrial Loan Applicants*, by Charles L. Merwin and Charles H. Schmidt (ms. 1941). It is partially based upon a review by the authors of a sample of credit files pertaining to Section 13b loans made by the Federal Reserve Banks of New York and Philadelphia.

**Table 11—NUMBER AND AMOUNT OF INDUSTRIAL ADVANCES OF FEDERAL RESERVE BANKS TO MAY 31, 1935, BY PRINCIPAL TYPE OF SECURITY\*** (*dollar figures in thousands*)

Principal Type of Security	Number of Loans		Amount of Loans	
	Number	Percent	Amount	Percent
Secured	124	74.7	\$9,458	82.8
First mortgages on real estate	33	19.9	6,401	56.0
Chattel mortgages on machinery and equipment	27	16.3	1,179	10.3
Second mortgages on real estate	17	10.2	640	5.6
Accounts receivable and contracts	30	18.1	835	7.3
Life insurance	8	4.8	143	1.3
Unlisted stocks	4	2.4	113	1.0
Listed stocks	3	1.8	79	.7
Capital stock of borrower	2	1.2	68	.6
Unsecured	42	25.3	1,966	17.2
<b>TOTAL</b>	<b>166</b>	<b>100.0</b>	<b>\$11,424</b>	<b>100.0</b>

\* Taken from James C. Dolley, "The Industrial Advance Program of the Federal Reserve System," *Quarterly Journal of Economics*, Vol. L (February 1936). Data secured by the author through questionnaires to the several Federal Reserve banks.

loan debtors of commercial banks, as was in fact required by law. Only two of the 200 loans approved by the Philadelphia bank were unsecured, and these ran for terms of 18 months or less.<sup>8</sup> A tabulation of industrial advances up to May 31, 1935, appearing in Table 11 and covering a substantial fraction of all Federal Reserve business credit, indicates that only a quarter of the number and 17 percent of the amount of such credits were unsecured. Most loans have been secured by first mortgages on fixed assets, chattel mortgages on equipment, or assignment of accounts receivable; the right was generally reserved by the lending bank to require additional security at its option.

The character or circumstances of concerns receiving Reserve bank credit made it necessary to acquire protection against the possibility that the borrower might be unable to make repayment. Reserve bank loans could only be made if

<sup>8</sup> Glenn K. Morris, *The Loans to Industry Program of the Federal Reserve Bank of Philadelphia* (unpublished thesis, June 1940).

credit was unavailable from private sources. While some firms were good credit risks, their commercial banking connections had been severed as a result of the banking crisis of 1933, and many others could not get bank credit because of deterioration in financial position after 1929. In a number of cases, the Reserve banks have approved loans of a specified amount, some part of which was disbursed upon the deposit of real estate mortgages or other security, and the remainder when and as accounts receivable were assigned by the borrower in the ratio of  $1\frac{1}{2}$  to 1. The taking of assignments of accounts receivable, in addition to liens on other assets, appears to have been used with considerable frequency as a security device. Borrowers were nearly always in dire want of working capital and receivables provided the best security for the bank, as well as a good method of gearing the amount of the loan to the working capital needs of the debtor.

#### *Use of Funds by Borrowers*

Under the statute, Reserve banks could lend funds only to provide borrowers with "working capital." Although the Board of Governors of the Federal Reserve System has never defined this phrase by regulation, preferring to leave its interpretation to the individual Reserve banks, the conception is fairly clear. This restriction to loans for working capital has probably served to reduce the potential amount of credit that could be extended by the Reserve banks even more than their restriction to loans with maximum terms of five years. Less than 16 percent of the original amounts of all term loans held by commercial banks at mid-1941 were intended to be used by borrowers exclusively to augment working capital. One method whereby Reserve banks have controlled the disposition of loan proceeds has been to write into loan agreements the requirement that the increase in borrower's net current assets *after* disbursement of the loan, but excluding the loan from current liabilities, must be kept at least equal to the amount of the loan.<sup>9</sup> Such a financial stricture precludes

<sup>9</sup> Glenn K. Morris, *op. cit.*

use of the proceeds for refunding, plant expansion or improvement, although money borrowed for working capital may release other dollars for other purposes, and close control by the banks over use of funds is not always feasible.

#### *Repayment Provisions*

Almost without exception, the Reserve bank term loans have been repayable in annual, semi-annual, quarterly, or monthly instalments of equal or approximately equal amounts. Among a sample of loans examined, there were no cases of payments in a single sum at maturity or balloon notes representing comparatively large final payments. Although instalment payments have constituted the normal method of discharge of debt, the schedules of these payments have often been changed prior to the maturity of loans in cases where the borrower was unable to part with cash at the rate or in the manner contemplated in the original loan agreement. The major conversions have been from annual or semi-annual payments to quarterly or monthly payments. In some instances, debtors have been required to pay specific amounts or a certain number of dollars or cents per unit of product sold, whichever was greater.

#### *Changes in Term Loan Characteristics and Lending Practices Since 1934<sup>10</sup>*

Term loans of commercial banks offer the best opportunity for discovering changes in loan characteristics and lending practices that have occurred since 1934. Information concerning medium-term securities acquired privately by life insurance companies and Reserve bank and RFC business loans is inadequate for such analysis. Even a study of commercial bank term credit is subject to the limitation that detailed information is available only on loans *held* at recent dates rather than upon all loans *made* since 1934. To the extent that there is a high degree of correlation between other characteris-

<sup>10</sup> This section is based upon an analysis of term loans held at mid-1941 by a National Bureau sample of 99 large commercial banks. For description of this sample see Appendix A.

tics of loans and the period and method of their repayment, any analysis of the characteristics of loans held at a given date but made during different years will be misleading. However, careful cross-checking to determine whether such correlations exist, and the establishment of appropriate limitations on periods of comparison, can eliminate significant errors arising from this cause.

#### *Shifts in Term of Loans*

The view has been frequently expressed by bankers that term loans are tending to have longer maturities. Although this hypothesis could be tested adequately only by examining the distribution, according to term at time of making, of all term loans made by commercial banks during recent years, analysis of term loans held at mid-1941 does not support the thesis that terms have tended to lengthen. Considering only loans made since 1936 and having four or more years to run at time of making, it has been true in every year except 1938 that five years is the most characteristic. During 1938 there was a marked shift to longer terms, nearly 38 percent of the loans made in that year having ten-year maturities, after which year there was a shift back to the five-year term. The total amount of credit having *more* than five-year terms fell from nearly 70 percent in 1938 to 56 percent in 1939 and to 42 percent in 1940; during the first half of 1941 there was a rise to 53 percent. Thus, there is no evidence available of a marked change in the term of loans.

#### *Shifts in Size of Loans*

There is some evidence that up to 1940 commercial banks tended to make term loans of larger size, if the average amounts of term loans made during different years and held at mid-1941 may be taken as a criterion. The explanation may lie in the business expansion which followed 1938. The average original amounts of loans rose from \$247,000 for loans made during 1936, to \$341,000 for loans made during 1937, to \$651,000 during 1938, and to \$773,000 during 1939.

Thereafter, the average fell to \$748,000 during 1940, and to \$636,000 for loans made during the first half of 1941. It appears likely that after 1939 banks extended term credits to somewhat smaller firms. But conclusions from these data must be tentative, since there is some tendency for loans of smaller amount to be paid off more rapidly than larger loans. The existence of such a tendency would make information on the sizes of loans held at any given date unreliable for our purposes.

#### *Shifts in Size of Borrowers*

Apparently no pronounced shift occurred during the period 1934-41 in the size of concerns securing term credit from commercial banks, although over this period there was a slight tendency toward borrowing by larger firms. During 1936 and 1937 the modal borrower had total assets between \$100,000 and \$1 million, while during 1938 he had assets of \$1-5 million. In 1939 the size of the typical borrower fell to the level of 1936 and 1937, but during 1940 he had assets of \$10-50 million. There was a drop to the \$1-5 million class during the first half of 1941. With respect to the aggregate *amounts* of loans made: During 1937, borrowers with total assets of \$50-100 million received the largest amount of credit going to any one size class, while in each year since 1937 the largest amount of term credit has been granted to firms with total assets of \$100 million or more.

#### *Shifts in Use of Funds by Borrowers*

Since 1936 there has been a slight relative increase in the importance of term borrowing to obtain new money, and a slight relative decline in the use of funds for retirement of debt and capital liabilities. These tendencies have not been pronounced, and they were affected by the short business cycle of 1936-39. Both in number and aggregate amount, term loans for new money in 1938 and 1939 fell in relative importance. New money loans expanded comparatively during 1940 and the first half of 1941, probably in reflection of



growth in national productive activity. During the first six months of 1941 new money loans constituted two-thirds of the number and 42 percent of the amount of term credit extended—the highest proportions of the period under review. These changes appear to mirror variations in the character of demand for business financing, rather than alterations in the willingness of the banking system to supply funds for different purposes.

*Shifts in Industry of Borrowers*

Changes in the industrial character of concerns negotiating term loans appear to have been dictated mainly by the business cycle. For example, the iron and steel industry suddenly rose to a position of relative importance during 1937, in which year it accounted for 15 percent of the number and 29 percent of the aggregate amount of term credit extended. Not until 1941 was this industry again an important term borrower. The public utility industry, while comparatively a large term borrower during every year since 1934, rose in relative importance during 1938 (a year of cyclical depression) and subsequently declined. There is evidence that oil production loans did not develop in volume until after 1938, perhaps in response to increasing restrictions on oil output imposed by state conservation authorities. Concerns in the transportation equipment industry first loomed into a position of importance during 1941, probably in consequence of national defense activities. In summary, alterations in the demand for medium-term credit appear to have dominated the industrial nature of borrowers, rather than changes in bank lending policy.

*Shifts in Security Taken*

To judge from their practices during different years in making the term loans held at mid-1941, commercial banks have definitely been disposed to dispense with collateral security. Although the number and aggregate amount of secured term loans made during 1936 and 1937 greatly exceeded the un-

secured loans, during succeeding years the aggregate amounts of new unsecured loans exceeded the amounts of new secured loans, greater numbers of loans continuing, however, to carry security. During the first six months of 1941, both the number and amount of uncollateralized credits surpassed secured credits, over 72 percent of all loans being unsecured. This phenomenon is probably to be explained by the growing familiarity of bankers with term lending techniques, combined with an intensification of competition among lenders. Broader reliance is being placed upon the restrictive clauses contained in term loan agreements, while less stress is being laid upon the pledge of specific assets by borrowers.

#### *Shifts in the Taking of Commitments*

There has been no significant change in the frequency with which commitments have been made by the public or private agencies to assume the risks of commercial bank term loans. With the exception of loans made during 1938, in every year since 1936 the number of term loans with respect to which commitments were made did not exceed 7 percent and the amounts of such loans did not exceed 4 percent of all term credit. During 1938 there was a marked increase in the relative number and amount of loans for which commitments were made by other lenders, nearly 15 percent of the number and 5 percent of the amount of all loans made in that year carrying commitments. This may be interpreted to reflect the sharp depression of 1938, during which the credit-granting activities of the public term lending agencies increased and lenders' appraisal of uncertainties were made with less optimism, leading to a greater desire to distribute risks.

#### *Shifts in Methods of Repayment*

Ever since 1936 there has been a slightly increasing disposition on the part of commercial banks to make term loans repayable in equal or approximately equal instalments, or repayable in accordance with the gross or net income of the borrower. But this tendency has not been strong, since the single payment

loan and the balloon note have almost maintained their relative positions. Balloon notes reached their position of highest relative importance during 1939, nearly one-fifth of the number and one-third of the amount of term credit extended in that year having a larger payment due at maturity than at any preceding date.

*Shifts in the Splitting of Loans*

Analysis of term loans held in bank portfolios at mid-1941 yields some evidence of an increase since 1935 in the frequency with which the cooperation of other lenders is sought in extending credit. It is likely that this fact is explained by the tendency, noted previously, for the average size of term loans to increase. Relatively the largest number and amount of all split term loans were made during 1939, the year in which the average size of loans was largest; nearly half the number and three-quarters of the amount of term credit extended in that year were divided between the originating banks and other institutions.

*Summary of Changes*

As far as can be determined from analysis of loans held at a given date, the nature of bank term loans does not appear to have altered markedly during the five preceding years. Term of loans, size of loans, and size and industry of borrowers have not undergone any marked change. Nonetheless, developments have occurred to emphasize the distinctive features of business term loans. The tendencies to dispense with collateral security, to insist upon amortization of debt in equal instalments, and to split loans among several lenders have become more pronounced. Furthermore, the comparative increase in the proportion of term credit devoted to business expansion augurs better for a sustained volume of term lending than would be the case if an increasing fraction of borrowed funds were devoted to retirement of debt or preferred stock. Term borrowing for the latter purpose is motivated principally by continued reduction in the structure of interest

rates, that is, upon a condition that is quite unlikely to persist indefinitely.

Toward the end of 1940 the willingness of commercial bankers to make new term loans appears to have abated somewhat, if the volume of term loans made during the first half of 1941 in comparison with those made during the comparable part of 1940 is indicative. The probable causes were the rather rapid decline in interest rates of term loans, the likelihood that some banks may have built up portfolios of term loans to a point beyond which they did not wish to go, and a belief that the risks carried by medium-term credit had risen in consequence of the growing uncertainties of international affairs. The fall in term loan interest rates was apparently due to the intense efforts exerted by commercial banks during immediately preceding years to employ idle cash, and to sharpening competition of insurance companies and other financing institutions in making the larger and longer-dated loans. Added to all of these causes is the necessary decline in the demand for term loans to refinance outstanding obligations at lower interest rates, as corporations have gradually exhausted the possibilities of effecting savings in fixed charges by such action.

It is not amiss to observe finally that the enormous expansion in the volume of medium-term credit up to the end of 1940 (of which commercial bank term loans are the largest part) has come to penetrate nearly every section of the business credit market, in terms of industry, size of borrowers and uses of funds.

## *Practices and Techniques of Term Lending*

SINCE THE REPAYMENT of no loan is absolutely certain, private credit institutions cannot avoid measuring the risks of lending, nor can they avoid adopting a policy regarding the amount of risk they are willing to assume. As a practical matter, this involves, first, the adoption of *credit standards* by reference to which applications for loans may be tested, and second, the use of *credit appraisal methods* in order to determine whether requests for loans meet these standards.<sup>1</sup>

Commercial banks, life insurance companies, and public agencies extending medium-term credit to business concerns have gradually developed specially trained personnel and unique credit standards, along with methods of appraising and limiting term loan risks. The factors that determine the probability of repayment of a term loan differ markedly from those pertaining to a personal loan, a residential mortgage or other forms of credit. Moreover, the large size of individual term loans means that lenders cannot rely upon diversification to any considerable extent to limit their risks, but must attempt to compensate for this by the care with which they scrutinize each loan application.

### *Organization and Personnel*

Very few commercial banks have set up separate departments or divisions charged *exclusively* with the functions of making and controlling all term loans originating in the bank.<sup>2</sup>

<sup>1</sup> It may also entail the provision of reserves, set aside out of income from loans, against which "normal" losses may be charged.

<sup>2</sup> Among a large number of banks located in leading financial centers east of the Mississippi River, whose officers were interviewed by the writers, only one had concentrated all term lending functions in a separate department.

A number of banks have approximated this form of organization by placing a senior officer in charge of all term credits, with the duty of supervising and passing upon term loans originating with other officers. But the majority of American banks that are large enough to have developed a need for specialization of their business loan functions have divided their territories into geographical areas, one of which is assigned to each loan officer. A few large banks organize their business loans on an industrial basis, or combine an industrial with a geographical basis of organization. Whatever method of organization is used, it is generally true that applicants for term loans and seasonal loans will deal with the same loan officer. In short, banks have preferred to adapt their existing organizations to term lending rather than to create new divisions.

This fact does not indicate that bank managements fail to recognize any peculiarity in the credit problems posed by term loans. Many institutions have created special statistical or research departments for the analysis of applications for term loans. It is significant that in some cases these credit analyses are assigned to the analytical units connected with the bond or trust departments of the bank, rather than to the regular credit department.<sup>3</sup> This is evidence of a recognition that term loans should be judged by standards and analyzed by methods appropriate to investments rather than to short-term loans.

As may be inferred from the general absence of special organization for term lending by commercial banks, the personnel engaged in this work consists mainly of regular bank loan officers. The majority of banks that have systematically entered the term loan market on a substantial scale have, however, recruited personnel with investment banking experience. As one experienced bank officer put it, "a special attitude of mind is necessary in making term loans." Many individuals formerly associated with the securities affiliates of large banks

<sup>3</sup> Several banks reported to the writers a plan to merge their credit departments with their departments of statistics and analysis, as a result of expansion of their activities in term lending. This is evidence of a shift in emphasis in credit appraisal methods toward evaluation of long-run earning power.

are now engaged in term loan operations. Some banks have also drawn upon former officers and security analysts of investment banking houses for skills useful in extending longer term credits. Certain banks have employed full time, or retained on a part-time basis, management engineers, marketing consultants, geologists, petroleum engineers, or other types of experts to aid them in sifting loan applications. Expert personnel has been employed with greatest frequency by banks with heavy interests in term loans to oil producers.

### *Methods of Acquiring Loans*

It is probable that the majority of banks having term loans in their portfolios at the end of 1940 did not actively solicit them. The loans were created primarily as a result of requests of borrowers, or in consequence of suggestions made by bankers to borrowers who came to the bank expecting to obtain traditional short-term credit. This implies the existence of more pressure on the demand than on the supply side of the term loan market. Advertising and personal solicitation of prospective term borrowers has been confined to a comparatively few banks in large cities, but these have been among the most active term lenders. Several of these banks have systematically scrutinized financial statements and other information pertaining to businesses contemplating expansion or having high-coupon debt or preferred stock outstanding. Then, through a traveling representative, they have tried to interest these concerns in negotiating term loans. Such activities resemble those of the buying departments of investment banking houses which aim to maintain contact with all concerns likely to require financing.

Many bankers view aggressive loan solicitation with disfavor. They argue that debts actively invited are likely to be of inferior quality. This conclusion does not necessarily follow. A soliciting bank may very well acquire loans of unquestionable merit that would otherwise have been made by competing banks or financing agencies, or never have been made at all (to the disadvantage of both borrower and lender), *providing*

that it does not relax its credit standards or compromise the thoroughness of its credit investigations.

### *Formation of Loan Agreements*

Practically all term loans of commercial banks embody, or are accompanied by, an agreement between borrower and lender that contains covenants by the debtor to conduct his business in prescribed ways and defines the conditions of the loan. Agreements usually contain both positive promises of the borrower to perform specific acts, and "negative pledge" clauses *not* to perform other acts. Although these agreements resemble articles contained in mortgage indentures pertaining to corporate bond issues, they usually go much farther in restricting the conduct of the borrower. Indeed, the comprehensiveness with which borrowers' actions are hedged about is one of the distinguishing features of term lending. It is the device lenders have used to offset the additional uncertainties inevitably present in credits running for medium instead of short terms.

It is felt that the most effective protection of the lender's interests is found not in the real estate, chattels, receivables, or inventory that may be hypothecated, but in the loan agreement that sets up financial and other conditions to be maintained by the borrower and automatically accelerates the maturity of the loan in case of violation. Under such arrangements the lender incurs the trouble and expense of taking liens on assets only if the maturity of the loan is accelerated. National banks are surrounded by such restrictions on real estate loans that they prefer not to acquire them. Neither do most borrowers wish to incur the cost and publicity attendant upon the drawing up and recording of real estate mortgages. In short, the taking of any collateral security entails costs, and the acquisition of real estate mortgages involves especially large costs, which both lender and borrower desire to avoid if possible.

A consideration of the provisions usually contained in term loan agreements throws light on the operating problems in-



volved. Term loans are generally made to enable borrowers to carry out specific programs, and agreements are therefore "tailor made" to fit the circumstances of each case. As few lending agencies make use of stereotyped forms, the great variety of provisions that may be found in loan agreements makes summary difficult.<sup>4</sup>

#### *Provisions Relating to Use of Funds*

The majority of agreements made with commercial banks do not tie the borrower down with respect to use of funds arising from the loan, although bank officers customarily know the purposes for which loan proceeds will be used. In contrast to instalment sales financing, term loans are "general purpose" credits, although provisions of the loan agreement may *imply* limitations on what the borrower does with funds coming into his hands. Term loan agreements made with the Federal Reserve banks and the Reconstruction Finance Corporation generally contain rather specific restrictions on the uses of the loan proceeds, undoubtedly because of the impaired financial conditions of many of the borrowers, and because the statutes under which these agencies operate limit the purposes for which loans may be made.

#### *Provisions Concerning the Incurring of Indebtedness*

Term loan agreements commonly specify a maximum amount of term credit that may be outstanding at any one time—that is, the maximum loan authorization together with a schedule of repayments. Infrequently, the loan agreement sets up a "line of credit" for the borrower for a specific term of years. About 5 percent of the number and aggregate amount of term loans are revolving credits with fluctuating outstanding indebtedness. Other controls of debt found in the majority of loan agreements include prohibitions against incurring any long-term indebtedness (except with permission of the lending bank)

<sup>4</sup> An excellent list of the provisions commonly contained in term loan agreements, based upon study of a large number of such agreements, may be found in Albert Wagenfuehr, *Term Loans by Commercial Banks* (Robert Morris Associates, Philadelphia, 1940) pp. 27-30.

and against the pledge of any assets without such permission. While this does not give the lending bank the same protection it would have if it took mortgages on real estate or other assets of the borrower, it is protective in the sense that it prevents others from obtaining prior claims to the borrower's assets. It will be observed that this usually leaves the debtor concerns free, within limits, to borrow for seasonal or other short-term purposes, and in fact they do so. Finally, the loan agreement may prohibit the borrower from assuming any contingent liabilities, such as guaranteeing the indebtedness of a subsidiary.

#### *Provisions Concerning Financial Conditions*

Among the most frequent provisions appearing in term loan agreements, and perhaps the most important from a credit standpoint, are those calling for maintenance of the current ratio, as defined in the loan agreement, at some specified minimum. This is frequently coupled with a requirement that net working capital shall be kept at or above a specified minimum, the two conditions jointly forming an indirect control of the amount of borrowing. It is evident that the second condition is essential if the lender wishes to assure himself that the net liquid assets of the debtor are to be preserved. Restrictions on amounts permitted to be invested in fixed assets, on dividend disbursements, and on salaries or bonuses paid to executives, also commonly found in term loan agreements, represent endeavors to maintain liquidity and to prevent dissipation of the cash coming to the business. Clearly, controls of borrowing and of disbursements aim at preserving the borrower's equity available in liquid form to discharge the loan when due.

#### *Provisions Concerning Management*

Sometimes major changes in management personnel and its compensation are subjected to approval of the lending bank, or changes in management are insisted upon as conditions of granting loans. Often borrowing concerns are required to maintain life insurance of specified amounts, with respect to

principal managerial personnel, proceeds of which are assigned to the lender. Such requirements are especially frequent in RFC term loan agreements. Term loan agreements may also require the owners of the borrowing enterprise to pledge stock or grant proxies to vote stock—all with the aim of ensuring that management shall be adequate during the life of the loan.

#### *Provisions Concerning Books and Records*

Nearly all banks insist, as a condition of making term loans, the borrowers maintain adequate records and grant the lender access to them, because only so is it possible to judge the merit of the credit and watch its development. Moreover loan agreements frequently require the debtor to submit certified annual balance sheets and profit and loss statements, and semi-annual, quarterly or even monthly figures. Some agreements ask for the submission of financial budgets for periods of three or six months in advance.

#### *Provisions Pertaining to Acceleration of the Debt*

Normally, the agreement provides that all debt becomes due upon the default of any other debt of the borrower, upon failure to fulfil the financial, management, or other provisions of the loan agreement, upon filing of a voluntary or involuntary petition in bankruptcy, or upon suspension of operations for causes other than strikes, as well as upon default in payment of interest or principal of the loan.

#### *Provisions Respecting Collateral Security*

If security has been required, the loan agreement specifies the documents necessary, such as real estate mortgages or deeds of trust, chattel mortgages, assignments of receivables or of life insurance, or pledges of inventory. As has been noted, practically all RFC loans and the great majority of Reserve bank loans carry collateral security. In contrast, only about 40 percent of the number of medium-term credits of life insurance companies are collaterally secured. At mid-1941 com-

mercial banks had taken security for 56 percent of the number and 33 percent of the amount of term loans held by them.

### *Credit Standards*

Experienced loan officers recognize that the distinction between an acceptable and an unacceptable credit rests upon the evaluation and combination of so many diverse elements that they never admit the use of any formula in judging credits. They believe that one complex of circumstances appears to justify a loan; another does not. If information were available, term loan credit standards could be inferred from a comparison of the characteristics of loan applications accepted with those of loans rejected. Still another method of determining good credit standards would be to compare the characteristics of loans that proved to be good with those that resulted in losses.<sup>5</sup> These procedures present technical difficulties, and experience with term loans has been too limited to make them feasible at the present time. It is nevertheless possible, through conversations with many officers engaged in term lending, to isolate the factors which are uppermost in their minds when deciding whether to extend medium-term business credit. In general, there are three major subjects with which a term lending institution may be concerned: (1) the borrowing enterprise, (2) the collateral security, if any, (3) other endorsers of the obligation, if any. Since the credit standards of commercial banks differ somewhat from those of insurance companies and government agencies making term loans, it is convenient to deal with these institutions separately.

#### *Commercial Banks*

The credit standards applied most frequently by commercial banks to term loans relate mainly to the circumstances of the borrowing business, rather than to collateral security or endorsers of a loan. In many cases where security has been taken

<sup>5</sup> This type of study was made of a sample of consumer credits. See National Bureau of Economic Research (Financial Research Program), *Risk Elements in Consumer Instalment Financing*, by David Durand (1941).

it was not conceived of as the major protection against loss, but rather as a restriction upon further borrowing by the debtor or as a moral stimulant to repayment. With respect to 44 percent of the number (67 percent of the amount) of term loans, the lending bank relies for payment solely upon the performance of the enterprise. In view of this dependence it is commonly the case that term loan agreements require the borrower to maintain his financial position at a level at least as favorable as existed at the time of making the loan. In addition the lending institution provides, in the loan agreement, for certain protective measures if it appears that the borrower's financial position is becoming unsatisfactory. These include the acquisition of liens on assets and the acceleration of the maturity of the note. However, although such measures are provided for, bankers generally do not rely upon the value of assets to liquidate term indebtedness. They do not desire to acquire through foreclosure property that they are usually unequipped to operate or sell advantageously. Their reliance is primarily upon the ability and desire of the debtor to repay the loan out of earnings. Credit standards applied by commercial banks to term loans therefore grow out of standards traditionally applied to short-term loans, and relate principally to the competence and moral character of the management, the concern's financial position at time of making the loan, and its prospective earning power.

With respect to moral character, bankers universally insist that the principals of a business, whether partners or important officers or stockholders in a corporation, display an absolutely "clean" record. In the case of large, well-established corporations, good moral character of principals may usually be taken for granted. No matter how impressive the present and prospective financial position of the enterprise may be, or how valuable the collateral pledged, term loans will not be granted unless the banker is thoroughly satisfied of the borrower's intention to repay his debts. This credit standard is justifiably founded upon the experience that a dishonest or

unscrupulous borrower will find some way of avoiding his obligations, despite the strictest precautions taken by the lender. It has always been applied in making short-dated loans, but is considered particularly necessary in term lending, since incompetence or lack of a sense of moral obligation has a longer period to work out its effects.

There does not appear to be any uniform practice with regard to the standards of present financial position. Commercial banks are naturally unwilling to extend medium-term credit to a concern encumbered with so large an amount of current obligations in proportion to its current assets that financial embarrassment might follow promptly in the wake of some untoward event, such as a plant shutdown or a sharp decline in commodity prices. The familiar 2/1 ratio of current assets to current liabilities has generally been applied as a *minimum* standard in making term loans, although much higher ratios are considered necessary for concerns subject to rapid changes in asset valuations. Moreover, unless unusual circumstances warrant it, bankers commonly refuse to extend term credit to a business that has previously pledged its inventory or receivables to another creditor. The pledge of these assets is regarded as indicating a probability that, according to conservative standards, the business has inadequate working capital. On the other hand, concerns that have previously mortgaged their fixed assets are often granted term loans, provided there is an adequate cushion of equity and an established earning power.

Few banks like to see the aggregate debt of a company exceed the amount that the owners of the business have already invested although in certain industries exceptions are recognized. In industries wherein the values of fixed as well as current assets are comparatively unstable, the ratio of equity to debt is required to be considerably above 1/1. The financial records of the borrowing concern are expected to show an ability to earn the annual percentage on its invested capital that is at least "normal" in its industry. Nevertheless, term

credit may be granted to concerns with poor past performance, if it can be shown that the cause was incompetent management or some other factor, since eliminated or rectified.

It is difficult to state precisely the objective standards of probable future earning power that banks expect applicants for term credit to meet. With certain exceptions, it may be said that a borrower must demonstrate reasonable ability to repay a loan out of available incoming cash, without liquidation of essential assets, and within the maximum term established by the bank. This credit standard—ability to “throw off” enough cash to liquidate the loan at maturity—is also applicable to short-term lending, but since a short-term loan can be liquidated out of collection of receivables, selling down of inventories, or completion of special transactions, it does not require an estimation of earning power over a period of years. Medium-term loans thus present much more difficult credit problems.

Risk inevitably increases with the term of a loan, and estimates of future earning power diminish in accuracy the more distant the date for which they are made. Establishment of a maximum term of loans is thus an important method by which a bank can limit its risks on term loans. Although some banks do not have standards on this matter, many banks will not make loans running over five years, a few banks limit term to three or four years, and still other banks are willing to lend for seven or even ten years. Accordingly, a business concern might be able to secure credit from one institution but not from another, upon demonstrating reasonable ability to pay off a loan within, say, five years.

Standards concerning maximum term of loan have been particularly important in loans to oil producers for the purpose of financing drilling operations. The producer customarily pledges his present producing properties, or the oil produced therefrom, as security for a loan. Many banks follow the practice of requiring borrowers to pay instalments amounting to 50 percent of the sums realized from sale of oil produced on

the pledged properties. Consequently, if a bank had a three-year maximum term for its oil loans, the amount it would lend on a given property would be less than if its maximum term were five years, because the "throw-off" of cash would be less during the shorter period. Restriction of oil production by state conservation authorities also reduces the amount of credit an oil producer can obtain by pledging a given property; other things being equal, this causes pressure to lengthen the term of oil loans.

### *Life Insurance Companies*

Life insurance companies have participated in the medium-term business credit market mainly through their private purchases of securities from issuers, and, to a subordinate degree, through mortgage loans to business concerns. Credit standards applied by them in the private acquisition of corporate bonds or notes have been the conventional ones long utilized by investment bankers, and need not be described herein. In making mortgage loans on business properties, insurance companies have utilized credit standards pertaining both to the earning power of the borrowing business and to the value of the pledged property.

The negotiation of agreements between business corporations and life insurance companies purchasing securities privately has been well and authoritatively described as follows:<sup>6</sup>

Securities to be privately placed are customarily offered by the issuers or by agents or bankers on their behalf. Preliminary basic terms are determined in conferences between the issuer and the purchaser, and the transaction is then implemented by the negotiation of a purchase agreement, the initial draft of which is customarily prepared by the purchaser. Where practicable, the indenture or supplemental indenture under which the securities are to be issued is attached in draft form to the purchase agreement. If available time does not permit this, the more important provisions of the proposed indenture are summarized in an exhibit to the purchase agreement, which provides that the indenture shall incorporate such terms and

<sup>6</sup> Churchill Rodgers, "Purchase by Life Insurance Companies of Securities Privately Offered," *Harvard Law Review*, Vol. LII, No. 5 (March 1939).



shall otherwise be in a form satisfactory to both the issuer and the purchaser. After the execution of the contract, the purchaser usually prepares a list of documents essential to consummate the transaction, and these documents are then prepared with the collaboration of all parties.

In order to preserve the exempt character of the transaction under the Securities Act, the number of buyers of the issue must be rigorously limited. While the Securities and Exchange Commission has not announced a maximum number of purchasers (any excess of which would make the transaction a "public offering"), up to June 1940 as many as sixteen have participated in the private purchase of an issue. Normally, a separate purchase contract is entered into by the issuer with each buyer.

For many years legislation has restricted insurance companies to the making of loans secured by real estate mortgages, the loans not exceeding two-thirds of the appraised value of the collateral. Up to recent years, practically all such loans have been made to borrowers pledging residential property, farm land, or non-specialized urban property such as office buildings, stores and lofts. For all of these properties there was a comparatively broad market. The credit problem in lending against them was exclusively one of appraising the security, and not one of evaluating the financial strength of the borrower. In extending credit to business concerns secured by mortgages on industrial plants and other "special purpose" properties, insurance companies have necessarily modified their earlier credit standards to the extent of appraising the current and prospective financial strength of borrowers. One large company has created a separate department for making "special purpose" mortgage loans. Before any such loan is approved, it must pass the scrutiny of the real estate department, which seeks to determine whether the value of the collateral is adequate to warrant the loan, and of the security department, which must be satisfied that the loan can be amortized out of the borrower's earnings. This dual test is designed to provide two sources from which repayment could be secured.

*Reconstruction Finance Corporation<sup>7</sup>*

The Reconstruction Finance Corporation Act limits loans to business enterprises by the following principal conditions:<sup>8</sup>

(a) Capital or credit, at prevailing rates for the character of loan applied for, must not be otherwise available.

(b) All credits must be "of such sound value, or so secured, as reasonably to assure retirement or repayment."

(c) Disbursements of loans can be made only when the borrowing enterprise is "solvent."

(d) Loans may be made only when they offer reasonable assurance of continued or increased employment of labor by the applicant.

Except for cases where local banking facilities were inadequate, it follows from condition (a) that the credit standards of the RFC were required to differ from those of private institutions. Since loans of "sound value" would in all likelihood be made by private lending institutions, condition (b) in effect requires that RFC loans be secured. Hence, relatively greater emphasis is necessarily placed by the RFC upon the value of collateral security pledged by the debtor.

There have been few, if any, business loans made without commercial bank participation that could have been made by commercial banks if they applied the usual term credit standards. The RFC assured itself that credit was "not otherwise available" to an applicant by offering a prospective loan or a participation therein to the bank with which the applicant had customarily dealt. In some cases where such a bank declined to grant credit it is possible that another bank would have made or participated in a loan, but this appears unlikely in view of the financial characteristics of loan applicants. The majority of RFC loan applicants had very inadequate working capital. In few cases were their current ratios as high as 2/1, and several applicants had current ratios less than 1/1.

<sup>7</sup> This discussion is based upon a detailed review of a random sample of 40 business loan applications authorized by the RFC, and 40 loan applications rejected.

<sup>8</sup> See Reconstruction Finance Corporation, *Circular No. 13*, revised (Washington, 1938).

Ratios of borrowers' debts to net worth not infrequently exceeded 1/1, even on the undoubtedly generous valuations of assets contained in balance sheets submitted by loan applicants. Moreover, the operations of applicants usually had resulted in losses during the majority of years immediately preceding the dates of their applications. Nearly every applicant was heavily in debt to banks, trade creditors, stockholders or suppliers of equipment. As a group, concerns borrowing from the RFC have indeed been "substandard" from a bank credit point of view; loans to these concerns would have involved greater risks than commercial banks could have taken. It was, of course, precisely this class of enterprise that the RFC was given the difficult assignment of assisting.

In cases where a borrowing concern pledged real estate to the RFC as primary security for a loan, it appears that a ratio of 1/1 between borrowers' net worth and the amount of the loan was regarded as a minimum. Where the primary security consisted of inventory, the maximum loan was normally two-thirds of the cost value. If assigned open accounts receivable constituted the primary security, the ratio of face value of accounts to the RFC loan disbursement was a minimum of  $1\frac{1}{2}/1$ . In a number of cases the RFC authorized loans of certain amounts on the deposit of mortgages on real estate or chattels, and authorized additional disbursements when and as assignments of acceptable receivables with face value 150 percent as large as the additional loans were made by the borrower.

#### *Federal Reserve Banks<sup>9</sup>*

Credit standards applied by Federal Reserve banks in passing upon applications for industrial loans have been similar to those of the Reconstruction Finance Corporation in many

<sup>9</sup>This discussion is based upon published reports of the Board of Governors of the Federal Reserve System and of the several Federal Reserve banks, as well as information secured through questionnaires circulated among Federal Reserve banks and an examination of credit files of the Federal Reserve Banks of New York, Chicago, and Philadelphia.

respects. These standards have been shaped in the light of the following statutory restrictions upon Reserve bank loans:

(a) The borrowing concern must be "an established business" located within the district of the lending Reserve bank.

(b) The borrower must be unable to obtain "requisite financial assistance on a reasonable basis from the usual sources."

(c) The loan must be used for "working capital purposes."

(d) The term of the loan may not exceed five years.

Condition (b) carries the implication that the credit standards applied by the Reserve banks must differ from those of commercial banks, unless Reserve bank lending is to be confined to communities wherein private banking facilities are lacking, which has not been the case. It has the same effect as the analogous provisions in the RFC Act. But the limitations on term of loans and use of funds by borrowers are much more rigorous than those prescribed for the RFC. Since Reserve bank credit may not be used for plant expansion or refunding, Reserve banks must ensure that borrowers actually use loan proceeds for working capital.

Analysis of the financial characteristics of applicants for industrial advances of the Federal Reserve banks discloses that their financial condition by the end of 1933 was somewhat poorer than that of the average business concern of comparable size. They experienced greater declines in sales during the 1929-32 contraction period than did average concerns in the same industries, were less likely to show a profit, were more heavily indebted both on long and short term, operated with smaller inventories relative to total assets, and displayed signs of possessing insufficient working capital. About a third of all applicants were approved for an industrial advance, the approved applicants being somewhat larger, more heavily weighed by manufacturing concerns, less heavily indebted, and containing more numerous cases of expanding sales, than the rejected applicants.<sup>10</sup>

<sup>10</sup> See National Bureau of Economic Research (Financial Research Program), *Capital and Credit Requirements of Federal Reserve Bank Industrial Loan Applicants*, by Charles L. Merwin and Charles H. Schmidt (ms. 1941).

Because they deal with concerns financially less resistant to adversity, Reserve banks necessarily place relatively greater emphasis on collateral security. First mortgages on plant and equipment, assignment of accounts receivable, pledge of inventory, assignment of cash values of life insurance, and endorsements of principal officers or stockholders have all been sought by Reserve banks to bolster their positions and lessen the probability of loss. Appraisal of these assets has been given more weight than commercial bankers usually allow in determining whether credit should be granted. In some cases, Reserve banks have made term loans of given amount on the security of fixed assets, and, in addition, have extended short-term credits against the assigned accounts receivable of a borrower to meet his temporary credit needs. In such cases, the standard ratio of face value of pledged receivables to the amount of the loan was  $1\frac{1}{2}/1$ .

### *Credit Appraisal Methods<sup>11</sup>*

The particular credit standards applied in making term loans have been accompanied by the use of special methods of credit appraisal. In extending medium-term credit, bankers look beyond seasonal or temporary business transactions of the borrower, and expand their credit investigations beyond the limits that are usually set in making short-term loans. The influence of business cycles and of long-term economic forces upon the financial position of the borrower is carefully weighed. Moreover, term credit analysis, although strongly resembling that used by investment bankers, differs from the techniques applied to public issues of corporate bonds or notes. As term loans and debt securities privately purchased from issuing concerns are not marketable assets, lenders cannot look to factors directly affecting market prices, except where the borrowing concern has a similar issue of securities outstanding in the hands of the public. Since a lending institution often cannot look to a public market for a continuing appraisal of

<sup>11</sup>This section is based upon numerous interviews held by the authors with officers of lending institutions in charge of term lending operations.

the borrower's credit or the liquidation of a loan, it must increase its requirements with respect to quality and augment the care with which it scrutinizes such credits.

In their broad outlines, credit appraisal techniques used by Federal Reserve banks and the Reconstruction Finance Corporation have not differed from those of commercial banks or insurance companies. A term loan credit analysis conducted by any type of institution may include the following steps:

1. Acquisition and analysis of credit information obtained from mercantile agencies, competitors, customers or suppliers of the applicant.

2. Acquisition and analysis of financial statements of the applicant extending over the most recent seven, ten, or more years.

3. A survey and report, often by an "outside" engineer, upon the physical condition and technical efficiency of the applicant's plant and equipment, and his costs of production in comparison with those of other concerns in the same industry. The fact that most banks in term lending have extended credit only to prime or near-prime risks has made for less elaborate investigation. But when term lending becomes more general, engineering reports, etc., may be more widely used.

4. A survey and report, sometimes by retained merchandising experts, upon the market for the applicant's products and upon the effectiveness of his sales promotional and advertising methods.

5. Preparation of an organized file or report embodying all of the preceding data, together with the conclusions and recommendations of the loan officers in charge of the matter. This document is intended for review by the discount committee or board of directors of the lending institution.

Such an analysis represents the *maximum* scope of an investigation and is not to be considered typical. The different components do not form part of the routine of all term lending institutions, are not applied to all term loans, and are not necessarily taken consecutively. Most banks have not developed so elaborate a procedure, and even those making use of

a "full dress" credit investigation do so only for loan applications that, because of exceptionally large amount, mediocre financial position of the applicant, or unusual nature of the applicant's business, require a very careful appraisal. In fact, the majority of large banks have long possessed files of information concerning important business enterprises, and are in a position to render credit decisions *prior* to making investigations or formulating the specific provisions of loan agreements. Obviously, a detailed procedure is only justified with respect to loans yielding a large enough gross income to defray relatively high costs of administration. Loans may yield comparatively large gross income because they carry high interest rates or because they are large in size.

Whatever its scope, the broad purposes of a term loan credit investigation are twofold: first, to estimate the probability that the applicant will repay the loan at all; and second, to determine the period of time within which he will be able to extinguish the debt. Since this period is necessarily more than one year, the financial position of the borrower must be forecast for several years in advance and not merely through the seasons of a year.

After a banker has satisfied himself, through his own experience and knowledge as well as through checks made with mercantile agencies, competitors, suppliers or customers of the applicant, regarding the integrity and responsibility of the principals of a business, his next task is to appraise the industrial strength of the enterprise. The salient questions in his mind are likely to be: Is the industry of which this firm is a member experiencing long-term growth, or is it subject to such basically adverse shifts in costs of production and demand for its products that even the best management will have difficulty in overcoming them? Furthermore, even if the industry as a whole is likely at least to hold its own in the economy during the life of the loan, has the applicant concern a well-established place in that industry? An answer to the first question can be found through general industrial analysis in which the banker will bring to bear his general knowledge and ob-

servations of fundamental economic trends. To this end, some banks have made comprehensive industrial studies, utilized in connection with all loan applications coming from members of a particular industry. A solution to the second question may be deduced by considering the competitive position of the applicant in relation to other enterprises in the industry, especially with regard to costs of production and public acceptance of the product.

It is in connection with this latter question that an appraisal of management becomes crucial. The ability of an enterprise to hold its own or to make progress in a changing economic environment depends to a large extent upon the competence of its management in relation to those of competitors. No lender can possibly foresee all the future circumstances that will affect the fortunes of the borrower. But if he has satisfied himself of the superior ability of the management, he can reasonably expect that appropriate adjustments will be made. Appraisal of management is the touchstone of term credit analysis.<sup>12</sup> While one pragmatic test of managerial ability is the concern's record of profitability, revealed by financial statements, many bankers also secure brief biographies of directors and principal officers, and study changes in directing and operating personnel for the purpose of measuring the stability of management and its freedom from internal dissension. To this end, some banks set up year-by-year listings of directors, officers, and principal stockholders covering periods up to ten years.

Nearly all lending institutions require an applicant to submit comparative financial statements, both balance sheets and profit-and-loss accounts, extending over the most recent seven or more years. These data are then frequently transcribed on special analytical forms, facilitating a year-by-year comparison of the financial position of the concern. It is common for bankers to make a sources-and-application-of-funds analysis, utilizing balance sheets at the ends of successive years, for the

<sup>12</sup> As one banker stated to the authors: "Bad management can't wreck a good business so badly that it won't be able to pay off its six-month note, but it can easily cause default upon a four- or five-year term loan."



purpose of determining the nature and magnitude of changes in the financial structure of the concern, and to indicate what reductions of particular assets or increases in certain liabilities ("sources" of funds) were made for the purpose of increasing other assets or reducing other liabilities ("applications" of funds).

Such analysis is generally directed to a calculation of the normal annual earning power of a business, and more particularly to its annual cash gain. The latter amount may be used as a measure of the ability of a concern to "throw off" cash annually in repayment of a term loan, and often determines whether or not a loan is to be granted, and if so, the term of the credit. As a rough measure of the annual cash "throw-off," which gauges the ability of the borrower to make periodical repayments, many banks use the annual net income *before* depreciation allowances, sometimes adjusting it for capital needs of the business and income tax requirements.

From balance sheets and income-and-expense statements, financial ratios for each year-end or semi-annual period are also computed, such as current assets to current liabilities, debt to net worth, net earnings to invested capital, sales to inventory, sales to fixed assets, and many others. Such ratios may not only indicate the temporal progress of the concern but also, through comparison with "normal" ratios of the industry of which it is a member, throw light upon the concern's competitive position.<sup>13</sup>

No matter how skillfully and ingeniously performed financial statement analysis has limitations as a technique of credit appraisal. Fundamentally it is a systematic survey of the historical record of the concern, and does not necessarily signal the course of future development, although it has evidential value. Recognizing this, bankers supplement it with other devices. Frequently they require financial budgets from an applicant, indicating how the proceeds of the loan will be utilized,

<sup>13</sup> Average financial ratios for many different industries have been computed by Dun & Bradstreet, Inc., and the Robert Morris Associates, and appear in the *Survey of American Listed Corporations*, published by the Securities and Exchange Commission.

and serving as a standard against which subsequent performance may be compared. In addition, as indicated above, they seek to assess the physical condition and operating efficiency of the borrower's producing properties, the character of the market for his products, and the effectiveness of his sales promotional and advertising methods.

In passing upon larger term loans, it is not uncommon for bankers to seek the opinions of independent experts, as investment bankers long have done. This occurs with particular frequency in the making of loans to oil producers, since the banker, usually relying to an important degree upon the value of the producing properties pledged by the borrower, faces a highly technical problem of valuation. In valuing such collateral, a bank usually secures an opinion from an independent petroleum geologist, familiar with the geological structures of the territory, regarding the probable amount of potentially recoverable oil reserve in the ground. From a petroleum engineer the bank then procures an estimate of the costs of recovering this oil, the amounts of periodical recovery, and the selling price per barrel; from all of these data probable annual net incomes may be estimated. By discounting these future net incomes to the present, through use of an appropriate discount factor, the present value of the pledged property may be estimated. Some banks operating extensively in this field employ their own full-time experts, and at least one large commercial bank maintains a department of petroleum economics, staffed by a geologist, a petroleum engineer, and a petroleum economist. The making of term loans on coal or natural gas properties involves the use of analogous procedures.

All the data collected during the course of a term loan investigation are usually organized into a formal report, similar in content to the reports of underwriting investigations made by investment bankers. These documents, comprising a hundred or more typewritten pages with respect to a loan of large size to a borrower in an unfamiliar industry, are studied by the loan committee or board of directors of the lending institution. The practice of the RFC, which has the task of

passing on thousands of comparatively small loan applications, is to summarize the data in a "review committee report" of about ten or fifteen pages, which is submitted to the board of directors for action. In a small bank which has only a few loan executives, each of whom has intimate knowledge of the business enterprises in the community, formal presentation of a report upon a loan application may often be dispensed with.

### *Supervising Active Term Loans*

The task of term loan administration is not complete when the executives of the lending institution have authorized disbursement of money to the borrower. Apart from the necessary accounting routines of collecting interest and instalments of principal on or before their due dates, lenders usually make a continuing analysis of the financial progress of the indebted business. In order to secure information that will make such analysis possible, many banks write into term loan agreements or have understandings with their borrowers that monthly, quarterly or semi-annual financial information will be furnished. In addition, some lending institutions request monthly budgets for periods of three to six months in advance, so that loan officers can be apprised of the business plans of the borrower and can judge the degree to which those plans are adhered to. Banking practice calls for a periodical review of each loan, in the light of all the factual information coming into the borrower's credit file, so that violations of the loan agreement may be promptly detected or any developments inimical to the interests of the bank (or the borrower) may be drawn to the borrower's attention and corrected.

It is the regular practice of many banks to have a representative visit the place of business of the borrower periodically, to discuss his new products and his production or marketing plans and problems. Out of such meetings often emerge suggestions valuable to the business executive as well as information of use to the banker. The objectives of such follow-up activities are to assure discharge of the provisions of the original term loan agreement, and to maintain contact

with the borrowing concern regarding its future credit requirements.

*Relation of Term Loans  
to Other Assets of Commercial Banks*

The estimated \$2,162 million of term loans held by all American banks at the end of 1940 comprised about 12 percent of total loans and discounts of all kinds. Term loans were, nevertheless, relatively much more important to commercial banks as a form of *direct business* credit than this figure indicates. They comprised no less than 32 percent of the "commercial and industrial" loans held by commercial banks, a loan category which includes most business loans but excludes open market paper, agricultural and real estate loans, loans to banks, loans to brokers, dealers and individuals collateralized by securities, personal loans and loans to financial institutions (other than instalment financing companies) and nonprofit organizations.<sup>14</sup>

While term loans hold an increasingly significant position among the loans of all commercial banks, they are even more important components of the loans of large banks. As has already been observed, large banks engage in extending term credit with greater frequency and tend to accumulate larger amounts of term loans in proportion to their deposits or assets than do smaller institutions. Table 12 gives the percentages of term loans to all loans and discounts held by a sample of fifty large commercial banks, classified into size groups according to loans and discounts held. Collectively, these banks held about \$800 million of term loans which formed 22 percent of their total loans and discounts; for five large banks term loans were 30 percent or more of all loans and discounts. It appears

<sup>14</sup> See *Instructions for the Preparation of Reports of Condition* by State Bank Members of the Federal Reserve System (Board of Governors of the Federal Reserve System, Washington, 1938 Revision) pp. 11-13. About 83 percent of the number and 94 percent of the amount of all term loans held by the sample of 99 commercial banks used in this study (see Appendix A) were classified as "commercial and industrial loans" in reports of condition submitted to bank supervisory authorities. About 41 percent of the number and 63 percent of the amount of even those loans secured by real estate, at least in part, were so classified, although banks are instructed to report these as "real estate loans."

Table 12—CLASSIFICATION OF 50 COMMERCIAL BANKS BY SIZE AND BY PERCENTAGE OF TERM LOANS TO TOTAL LOANS AND DISCOUNTS<sup>a</sup>

Percentage of Term Loans to Total Loans and Discounts	Number of Banks Having Total Loans and Discounts on June 30, 1941 of						Total Number
	Less than \$10	\$10- \$25	\$25- \$50	(in millions)		\$250 and over	
				\$50- \$100	\$100- \$250		
Less than 5 percent	6	4	7	1	1	1	20
5-10 percent	1	3	3	2	..	..	9
10-20 percent	1	2	4	4	1	..	12
20-30 percent	..	..	2	..	1	1	4
30 percent and over	..	..	1	1	1	2	5
TOTAL NUMBER	8	9	17	8	4	4	50

<sup>a</sup> National Bureau sample of 50 commercial banks having some term loans outstanding at the end of 1940. Size of bank measured by loans and discounts as of June 30, 1941.

likely that term loans to business enterprises comprised not far from two-thirds of the amount of "commercial and industrial" loans in the portfolios of these fifty large banks at the end of 1940—a striking reflection of the changes that have occurred in the credit relationships between larger banks and business enterprises during the past decade. Table 12 indicates great dispersion in the relation of term credit to total loans among large commercial banks, although there is a tendency for the largest term-lending banks to have relatively larger fractions of their loan portfolios in the form of term loans than is the case for smaller institutions in the group.<sup>16</sup>

The lengthening of the maturities of bank credit extended to business has been a matter of concern to a number of bankers. Other things being equal, loans of medium term undeniably carry larger risks to lenders than do loans of short term. Moreover, term loans are less liquid assets in several respects than either short-term loans or investments in marketable securities. Consequently, bankers whose institutions have been active in term lending have given thought to the maximum

<sup>16</sup> Total assets or total deposits would have formed a preferable measure of size of these banks, but this information was not available.

amount of term credit their banks should have outstanding; a few of them have laid down rules-of-thumb limiting outstanding term loans to fixed amounts or to certain percentages of total assets, total deposits, time deposits, or bank capital. There is an understanding in one bank, for example, that outstanding term loans shall not exceed 10 percent of total assets, which would normally be about 30 percent of total loans.<sup>16</sup>

The industrial character of its territory and the attitudes and training of its personnel are major factors in determining the aggregate amount of term loans a bank can develop. Given these factors, bankers consider the following points in deciding the proper amount of term credit they should have outstanding at any one time:

1. *The degree of stability in turnover of deposits.* Banks possessing a comparatively high degree of stability in the rate of turnover of their deposits obviously are better able to increase medium-term loans, other things being equal, than institutions that face erratic flows of cash.

2. *The ratio of capital to deposits.* Since term loans are assets with less liquidity than cash or government securities, a bank with a comparatively small capital "cushion" under its deposits will tend to limit term lending more rigorously, other things being equal, than one which has comparatively large capital out of which losses could be met.

3. *The quality and maturities of other assets.* Institutions holding relatively large amounts of long-term bonds, particularly issues of less than prime quality or issues with poor marketability, more severely limit the amount of their term loans, other things being the same, than banks whose other assets consist in relatively large measure of highly liquid, prime-quality, or short-term obligations. Conversely, banks that have acquired relatively large portfolios of term loans have re-adjusted the qualities and maturities of securities in their

<sup>16</sup> It may be noted, in passing, that American banking legislation has imposed certain limits upon the amounts of credit of given type that banks may have outstanding. For example, a national bank may not have loans outstanding secured by real estate of an amount greater than 60 percent of its capital or surplus, or the sum of its time deposits, whichever is greater.

investment portfolios in order to bring about the desired distributions of their total earning assets.

### *Diversification of Term Loans*

American banking laws and bank supervisory authorities have long required some degree of diversification in the loans of commercial banks. The National Bank Act did so by implication when it limited the amount of credit obtainable by any one borrower to not more than 10 percent of a bank's capital and surplus. State banking laws commonly contain somewhat similar provisions. In practice, few banks are willing to make term loans up to their legal limits, preferring to sell participations or to seek the cooperation of other lenders in very large loans. While statutory limitations on loans to single borrowers have frequently made it necessary for banks to cooperate in term lending, there are many cases where cooperation has occurred only because self-imposed rules of banks restricted the amounts of individual loans they would make to considerably *less* than the amounts allowed by law. The well-developed facilities for cooperation among lenders in the medium-term business credit market, to which reference has been made previously, make it possible for any bank confronted with an application for a loan larger than permitted by the law or its own policy to invite other institutions to share the risks.

Apart from diversifying their term loans among borrowers, commercial banks generally seek to spread risks among industries. Few, if any, banks have adopted specific formulae of industrial diversification. In fact, some banks have placed relatively large amounts of term credit in those few industries for which their past experience has developed an unusual capacity for the appraisal of credit risks. There is a tendency for commercial banks to become specialists in extending medium-term credit to concerns in particular industries, just as certain investment banking houses have become industrial specialists. Industrial specialization in originating term loans is not, of course, necessarily accompanied by similar specializa-

tion in the loan portfolio. Such a bank may offer other institutions participations in its loans, receiving from them, in turn, opportunities to participate in loans made to concerns in many industries.

### *Term Loan Reserves*

Among a large number of banks located in major financial centers of the United States, with whose officers the question was discussed, no bank had created a special reserve to meet losses from term loans. Traditional American banking practice has been to set up out of earnings a general "reserve for contingencies" against which is charged losses realized upon the disposition of any kind of assets. When a particular loan is criticized by a bank-examining authority and classified as "doubtful" in value, a bank generally sets up a special reserve against the prospective loss on that specific loan. It is very uncommon for banks to maintain reserves for single classes of loans, with one major exception: A growing number of banks are creating special reserves against losses from consumer instalment credits, by setting aside out of earnings one-half percent (more or less) of the annual volume of such loans until the reserve is built up to a point deemed adequate to cover losses that may accrue in the future.

While bankers generally recognize that loss in term lending is a real contingency, there are certain difficulties in establishing reserves for term loans. The chief of these difficulties is lack of knowledge of the "normal" ratio of losses to volume of term credit extended. In extending consumer instalment credit, banks engage in a large number of comparatively small transactions, each completed within a short period of time. As a result, there accumulates a volume of experience adequate to form the basis for a reasonably accurate judgment concerning the normal loss ratio. In term lending, on the other hand, comparatively few loans are made but they are of large amounts and extend for long periods. Thus, the fund of experience is as yet too limited to permit of a scientific solution of the reserve problem.



The experience of financial institutions in holding small corporate bond issues during the period 1922-28 has some evidential value with respect to term loans, but cannot be regarded as determinative of the probable term loan loss ratio because of many differences in characteristics and circumstances under which these credits were granted. After surveying the default and loss record of some 385 public issues of corporate bonds of \$5 million or less during this period, one investigator concluded that at least 1 percent of the unpaid balances of term loans should annually be set aside out of earnings as a minimum reserve for eventual losses.<sup>17</sup> Since the weighted average interest rate charged by commercial banks on term loans during the first six months of 1941 was about 2.5 percent per annum, adoption of this suggestion would absorb about 40 percent of the gross income from term lending.

A further difficulty of establishing special term loan reserves, often cited, is that the process of accumulation would bear especially hard on the net profitability of term lending in view of present rates on term loans, and would impair the ability of banks to build up capital commensurate with increasing deposit liabilities. The latter follows from the fact that, although there is no uniform policy on this point, bank supervisory agencies do not generally include loss reserves as part of a bank's net sound capital. It may be observed, however, that if some losses *do* occur in the normal course of term lending operations, capital positions and bank earnings would undergo more severe and less convenient readjustments in the absence of a reserve than if a reserve had gradually been accumulated to absorb the shock of large, sudden losses. The amount of any term loan reserve would necessarily be geared to losses resulting from individual cases of misfortune or bad judgment. The current earning position of a bank could never be protected against catastrophes resulting from such powerful adverse forces as affected the whole economic structure during 1929-33.

<sup>17</sup> Report of L. Merle Hostetler prepared for the National City Bank of Cleveland, Ohio, cited by Albert Wagenfuehr, *op. cit.*

## *Interest Rates and Costs in Term Lending*

TERM LOANS OF COMMERCIAL banks have carried interest rates that were much lower, on the average, than those charged by Federal Reserve banks and the Reconstruction Finance Corporation for medium-term business credit. These rates have had a greater range as between loans made at any one time and have varied to a greater extent through time. Commercial bank charges have been more responsive than those of the public lending agencies to differences in financial strength of borrowers, size of loans, term of loans, and changing conditions in the money market.

### *Interest Rates Charged for Term Loans*

The percentages of the number and amount of a broad sample of commercial bank term loans made in large and medium-sized cities at different rates of interest are given in Table 13.<sup>1</sup> During the three-year period, March 1939-March 1942, a larger *number* of loans were made at 5 to 6 per cent rates than at any other level of interest rates. Loans at these rates were made for the most part in southern and western cities and the amount of bank term credit comprised by these loans were negligible, never as much as 7 percent and generally less than 2 percent of the total. Over the whole

<sup>1</sup> Since 1939, the Board of Governors of the Federal Reserve System has been collecting quarterly data on the number and amount of term loans made at different interest rates by commercial banks located in 19 leading cities. Data cover loans made during the first half of the months of March, June, September and December, excepting data for March 1939 which refer to the second half of the month. During the reporting periods they included 4,440 loans whose aggregate original amount was \$522 million, and may be regarded as representative of term loan rates during these years in medium-sized and large cities. See *Federal Reserve Bulletin* (November 1939) pp. 963-67.

Table 13—PERCENTAGE DISTRIBUTION OF THE NUMBER AND AMOUNT OF TERM LOANS MADE AT DIFFERENT RATES OF INTEREST BY COMMERCIAL BANKS IN 19 CITIES DURING SELECTED PERIODS FROM MARCH 16, 1939 THROUGH MARCH 15, 1942<sup>a</sup>

Interest Rate Per Annum <sup>b</sup>	1939				1940				1941				1942
	Mar. 16-31	June 1-15	Sept. 1-15	Dec. 1-15	Mar. 1-15	June 1-15	Sept. 1-15	Dec. 1-15	Mar. 1-15	June 1-15	Sept. 1-15	Dec. 1-15	Mar. 1-15
NUMBER OF LOANS MADE													
1-2 percent	.6	..	6.4	.4	1.9	8.6	11.9	6.6	2.1	8.8	5.3	7.9	7.1
2-3 percent	7.9	5.1	8.8	14.2	5.0	24.0	9.0	20.2	7.8	8.8	15.0	15.2	7.8
3-4 percent	16.9	11.4	12.0	24.9	23.2	12.9	11.9	11.8	5.0	14.0	7.1	12.4	6.6
4-5 percent	21.2	22.9	11.2	14.2	23.2	14.6	28.3	13.2	3.1	11.1	12.8	6.6	6.9
5-6 percent	19.7	34.3	30.6	17.6	25.5	32.6	27.0	28.9	13.6	36.2	46.1	34.9	23.8
6-7 percent	24.1	3.4	20.6	13.7	18.1	5.6	11.5	18.4	65.1	19.9	4.0	18.1	40.5
7 percent and over	9.6	22.9	10.4	15.0	3.1	1.7	.4	.9	3.3	1.2	9.7	4.9	7.3
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
AMOUNT OF LOANS MADE													
1-2 percent	1.0	..	26.0	.5	12.1	27.7	85.5	18.6	3.4	40.3	49.6	58.9	35.4
2-3 percent	37.1	17.2	57.2	30.3	53.6	28.8	4.4	66.4	81.9	16.8	25.1	18.6	15.3
3-4 percent	45.5	67.5	15.2	36.6	26.7	36.7	7.8	11.2	11.0	36.0	10.1	19.1	8.5
4-5 percent	15.2	10.1	1.0	24.9	5.9	5.3	2.2	2.0	2.3	4.6	5.3	1.2	35.1
5-6 percent	.5	4.3	.4	6.9	1.1	1.4	.1	1.4	1.1	1.4	6.8	2.1	5.1
6-7 percent	.6	.8	.2	.7	.5	..	..	.4	.3	.8	3.0	.1	.2
7 percent and over	.1	.1	..	.1	.1	.1	..	..	.1	.1	.1	.1	.4
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

<sup>a</sup> Computed from a special tabulation furnished by the Board of Governors of the Federal Reserve System.

<sup>b</sup> No loans made at less than 1 percent. \* Less than .05 percent.

period the largest *amount* of bank term credit has been accounted for by loans with rates of 2 to 4 percent. No loans were made at less than 1 percent interest, and a few loans have carried charges exceeding 7 percent. There is evidence of a softening of rates during the third reporting period of 1939 and the first three periods of 1940. Some stiffening in rate is indicated during the first half of 1941 and again in the first period of 1942 after an easing of rates during the latter part of 1941. These changes in rates are also revealed by changes in the weighted average of all bank term loan interest rates as depicted in Chart IV. The rather sharp short-run fluctuations in the average term loan rate reflect changes in the size of loans, term of loans, and credit ratings of borrowers through time, as well as changes in money market conditions.

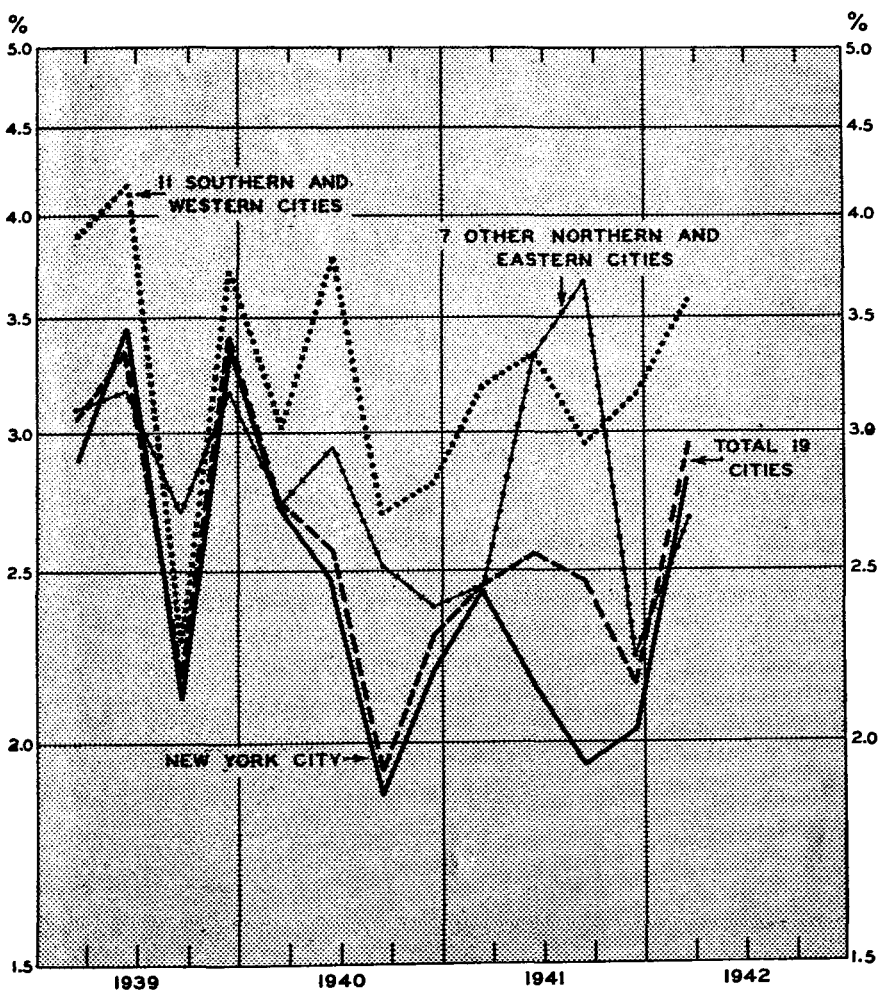
There is a high degree of inverse correlation between the size of commercial bank term loans and the interest rates charged; small loans carry high rates, and conversely. This is clearly revealed by the following tabulation of the average size of the loans included in Table 13 that were made at different interest rates, and the percentages of the total number and amount of loans made at each rate:<sup>2</sup>

<i>Interest Rate</i>	<i>Number of Loans</i>	<i>Amount of Loans</i>	<i>Average Size of Loans</i>
1-2%	5.4%	32.3%	\$701,400
2-3	11.1	35.9	379,000
3-4	11.4	21.3	221,500
4-5	11.9	7.6	75,200
5-6	28.1	2.3	9,500
6-7	26.0	.5	2,200
7 and over	6.1	.1	1,600

The substantial "fixed" costs of making a credit investigation and administering a term loan, irrespective of its size, together with the normally larger risks of lending relatively small amounts to smaller business enterprises, account for this inverse correlation between size of loan and interest rate.

<sup>2</sup> Data furnished by the Board of Governors of the Federal Reserve System.

INTEREST RATES PER ANNUM CHARGED ON TERM LOANS TO BUSINESS BY COMMERCIAL BANKS IN 19 CITIES, BY SELECTED PERIODS, 1939-42<sup>©</sup>



© Data taken from tabulations of Board of Governors of the Federal Reserve System. Rates are weighted averages.

The rate charged a given concern by a commercial bank for a medium-term loan is normally somewhat higher than the rate charged on a short-term loan to the same enterprise. Yet the differential has been surprisingly small in many instances. Some businesses, particularly large and well-established corporations, have been able to negotiate bank term credit at astonishingly low rates. More than 85 percent of the term credit extended during the first half of September 1940 by the banks whose loans are included in Table 13 carried rates of 1 to 2 percent per annum. However, this represents an irregularity in the market and reflects a few large loans made during that period at especially low rates.

The effective interest rates at which medium-term bonds and notes have been purchased privately from issuers by life insurance companies have borne a strong resemblance to rates charged for large term loans by commercial banks. Table 14 shows the percentages of all medium-term debt securities purchased annually during 1937-40 by five leading insurance companies and held at the end of 1940, distributed according to the interest rate yielded to maturity. A large proportion of

*Table 14*—PERCENTAGE DISTRIBUTION OF THE NUMBER AND AMOUNT OF MEDIUM-TERM ISSUES PRIVATELY PURCHASED BY 5 LIFE INSURANCE COMPANIES DURING 1937-40 AT DIFFERENT EFFECTIVE RATES OF INTEREST, AND HELD ON DECEMBER 31, 1940<sup>a</sup>

<i>Effective Interest Rate</i>	<i>Number of Issues Purchased</i>					<i>Amount of Issues Purchased</i>				
	1937	1938	1939	1940	All Years <sup>b</sup>	1937	1938	1939	1940	All Years <sup>b</sup>
Less than 1 per cent	..	..	..	7.9	3.7	..	..	..	13.9	5.5
1-2 percent	..	..	12.8	12.9	8.3	..	..	18.3	5.1	5.5
2-3 percent	43.5	10.3	20.5	46.5	32.8	54.2	31.3	36.9	57.3	44.6
3-4 percent	21.7	65.6	41.1	22.8	33.6	19.0	55.6	30.4	16.6	28.5
4-5 percent	34.8	24.1	25.6	9.9	20.7	26.8	13.1	14.4	7.1	15.7
5 percent and over	..	..	..	..	.9	..	..	..	..	.2
<b>TOTAL</b>	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

<sup>a</sup> A National Bureau sample of the 5 largest legal reserve life insurance companies domiciled in the United States. Medium-term issues are those having terms at time of acquisition of 15 years or less.

<sup>b</sup> Includes issues purchased prior to 1937.

the number and amount of all issues yielded between 2 and 4 percent. Since 1938 only a relatively small amount of these credits yielded 5 percent or more. Only a few issues, purchased during 1940, yielded less than 1 percent per annum, these representing several one-year and two-year notes discounted for national instalment financing companies. During the four-year period there was a tendency for yields of medium-term private placements to fall, paralleling the decline in yields from large bank term loans.

If the data were more numerous and better classified, it would be extremely interesting to compare the yields of bank term loans, medium-term private placements, and public offerings of medium-term corporate bonds and notes, for credits of about equal size extended to corporations of comparable size and credit standing. In view of the rapid expansion in the annual volume of term loans and private placements since 1933, such a comparison would probably show that, on the average, large loans with maturities up to eight or nine years distant could be obtained most cheaply from commercial banks, and credits with terms of about eight to fifteen years could be negotiated to best advantage with life insurance companies.

The great majority of business loans made by the RFC have carried an interest charge of 5 percent per annum, a few loans having been made at 4 to 6 percent. After April 1, 1939, the proportion of loans made at 4 percent increased somewhat. It has evidently not been the policy of the Corporation to vary interest rates in accordance with regional differences or with respect to size of loan, credit rating of borrower or other factors.

Federal Reserve banks, like the RFC, are not restricted in their charges by the legislation authorizing them to make business loans, each bank being free to formulate its own policy. The rates charged by each bank for industrial advances during the period September 1934 to June 1939 ranged within the following limits:<sup>3</sup>

<sup>3</sup> Compiled from *Federal Reserve Bulletin*, various issues.

Federal Reserve Bank of Boston	3½-6%
Federal Reserve Bank of New York	4 -6
Federal Reserve Bank of Philadelphia	4 -6
Federal Reserve Bank of Cleveland	4½-6
Federal Reserve Bank of Richmond	6
Federal Reserve Bank of Atlanta	5 -6
Federal Reserve Bank of Chicago	5 -6
Federal Reserve Bank of St. Louis	5 -5½
Federal Reserve Bank of Minneapolis	6
Federal Reserve Bank of Kansas City	4 -6
Federal Reserve Bank of Dallas	5 -6
Federal Reserve Bank of San Francisco	5 -6

There has been a tendency for the rates charged by each Federal Reserve bank to reflect, at least in part, the prevalent differences between geographical areas in the costs of business credit. Reserve banks located in the New England and North Atlantic areas have granted loans at somewhat lower rates than those in the South, Middle West and Pacific regions. Moreover, the existence of a range of rates for *each* Reserve bank indicates an endeavor to take some account of differences in the size, credit risk and costs of administering different loans. Clearly, the rate structure of Federal Reserve banks more closely resembles that of private agencies than do the rates of the RFC.

### *Costs of Term Lending*

From a functional point of view, the costs incurred by a term lending institution include: (1) outlays for credit investigations preceding the disbursement of loans, (2) interest and other costs of the funds advanced, (3) expenditures on supervision and control of outstanding loans until their maturity, and (4) losses resulting from non-payment of individual loans. The surplus of interest and fee income from term loans over these expenditures constitutes net income from the term lending operation.

Quantitative information is lacking on the costs of making term loans per dollar of funds annually outstanding. No term lending institution has made data available on its costs of extending medium-term credit to business. In fact, few institutions employ a sufficiently detailed cost accounting procedure to determine accurately net income from each type of credit



extended. Even the most elaborate procedure would, in any event, be defective in failing to make provision for the accumulation of reserves against term loan losses, since the amount of such accumulation cannot be estimated until more is known about the repayment record of term loans.

It is fairly clear that the costs of making medium-term business loans per dollar of credit annually outstanding are considerably larger than those incurred in making short-term loans to *similar borrowers*. In the first place, the longer maturities of the loans call for a more elaborate credit investigation. In case collateral security is pledged, there are legal and other costs to be incurred in evaluating and perfecting a lien on the pledged assets. Moreover, term loans often require a continuing analysis of the debtor's progress, including field trips by bank representatives to the borrower's place of business. Finally, and apart from all these costs of loan administration, the more distant maturities of medium-term loans require the lender to assume greater risks, for which higher compensation is in order. The amount of the cost differential between medium-term and short-term lending of similar sums to the same borrower cannot be stated precisely or in general terms. It will depend mainly upon the size of the loan, the credit rating of the borrower, and the term of the loan.

It is also evident that a substantial part of the out-of-pocket costs of making and administering a term loan are fixed and invariable, whatever the amount of the loan. Although a somewhat more elaborate and costly credit investigation is normally made in passing upon an application for a large term loan, much the same routine is followed for the small loan. As a result, the costs of making small loans, per dollar of credit outstanding per annum, are substantially higher than is the case with large loans. For this reason, many banks place minimum limits upon the size of loans they will make, the most frequent minima being \$50,000 or \$100,000. The experience of the RFC shows that relatively large expenses are incurred in making small term loans to business concerns. It has been authoritatively stated that the business loans of the

Corporation take approximately two-thirds of the time of the executives and the board of directors,<sup>4</sup> although such loans constituted only 8 percent of total RFC loans to all non-governmental institutions outstanding at the end of 1940.<sup>5</sup> If all expenses of the Corporation are allocable between types of loans in the same ratio as the time of the executives and the board, the costs of making business loans would be about eight times those of making all other nongovernmental loans, per dollar of credit outstanding. The annual administrative expenses of the RFC have been placed at about 1 percent of all outstanding loans.<sup>6</sup>

### *Profitability of Term Lending*

Largely because of the inadequacy of information concerning costs of term lending, nothing definitive can be said regarding the profitability of term lending to commercial banks. The remarkable rate of growth in bank term loan volume since 1933 might be considered to establish a presumption of profitability. The prevailing view of commercial bankers is that term loans have formed a comparatively lucrative outlet for idle cash. The excellent record of these credits up to the middle of 1941, a record of negligible losses, defaults, or forced rearrangements of amortization provisions, undoubtedly supports this attitude.

However, the evidence is not yet conclusive. Until it can be shown that interest and fee income from term loans has exceeded all of the costs of making and administering them, including losses, by amounts sufficient to produce larger net yields than have been afforded by other banking assets carry-

<sup>4</sup> See U. S. Senate Committee on Banking and Currency, *Business Loans by Federal Reserve Banks*, p. 49, for testimony of Jesse H. Jones, Chairman of the Reconstruction Finance Corporation.

<sup>5</sup> These include loans to banks and trust companies, building and loan associations, insurance companies, mortgage loan companies, agricultural financing institutions, railroads, business enterprises, national defense business concerns, and mining, milling and smelting companies. See Reconstruction Finance Corporation, *Quarterly Report*, Fourth Quarter of 1940, pp. 7-13.

<sup>6</sup> See U. S. Senate Committee on Banking and Currency, *op. cit.*, p. 50.

ing equal risks, relative profitability is not established. Thoughtful bankers recognize that term loans have not yet passed the acid test of a severe and protracted depression. In addition, the practice of banks not to accumulate out of interest income special reserves against term loan losses may, in some cases, have tended to exaggerate the net income term loans are believed to produce. While the risks assumed by commercial banks in making term loans have been materially smaller than those carried by loans of the RFC and Federal Reserve banks, the weighted average interest rate charge for term loans by commercial banks has also been much smaller than that charged by the public agencies.

The evidence points to a probable ultimate loss on the business loans of the RFC, considered as a group. The Chairman of the Corporation has said that the percentage of loss to volume of loans disbursed would probably be greater for business loans than for any other class of credit extended by the RFC.<sup>7</sup> At the middle of 1940, he estimated this loss ratio at 10 percent of loan volume. Considering this loss in combination with the comparatively large costs of administering RFC business loans, to which reference has been made previously, it is highly improbable that interest income will cover all of the costs. Clearly, commercial banks or other private lending institutions could not profitably have made the business loans of the RFC, at the charges imposed by that agency.

It also appears probable that the industrial advances of the Federal Reserve banks, taken as a group, will not produce any considerable net income, although particular banks appear to have earned a satisfactory return on their direct business loan operations. The Chairman of the Board of Governors of the Federal Reserve System stated at the middle of 1940:<sup>8</sup>

<sup>7</sup> See Reconstruction Finance Corporation, *op. cit.*, p. 11, and U. S. Senate Committee on Banking and Currency, *op. cit.*, p. 49. Although national defense activity since June of 1940 improved the financial condition of many RFC borrowers, it is likely that many others, unable to get defense orders, or suffering from rising labor costs and shortages of raw materials, have suffered further impairment of financial position.

<sup>8</sup> See U. S. Senate Committee on Banking and Currency, *op. cit.*, p. 51.

... On the basis of information now available, it would appear that for the Federal Reserve banks as a whole the earnings on industrial advances and commitments will approximately offset the expenses and losses incurred in connection with such loans.<sup>9</sup>

While the profit-and-loss record of the Federal Reserve bank business credits is thus indicated to be somewhat more favorable than that of the RFC business loans, private financing agencies evidently could not have earned as much by making the Reserve bank loans as by investing their funds in other assets.

Congress intended that the public agencies should make business loans involving greater risks than private institutions were able to assume. Furthermore, the data show that the medium-term business credits extended by the RFC were fraught with somewhat larger uncertainties concerning repayment than those of the Federal Reserve banks. Congress assigned the RFC a more difficult task when it placed no restriction on term of loans and gave much greater latitude in use of funds by borrowers from the RFC. The business credits granted by both of these public agencies have undoubtedly produced broad social benefits, which must be weighed in determining the economic value of their business lending operations. An evaluation of these benefits is beyond the scope of the present investigation.

<sup>9</sup>This judgment is supported by data made available by the Board of Governors of the Federal Reserve System on the industrial loan program covering operations up to December 31, 1941. During the 7½-year period the Federal Reserve banks had net earnings on industrial loans, in excess of expenses, charge-offs and reserves for losses, of \$500,000. The total volume of advances made up to the end of 1941 was about \$80 million; commitments to make advances which were still outstanding at the end of 1941 or on which no advance had been made amount to \$73 million.

*Term Lending in Defense and War*

THE INITIATION OF THE DEFENSE program in 1940 and the beginning of active participation in war in late 1941 have set forces in motion that are certain to have important effects on the American banking system. The total impact of the vast defense and war program upon American commercial banking and upon methods of business financing is, of course, too broad a subject to come within the scope of the present investigation. In this chapter attention is directed only to the effect of the war on term lending to business concerns by private and public agencies.

Of necessity this chapter deals principally with developments that took place during the defense period. Much of the data necessary to describe the development of the program and its effect on banking has been curtailed since December 1941, although wherever possible statistical information has been brought up to date of writing. Also, the arrangements that will be called for to finance the greater needs of active war as contrasted to defense are only now being made and any description of these arrangements cannot, in the nature of things, be fully abreast of current happenings. Despite these limitations it is possible to indicate in general terms how the war effort is affecting term lending, for the changes produced began to show themselves during the defense period. Furthermore, it appears likely that the principal effect of active participation in war will be an intensification and acceleration of these tendencies.

*Scope of War Financing*

The defense and later the war effort has involved a considerable amount of productive activity that could not be fi-

nanced by the conventional advance of credit to private business enterprises. The scope of the financing must, therefore, be measured in part in terms of the direct financing activities of public agencies. One part of the program requires the construction of specialized munition plants and the creation of reserves of essential raw materials. Since this entails investments carrying very large uncertainties, special corporations have been created as subsidiaries of the Reconstruction Finance Corporation to make such investments. Rubber Reserve Company and Metals Reserve Company acquire stocks of rubber and critical metals, especially tin. Defense Plant Corporation constructs plants, purchases machinery and equipment, and leases these facilities to manufacturers holding defense contracts. Its interests are protected by rentals received from the lessee concerns or by contracts of reimbursement from the War or Navy Departments. Defense Supplies Corporation acquires and carries in stock essential materials, including aviation gasoline, nitrate of soda and wool. Defense Homes Corporation provides equity capital for housing projects located in defense production centers, in cases where private capital is not available.

The magnitude of the activities of these corporations is indicated by the fact that their total commitments (including actual advances of cash) amounted to \$9,672 million by March 7, 1942, the commitments of Defense Plant Corporation alone being \$4,798 million.<sup>1</sup>

Notwithstanding the important production activities carried on directly by public agencies, the military program has produced broad quantitative changes in business financing by private agencies. The magnitude of this program is indicated by the fact that between June 1940 and March 31, 1942 the Federal government had appropriated or authorized the expenditure of \$137 billion (including the lend-lease program).<sup>2</sup> Total expenditures by the various departments of the Federal

<sup>1</sup> Report of the Secretary of Commerce, covering the defense and war activities of the Reconstruction Finance Corporation and its subsidiaries, March 21, 1942.

<sup>2</sup> *Victory*, Vol. 3, No. 15, p. 32.

government over this same period amounted to nearly \$23 billion. These vast expenditures set in motion productive activities whose magnitude was limited principally by the availability of men and materials and the time required to construct facilities and equipment for the production of military goods. They generated great increases in employment, volume of production and demands by business concerns for credit to finance this production. Between mid-1940 and the end of 1941 total loans of member banks of the Federal Reserve System rose by \$4 billion—about 30 percent.<sup>8</sup>

### *Definition of War Credit*

War credit is credit extended to business concerns for the purpose of financing the production or holding of military goods or the production of materials and equipment necessary for making such goods. Possession of a prime contract or a subcontract from the Federal government definitely marks a concern as a war producer. This definition is not entirely free from ambiguities, and the task of separating credit extended to finance war production from that granted to finance civilian production is sometimes a difficult one. Modern warfare is "total" in demanding enlistment of the totality of the nation's economic and financial resources and in requiring the subordination of civilian demands. What specific commodities have military value, and how can credit be traced and allocated to the production of such commodities? The great majority of articles produced in the economy may under some circumstances and in some ways contribute to the war effort, if only in support of civilian morale.

Further to complicate the problem, most business concerns deal in several commodities possessing varying degrees of utility for military purposes. Credit advanced to such concerns cannot be earmarked as to use with exactitude. Loans made to government contractors or subcontractors engaged *exclusively* in producing military equipment, materials or supplies are clearly enough war loans. But how should one classify a

<sup>8</sup> *Federal Reserve Bulletin* (March 1942) p. 238.

loan to a manufacturer of steel grab buckets, who sells these articles to steel manufacturers using them in loading the iron ore necessary to produce the steel subsequently used in the products of the government contractors? And how should one determine what fraction of a loan to a manufacturer of lip-stick cases also producing cartridge shells is war credit? No doubt rough estimates can be made in the majority of cases, but the inherent difficulties of these problems should be recognized in interpreting the data.<sup>4</sup>

### *Institutions Making Defense and War Loans to Business*

During the initial stages of the defense program, many businesses, especially the larger corporations that were at first relatively more important, financed their military orders with available working capital on hand. Other concerns took recourse upon the customary institutional sources of business credit, including banks, commercial finance companies, Federal Reserve banks, the Reconstruction Finance Corporation, public offerings of securities through investment bankers, or private placements of securities with life insurance companies or other institutional investors.

Government contractors have also had an additional source of funds for financing their contracts to completion, namely, advance payments on contracts made with the War or Navy Departments. Legislation passed during 1941 permitted these executive agencies to advance, from available appropriations,

<sup>4</sup> In reporting defense loans and commitments held on April 30, 1941, weekly reporting member banks of the Federal Reserve System were instructed as follows: "Include all commitments and loans made directly or indirectly for national defense purposes, whether or not secured by assigned government contracts, and whether made to prime contractors or to subcontractors. If the proceeds of a commitment or loan are to be used only in part for defense purposes, the reporting bank should if practicable, make an estimate of the amount so used and report only this amount. In the absence of information of the contrary, however, it may be assumed that if a borrower is engaged to a substantial extent directly or indirectly in providing facilities, supplies, or equipment for national defense, all new loans and commitments to such a borrower since the defense program was inaugurated outstanding on April 30, 1941, may be reported as being for the purpose of financing the defense program." See "Instructions for Preparation of Reports on Form F.R. 550," *Federal Reserve Bulletin* (September 1941) p. 873.



sums not exceeding 50 percent of the contract price of supplies or facilities, of which advance two-fifths may go to subcontractors participating in the completion of the contract. These advances may be authorized by Army or Navy officials without approval from Washington provided they do not exceed \$100,000 on any one contract. Although data are not available to measure accurately the importance of this and other sources of defense credit, rough estimates of the roles played by the most important defense lending institutions—commercial banks and the Reconstruction Finance Corporation—may be made.

Commercial banks far surpass any other type of lending institution in the volume of such financing of business. It is likely that banks are making more than four-fifths of the number of all war loans and extending more than 90 percent of the amount of all credit advanced. About 5 percent of the number and amount of war loans are made by the RFC, and the balance by other institutions, such as factoring and commercial financing companies and Federal Reserve banks. These conclusions may be drawn from analysis of military contracts assigned by contractors to lending institutions during the period February 1941-January 1942, information on which is given in Table 15. It is assumed that the proportion of loans disbursed to amount of defense contracts assigned was the same for each type of lending institution.

The aggregate amount of defense loans held by commercial banks at the end of April 1941 fell just short of \$1 billion.<sup>5</sup> If this estimate is correct, it appears that as a maximum such loans roughly constituted a third of the \$2.75 billion increase in total loans of member banks between mid-1940 and mid-1941. The other two-thirds comprised credit granted to finance business expansion *resulting* from these defense activities. Moreover, the volume of defense lending by commercial banks

<sup>5</sup> This estimate is based on the fact that weekly reporting member banks of the Federal Reserve System, which account for about 49 percent of the amount of all loans and discounts in the American banking system, reported holding 3,630 defense loans totaling \$460 million on April 30, 1941. (In addition, these banks had outstanding 2,254 commitments to make loans aggregating \$633 million.) See *Federal Reserve Bulletin* (September 1941) pp. 866-74.

*Table 15*—PERCENTAGE DISTRIBUTION OF THE TOTAL NUMBER AND AMOUNT OF DEFENSE CONTRACTS ASSIGNED TO DIFFERENT TYPES OF LENDING INSTITUTIONS, FEBRUARY 27, 1941 TO JANUARY 29, 1942<sup>a</sup>

<i>Cumulative to</i>	<i>Commercial Banks</i>		<i>Federal Reserve Banks</i>		<i>Reconstruction Finance Corp.</i>		<i>Other Lending Institutions</i>		<i>All Contracts Assigned</i>	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount
February 27, 1941	84.2	95.7	..	..	6.4	3.4	9.4	.9	100.0	100.0
May 1, 1941	85.2	94.5	..	..	5.6	3.9	9.2	1.6	100.0	100.0
May 29, 1941	85.9	95.4	..	..	5.1	3.3	9.0	1.3	100.0	100.0
June 26, 1941	86.1	94.2	..	..	4.7	4.3	9.2	1.5	100.0	100.0
July 31, 1941	84.6	93.6	1.9	.5	4.2	4.1	9.3	1.8	100.0	100.0
August 28, 1941	84.4	91.8	1.7	.5	4.9	5.9	9.0	1.8	100.0	100.0
September 25, 1941	84.4	91.7	1.7	.5	5.1	5.9	8.8	1.9	100.0	100.0
October 30, 1941	84.0	91.9	1.6	.5	5.0	5.7	9.4	1.9	100.0	100.0
December 26, 1941	84.3	91.6	1.5	.5	4.4	5.5	9.8	2.4	100.0	100.0
January 29, 1942	84.3	91.6	1.4	.5	4.4	5.2	9.9	2.7	100.0	100.0

<sup>a</sup> Based upon tabulations furnished by the Board of Governors of the Federal Reserve System.

grew very rapidly during 1941 and 1942, as the war production program expanded to encompass a larger number of business enterprises. During this twelve-month period the number of war loans increased by more than six times and the amount of such loans more than quadrupled, to judge from the volume of contracts assigned to lending institutions by government contractors.<sup>6</sup>

Up to March 7, 1942 the RFC had authorized 675 direct loans to some 480 different business enterprises engaged in war production, under both its regular business loan powers and the special defense lending powers acquired by it on June 25, 1941. Under both laws nearly \$665 million of defense and war credit had been authorized by that date. In addition to its direct loans to business concerns the RFC has cooperated with banks in their war loan programs by taking participations in credits extended to concerns engaged in war production. Up to March 7, 1942, the Corporation had authorizations of such participations in the amount of \$23 million on loans aggregating \$37 million. While this amounts to a very large volume of direct loans and participations, the major contribution of the RFC to the volume of defense and war lending has been its loans to, and purchases of capital stock of, its subsidiary defense corporations, which, as indicated above, amounted to nearly \$10 billion by March 7, 1942.

#### *Term Lending of Commercial Banks in Defense and War*

The proportion of all war loans that are made on a term loan basis, that is, the proportion having a term of over one year, is not significantly different from the proportion of term

<sup>6</sup> See Table C-4. It is assumed that loans not accompanied by assignments of claims grew at a rate equal to those so accompanied, and that the proportion of loans granted to amount of assigned contracts remained constant throughout the period. Another evidence of growth in bank lending for defense is that 369 banks located in 142 cities reported to the American Bankers Association that they held 6,219 defense loans amounting to more than 517 million at the end of June 1941. In short, a group of banks roughly comparable in number and size to the weekly reporting member banks held defense loans 71 percent larger in number and 13 percent larger in amount than the weekly reporting banks had had outstanding only three months earlier.

loans to total business credits extended before the defense period. To the extent that defense and war have affected term lending it has been by changing the characteristics of term loans made rather than by increasing the relative importance of term loans. Thus, about 7 percent of the number and 21 percent of the amount of the defense loans made by medium-sized and large commercial banks are term loans, running a year or more to maturity; term loans held by large commercial banks at the end of 1940 were estimated to constitute 22 percent of all loans and discounts held by them.<sup>7</sup> Like traditional business loans, many loans were written to run less than one year but were expected by both banker and borrower to be renewed at maturity and to extend more than one year. Data on all defense loans held by weekly reporting member banks of the Federal Reserve System at the end of April 1941, showing their distribution by term at time of making, are given in Table 16.

*Table 16*—NUMBER AND AMOUNT OF DEFENSE LOANS HELD BY WEEKLY REPORTING MEMBER BANKS AT APRIL 30, 1941, BY TERM AT TIME OF MAKING\* (*dollar figures in thousands*)

<i>Term at Time of Making</i>	<i>Number of Loans</i>		<i>Amount of Loans</i>	
	Number	Percent	Amount	Percent
<b>Non-instalment loans</b>				
Less than 1 year	2,976	82.0	\$324,236	70.5
1-2 years	42	1.2	13,301	2.9
2-3 years	17	.5	1,603	.3
3-5 years	41	1.1	24,088	5.2
5 years and over	9	.2	3,328	.7
<b>Instalment loans</b>				
Less than 1 year	168	4.6	20,258	4.4
1 year and over	160	4.4	53,585	11.6
<b>Miscellaneous loans</b>	217	6.0	19,713	4.3
<b>ALL LOANS</b>	3,630	100.0	\$460,112	100.0
<b>Total—less than 1 year</b>	3,144	86.6	344,494	74.9
<b>Total—1 year and over</b>	269	7.4	95,905	20.8

\* Based upon tabulations furnished by the Board of Governors of the Federal Reserve System.

<sup>7</sup> See Appendix A.

One significant result of defense financing is a gradual extension of term credits of smaller size, presumably to business concerns of smaller proportions. The average amount of term loans made for military purposes, and held by weekly reporting member banks of the Federal Reserve System at the end of April 1941, was \$357,000. This amount is only 54 percent of the average size of all term loans held by comparable banks at the middle of 1941. A reasonable interpretation is that ever-smaller concerns are receiving Federal contracts or subcontracts to produce goods of military value. These enterprises need credits running for more than a year in order to acquire the plant, machinery and equipment, and working capital necessary to finance their contracts to completion.

A second important effect of the military program upon bank term lending has been a definite change in the pattern of use of term credit obtained by borrowing concerns. Whereas only a third of the amount of all bank term loans held at mid-1941 provided new money to borrowers (the remaining two-thirds being for retirement of outstanding debt or preferred stocks), term loans made for defense purposes were all new money loans. Thirty-seven percent of the amount of term loans for military production held by weekly reporting banks on April 30, 1941 provided funds for new plant facilities, 43 percent provided working capital for expanded production, and the balance was used for a combination of these purposes.<sup>8</sup>

A third repercussion of war financing upon term lending by commercial banks has been an increasing emphasis upon the term loan agreement and a decreasing emphasis upon collateral security. War term loans of banks are secured by assignment of government claims less frequently than other term loans are collaterally secured. As much as 72 percent of the number and 70 percent of the amount of war term loans were not accompanied by assignment of government claims. As this is the type of security most likely to be used in connection with a term loan, it appears improbable that loans not secured by government claims were secured by other

<sup>8</sup> See Table C-6.

assets. The implication is that, in the majority of instances, the borrower's credit standing was considered so satisfactory that the taking of collateral security appeared unnecessary.

No important change has occurred with respect to repayment provisions. Term loans for defense purposes display little difference in this regard from other term loans. Fifty-six percent of the amount and 60 percent of the number of such term loans were repayable in instalments. The fact that an even larger fraction of these term loans is not amortized in instalments is probably to be explained by the use of loan proceeds. The defense and war loans finance the execution of specific government contracts and the borrower's ability to repay is created at time of delivery of completed goods to the government.

In summary, it is accurate to say that defense and war financing of business, while not altering any of the fundamental characteristics of term loans described earlier in this study, is serving to accelerate and emphasize the use of certain of their distinguishing features. It appears to have accelerated tendencies that were evident in the pre-defense period, namely a tendency toward the making of smaller loans, a shift toward new money uses and away from refinancing and a decreasing emphasis on the use of the different forms of security. Furthermore, it seems probable that these tendencies may be intensified during the war period.

### *War Term Lending of Public Agencies*

Although the RFC has since 1934 possessed power to make loans to business concerns, and in fact authorized many defense loans under its original powers, on June 25, 1940 it was granted even broader authority.<sup>9</sup> By Act of Congress, the RFC was permitted to make loans to (or with the approval of the President to purchase the capital stock of) any business corporation for the purposes of "(a) producing, acquiring and carrying strategic and critical materials, as defined by the President, or (b) for plant construction, expansion and equip-

<sup>9</sup> Public, No. 664, 76th Congress.

ment, and working capital to be used by the corporation in the manufacture of equipment and supplies necessary to the national defense, on such terms and conditions and with such maturities as the Corporation may determine."<sup>10</sup> Obviously this Act greatly expanded the powers of the RFC to make loans to concerns engaged in military production.

There were no requirements in the 1940 law that borrowers be solvent, that loans be of such sound value or so secured as to assure repayment, or that credit be unavailable at prevailing rates for the class of loan applied for—restrictions all contained in the original 1934 business loan legislation. The existence of a national emergency presumably was deemed sufficient cause for relaxing credit standards applicable to concerns producing or holding materials vital to national welfare. Inferentially, the philosophy was that the RFC should assume greater risks in granting credit to that peripheral group of concerns unable to obtain credit either from private agencies or from the RFC under its regular business loan powers, in order to assure an expeditious mobilization of military production.

Although data are not available on the term to maturity of defense loans made by the RFC, certain inferences with respect to the term of these loans may be made from an analysis of the use of the funds by borrowing concerns. About a third of the amount of RFC defense credit was designated as being used for working capital only, about a quarter for acquisition of plant facilities only, and the remainder for repayment of debts or combinations of purposes. To an overwhelming ex-

<sup>10</sup> As the law did not specify how the RFC should determine that credit would be used by an applicant "in the manufacture of equipment and supplies necessary to the national defense," it is uncertain whether this phrase required an applicant to hold a prime contract, to be a defense subcontractor, or to be a producer of machinery and equipment necessary to the operations of either or both prime contractors or subcontractors. The Corporation has announced that it is impracticable to specify in advance the particular terms and conditions upon which defense loans will be authorized, the Directors making the final determination in each case of the extent to which the credit will aid the national defense program. Reconstruction Finance Corporation, *Circular No. 23*, "Information Concerning Loans and Purchases to Aid in the National Defense Program" (July 1940) p. 2.

tent, the indicated purpose for which RFC defense credits have been granted to borrowers is the provision of new money (Table 17). It seems reasonable to infer that credit utilized for acquisition of plant, machinery and equipment is repayable, at least in part, after the lapse of one year.

The RFC has made a large number of small loans, presumably to small enterprises, and thus has served a group of borrowers similar in size to those receiving normal business credit from it. Up to mid-September 1941, loans of less than \$50,000 accounted for about two-thirds of the number of defense loans authorized but only for 1.3 percent of the amount. On the other end of the scale, ten loan authorizations each for \$10 million or more accounted for nearly two-thirds of the amount of RFC defense credit granted to business. These RFC loans have gone to a large number of very small concerns and to a few very large concerns. Many of the small borrowers have operated air training schools and services, and have sought credit wherewith to purchase small training planes. Because of their extremely small size and lack of appreciable equity funds in the business, they have not been first-class credit risks. Five of the ten very large authorizations were made to aircraft manufacturers for plant expansion or working capital to complete government contracts. Data are given in Table 17.

Concerns performing air training and transport service and manufacturers of miscellaneous Army equipment and supplies have provided the largest *number* of RFC defense borrowers. Manufacturers of aircraft and parts, and of critical metals and other materials, have accounted for almost two-thirds of the total amount of defense credit extended. Contractors engaged in construction work or in shipbuilding have not resorted to the RFC for funds on as large a scale as have producers of Army equipment and supplies.<sup>11</sup>

<sup>11</sup> Analysis of the amount of all defense contracts awarded from June 13, 1940 through August 30, 1941 indicates that 17.2 percent were for construction, 28.0 percent for ships, 27.4 percent for airplanes and parts, and 27.4 percent for ordnance and supplies. See National Industrial Conference Board, *Addenda to the Conference Board Economic Record* (September 1941).



Table 17—NUMBER AND AMOUNT OF DEFENSE LOANS AUTHORIZED BY THE RECONSTRUCTION FINANCE CORPORATION TO SEPTEMBER 13, 1941, BY USE OF FUNDS, BY SIZE OF LOAN AND BY TYPE OF PRODUCT OR SERVICE OF BORROWER<sup>a</sup> (dollar figures in thousands)

	Number of Loans		Amount of Loans	
	Number	Percent	Amount	Percent
USE OF FUNDS				
New money only	377	90.2	\$211,355	79.5
Working capital only	126	30.1	88,187	33.1
Acquisition of machinery or equipment only	135	32.4	2,077	.8
Acquisition of plant facilities only	39	9.3	66,984	25.2
Combination of purposes	77	18.4	54,107	20.4
Repayment of debt only	8	1.9	40,048	15.1
Combination of new money and repayment	33	7.9	14,232	5.4
TOTAL	418	100.0	\$265,635	100.0
SIZE OF LOANS				
Under \$5	20	4.8	\$78	<sup>b</sup>
5-10	125	29.9	873	.3
10-50	122	29.2	2,765	1.0
50-100	30	7.2	2,000	.8
100-500	79	18.9	15,418	5.8
500-1,000	10	2.4	7,308	2.8
1,000-10,000	22	5.2	60,973	23.0
10,000 and over	10	2.4	176,220	66.3
TOTAL	418	100.0	\$265,635	100.0
TYPE OF PRODUCT OR SERVICE OF BORROWER				
Air training service	171	40.9	\$6,070	2.3
Aircraft and parts	41	9.8	96,991	36.5
Naval construction, repairs and parts	28	6.7	10,788	4.1
Army equipment and supplies (except guns and ammunition)	94	22.5	22,571	8.5
Guns, ammunition and components	36	8.6	7,799	2.9
Defense housing and public utilities	10	2.4	10,288	3.9
Critical metals and materials	21	5.0	69,746	26.2
Other, and no information	17	4.1	41,382	15.6
TOTAL	418	100.0	\$265,635	100.0

<sup>a</sup> Based upon releases by the Federal Loan Agency of Letters of Jesse Jones to Congress, dated May 9 and September 16, 1941. Includes authorizations under both Section 5d of the RFC Act and Act of June 25, 1941. Cancellations or rescissions of authorizations no deducted.

<sup>b</sup> Less than .05 percent.

Federal Reserve banks have participated in the war financing program in two ways. First, as will be shown below, they act as liaison agencies of the War and Navy Departments and the Maritime Commission in extending guarantees to lenders against loss on loans made to concerns to finance the completion of war orders.<sup>12</sup> Second, through industrial advances made under section 13b of the Federal Reserve Act the banks have extended credit directly to contractors. This aspect of war financing (while still relatively small as contrasted to other sources of credit for war contractors) has tended to increase. While the total amount of industrial advances increased only slightly from the beginning of 1941 to March 1942, commitments and participations outstanding more than doubled.

#### *Credit Standards and Procedures in Defense and War Financing*

In financing business enterprises producing war materials and supplies, bankers have not been confronted with credit problems *essentially* different from those of normal times, but they have had to make certain adaptations in their credit standards and procedures. The need for bringing the entire productive capacity of the nation rapidly into utilization has entailed: first, extension of additional amounts of credit to borrowers with long-established credit relationships; second, opening of new lines of credit to concerns (many of them small and financially weak) with which lending institutions had not previously had credit relations. To enable lenders to meet these new credit demands and yet protect themselves against loss, certain new devices for facilitating the flow of funds have been evolved.

One important facilitating device is the Assignment of Claims Act of 1940, which permits all claims against the Federal government for payments of \$1000 or more to be assigned to "a bank, trust company, or other financing institu-

<sup>12</sup> Guarantees are provided for in Executive Order No. 9112 issued on March 26, 1942 (*Federal Reserve Bulletin*, April 1942, pp. 299-301) and are extended under Regulation V of the Board of Governors of the Federal Reserve System (*Federal Reserve Bulletin*, May 1942, pp. 424-27).

tion, including any Federal lending agency."<sup>18</sup> Claims may be assigned under contracts either for supplies or for plant facilities. When a claim is assigned, written notice together with a copy of the assignment must be filed by the assignee with the General Accounting Office, with the contracting officer of the Federal government or the head of his department, with the company supplying the contractor's surety bond, and with the Federal disbursing officer, if any, designated in the contract to make payment. Further to protect lenders, the Act permits the War or Navy Departments to write contracts with suppliers under which payments are not subject to reduction or set-off of tax or other debts due the Federal government by the assignor.

Another device which facilitates the flow of credit into war production is the Emergency Plant Facilities Contract. Many manufacturers have hesitated to expand their plants in the belief that this expansion might be worth little or nothing at the end of the emergency. The Emergency Plant Facilities Contract provides that a manufacturer can erect a plant certified as necessary for national defense and be reimbursed the entire cost by the Federal government in 60 equal monthly instalments following completion of the facilities. At the termination of this period, title passes to the government, unless the contractor desires to retain the plant. In the latter case, he contractor may purchase the plant at cost less the depreciation specified in the contract or at a lower negotiated price. The contract thus provides a favorable distribution of risk between contractor and government, in leaving to the contractor the normal risks of production, but in requiring the government to carry the risk of obsolescence and excessive plant capacity at the end of the emergency. By assignment of payments due from the government under such contracts, contractors can secure funds from banks to finance plant construction.

A third facilitating device for encouraging private financing

<sup>18</sup> Public, No. 811, 76th Congress. Approved October 9, 1940.

of plant expansion is a ruling of the Treasury Department that when a concern expands a plant, certified as necessary for national defense, it may amortize the total cost over a period of 60 months, deducting this amortization from its income for tax purposes.<sup>14</sup> Such amortization may be allowed whether the plant expansion is privately financed or financed under an Emergency Plant Facilities Contract. This ruling has stimulated expansion of plants in which business concerns have definitely intended to retain an interest after the emergency.

Further steps taken to expedite the completion of financing arrangements for concerns—particularly smaller concerns—having war production contracts have recently been announced by the Federal government. On February 19, 1942 the RFC authorized its thirty loan agencies to approve, on their own responsibility, loans not in excess of \$100,000 without referring them to Washington. Further to facilitate production, the War Production Board established a Bureau of Finance in its Division of Industry Operations to furnish advice and assistance on financing arrangements to holders of contracts and to concerns desirous of obtaining contracts. Arrangements are sought for loans from commercial banks and, where such are not possible, for loans from the RFC, a Federal Reserve bank or some other public financing agency.

Finally, a recent Executive Order has authorized the War Department, Navy Department and Maritime Commission to enter into contracts with financial institutions, both public and private, guaranteeing, in whole or in part, loans made by these institutions to finance war contractors and subcontractors. The War and Navy Departments and the Maritime Commission are empowered to extend this guarantee where they believe the work being done is essential to the prosecution of the war. Furthermore, the War and Navy Departments and the Maritime Commission are authorized in this Executive Order to make loans directly to war contractors or to partici-

<sup>14</sup> T. D. 5016 relating to Second Revenue Act of 1940, Sections 23, 24.

pate with any public or private lending agency in the making of such loans.<sup>15</sup>

Under this program the Federal Reserve banks act as liaison agencies between the Federal departments, financial agencies and war contractors. Wherever possible the Federal Reserve banks attempt to arrange the credit extension without guarantee, through private agencies, through the RFC, or through their own facilities as provided for under Section 13b of the Federal Reserve Act. If this is not feasible the banks arrange a guarantee of all or part of the loan by the Federal department concerned. As a last resort, the public agency may extend funds directly, making the entire loan or taking a participation therein. Regulation V, which governs operations under this plan, provides that rates of interest, maximum or otherwise, are to be specified from time to time by the Board of Governors of the Federal Reserve System after consultation with the Federal departments and the Reserve banks and that the maturity of the loans made or guaranteed in whole or in part under this plan shall not exceed five years.

The availability of loan guarantees has had a profound effect on the credit appraisal problem faced by lending institutions in making war contract loans. This protection has greatly reduced the major source of risk in war lending, namely that the contractor will fail satisfactorily to produce the materials contracted for according to all the specifications of the contract, along with the other risks attendant upon such loans. These loan guarantees do not, however, dispose entirely of the problem of credit appraisal in the making of war loans. Lending agencies are encouraged to take only partial guarantees. For this reason they necessarily examine loan applications with care though it is the objective of the guarantee to reduce to a minimum the limitations that peacetime credit rules and standards set on production. Further, it is stated in Regulation V that the objective of the plan is to obtain "maximum war production expeditiously" but that the Federal Reserve banks

<sup>15</sup> Executive Order No. 9112 issued March 26, 1942.

"will make reasonable efforts to afford the War Department, Navy Department and the Maritime Commission the best available protection against possible financial loss consistent with this objective."

Before the availability of loans and guarantees from the War and Navy Departments and the Maritime Commission, the focus of the credit analysis was the likelihood that the borrower could actually produce and deliver the commodities called for by the contract. Under present arrangements, even though a guarantee may be given against nonperformance on the part of the contractor, there remains the necessity of sifting out those contractors eligible to receive this degree of protection. It is obviously necessary to make careful judgments where only partial guarantees are taken. Also, an assessment of the competence of the contractor in estimating and controlling costs remains vital in credit analysis of defense and war loans, for it determines how much credit is required in order to complete the contract. The lending and guaranteeing agencies must be satisfied that the contractor has adequate plant capacity and can obtain the necessary raw materials, skilled labor and transportation facilities. Finally, quite aside from questions of creditworthiness there is the further point that the urgency of our need for war materials is such that the technical efficiency of the contractor must be judged carefully by the agency extending a guarantee against default through nonperformance.

The credit standards applied to defense loans made under the regular business loan powers of the RFC were such that, as a group, these loans were expected to "stand on their own feet" and pay out without loss to the Corporation. Loans made under the Act of June 25, 1940 represented credits extended for the most part at the request of the Army or the Navy Department, and granted to concerns producing urgently needed military supplies. As a class, these latter loans have carried larger risks to the lender. For a time many of the borrowers were subcontractors who, unlike direct contractors with the Federal government, were then unable to obtain an

advance from the government to aid in financing their production and sorely lacked working capital. The major risk assumed by the RFC in granting credit to these concerns has been that the borrowers may have inadequately estimated the costs. This contingency has been especially likely in defense and war production, much of which involves products that are experimental or new to the manufacturing concern. The problems presented to the RFC by these loans have been reduced greatly by the facilitating legislation reviewed above.

All these aspects of credit analysis necessarily become more difficult as the war effort widens and intensifies. As more concerns are drawn into war production it is inevitable that smaller concerns and, further, less efficient producers must be utilized. Both of these tendencies, and in particular the latter, increase the risks attendant upon war term lending. While the burden of carrying the risks may be shifted in whole or in part by a guarantee, this does not, of course, reduce the losses that will eventually be sustained. This necessity of extending term credit to relatively high-risk concerns is likely to have a significant effect on the future of term lending. The experience thus gained by lending agencies should raise their ability to lend funds to relatively small concerns within manageable limits of risk. The resulting accumulation of experience and development of skill cannot fail to have a lasting effect on business lending policy and practice.

**APPENDIX A**

**The Commercial Bank Term Loan  
Sample and Estimates Made  
Therefrom**



# A

## *The Commercial Bank Term Loan Sample and Estimates Made Therefrom*

DURING JUNE 1941 letters were addressed to each of 210 commercial banks, whose officers were members of the Association of Reserve City Bankers, requesting detailed information on each term loan held by them on or around June 30, 1941. Eighty-one banks subsequently returned completed schedules in time for tabulation,<sup>1</sup> and 18 additional banks reported that they did not hold a significant amount of term loans. Consequently, the sample consisted of 99 commercial banks, 82 percent of which held significant amounts of term credit at the middle of 1941.

The 81 commercial banks holding term loans in their portfolios returned schedules for 2,820 individual loans, of which 2,764 were complete enough to be included in the tabulations after editing. Of this latter number, 2,607 loans called for the disbursement and repayment of definite sums of money by the borrower in accordance with a pre-determined agreement, and 157 loans constituted "revolving" credits, with respect to which borrowers were granted credit "lines" within which their outstanding indebtedness could fluctuate. These two groups of loans were tabulated separately, the original amounts and unpaid balances at time of reporting being respectively as follows:

	<i>Number of Loans</i>	<i>Original Amount</i>	<i>Unpaid Balances About June 30, 1941</i>
"Regular" term loans	2,607	\$1,679,252,000	\$1,459,560,000
"Revolving" term loans	157	(not tabulated)	110,371,000
ALL LOANS	2,764		\$1,569,931,000

The average original amount of regular term loans was \$644,000, and the average unpaid balance of all loans was \$568,000.

In addition to providing detailed information concerning each term loan held on or around June 30, 1941, the 210 commercial banks were requested to state the total amounts of their term loans outstanding at the end of each year of the six-year period 1935 through 1940. Although 81 banks responded to this request, the returns of only 56 banks

<sup>1</sup> A total of 74 term loan schedules was received from 5 additional banks after September 1, 1941, too late for inclusion in the tabulations.

were complete enough to be used in constructing a time series on annual term loan credit outstanding.

### Character of the Sample

The 99 commercial banks cooperating in the term loan study were all comparatively large institutions, only three banks having total assets at March 31, 1941 of less than \$30 million, and only one having total assets of less than \$10 million. Average total assets per bank were over \$300 million, in reflection of the fact that many of the largest American banks were included in the group. Certain salient relationships between the 99 cooperating banks, the approximately 400 weekly reporting member banks of the Federal Reserve System (typical of banks located in the large cities of the country), all Federal Reserve member banks, and all insured commercial banks, are shown in Table A-1. The 99 cooperating banks accounted for over 42 percent of the total assets and 34 percent of all the loans and discounts held by all insured commercial banks at the end of 1940. The ratio of loans and discounts to total assets of the cooperating banks was practically the same as that of the weekly reporting banks, which are almost all institutions of substantial size located in cities of medium and large population. Loans and discounts formed a larger fraction of the total assets of Federal Reserve member banks and all insured commercial banks, since these latter classes included many small institutions wherein personal loans and consumer instalment credits are relatively important. There

*Table A-1—TOTAL ASSETS AND LOANS AND DISCOUNTS OF 99 BANKS COOPERATING IN THE TERM LOAN STUDY, AND OF WEEKLY REPORTING, FEDERAL RESERVE MEMBER, AND ALL INSURED COMMERCIAL BANKS IN THE UNITED STATES, AT DECEMBER 31, 1940 (dollar figures in millions)*

<i>Class of Bank</i>	<i>Total Assets</i>	<i>Total Loans and Discounts</i>	<i>Ratio of Loans and Discounts to Assets</i>
99 cooperating banks <sup>a</sup>	\$30,676	\$6,537	21.3%
400 weekly reporting member banks <sup>b</sup>	43,441	9,390	21.6
6,486 Federal Reserve member banks <sup>c</sup>	62,658	15,321	24.5
13,491 insured commercial banks <sup>d</sup>	72,704	19,035	26.2
<i>Percent of Cooperating Banks to</i>			
Weekly reporting banks	70.6%	69.6%	
Federal Reserve member banks	49.0	42.7	
Insured commercial banks	42.2	34.3	

<sup>a</sup> Compiled from National Bureau data and Polk's *Bankers Encyclopedia*.

<sup>b</sup> Total assets figure supplied by the Board of Governors of the Federal Reserve System; total loans and discounts from *Federal Reserve Bulletin* (March 1941) pp. 232-33.

<sup>c</sup> Federal Reserve System, *Annual Report of the Board of Governors, 1940*, pp. 48-49.

<sup>d</sup> Federal Deposit Insurance Corporation, *Annual Report, 1940*, pp. 140-41.

is no reason for believing that, in the composition of their loans, the 99 cooperating banks differ materially from other large commercial banks. The composition of loans of smaller institutions probably changes materially as size diminishes.

### *Estimate of Term Loans Outstanding of All Commercial Banks During Recent Years*

An estimate of the aggregate outstanding term credit of all American commercial banks could be made with great assurance by sampling banks of different sizes and determining the ratio of term loans to all loans and discounts held by banks of different size classes at different dates. As this procedure was beyond the resources available to the authors, a cruder method of estimation was necessarily utilized. Interviews with many loan officers and bank examining officials, coupled with careful study of the statistical materials, lead to the conclusion that term lending is done most frequently by large banks. This information also indicates that the ratios of term loans to all loans and discounts are, in general, greater among the large than among the smaller banks which do engage in term lending. It is highly probable that the very large number of banks with deposits of \$1 million or less hold only negligible amounts of term loans. The statutory limitation upon the size of loans made by a national bank with \$1 million of deposits does not greatly exceed \$10,000. Term loans of this amount or less are likely to be very uncommon, because of the comparatively large fixed costs of credit investigation and loan administration.

In estimating outstanding term loans of all insured commercial banks at the end of 1940, it has therefore been deemed advisable to separate all banks into three major groups according to size in terms of total deposits. Total loans and discounts of the three classes of insured commercial banks examined were as follows:<sup>2</sup>

<i>Total Deposits</i>	<i>Number of Banks</i>	<i>Total Loans and Discounts Held During 1940</i>
(1) Less than \$1 million	8,723	\$1,820,000,000
(2) \$1 million to \$10 million	4,168	4,274,000,000
(3) \$10 million and over	546	10,943,000,000
<b>TOTAL</b>	<b>13,437</b>	<b>\$17,037,000,000</b>

With respect to the 546 banks in group (3) it has been assumed that

<sup>2</sup> See Federal Deposit Insurance Corporation, *Annual Report, 1940*, p. 171. While the FDIC data cover only insured commercial banks that were examined during 1940, non-insured banks and insured banks that were not examined were for the most part banks in the size class (1), omission of which is not believed to result in serious error in estimating term loans outstanding of all commercial banks.

82 percent of the number of banks were engaged in term lending, that term loans comprised 22 percent of the loans and discounts held by term lending banks, and that the average amount of loans and discounts held by term lending banks was equal to that of non-term lending banks. These assumptions rest on the fact that 82 percent of the 99 cooperating banks in the sample held term loans at mid-1941, and that 50 banks within this group reported that term loans comprised 22 percent of their loans and discounts at the end of 1940. Since it was found by the Board of Governors that 83.5 percent of the 400 weekly reporting member banks held some term loans in April 1939, there is some confirmation of the assumption regarding the frequency with which banks in large centers engage in term lending. With regard to the 4,168 banks in group (2), having deposits of \$1 million to \$10 million, it has been arbitrarily assumed that 40 percent were engaged in term lending, and that term loans constituted 11 percent (one-half as large a fraction as for the large banks) of loans and discounts. The assumption that 40 percent of the number of banks made term loans has some basis in the finding of the New York State Commissioner of Banking during April 1939 that 43 percent of all state banks outside New York City had made some term loans. The amount of term lending of banks in this size class appears to be generously estimated on these hypotheses, but even if there is a wide margin of error the total estimates of term loans are not greatly affected. The assumption with respect to the small banks in group (1) is that they held an insignificant amount of term loans and could be ignored in the calculation of the total.

The estimate of term loans held by all commercial banks at the end of 1940 is therefore:

Term loans held by commercial banks with deposits of \$10 million and over	\$1,974,000,000
Term loans held by commercial banks with deposits of \$1 million to \$10 million	188,000,000
<b>TOTAL</b>	<b>\$2,162,000,000</b>

While this estimate is subject to many qualifications, it probably does not err by more than about 5 percent.

In determining the amounts of outstanding term credit at the end of each recent year, recourse was had to the data on year-end outstanding term loans of 56 banks referred to previously. At the end of 1940, the 56 reporting banks held \$967.4 million of term loans, or about 45 percent of the estimated \$2,162 million held by all commercial banks. It has been assumed that at the end of each year of the period, loans held by the 56 reporting banks bore the same proportion to estimated loans of all commercial banks that they held at the end of 1940, upon which assumption the following series is reached:

*Outstanding Term Loans Held*

<i>Year Ending December 31</i>	56 Reporting Banks—Actual	All Commercial Banks—Estimated
1935	\$215,100,000	No estimate
1936	336,900,000	No estimate
1937	370,300,000	\$827,000,000
1938	484,700,000	1,083,000,000
1939	714,200,000	1,596,000,000
1940	967,400,000	2,162,000,000

Since it is likely that banks which entered the field of term lending at the earliest dates tended to have available and to report more accurate computations of term loans outstanding during preceding years, these banks probably were in fact relatively more important during earlier years than at the end of 1940. The assumption of constant proportionality consequently exaggerates to an unknown extent outstanding term credit of all commercial banks during the early years of the period. It was therefore deemed inadvisable to estimate outstandings prior to 1937, since the error for earlier years grows continually larger. The error is believed to be not so large as to make the estimates wholly unreliable for 1937 and subsequent years. It is worth noting that the \$1,100 million of term loans reported held at April 19, 1939 by weekly reporting member banks of the Federal Reserve System (which hold about 70 percent of all commercial loans of banks in the System) is not irreconcilable with the estimate of \$1,596 million for all banks at the end of 1939.

*Estimate of the Annual Volume of  
Term Loans Made by Commercial Banks During Recent Years*

It is possible to make rough estimates of the amounts of term credit annually extended by all commercial banks by assuming that annual loan volume of all term lending banks varied in the same way during recent years as it did for the 99 large banks cooperating in the term loan study. Term loans of all commercial banks outstanding at the end of 1940 have been estimated at \$2,162 million. At the same date, it is estimated that outstanding loans of the 99 cooperating banks were \$1,175 million, or about 54 percent of the total.<sup>3</sup> In other words, the loans outstanding of all commercial banks were 1.84 times those of the 99 cooperating banks. It may reasonably be assumed that the ratio of original amounts of loans of the 99 cooperating banks to the original

<sup>3</sup> Outstandings of the 99 cooperating banks were \$1,570 million at June 30, 1941, from which may be deducted \$395 million of loans made and outstanding during 1941, leaving a balance of \$1,175 million. (This ignores repayments made during the first half of 1941 on loans made prior to 1941, which in any event are very unlikely to have exceeded \$40 or \$50 million.)

amounts of loans made by all commercial banks was the same as that of their respective outstanding term loans. The following tabulation therefore shows the original amounts of all loans made by the cooperating banks during 1938, 1939 and 1940 and held at June 30, 1941. The estimated loans made by all commercial banks during the same years have been arrived at by multiplying the loan volumes of the cooperating banks by the factor 1.84 for each year.

<i>Year</i>	<i>Original Amount of Regular Term Loans Made by 99 Cooperating Banks and Held at Mid-1941</i>	<i>Estimated Original Amount of Loans Made by All Commercial Banks</i>
1938	\$117,800,000	\$217,000,000
1939	449,600,000	827,000,000
1940	734,900,000	1,352,000,000
<b>TOTAL</b>	<b>\$1,302,300,000</b>	<b>\$2,396,000,000</b>

Since a significant proportion of all term loans made by commercial banks are paid off and disappear from the portfolios of the lenders after three and one-half years, it has not been deemed advisable to carry the estimates back past 1938. Even with this limitation, there is some underestimation of the volume of loans made during 1938, and to a lesser degree during 1939. The original amounts of loans with terms of less than  $3\frac{1}{2}$  years made in the former year, and with terms of less than  $2\frac{1}{2}$  years made in the latter year, are not included. These errors are believed not to be large.

## **APPENDIX B**

### **The Sample of Securities Privately Purchased by Life Insurance Companies and Estimates Made Therefrom**

# B

## *The Sample of Securities Privately Purchased by Life Insurance Companies and Estimates Made Therefrom*

AS A RESULT OF PERSONAL REQUESTS made of their executive officers, five of the largest legal reserve life insurance companies furnished tabulations of privately purchased bonds and notes with terms of 15 years or less at time of issuance held by them at December 31, 1940. To preserve confidential relationships, the names of issuing concerns were not furnished, but information was given concerning the character of the lien (if any), coupon rate, maturity date, year of purchase, amount purchased, amount held at the end of 1940, effective rate at which purchases were made, issuer's main business and total assets at the end of 1940, and participations (if any) with other lending institutions in the credit transaction.

The schedules returned by the five companies listed 217 separate issues held at the end of 1940, with original aggregate amounts of \$824 million at time of acquisition, and outstanding balances of \$761 million at date of reporting. The average original amount of issues acquired was \$3.8 million, and the average outstanding balance was \$3.5 million. Since about half the number and amount of issues privately purchased by insurance companies involved transactions in which other lending agencies participated, and each company reported only the original amount and outstanding balances of its *own* holdings, the data should be interpreted as descriptions of a group of loans made by insurance companies rather than loans received by issuing business corporations. This difference is especially important in considering the size of loans effected through private placements of bonds or notes.

### *Character of the Sample*

The five cooperating companies have purchased and held a preponderance of all medium-term bonds and notes privately purchased by all life insurance companies during recent years; analysis of the characteristics of their holdings at the end of 1940 is therefore believed to be representative of all private placements of medium term (i.e., term of 15 years or less at time of issuance). The importance of the five companies among all life insurance companies active in the private



placement market is indicated by the following figures, showing private acquisitions of bonds of all terms from issuers by the 26 largest legal reserve life insurance companies and by the five cooperating companies, during each year of the period 1932-38.<sup>1</sup>

Year	26 Largest Legal Reserve Life Insurance Companies	5 Cooperating Companies	Percentage of 5 Cooperating to 26 Companies
1932	\$33,300,000	\$29,464,000	88.5
1933	16,788,000	15,855,000	94.4
1934	90,647,000	83,622,000	92.3
1935	351,378,000	318,415,000	90.6
1936	327,792,000	254,366,000	77.6
1937	371,353,000	322,430,000	86.8
1938	659,503,000	571,479,000	86.7
TOTAL	\$1,850,766,000	\$1,595,631,000	86.2

Life insurance companies are dominant in the private placement market. Recent studies of the Securities and Exchange Commission indicate that they purchased from 74 percent to 99 percent of total corporate bonds annually sold privately during the years 1934-39.<sup>2</sup> For this reason, and because the cooperating companies represent so large a fraction of the purchases of life insurance companies active in the field, it appears reasonable to conclude that the characteristics of the loans of the cooperating companies present a reasonably accurate view of private placement credit in general.

*Estimate of the Annual  
Volume of Medium-Term Issues Privately  
Purchased by Life Insurance Companies During Recent Years*

Although the SEC collected data from the 26 largest American legal reserve life insurance companies on their private acquisitions of bonds from issuing corporations during each year of the period 1928-38, no classification of these acquisitions was made according to term at time of issuance. The proportion of all private placements of bonds and notes with life insurance companies represented by medium-term issues must therefore be estimated. This may be done, on certain not unreasonable assumptions, by the following method:

1. The data furnished to the National Bureau on annual original amounts of medium-term issues purchased privately by the five cooperating companies and held at the end of 1940, were first broken

<sup>1</sup> Data collected by the Securities and Exchange Commission and printed in Temporary National Economic Committee, 76th Congress, 3d Session, *Hearings Pursuant to Public Resolution No. 113* (Washington, 1940) Part 10-A, p. 129.

<sup>2</sup> Data furnished to the National Bureau of Economic Research by a letter of the Securities and Exchange Commission, dated September 11, 1941.

down according to the original amounts of issues purchased during each year from 1935 onward. Since it is known that about 15 percent of the amount of all issues mature and disappear from portfolios within four years after acquisition, and about 10 percent of the amount of all acquisitions are paid off within two years, in order to estimate the original amounts of all medium-term securities of *all* maturities purchased during each year, the amounts of securities reported to have been acquired during 1935 and 1936 and *held at the end of 1940* were raised by 15 percent, and the amounts of acquisitions during 1937, 1938 and 1939 were raised by 10 percent. Acquisitions during 1940, held at the end of that year, were left unchanged. Since only 23 percent of the amount of medium-term issues acquired by life insurance companies have serial maturities (the remainder being repayable in single amounts), the error of ignoring serial payments is believed not to be large.

2. Utilizing the SEC data on *all* private purchases of the five cooperating companies during 1935 through 1938, ratios were found of the amounts of medium-term issues (as estimated in step 1) to all issues purchased during these years. During the four-year period, 1935-38, medium-term issues formed 26 percent of all securities privately acquired.

3. All issues privately acquired by the five companies during 1939 and 1940 were then estimated by assuming that the medium-term issues (estimated in step 1) were 26 percent (found in step 2) of the amount of all issues.

4. The series on all issues purchased privately by *all* life insurance companies was tabulated by the SEC for each year of the period 1935-38. Since the five cooperating companies purchased 86.2 percent of the amount of securities privately purchased by all companies during the ten-year period 1928-38, the amounts of all issues privately purchased by all companies during 1939 and 1940 were estimated by assuming that all issues acquired by the five cooperating companies in these years (found by step 3) continued to have the same relative importance in the total (i.e., 86.2 percent).

5. *Medium-term* issues privately purchased by *all* life insurance companies were then computed by assuming that the ratio of medium-term to all issues acquired by the five cooperating companies was, in each year, the same as the ratio of medium-term to all issues privately acquired by all companies.

In Table B-1 appear the results of these computations, including the amounts of *issues of all maturities* annually purchased by the five cooperating companies and by all companies, and estimated amounts of *medium-term issues* privately purchased by the two groups of companies during each year. On the assumptions, it appears that life insurance companies acquired privately from issuers during the six-year period

**Table B-1—ESTIMATED AMOUNT OF MEDIUM-TERM SECURITIES ANNUALLY PURCHASED PRIVATELY BY LIFE INSURANCE COMPANIES, 1935-40 (dollar figures in millions)**

Year	(1) <i>All Issues Purchased Privately by 5 cooperating Companies</i>	(2) <i>Medium-Term Issues Purchased Privately by 5 Cooperating Companies</i>	(3) <i>Ratio of (2) to (1)</i>	(4) <i>All Issues Purchased Privately by All Companies</i>	(5) <i>Estimated Medium-Term Issues Purchased Privately by All Cos. (4) x (3)</i>
1935	\$318.4 <sup>a</sup>	\$49.2 <sup>b</sup>	0.154	351.4 <sup>a</sup>	\$54.1
1936	254.4 <sup>a</sup>	62.1 <sup>b</sup>	0.244	327.8 <sup>a</sup>	80.0
1937	322.4 <sup>a</sup>	134.9 <sup>a</sup>	0.418	371.4 <sup>a</sup>	155.2
1938	571.5 <sup>a</sup>	135.3 <sup>c</sup>	0.237	659.5 <sup>a</sup>	156.3
1939	660.0 <sup>d</sup>	171.4 <sup>e</sup>	0.260 <sup>f</sup>	766.0 <sup>f</sup>	199.2
1940	1,240.0 <sup>d</sup>	323.1	0.261 <sup>e</sup>	1,440.0 <sup>f</sup>	375.8
<b>TOTAL</b>	<b>\$3,366.7</b>	<b>\$876.0</b>	<b>0.260</b>	<b>\$3,916.1</b>	<b>\$1,020.6</b>

<sup>a</sup> Securities and Exchange Commission data in Temporary National Economic Committee, 76th Congress, 3d Session, *Hearings Pursuant to Public Resolution No. 113* (Washington, 1940) Part 10-A.

<sup>b</sup> Estimated by adding 15 percent to the original amounts of securities which were purchased during this year, and held at end of 1940.

<sup>c</sup> Estimated by adding 10 percent to the original amounts of securities which were purchased during this year, and held at end of 1940.

<sup>d</sup> Estimated by assuming that medium-term issues purchased during the year were 26 percent of all issues (see footnote e).

<sup>e</sup> Weighted average percentage of all private placements purchased by 5 cooperating companies during 1935-38 that were of medium term.

<sup>f</sup> Estimated by assuming that the weighted average ratio of purchases of the 5 cooperating companies to all 26 companies during 1932-38 (namely 86.2 percent) obtained during 1939 and 1940.

about \$3.9 billion of securities, of which about \$1 billion represented medium-term credit.<sup>3</sup> The rate of growth of insurance company participation in the medium-term business credit market through private placement has exceeded even the rapid pace set by commercial bank term loans.

### *Estimate of Medium-Term Private Placement Credit of Life Insurance Companies Outstanding at the Ends of Recent Years*

The five cooperating life insurance companies held \$761 million of privately acquired medium-term bonds at the end of 1940. If the ratio

<sup>3</sup> This estimate is in general agreement with an estimate made by different methods that the total dollar amount of issues placed directly by issuers with all types of investors during the six-year period, 1935-40, was \$4,314 million. See House Committee on Interstate and Foreign Commerce, 77th Congress, 1st Session, *Hearings on H.R. 4344, H.R. 5065 and H.R. 5832* (Washington, 1941) Part II, p. 366.

of their outstanding credit of this type to that of all life insurance companies was the same as the ratio of their acquisitions to that of all companies (86.2 percent), then the amount of medium-term private placement credit of all companies outstanding at the end of 1940 was \$883 million. While this figure can be cited with some assurance, lack of precise knowledge of the rates of amortization of private placement debt makes precarious the estimation of outstanding credit at the ends of earlier years. Since only 9 percent of the original amounts of all issues held by the five cooperating companies at the end of 1940 had terms of less than five years at time of issuance, it would not seriously impair the validity of a very rough estimate simply to take outstandings at the end of 1940 and to deduct the original amounts of issues acquired during that year to obtain outstandings at the end of 1939; and so on, back to 1937. Proceeding by this method, outstanding medium-term private placement credit of all insurance companies may be estimated as follows:

<i>Year</i>	<i>Medium-Term Issues Privately Purchased During Year</i>	<i>Medium-Term Issues Privately Purchased and Held at End of Year</i>
1940	\$375,800,000	\$883,000,000
1939	199,200,000	507,200,000
1938	156,300,000	308,000,000
1937	155,200,000	151,700,000

These estimates are subject to such severe qualifications as to be precluded from any other use than as rough measures of the general position of insurance companies in the medium-term business credit market.

**APPENDIX C**

**Supplementary Tables**

**Table C-1—PERCENTAGE DISTRIBUTION OF THE NUMBER AND AGGREGATE AMOUNT OF MEDIUM-TERM LOANS MADE BY TERM LENDING INSTITUTIONS, BY TOTAL ASSETS OF BORROWER**

Total Assets of Borrower (in thousands)	Number of Loans				Aggregate Amount of Loans			
	Com- mercial Banks <sup>a</sup>	Life Insurance Companies <sup>b</sup>	RFC <sup>c</sup>	Federal Reserve Banks <sup>d</sup>	Com- mercial Banks <sup>a</sup>	Life Insurance Companies <sup>b</sup>	RFC <sup>c</sup>	Federal Reserve Banks <sup>d</sup>
Less than \$5		..	7.4	..		..	•	..
5-10		..	5.6	..		..	•	..
10-20	11.8	..	9.3	12.6	.4	..	.4	.7
20-50		..	14.8			..	.5	
50-100		..	12.9	11.6		..	1.2	1.5
100-250	23.0	..	12.9	30.1	3.7	..	2.5	6.7
250-500		..	5.6	17.5		..	2.0	8.4
500-1,000		..	12.9	9.7		..	12.5	9.7
1,000-5,000	20.5	5.5	11.1	14.6	9.9	1.2	20.6	49.1
5,000-10,000	8.3	6.0	3.7	3.9	7.2	1.9	35.4	23.9
10,000-50,000	15.8	38.3	1.9		22.3	25.4	13.0	
50,000-100,000	5.5	9.2	..	..	13.2	11.1	..	..
100,000 and over	12.0	38.7	..	..	40.0	58.5	..	..
No information	3.1	2.3	1.9	..	3.3	1.9	11.9	..
<b>TOTAL</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

<sup>a</sup> Analysis of loans held by a National Bureau sample of 99 banks on or about June 30, 1941.

<sup>b</sup> National Bureau tabulation of securities privately purchased from issuers by the 5 largest legal reserve life insurance companies and held at mid-1941.

<sup>c</sup> Analysis of a National Bureau sample of 54 industrial loans approved up to mid-1941 by the Reconstruction Finance Corporation.

<sup>d</sup> Analysis of a National Bureau sample of 103 industrial loan applications approved by Federal Reserve banks up to May 31, 1940.

• Less than 0.05 percent.

Table C-2—PERCENTAGE DISTRIBUTION OF THE NUMBER AND AGGREGATE AMOUNT OF MEDIUM-TERM LOANS MADE BY TERM LENDING INSTITUTIONS, BY INDUSTRY OF BORROWER

Industry of Borrower	Number of Loans				Aggregate Amount of Loans			
	Commercial Banks <sup>a</sup>	Life Insurance Companies <sup>b</sup>	RFC <sup>c</sup>	Federal Reserve Banks <sup>d</sup>	Commercial Banks <sup>a</sup>	Life Insurance Companies <sup>b</sup>	RFC <sup>c</sup>	Federal Reserve Banks <sup>d</sup>
Manufacturing	35.5	47.5	60.0	66.2	30.6	45.5	77.8	80.8
Food and products	5.0		12.2	} 9.7	2.8		7.7	} 8.1
Tobacco	.6		.1		2.2		.1	
Textile mill products	2.2		8.5	8.0	1.5		20.0	7.9
Lumber and timber products	1.6		10.7	8.8	.7		12.1	8.2
Paper and pulp	3.2		1.7	1.8	4.0		6.3	2.4
Printing and publishing	3.2		3.7	4.9	1.7		1.3	2.9
Chemicals and allied products	1.7		2.6	2.1	1.8		2.1	1.3
Petroleum, coal and gas products	.3		.3	1.2	.2		.3	5.1
Rubber and products	.8		.4	..	.9		.4	..
Leather and products	.3		1.1	1.5	.2		1.0	1.3
Stone, clay and glass	1.3		3.1	3.3	.7		3.2	2.0
Iron and steel products	3.6		5.0	6.7	4.3		7.2	11.9
Transportation equipment	3.1		1.6	2.5	2.9		9.3	14.8
Non-ferrous metals and products	.8		1.4	1.3	.6		.8	1.6
Machinery	4.1		5.2	6.0	1.9		5.5	6.4
Miscellaneous manufacturing	3.7		1.4	8.4	4.2		.5	6.9

Mining and extraction	11.8	1.8	3.1	1.5	21.3	.7	5.6	1.7
Construction	.7	..	1.7	3.2	.2	..	.8	2.4
Wholesale trade	5.5	..	8.0	10.9	.8	..	2.9	7.1
Retail trade	7.3	8.3	15.4	15.1	4.0	8.6	3.6	5.8
Finance	9.9	20.7	..	..	15.8	26.9	..	..
Public utilities and transportation	20.8	21.7	1.7	1.1	22.7	18.3	4.9	1.4
Service	7.3	•	8.7	2.0	4.5	•	4.0	.8
Agriculture, forestry, fishing	1.2	..	2.4	..	.1	..	.4	..
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

<sup>a</sup> Original amount of term loans held by a National Bureau sample of 99 banks on or about June 30, 1941.

<sup>b</sup> National Bureau sample of issues privately purchased by 5 life insurance companies. See Appendix B.

<sup>c</sup> All loans to business enterprises (except in connection with national defense) disbursed by the RFC from February 2, 1932, through December 31, 1940. Reconstruction Finance Corporation, *Quarterly Report*, Fourth Quarter of 1940, pp. 62-65.

<sup>d</sup> Data on number of applications for industrial advances approved by the Federal Reserve Banks up to May 31, 1940, based on a special tabulation.

<sup>e</sup> Service and finance grouped.



**Table C-3—PERCENTAGE DISTRIBUTION OF THE NUMBER AND AGGREGATE AMOUNT OF MEDIUM-TERM LOANS MADE BY TERM LENDING INSTITUTIONS, BY SIZE OF LOAN**

Size of Loan <sup>a</sup> (in thousands)	Number of Loans				Aggregate Amount of Loans			
	Com- mercial Banks <sup>b</sup>	Life Insurance Companies <sup>c</sup>	RFC <sup>d</sup>	Federal Reserve Banks <sup>e</sup>	Com- mercial Banks <sup>b</sup>	Life Insurance Companies <sup>c</sup>	RFC <sup>d</sup>	Federal Reserve Banks <sup>e</sup>
Less than \$5	} 9.0	} 11.5	37.6	23.5	} .1	} .8	1.9	1.2
5-10			15.9	13.9			2.7	1.9
10-25	} 16.7	} 11.5	19.0	21.8	} .7	} .8	7.3	6.8
25-50			11.2	17.4			9.4	11.3
50-100	10.4		8.1	11.8	1.1		13.4	15.2
100-250 <sup>f</sup>	19.0		4.3	6.0	4.6		13.8	15.1
250-500 <sup>g</sup>	14.0		2.9	3.9	7.4		19.5	18.6
500-1,000 <sup>h</sup>	12.7	11.1	} .6	} 1.7	12.3	1.8	} 10.1	} 29.9
1,000-5,000	16.1	49.3			49.7	29.0		
5,000-10,000	1.6	14.7	} .4	} 1.7	15.5	22.3	} 21.9	} 29.9
10,000 and over	.5	13.4			8.6	46.1		
<b>TOTAL</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

<sup>a</sup> Class intervals for commercial banks and life insurance companies are inclusive of the lower limit and exclusive of the upper. For RFC and Federal Reserve banks the intervals are exclusive of the lower limit and inclusive of the upper.

<sup>b</sup> Loans held by a National Bureau sample of 99 banks at mid-1941.

<sup>c</sup> A National Bureau sample of medium-term issues purchased privately by 5 life insurance companies, and held at December 31, 1940.

<sup>d</sup> Loans authorized to business enterprises from February 2, 1932 to December 31, 1940, except for national defense. Reconstruction Finance Corporation, *Quarterly Report*, Fourth Quarter of 1940, p. 61.

<sup>e</sup> Loan applications approved up to December 31, 1937. Federal Reserve System, *Annual Report of the Board of Governors, 1937*, p. 61.

<sup>f</sup> Interval for RFC and Federal Reserve banks is 100-200.

<sup>g</sup> Interval for RFC is 200-500 and for Federal Reserve banks the interval is 200-400.

<sup>h</sup> Interval for Federal Reserve banks is "over 400."

**Table C-4—NUMBER AND ESTIMATED AMOUNT OF DEFENSE CONTRACTS ASSIGNED, FEBRUARY 27, 1941 TO JANUARY 29, 1942<sup>a</sup> (dollar figures in millions)**

Cumulative to	Number of Contracts		Estimated Amount of Contracts <sup>b</sup>	
	Number	Index	Amount	Index
February 27, 1941	955	100	\$257	100
May 1, 1941	1,743	183	398	155
May 29, 1941	2,092	219	513	200
June 26, 1941	2,402	252	555	216
July 31, 1941	3,020	316	702	273
August 28, 1941	3,544	371	773	301
September 25, 1941	3,977	416	826	321
October 30, 1941	4,695	492	928	361
December 26, 1941	5,809	608	1,018	396
January 29, 1942	6,609	692	1,091	423

<sup>a</sup> Based upon tabulations furnished by the Board of Governors of the Federal Reserve System.

<sup>b</sup> Less than half the number of contracts assigned have the amounts reported. Amounts were estimated on the assumption that the average amount of contracts for which amount was not reported was equal to that of contracts for which amount was reported.

**Table C-5—AVERAGE AMOUNT OF DEFENSE CONTRACTS ASSIGNED TO DIFFERENT TYPES OF LENDING INSTITUTIONS, FEBRUARY 27, 1941 TO JANUARY 29, 1942<sup>a</sup> (in thousands)**

Cumulative to	Com- mercial Banks	Federal Reserve Banks	RFC	Other Lending Institutions	All Contracts
February 27, 1941	\$328.0	..	\$154.0	\$27.2	\$288.2
May 1, 1941	253.3	..	160.3	39.8	229.2
May 29, 1941	272.2	..	160.3	35.9	244.9
June 26, 1941	252.5	..	214.7	36.5	230.7
July 31, 1941	257.1	\$68.6	227.4	43.6	229.5
August 28, 1941	237.3	66.4	265.1	43.3	215.9
September 25, 1941	225.5	63.3	241.2	45.4	205.4
October 30, 1941	216.3	57.8	226.9	39.5	194.9
December 26, 1941	190.6	55.6	217.9	42.3	171.9
January 29, 1942	179.3	55.0	194.7	45.4	161.7

<sup>a</sup> Based upon tabulations furnished by the Board of Governors of the Federal Reserve System.

**Table C-6—DEFENSE TERM LOANS HELD BY WEEKLY REPORTING MEMBER BANKS OF THE FEDERAL RESERVE SYSTEM AT APRIL 30, 1941, BY USE OF FUNDS, BY TYPE OF REPAYMENT PROVISION, AND BY ASSIGNMENT OR NON-ASSIGNMENT OF GOVERNMENT CLAIMS\* (dollar figures in thousands)**

	<i>Number of Loans</i>		<i>Amount of Loans</i>	
	Number	Percent	Amount	Percent
<b>USE OF FUNDS</b>				
For plant facilities	121	45.0	\$35,908	37.4
For production	109	40.5	40,877	42.6
For both plant facilities and production	39	14.5	19,124	20.0
<b>TOTAL</b>	<b>269</b>	<b>100.0</b>	<b>\$95,905</b>	<b>100.0</b>
<b>TYPE OF REPAYMENT PROVISION</b>				
Non-instalment	109	40.5	\$42,320	44.1
Instalment	160	59.5	53,585	55.9
<b>TOTAL</b>	<b>269</b>	<b>100.0</b>	<b>\$95,905</b>	<b>100.0</b>
<b>ASSIGNMENT OR NON-ASSIGNMENT OF CLAIMS</b>				
With assigned claims	75	27.9	\$29,219	30.5
Without assigned claims	194	72.1	66,686	69.5
<b>TOTAL</b>	<b>269</b>	<b>100.0</b>	<b>\$95,905</b>	<b>100.0</b>

\* Based upon data furnished by the Board of Governors of the Federal Reserve System.

## Index

- ACCELERATION OF DEBT MATURITY—Provisions for, 79.
- ACCOUNTS RECEIVABLE—Assignments Taken by Reserve Banks, 65, 89; By the RFC, 87.
- AMERICAN BANKERS ASSOCIATION—27n.
- ASSIGNMENT OF GOVERNMENT CLAIMS—121, 126-27, 156.
- “BALLOON” PAYMENTS—Size of Loans with, 53; Resemblance to Sinking Funds of Corporate Issues, 55; Additional Risks of, 55.
- BANK EXAMINATION—Revised Policies and Methods, 26-27.
- BANKING CRISIS OF 1933—Effect on Bank Lending, 16-17, 65.
- BORROWERS—Number of, 34; Size of, 35; Lack of Importance of Small Business, 36; Industries of, 39-42; Shifts in Size of, 68; Shifts in Industry of, 69; “Substandard,” 87. *See also* USE OF FUNDS.
- COLLATERAL SECURITY—76; Relation of Loan Agreement to, 79; Effect of War Program on, 121. *See* SECURITY TAKEN.
- COLM, G.—16n.
- COMMITMENTS—Shifts in the Taking of, 70; By Subsidiaries of the RFC, 114.
- CORPORATE TAXATION—Effect on Demand for Medium-Term Credit, 20.
- COSTS OF TERM LENDING—Comparison with Short-Term Lending, 109.
- CREDIT ANALYSIS—Outline of, 89-95; Purposes of, 91; Use of Independent Experts in, 94; Organization of Formal Reports, 94-95; Under the War Program, 130. *See* CREDIT STANDARDS.
- CREDIT APPRAISAL METHODS—*See* CREDIT ANALYSIS.
- CREDIT STANDARDS—Commercial Bank, 80-84; Bases of, 80; On Oil Production Loans, 83-84; Life Insurance Companies, 84-85; RFC, 86-87; Federal Reserve Banks, 87-89; Under the War Program, 123, 126-31.
- DEFENSE HOMES CORPORATION—114.
- DEFENSE LOANS—Guarantee under Regulation V, 128-29. *See* WAR CREDIT.
- DEFENSE PLANT CORPORATION—114.
- DEFENSE SUPPLIES CORPORATION—114.
- DEPOSIT INSURANCE—Effect on Term Lending, 23.
- DOLLEY, JAMES C.—64.
- DUN AND BRADSTREET—93n.
- DURAND, DAVID—80n.
- EMERGENCY PLANT FACILITIES CONTRACT—Provisions of, 127.
- FEDERAL DEPOSIT INSURANCE CORPORATION—26n, 33n.
- FEDERAL LEGISLATION—Securities Act of 1933, 17-19; Federal Reserve Act, 23, 83; Deposit Insurance, 23-24; RFC Act, 24, 61, 86, 122-23; Real Estate Mortgage Insurance, 25; Ship Mortgage Insurance, 25n.
- FEDERAL RESERVE BANK OF CHICAGO—87n.
- FEDERAL RESERVE BANK OF NEW YORK—63n, 87n.
- FEDERAL RESERVE BANK OF PHILADELPHIA—63n, 87n.
- FEDERAL RESERVE BANKS—Rediscount and Advance Powers of, 23; Financial Characteristics of Loan Applicants, 88; Emphasis on Collateral Security, 89; Variation in Industrial Advance Rates Among, 108. *See* CREDIT STANDARDS, FEDERAL LEGISLATION, FEDERAL RESERVE SYSTEM, INTEREST RATES, LOANS, PARTICIPATIONS, REGULATION V, REPAYMENT PROVISIONS, SECURITY TAKEN, TERM, USE OF FUNDS, WAR CREDIT.

- FEDERAL RESERVE SYSTEM, BOARD OF GOVERNORS OF**—Report of Condition, 93n; Industrial Loan Program, 112n; Regulation V, 128-29. *See* **FEDERAL RESERVE BANKS, FEDERAL LEGISLATION.**
- GARLOCK, FRED L.**—13n.
- HARDY, CHARLES O.**—26n.  
**HART, ALBERT G.**—16n.  
**HOSTETLER, L. MERLE**—101n.
- INDUSTRIES OF BORROWERS**—39-42, 69.  
**INSURANCE COMPANIES**—Entry into Medium-Term Credit Market, 31; Legal Restrictions on Lending, 85. *See* **CREDIT STANDARDS, INTEREST RATES, LOAN AGREEMENTS, LOANS, PRIVATE PLACEMENTS, REPAYMENT PROVISIONS, SECURITY TAKEN, TERM, USE OF FUNDS, WAR CREDIT.**
- INTEREST RATES**—Effect on Demand for Medium-Term Credit, 20; Commercial Banks, 102-06; Insurance Companies, 106-07; RFC, 107; Federal Reserve Bank Industrial Advances, 107-08; Differences in Geographical Areas, 108.
- JACOBY, NEIL H.**—12n, 17n, 51n.  
**JONES, JESSE H.**—39n, 110n.
- LEHMANN, F.**—16n.
- LOAN AGREEMENTS**—Endorsements, 51; Modification, 60; "Fifty Percent" Clause, 62; Formation, 76-79; "Tailor Made," 77; Restrictions on Use of Funds, 77; "Line of Credit," 77; Provisions Concerning Incurring of Indebtedness, 77-78; Financial Conditions, 78, 82-83; Provisions Concerning Management, 78-79; Of Life Insurance Companies, 84-85; Effect of the War Program on, 121.
- LOANS**—Size of, 37-39; Correlation Between Size and Term, 49; Splits Between Insurance Companies and Banks, 56; Shifts in Size of, 67-68; Shifts in the Splitting of, 71; Methods of Acquiring, 75; Statutory Restrictions on Reserve Banks, 83; Statutory Restrictions on the RFC, 86; Lengthening Maturities of, 97; Description of Samples of, 135-40, 143-47.
- LOSS EXPERIENCE**—On Term Loans, 101.
- MANAGEMENT**—Approval of Changes in, 78-79; Appraisal of, 92.
- MAY, A. WILFRED**—16n.
- MEDIUM-TERM CREDIT**—Demand for, 20-21; Supply of Funds for, 21-22; Annual Volume, 29; Outstandings, 30, 32; Institutions Extending, 32-34; Mortgage Loans to Business Concerns, 33; Potential Market for, 35; Competition of Lending Agencies in, 37.
- MERWIN, CHARLES L.**—63n, 88n.
- METALS RESERVE COMPANY**—114.
- METHODS OF REPAYMENT**—Shifts in, 70-71. *See* **REPAYMENT PROVISIONS.**
- MORRIS GLENN K.**—64n, 65n.
- MORTGAGE LOANS**—Insurance Companies, 33, 84; Legal Restrictions on, 85; Credit Standards for, 85.
- NATIONAL INDUSTRIAL CONFERENCE BOARD**—124n.
- NEW YORK**—Report of the Superintendent of Banks, 34n.
- OPERATING POLICIES**—Commercial Banks, 98.
- ORGANIZATION AND PERSONNEL**—Commercial Banks, 73-75.
- PARTICIPATIONS**—Effect of Federal Legislation on, 43-44, 99; Charges by RFC on, 44; Percentage of, 44-45; Magnitude of, 45; Reasons for, 45; Importance of, 86; Under the War Program, 119.
- PRIVATE PLACEMENTS OF CORPORATE SECURITIES**—Resemblance to Term Loans, 10; Reasons for, 11; Advantages, 18-19; Disadvantages, 19; Provisions for Resale, 19; Use of Funds Acquired Through, 58; Serial Maturities, 59; Risks of Nonrepayment, 59; Participations in, 85.
- PROFITABILITY OF TERM LENDING**—110-12.
- PUBLIC REGULATION OF COMMERCIAL BANK INVESTMENTS**—Effect on Term Loans, 27-28.
- RECONSTRUCTION FINANCE CORPORATION**—Financing by Subsidiaries of, 114. *See* **ACCOUNTS RECEIVABLE, COMMITMENTS, CREDIT STANDARDS, FEDERAL LEGISLATION, INTEREST RATES, LOANS, PARTICIPATIONS, REFUNDING, REPAYMENT PROVISIONS, SECURITY TAKEN, TERM, USE OF FUNDS, WAR CREDIT.**

- RECORDS**—Requirements for Keeping, 79.
- REFUNDING**—Commercial Bank Credit, 51; RFC Credit, 62.
- REGULATION V**—128-29.
- REPAYMENT PROVISIONS**—Commercial Banks, 53-55; Life Insurance Companies, 58; RFC, 62; Federal Reserve Banks, 66; Under the War Program, 122.
- RESERVES**—Term Loan, 100-01; Consumer Instalment, 100.
- ROBERT MORRIS ASSOCIATES**—93n.
- RODGERS, CHURCHILL**—19n, 84n.
- RUBBER RESERVE COMPANY**—114.
- SAULNIER, RAYMOND J.**—12n, 17n, 51n.
- SCHMIDT, CHARLES H.**—63n, 88n.
- SECURITIES AND EXCHANGE COMMISSION**—Cost of Flotation of Registered Securities, 18n.
- SECURITY TAKEN**—Commercial Banks, 49-51; Life Insurance Companies, 57-59; RFC, 61; Federal Reserve Banks, 63-65; Shifts in, 69-70; As a Restriction on Further Borrowing, 81; Size of Loans in Respect to, 87.
- SOURCES-AND-APPLICATION-OF-FUNDS ANALYSIS**—Description and Purposes of, 92-93.
- TERM CREDIT**—Agencies, 29, 29n; Rate of Growth, 30-32; Number of Institutions Extending, 32-33; Factors Affecting Bank Investment in, 98; Estimates of Volume of, 135-47.
- TERM LOAN**—Definition, 9-10; Differentiated from Bank Purchases of Instalment Contracts, 11; As Break with Orthodox Banking Theory, 13; Maturities, 14; Growth in Demand, 15; Effect of Industrial Revival on, 16; Influence of Deposit Insurance on, 24; Changes in Characteristics, 71-72; Supervision of, 95; Relative Importance of, 96-97; Relation to Other Assets of Commercial Banks, 96-98; Diversification, 99-100; Industrial Specialization in, 99; Reserves, 100-01; Interest Rates Charged, 102-08; Costs of Making, 108-10; Minimum Size, 109; Profitability, 110-12. *See* **LOANS**.
- TERM OF LOAN**—Commercial Banks, 47-49; Correlation Between Industries and, 48; Life Insurance Companies, 56-57; RFC, 59-61, 123; Federal Reserve Banks, 63; Shifts in, 67; Importance of Maximum, 83; Effect of Restriction of Oil Production on, 84.
- UNITED STATES MARITIME COMMISSION**—25-26n; Guarantee of War Loans by, 128-30.
- USE OF FUNDS BY BORROWERS**—Commercial Banks, 51-53; Life Insurance Companies, 58-59; RFC, 61-62; Federal Reserve Banks, 65-66; Control by Reserve Banks of, 65; Shifts in, 68-69; Changes Under War Program, 121.
- VINER, JACOB**—26n.
- WAGENFUEHR, ALBERT**—77n, 101n.
- WAR CREDIT**—Definition of, 115; Institutions, Extending, 116-19; Extended by Commercial Banks, 119-22; Extended by Public Agencies, 122-26.
- WAR FINANCING**—Scope, 113-15; Through Advance Payments on Contracts, 116-17; Credit Standards and Procedures in, 126-31. *See* **WAR CREDIT, WAR PROGRAM**.
- WAR PRODUCTION BOARD**—128.
- WAR PROGRAM**—Effect on Business Financing of Private Agencies, 114; Term Lending by Commercial Banks Under, 119-22; Effect on Size of Term Loans, 121.

PUBLICATIONS OF THE  
NATIONAL BUREAU OF ECONOMIC RESEARCH

INCOME IN THE UNITED STATES

*Wesley C. Mitchell, W. I. King, F. R. Macaulay and O. W. Knauth*

- \*1 Volume I, SUMMARY (1921) 152 pp.
- 2 Volume II, DETAILS (1922) 420 pp., \$5.15
- \*3 DISTRIBUTION OF INCOME BY STATES IN 1919 (1922)  
*O. W. Knauth* 30 pp.
- \*4 BUSINESS CYCLES AND UNEMPLOYMENT (1923)  
*National Bureau Staff and Sixteen Collaborators* 405 pp.
- \*5 EMPLOYMENT, HOURS AND EARNINGS, UNITED STATES, 1920-22 (1923)  
*W. I. King* 147 pp.
- 6 THE GROWTH OF AMERICAN TRADE UNIONS, 1880-1923 (1924)  
*Leo Wolman* 170 pp., \$2.50
- \*7 INCOME IN THE VARIOUS STATES: ITS SOURCES AND DISTRIBUTION, 1919, 1920 AND 1921 (1925)  
*Maurice Levin* 306 pp.
- 8 BUSINESS ANNALS (1926)  
*W. L. Thorp*, with an introductory chapter, "Business Cycles as Revealed by Business Annals," by *Wesley C. Mitchell* 380 pp., \$2.50
- 9 MIGRATION AND BUSINESS CYCLES (1926)  
*Harry Jerome* 256 pp., \$2.50
- 10 BUSINESS CYCLES: THE PROBLEM AND ITS SETTING (1927)  
*Wesley C. Mitchell* 489 pp., \$5.00
- \*11 THE BEHAVIOR OF PRICES (1927)  
*Frederick C. Mills* 598 pp.
- 12 TRENDS IN PHILANTHROPY (1928)  
*W. I. King* 78 pp., \$1.00
- 13 RECENT ECONOMIC CHANGES (1929)  
*National Bureau Staff and Fifteen Collaborators* 2 vols., 950 pp., \$7.50
- INTERNATIONAL MIGRATIONS
- 14 Volume I, STATISTICS (1929), compiled by *Imre Ferenczi* of the International Labour Office, and edited by *W. F. Willcox* 1,112 pp., \$7.00
- 18 Volume II, INTERPRETATIONS (1931), ed. by *W. F. Willcox* 715 pp., \$5.00
- \*15 THE NATIONAL INCOME AND ITS PURCHASING POWER (1930)  
*W. I. King* 394 pp.
- 16 CORPORATION CONTRIBUTIONS TO ORGANIZED COMMUNITY WELFARE SERVICES (1930)  
*Pierce Williams and F. E. Croxton* 347 pp., \$2.00
- 17 PLANNING AND CONTROL OF PUBLIC WORKS (1930)  
*Leo Wolman* 260 pp., \$2.50
- \*19 THE SMOOTHING OF TIME SERIES (1931)  
*Frederick R. Macaulay* 172 pp.
- 20 THE PURCHASE OF MEDICAL CARE THROUGH FIXED PERIODIC PAYMENT (1932)  
*Pierce Williams* 308 pp., \$3.00
- \* Out of print.

- \*21 ECONOMIC TENDENCIES IN THE UNITED STATES (1932)  
*Frederick C. Mills* 639 pp.
- 22 SEASONAL VARIATIONS IN INDUSTRY AND TRADE (1933)  
*Simon Kuznets* 455 pp., \$4.00
- \*23 PRODUCTION TRENDS IN THE UNITED STATES SINCE 1870 (1934)  
*A. F. Burns* 363 pp.
- 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
- \*28 CORPORATE PROFITS AS SHOWN BY AUDIT REPORTS (1935)  
*W. A. Paton* 151 pp.
- 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., 8¼ x 11¼, \$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.
- 34 COMMODITY FLOW AND CAPITAL FORMATION; Volume I (1938)  
*Simon Kuznets* 500 pp., 8¼ x 11¼, \$5.00
- 35 CAPITAL CONSUMPTION AND ADJUSTMENT (1938)  
*Solomon Fabricant* 271 pp., \$2.75
- \*36 THE STRUCTURE OF MANUFACTURING PRODUCTION, A CROSS-SECTION VIEW (1939)  
*C. A. Bliss* 234 pp.
- 37 THE INTERNATIONAL GOLD STANDARD REINTERPRETED, 1914-34 (1940)  
*William Adams Brown, Jr.* 2 vols., 1,420 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., 8¼ x 11¼, \$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 vols., 956 pp., \$5.00

\* Out of print.



## FINANCIAL RESEARCH PROGRAM

### I A PROGRAM OF FINANCIAL RESEARCH

- 1 REPORT OF THE EXPLORATORY COMMITTEE ON FINANCIAL RESEARCH (1937)  
91 pp., \$1.00
- 2 INVENTORY OF CURRENT RESEARCH ON FINANCIAL PROBLEMS (1937)  
253 pp., \$1.50

### II STUDIES IN CONSUMER INSTALMENT FINANCING

- 1 PERSONAL FINANCE COMPANIES AND THEIR CREDIT PRACTICES (1940)  
*Ralph A. Young and Associates* 170 pp., \$2.00
- 2 SALES FINANCE COMPANIES AND THEIR CREDIT PRACTICES (1940)  
*Wilbur C. Plummer and Ralph A. Young* 301 pp., \$3.00
- 3 COMMERCIAL BANKS AND CONSUMER INSTALMENT CREDIT (1940)  
*John M. Chapman and Associates* 318 pp., \$3.00
- 4 INDUSTRIAL BANKING COMPANIES AND THEIR CREDIT PRACTICES (1940)  
*Raymond J. Saulnier* 192 pp., \$2.00
- 5 GOVERNMENT AGENCIES OF CONSUMER INSTALMENT CREDIT (1940)  
*Joseph D. Coppock* 216 pp., \$2.50
- 6 THE PATTERN OF CONSUMER DEBT, 1935-36 (1940)  
*Blanche Bernstein* 238 pp., \$2.50
- 7 THE VOLUME OF CONSUMER INSTALMENT CREDIT, 1929-38 (1940)  
*Duncan McC. Holthausen*, in collaboration with *Malcolm L. Merriam* and  
*Rolf Nugent* (1940) 137 pp., \$1.50
- 8 RISK ELEMENTS IN CONSUMER INSTALMENT FINANCING (1941)  
*David Durand* 106 pp., \$1.50; technical edition 163 pp., \$2.00
- 9 CONSUMER INSTALMENT CREDIT AND ECONOMIC FLUCTUATIONS (1942)  
*Gottfried Haberler* 239 pp., \$2.50

### III STUDIES IN BUSINESS FINANCING

- TERM LENDING TO BUSINESS (1942)  
*Neil H. Jacoby and Raymond J. Saulnier* 184 pp., \$2.00

## CONFERENCE ON RESEARCH IN INCOME AND WEALTH

- STUDIES IN INCOME AND WEALTH (Volumes I-III together, \$7.50)
- Volume I (1937) 368 pp., \$2.50
- Volume II (1938) 342 pp., \$3.00
- Volume III (1939) 500 pp., \$3.50
- Volume IV—OUTLAY AND INCOME IN THE UNITED STATES, 1921-1938 (1942)  
*Harold Barger* (in press)

## CONFERENCE ON PRICE RESEARCH

- 1 REPORT OF THE COMMITTEE ON PRICES IN THE BITUMINOUS COAL INDUSTRY  
(1938) 144 pp., \$1.25
- 2 TEXTILE MARKETS—THEIR STRUCTURE IN RELATION TO PRICE RESEARCH  
(1939) 304 pp., \$3.00
- 3 PRICE RESEARCH IN THE STEEL AND PETROLEUM INDUSTRIES (1939)  
224 pp., \$2.00

---

## NATIONAL BUREAU OF ECONOMIC RESEARCH

1819 Broadway, New York, N. Y.

European Agent: Macmillan & Co., Ltd.

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

## ***Term Lending to Business***

### ***The Authors***

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.

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.