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THE FINANCING
OF LARGE
CORPORATIONS

1920-39

by

ALBERT RALPH KOCH

NATIONAL BUREAU OF ECONOMIC RESEARCH

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1943

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PREFACE

THIS STUDY IS ONE OF a series prepared under the Financial Research Program's Business Financing Project, the second major investigation undertaken by the Program with the support of grants from the Association of Reserve City Bankers and the Rockefeller Foundation. Work on the project began early in 1940, with three major objectives: first, to trace from business accounting records the structural and cyclical changes that have occurred in the financial organization of business enterprise since the turn of the present century; second, to determine the cross-sectional pattern for recent years of business credit demands; and third, to describe the adaptations that financing institutions providing short- and medium-term credit have made over the past decade in response to changing demands for their services.

Project research activities have been carried on under two main divisions, one entitled "Changes in Financing 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. Under each division, a number of technical studies have been developed from special primary materials, the findings of which are to be the basis of broader interpretive studies in preparation.

When work on the Business Financing Project was initiated, no comprehensive tabulations of corporate financial data covering the entire period of our study were available with which to measure changes in the financing practices of business enterprise. Furthermore, existing tabulations were of varying coverage as to time period, industry and size of enterprise represented. The first problem of the project's staff was to test the accounting and statistical consistency of available compilations, and, the second, to build up supplementary tabulations of corporate financial data from whatever sources could be drawn upon. A number of public and private agencies cooperated generously in the solution of these problems, particularly the second, and with their assistance several new sam-

ples of business financial data were developed from investment manuals, state tax report files, Federal corporate income tax returns, the industrial loan files of the Federal Reserve Banks of New York and Philadelphia, Dun and Bradstreet credit reports, bank credit files, and other sources. The complete set of business financial data utilized in the Business Financing Project will eventually be made available under the title "Data for Studies in Business Finance, 1900-1940."

Dr. Koch's study is one of the technical series under the first division of the project. Others in the series are: *Financing Small Corporations in Five Manufacturing Industries, 1926-36*, by Charles L. Merwin, published in December 1942, and *The Financial Structure of Manufacturing and Trade Corporations: A Cross-Section View, 1937*, by Walter A. Chudson.

The primary data from which this study was developed were obtained from several sources. The data on large manufacturing corporations were compiled by the project staff from investment manuals, annual reports of corporations and direct correspondence with the individual corporations covered; those relating to 1930-39 were assembled with the cooperation of the Division of Research and Statistics of the Board of Governors of the Federal Reserve System, which has been engaged in a study of the financing of large manufacturing corporations for several years. The data for the large trade corporations other than department stores were obtained directly from similar sources, and those for department stores were tabulated in cooperation with the Harvard Bureau of Business Research from financial statements collected each year in connection with its annual study of department store operating ratios. The data on other groups of companies—the Bell Telephone System, steam railroads and electric light and power companies—were secured principally from published sources. The Federal Communications Commission supplied special information on telephone financing. The National Bureau gratefully acknowledges the help of all the agencies that cooperated in the assembly of data for this study.

The special purpose of this technical study has been to ascertain for the decades of the twenties and thirties the character of the changes in the financing processes of large integrated corporations. In carrying out this purpose, the author has been primarily concerned with fluctuations in the sources and uses of funds of these companies, as shown by annual changes in their financial

statement data. Except for Class A railroads and the Bell Telephone System, his data relate to samples. These samples, however, incorporate a large and important segment of American business. The analysis is meticulously factual, and the conclusions have been objectively and impartially drawn. It is only by such painstaking work that a body of carefully observed fact may be developed as a basis for broader economic generalization. In connection with a study of the Effect of War on the Financial Structure of American Business, in preparation under a grant of funds from the Carnegie Corporation, the Financial Research Program is now engaged in carrying Dr. Koch's data back to 1914 and forward through this war period.

In compiling the data for this study, extensive use was made of the Marvyn Scudder Financial Library of Columbia University. The National Bureau wishes to take this opportunity to express its appreciation of the cordial cooperation received from the Library.

For general criticism as to method of treatment and many suggestions as to the interpretation of business accounting data, we are indebted to an advisory committee to the National Bureau appointed by the American Institute of Accountants, whose membership included Charles H. Towns, chairman, Charles J. J. Cox and Maurice E. Peloubet. The members of this Committee gave generously of their time in reviewing and criticizing the first draft of this study and the present revision has benefited greatly from their help.

At the time this study goes to press, Dr. Koch is serving as an officer in the Office of Statistical Control of the Army Air Forces. In his absence, the editorial staff has assumed the responsibility for putting his monograph through publication.

RALPH A. YOUNG
Director, Financial Research Program

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MY THANKS ARE DUE in particular to Ralph A. Young, Director of the Financial Research Program, and Winfield W. Riefler, Chairman of the Committee on Research in Finance at the time of preparation of this study, for their unfailing interest and generous counsel. I am also very much indebted to the other members of the financial research staff of the National Bureau for discussions and suggestions, and to the statistical and typing staffs for their capable assistance. Catherine Connolly bore the brunt of the laborious statistical work and offered helpful comments, while Lucy Rozanski ably supervised the typing of the manuscript.

Lorine Pruette was a source of continuous encouragement and a capable editor who contributed greatly to the readability of the text. Renée S. Courtney assisted in editing and in preparing the manuscript for the press.

To many others who have contributed either data or helpful suggestions, I am most grateful. I am particularly indebted to Arthur B. Hersey of the Board of Governors of the Federal Reserve System who contributed both data on the manufacturing sample and criticism of preliminary memoranda; to Elizabeth A. Burnham and Pearson Hunt of Harvard University, the former supervising and the latter collaborating on the analysis of the department store study; to Rose Boots and Walter Hausdorfer for courteous assistance in utilizing the comprehensive corporate financial statistics of the Columbia University library; and to James W. Angell and Ruth P. Mack of Columbia University, and Solomon Fabricant of the National Bureau for consultation and advice. Raymond C. Kolb of the financial research staff assumed responsibility for checking the final tables for publication and made many contributions to the clarity of the factual presentation.

ALBERT R. KOCH

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