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A PROGRAM OF  
FINANCIAL RESEARCH

VOLUME I

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*Report of the  
Exploratory Committee on  
Financial Research*

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VOLUME II

*Inventory of  
Current Research  
on Financial Problems*

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

*(Resolution of October 25, 1926, revised February 6, 1933)*



A PROGRAM OF  
*Financial Research*

INVENTORY OF CURRENT RESEARCH ON  
FINANCIAL PROBLEMS

VOLUME TWO

NATIONAL BUREAU OF ECONOMIC RESEARCH  
*in cooperation with*  
ASSOCIATION OF RESERVE CITY BANKERS



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PART THREE

*Inventory of Current Research  
on Financial Problems*

PREPARED WITH THE ASSISTANCE OF THE  
CENTRAL STATISTICAL BOARD ON PROJECTS  
CONDUCTED BY FEDERAL AGENCIES



## PREFACE

THE INVENTORY is *not* a bibliography of published material. It is as comprehensive an account as possible of research that is now going on—work which is, in general, of a non-recurring character and which has not yet reached the stage of publication. Every effort has been made to organize it broadly according to the nature of the problems involved in the various research undertakings. Functional arrangement has not been sacrificed to precise alphabetical system. Rather, research has been grouped under five main classifications, which indicate in a general way the field of inquiry towards which the projects comprised under these respective headings are directed, as follows:

- I Organization and structure of finance
- II Quantity and behavior of credit
- III Control and regulation of credit
- IV Standards of credit and security analysis
- V Functions of and needs for credit

The purpose of such an inventory is to disclose to those actively interested in financial research the range and nature of the investigations currently being conducted and to bring investigators more closely into contact with one another's work. It is assumed that information on completed studies is already accessible in public or private libraries.<sup>1</sup> The same is true of the recurrent com-

<sup>1</sup> Several completed studies, however, published while the inventory was still in process, have been arbitrarily included.

pilations and analyses of important financial series by public agencies or private institutions as a part of their regular operations, which are therefore omitted.<sup>2</sup>

### COMPILATION OF INVENTORY

The method of compilation of the inventory grew out of its purpose. It could not be a purely mechanical process, a mere reporting and listing of research activity. The procedures followed were designed to ascertain the nature of the questions to which an answer is being sought through research and the methods that are being used in answering them. They were also intended to disclose the type of additional questions being raised as a result of or in conjunction with current research; what aspects of special fields of interest active investigators feel are most inadequately provided with data, most neglected at present, and what aspects offer the most fertile opportunities for additional research. It has not been possible to obtain a satisfactory response to so ambitious a program in all cases, particularly where contacts were effected entirely by correspondence. Generally speaking, however, cooperation has been readily obtained and active investigators have been generous in disclosing their interests, problems and questions.

Two procedures were followed in eliciting this information and cooperation. First, letters of inquiry were addressed to all authorities and research bureaus, whether independent or attached to universities, that might reasonably be supposed to be conducting research within

<sup>2</sup> Exceptions have been made in particular for a number of continuing research projects of the Division of Research and Statistics, Board of Governors of the Federal Reserve System, which necessarily have a distinct pertinence to the inventory.

the boundaries of finance. Responses elicited to the original inquiry provided the basis for follow-up correspondence to obtain supplementary information. Many leads were supplied as to other authorities and research bureaus engaged in financial research, and inquiries were directed to them in turn. Second, direct contacts were made with the directors and staffs of all Federal research agencies by the Secretary of the Committee and representatives of the Central Statistical Board. In addition, the Secretary of the Committee personally saw or wrote to as many private institutions and investigators as possible.

#### ORGANIZATION OF INVENTORY

The classification of the research projects described is in keeping with the purposes of the inventory. Since the aim is to show the interrelations of current financial research and to bring independent research projects attacking the same general problem into close association, the framework of the inventory indicates the common purposes of the various subjects. Within this framework, as a preface to each main area of research, schematic outlines of the five inventory areas are presented to indicate more specifically the meaning and content that the main headings dividing each main area are intended to convey. Under each division arrangement of projects is alphabetical by sponsorship, first by public agency, then by research bureau and institute, and so on. The outlines may be used as reference sources to facilitate the location of the specific subject matter that may be covered in the current research projects reported in the inventory. Also questions of the classification of individual projects in the inventory may be resolved by reference



to them. In their use, the limitations of schematic outlines must be kept in mind. They are designed to be suggestive rather than definitive in their coverage, in other words, to embrace the essentials without the encumbrance of excessive detail.

As a further aid to the use of the inventory a list of the titles of all projects reported in it is appended. As in the inventory itself, these are arranged alphabetically by: [1] public agency; [2] research bureau and institute; [3] private organization; [4] individual investigator. Such a list gives a quick perspective of the range and scope of current financial research, so far as this may be disclosed merely by titles. It is particularly helpful in gaining a summary view of the current activities of public agencies and other institutions engaged in financial research that report several projects classified in different parts of the inventory.

To devise a framework of classification of utmost convenience to users of an inventory of this type presents many difficulties. Differences of opinion may well arise over any scheme suggested, and a degree of arbitrariness must characterize the plan finally accepted. Two major problems become apparent in such an organization. In the first place, effective classification of research projects according to the common problems with which they deal depends on the completeness of the information and also on the accuracy with which the material has been interpreted. This classification is subject to a certain amount of error for both reasons. In the second place, a few projects of large scope and broad objectives are virtually impossible to classify under one area and a single subdivision thereof. In such cases, it has been necessary to describe the project according to the main parts of which it is composed and to classify partial

abstracts in appropriate places. Inasmuch as the projects demanding multiple classification are relatively few and since the scheme of organization lends itself to convenient cross referencing, it has been deemed consistent with the objectives of the inventory to make cross classification of large projects.

The limitation thus imposed on multiple classification of individual research projects is not above criticism. There are necessarily a number of borderline cases where more than one classification of a project might be admissible. This is inevitably the case, for financial institutions, mechanisms and processes together constitute a unified system, the several parts and phases of which are intimately interdependent. Significant research activity concerned with any part or phase of the financial system must inevitably bear directly or indirectly on other phases. Competent investigators are necessarily led on by an awareness of this interdependence, and induced to extend their inquiries, or in any case to appraise within the limits of their own knowledge the wider implications of their individual findings for the financial system as a whole.

#### SPECIFIC CHARACTERISTICS OF MAIN RESEARCH AREAS

The types of research project placed under each of the five research areas into which the inventory is divided and the current distribution of work in each field are described below.

##### *I Organization and structure of finance*

The first area of research has been set apart for the classification of the following types of research project:

[1] those devoted principally to the objective description of the development or present constitution of international and domestic monetary organization and agencies; [2] those describing in considerable detail some phase of the development, organization, and operating characteristics and practices of specialized agencies and institutions currently rendering various financial services directly to the community; [3] those concerned primarily with the interrelationships among financial agencies and institutions, competitive and functional; [4] those dealing with the soundness of contemporary financial agencies or institutions in relation to the economic setting in which they operate and to the functions and ends they may endeavor to serve. So far as research in this area is concerned purely with description of financial organization, institutions, and institutional interrelationships, quantitative data and methods are of supplementary rather than primary usefulness. Current research activity, accordingly, is widely distributed among sponsoring sources, and research projects of private organizations and individual investigators are especially prominent. Projects devoted to the soundness of credit institutions, on the other hand, do rely extensively on quantitative materials and hence are concentrated mainly with public agencies and independently supported research bureaus which have facilities for undertaking quantitative research designed to serve the public interest.

## *II Quantity and behavior of credit*

The second area provides a place for associating together all reported research activity seeking to: [1] measure the quantitative importance of different credit phenomena; [2] trace changes in credit phenomena through time by means of quantitative measures; [3] de-

termine relationships among financial phenomena and other economic elements as reflected in parallelisms of movement of quantitative measures. Entailing a quantitative approach and the intensive application of statistical techniques, research in this area is both labor and time consuming, and hence extremely expensive. It is chiefly confined, therefore, to agencies that can incur burdensome costs. Consequently, projects in this area are mainly centered with public bodies which must have quantitative data available in conjunction with the formulation and execution of public policies, and with research bureaus and institutes, animated by the public interest aspects of financial problems and adequately financed from foundation and other sources. In addition, some research is carried on by larger private financial agencies with a view to serving the special needs of contributors or subscribers. A few projects are carried on by academic authorities financed by special foundation subsidies.

### III *Control and supervision of credit*

Research activity concerned primarily with different aspects of the system of credit control and the supervision of credit agencies which social organization has *so far* provided is grouped together in the third area of the inventory. It includes, therefore, only research projects expressly investigating existing systems of control and supervision with the purpose of, for example: [1] supplying a more accurate description of the prevailing statutory framework of credit regulation, evolved more or less piecemeal to meet acute financial problems as they arose; [2] determining the effectiveness of the several parts of the present system of regulation in attaining the functional ends for which they were devised; [3] evaluating the deficiencies and limitations of extant measures and

instrumentalities of regulation in terms of the regulative functions that need to be performed; [4] examining critically the general effectiveness of governmental control and regulation of credit. Because studies in this field are particularly the concern of supervisory agencies themselves, as faced with complex problems of administration, policy making and legislation, current investigations dealing with the control aspects of credit are concentrated to a substantial extent in public bodies. Individual investigators here and there are engaged in descriptive projects, and a few projects that fall within the area are being done by research bureaus and institutes or private organizations.

#### *IV Standards of credit and security analysis*

The fourth area has been reserved to classify all reported research that undertakes to deal with criteria or standards for appraising the soundness or quality of credit and securities in the performance of essential financial functions. Current research projects correlated in this part of the inventory include those undertaking to: [1] examine critically prevailing procedures and standards of credit and security analysis; [2] derive more objective methods and standards from the study of the experience records of various financial institutions and from a more careful sifting and synthesis of information contained in financial reports and other sources. Broadly speaking, problems of this character can be dealt with effectively only in terms of the pooled experience of many financial institutions or of mass data covering a wide range of individual cases. The availability of suitable data and their subjection to refined statistical and analytical treatment, accordingly, are prerequisite to the establishment of practical credit and security standards. Virtually all

these investigations, moreover, necessitate the collection of primary data to be used as raw materials. For this reason, most of the numerous qualitative credit studies are sponsored by governmental agencies. However, organized bureaus and institutes of economic research and private organizations are also engaged in several projects dealing with selected phases in this area of research.

#### *V Functions of and needs for credit*

The fifth area is intended to bring together all research projects reported in the inventory canvass that are devoted to problems of: [1] defining fundamental financial concepts; [2] describing the mechanism and processes by which credit functions in modern society; [3] reviewing theoretically the stabilizing and unstabilizing effects of credit; [4] evaluating the alternative mechanisms of control and supervision of credit. It is assigned the final position in the organization because the ultimate focus of all financial research must be the better adaptation of the credit mechanism and financial institutions to community needs; and the control of credit and the supervision of credit agencies with respect to social needs. Primarily an area of analytical investigation, inquiry into the problem of functions of and needs for credit challenges particularly the banking and credit theorist. As a consequence, research projects reported in conjunction with this inventory and classifiable under this area are principally those of independent investigators.

### COORDINATION OF CURRENT RESEARCH ACTIVITY

It is abundantly evident from the findings of this inventory that contemporary financial research is distributed

over a wide front. The range and variety of problems under attack is impressive. Surprisingly enough, there appears to be little duplication of research projects. Explainable in part by the broad scope of the field of financial research, this absence of duplication is also attributable to the circumstances conditioning research, e.g., facilities, methods, resources, and to the diverse interests and motives that underlie individual investigations. It is perhaps also ascribable to the fact that *most* of the costly financial research is carried on under the auspices of public bodies. Highly developed channels of research communication among the many Federal agencies and especially the efforts of the Central Statistical Board to effect a better coordination of the research programs of various agencies have tended to reduce duplicative research activity in governmental circles to a minimum.

Taking the field of financial research as a whole, however, it is fair to conclude that current investigation is distinctly handicapped by the absence of any centralized facilities of coordination and planning. The widespread interest in the scope of contemporary financial research aroused by the assembling of material for the inventory and the willingness of agencies and investigators to go to considerable inconvenience and trouble to cooperate afford ample substantiation of this conclusion. Numerous letters received in response to requests for information on research in process requested that the Committee reciprocate by disclosing its findings in particular areas.

Public and independent research agencies almost invariably precede their investigations by extensive exploratory work with a view to ascertaining what other related studies are in preparation. While private agencies usually follow the same procedure, cases of inadequate

information on similar and related projects were brought to light. Individual academic investigators, being widely scattered geographically and confined by limited resources and isolation to published materials for their sources of information on current collateral inquiries, are manifestly handicapped in their knowledge of current financial research. Many of the requests for information that this inventory has prompted have come from independent authorities.

#### LIMITATIONS OF INVENTORY

Any inventory of research activity in process is fated to be incomplete. The incompleteness of this inventory is attributable to several specific causes. Some official agencies have not been willing to disclose to the Committee the nature and objectives of certain admitted research activities because of a feeling that their research, planned as an aid to policy making and operations was of internal interest only, and in any case they did not expect to publish the results. Official agencies in one or two instances have been reluctant to supply information also on the grounds that disclosure at an incomplete stage of investigation might be premature and result in undesired publicity. One independently financed research bureau took the position that its projects in process were purely exploratory and could not be described even to this Committee. Some private agencies, because of proprietary considerations, have not been responsive to requests for information. Where letters have been the sole means of contact with research agencies and individuals in universities, answers have not been received to all inquiries. Some investigators in universities also were disinclined to



describe their research activity because they did not feel it to be in a sufficiently advanced stage of development.

In compiling the inventory we have attempted to cover only research of a mature character. Studies and articles in preparation, undertaken primarily to meet particular educational needs, have not been included. Nor has it been attempted to cover the financial research activities of students engaged in fulfilling requirements for graduate degrees. Exception has been made, however, for a few relevant doctoral theses in an advanced stage, where information indicative of the data used and methods of analysis has been furnished. In addition, exception has also been made for a number of thesis studies in preparation by active bank officers for submission to the Graduate School of Banking, American Institute of Banking, Section American Bankers Association.<sup>1</sup> These exceptions, though not completely representative, do illustrate the types of financial research currently in progress in graduate schools.

Information was requested as an aid to the work of this Committee and the National Bureau of Economic Research. Some information generously supplied by official agencies was accompanied by the request that *confidential use only* be made of it and that no direct reference be made in any publication without specific

<sup>1</sup> The Graduate School of Banking was founded by the American Bankers Association in 1935, as an extension of the work of the American Institute of Banking. Its purpose is to offer qualified bank officers educational opportunities for advanced work in the fields of their professional interest. Information concerning graduate research activity under its auspices has been provided through the courtesy of F. N. Shepherd, Executive Manager of the American Bankers Association; Harold Stonier, Director of the Graduate School of Banking; Gilbert T. Stephenson, Director of the Trust Research Department, Graduate School of Banking.

permission. For this reason, all projects described confidentially are omitted from the inventory.

### CROSS REFERENCES

Cross references are made throughout the inventory for all related projects, unless they happen to be immediately associated in the alphabetical arrangement. This is essential for a number of reasons. For some large projects, it has been necessary, as previously noted, to prepare partial descriptions for appropriate classification in the several inventory areas and their divisions. Again, related projects classified in the same section may be separated by the arbitrary alphabetical listing by sponsorship—first, by public agency, then by research bureau and institute, and so on. Finally, many projects classified in separate areas and sections of the inventory possess phases that are intimately related.

The cross referencing system follows the scheme of the inventory's organization, and the symbols used conform to those used to indicate the order of organization. Thus, a reference, 'See also IC(d) 1c' means: see Part I; Section C under Part I; subsection (d) under Section C; project number 10 under subsection (d). The table of contents and the outlines constitute convenient indexes to the cross reference system.

### ACKNOWLEDGMENTS

The compilation of an inventory of this character has necessarily imposed inconvenience and sacrifice on all who cooperated in it. The Exploratory Committee on Financial Research wishes to acknowledge its indebtedness to all who have contributed so liberally in bringing its work to a successful conclusion. Special acknowledg-

ment is due the Central Statistical Board and to Aryness Joy and Edwin M. Martin of the Board's staff who actively collaborated in the preparation of the inventory. Not only did the Board generously make its facilities available but also sent special inquiries to all Federal agencies and departments interested in financial research, and the Board's staff have personally requested various authorities to cooperate with the Committee. In addition, the general accuracy of descriptions of the research of Federal agencies was verified with the assistance of the Central Statistical Board. The Committee has endeavored to reciprocate by making all materials independently collected, other than those submitted confidentially, freely available to public agencies.

• RALPH A. YOUNG  
*Secretary*

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