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A Program of Financial Research

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Origin of the Exploratory Committee on Financial Research

TO AN increasing extent in recent years thoughtful people have been asking searching and fundamental questions about money, banking and finance. This attitude of inquiry permeates many groups. It is notably prevalent today among those most intimately and directly concerned, including bankers and other operating officials of private financial institutions, faced with the problem of adjusting their activities and adapting their organizations to current conditions, as well as legislators, public officials and supervisory authorities, who are responsible for establishing the legal framework within which financial institutions function. The following questions indicate the trend of their thought.

1. Has our financial organization, as a whole, accentuated booms and deepened depressions? How can it be used to moderate them?

2. What principles should be applied in the relationship of government to private financial institutions?

3. What are the essential services that financial institutions provide? Are they organized to function effectively?

4. What should be the basis of competition between different types of specialized financial institution? To what extent is competition among them in the public interest? Has competition of some types tended to weaken the financial structure?

5. What are sound credit standards, in instalment financing, real estate financing, investment financing? In what ways does the lowering of these standards not only weaken an individual institution, but also undermine the credit situation as a whole?

6. What is the significance of (a) the decline in the demand for commercial loans? (b) the current low level of interest rates?

Questions like these, simple as they appear, are not easy to answer. Our organization of finance is highly complex. It is made up of many thousands of individual institutions characterized by great diversity of size, and by varying degrees of specialization. In it are commercial banks, savings banks, Morris Plan banks, industrial banks, mortgage banks, investment banks, Federal Reserve banks, home loan banks, credit unions, finance companies, insurance companies, investment trusts, security exchanges, brokerage houses, and many others. All these institutions are more or less specialized. Some are huge organizations, nationwide in scope, others operate within narrowly defined geographical limits. Together they constitute our system of finance, the mechanism through which essential financial services are rendered the community. But it is a system whose growth has been haphazard; it has not been planned. Our knowledge of its workings is inadequate. When new problems arise, we are not in a position to solve them; nor, when questions such as those noted above are raised, can we give factual answers.

Recent experience has demonstrated that we cannot postpone solutions and answers indefinitely. Our system of finance has long functioned inadequately, despite a greater degree of public supervision than is common in most other highly industrialized countries. Ever since the outbreak of war in 1914 it has been faced with new problems which neither its organization nor its experience had prepared it to meet. In its divers reactions to the unbalanced forces that have swept the world during the last two decades it has seemed to many thoughtful people to have accentuated whatever was most dangerous in each new situation. Under good conditions its expansion at times was unrestrained, and under adverse conditions it

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collapsed. Taking the period as a whole, thousands of individual units have been forced to the wall and for a time in 1933 the mechanism stopped functioning and the community was deprived entirely of the advantages of a financial organization.

Even though we are emerging from depression, still there are numerous conditions in the realm of finance that are new to our experience and whose implications we cannot judge. It is clear that the time calls for a new approach to the entire problem of finance, an approach that is not limited to single institutions or to piecemeal legislation, but that contemplates a continuous examination of our financial organization as a whole in relation to the essential services that justify its existence. This is recognized not only by public officials, economists and students of finance, but also by far-sighted bankers and executives of private institutions who realize that their own institutions cannot be regarded as isolated units unaffected by conditions in the rest of the credit system; that the financial stability of one institution depends not only on the quality of its assets, but also on the soundness of the credit structure as a whole. The primary need is to determine the facts and establish principles. Mere discussion of controversial issues is purposeless. Research by an impartial agency is the most effective means of fulfilling the need and avoiding the pitfalls of partisanship.

These considerations led to the appointment of an exploratory committee on financial problems by the National Bureau of Economic Research. Early in July of 1936 the Committee on Nationwide Banking Research of the Association of Reserve City Bankers suggested to officers of the National Bureau that an impartial agency should undertake a comprehensive survey of the banking structure of this country. This suggestion was thoroughly discussed at a subsequent conference, held at the Chase National Bank on July 21, 1936, between the Committee on Nationwide Banking Research and representatives of the National Bureau. As a result the National Bureau was requested to appoint a small committee to explore the subject of financial research with two objectives: (1) to prepare an inventory of relevant scientific work now in progress, and (2) to draw up recommendations of procedure which in the judgment of the Committee might be expected to lead to a better common understanding of the financial problems facing this country.

The National Bureau thereupon formally appointed the Exploratory Committee on Financial Research—Winfield W. Riefler, Chairman; David Friday, Walter Lichtenstein and J. H. Riddle—which submits its report herewith. The Committee engaged Ralph A. Young of the University of Pennsylvania to assume charge of its inventory and also to act as its Secretary. It has directly, or through the efforts of Dr. Young, endeavored to get into contact with all substantial projects in financial research now current. The sum of $7,500 was appropriated by the Association of Reserve City Bankers to the National Bureau to finance the work of the Exploratory Committee.

The National Bureau of Economic Research welcomes this opportunity to express its appreciation of the initiative shown by the Committee on Nationwide Banking Research of the Association of Reserve City Bankers in seeking a disinterested approach to the solution of financial problems. It wishes to thank also all those with whom the Committee has been in touch for their active, prompt and cordial cooperation. Without such cooperation this report, and especially the Exploratory Committee's inventory, published separately as Volume II, would not have been possible.

And without the continued collaboration of those who have so far aided and the active participation of others in government, in banking, and in universities, this ambitious program in the public interest cannot hope to be successful.

In accordance with the decision of the Executive Committee of the National Bureau on February 11, its officers have initiated the negotiations designed to bring practical realization to the Committee's plans.

PART ONE

The Problem and the Committee's Recommendations

THE PROBLEM

THERE is wide recognition in this country of a need for much more fundamental research into financial problems. There is an equally wide disposition throughout large sections of the community to cooperate with and to provide support for a program of impartial research. This cooperative attitude characterizes practically all groups concerned with financial problems, divided as they otherwise are by conflicts of interest and controversies with respect to the many financial questions at issue. The desire for a more basic and disinterested approach to problems of finance arises, in fact, from the very existence of these conflicts and controversies; for they indicate the extraordinary state of confusion that pervades public thinking on financial matters today, a confusion that will persist, it is feared, until the entire subject is clarified by impartial study.

This state of mind reflects the drastic financial experiences through which the nation has passed in recent years, a series of experiences that as a whole have no precedent in history. After assuming the exhausting burden of financing the World War we have passed through the post-War depreciation of currencies, the reestablishment and subsequent breakdown of the international gold standard, and the virtual collapse of our major financial markets—for stocks in 1929, for bonds in 1931, and for mortgages in 1932. With the banking crisis of 1933 still fresh in our memories we have seen a growth of excess banking reserves to enormous volume, a decline of interest rates to exceptional levels, and more recently, a striking revival of business activity without a corresponding revival in the demand for commercial credit. Taken individually, there are historical parallels for many of these phenomena. Taken collectively, they are without precedent. Their essential nature and the lessons they may embody in terms of future financial repercussions are still the subject of violent controversy and to a considerable extent lack authoritative interpretation from any source.

Divergent opinions concerning the significance of these developments cannot be ascribed to lack of effort on the part of students of financial problems, nor to lack of funds for far-reaching programs of research. During this same period financial data have been compiled, financial problems analyzed, and specialists trained in financial research at an exceptionally rapid rate—within governmental bureaus and private business and financial institutions as well as at the universities and at institutions devoted to economic research. Many of the divergencies are due rather to a lack of coordination of these efforts and facilities, large as they have been, and generous as has been their support. There has not existed during any part of this period, nor in fact since the termination of the work of the National Monetary Commission, any agency responsible for the coordination of separate inquiries into financial problems as parts of one whole. In the absence of such an agency, areas for research have been unevenly developed, leaving large and important sectors, such as the organization of mortgage finance and instalment credit financing, relatively unexplored. Furthermore, operating officials of private financial institutions have frequently been out of effective contact with research. It has been difficult, consequently, for the research specialist to utilize the valuable experience and insight bankers have to contribute, and they in turn have frequently been slow to apply to their own problems the well established findings of research. To a certain extent there has been a similar lack of contact among those working in the field, engaged either in the compilation of financial material or in the analysis of financial problems. Consequently, the emphasis put upon financial research in recent years has in some cases contributed to the confusion, conflict and controversy. Faced with urgent demands for the interpretation of forces as unexpected and unforeseeable as those which have swept the financial organization of society during this period, financial specialists have been compelled to advance tentative explanations based upon incomplete data. It is inevitable under the circumstances that these should frequently have been at variance with one another.

The program recommended by the Committee must meet the conditions imposed by this background. First, it must suggest specific studies for which there is urgent need. For example, our financial institutions should be resurveyed on a much more comprehensive basis. This survey should not be limited to banking institutions alone, but should embrace the entire financial organization. Second, if research activities are to be really useful and to remain in focus upon a changing scene, the program must provide a continuing mechanism by which they can be readapted from time to time in accordance with current developments. This mechanism should be of such a character that it may be continued as long as need for it exists. Finally, it must provide in its basic pattern of organization for the active cooperation and participation of public officials and of officers of private banking and financial institutions, as well as of specialists in finance from the universities, from business research bureaus, and from other institutions devoted to the compilation of financial data and to the analysis of financial problems.

The Committee is fully aware that the accomplishment of these objectives is not easy. In any field composed of groups with strongly divergent interests, a program directed towards cooperation, even upon the plane of impartial research into common problems, presents great difficulties. In the financial field these are magnified not only by competition among the various financial groups, and tensions between these groups and public supervisory authorities, but also by controversies among experts themselves concerning the fundamental nature of the issues.

The Committee believes, however, that the magnitude of the need presented outweighs the hazards and that the program it has worked out can be made to function. It has been evolved to preserve the requirements of objectivity, and to provide a framework within which leaders in the various fields of private finance, governmental authorities, and university specialists can pool their resources, their insight, and their experience in the pursuit of a common understanding. The fact that the most acute

tensions of the financial crisis are now receding into history makes the present propitious for the inauguration of such a program; the fact that the initiative in the appointment of this Committee was taken by a group of private financial institutions indicates that the need is widely felt; the cordial cooperation the Committee has received from those actively engaged in financial research everywhere, in the government and in the universities as well as outside, augurs well for its feasibility.

SUMMARY OF COMMITTEE RECOMMENDATIONS

Briefly stated, the Committee recommends: (1) projects in areas where factual information and disinterested analysis are urgently needed at present; (2) provision for a continuing organization to foster and coordinate financial research and to maintain it in a relevant relationship to changing situations. The Committee proposes that the National Bureau of Economic Research seek the cooperation of governmental bodies, interested banks and investment institutions, educational foundations, and public spirited individuals in sponsoring the organization of a small central staff to stimulate and administer research in this field.

1. To keep in touch with and to act as a continuing body in the coordination of financial research, wherever it may be carried on.
2. To provide immediately for the inauguration of a comprehensive survey of the financial structure as a whole along lines described in detail later in this report.
3. To formulate specific research projects into specific problems of vital importance that fall outside current research programs (several are outlined in detail in the section entitled Specific Projects).
4. To arrange for a more adequate analysis of research findings; if possible, prior to the publication of underlying data.
5. To secure the active participation in this work of public officials and of operating officers from private financial institutions.
6. To organize, as occasion demands, commissions of inquiry on questions of policy where the issue is not primarily one that requires the collection or analysis of facts, but rather the judgment of competent, disinterested persons on the relevance of facts already assembled.
7. To assure the publication of the results of this program currently as they become available in such a way that their full significance may be recognized and the contribution they have to offer be effective.

It will be noted that these recommendations conceive of financial research as a living process that can be of incalculable aid in the clarification of current controversies and in the creation of a broader basis for the formulation of public policies. To perform these functions, the program of research here envisaged cannot be restricted to any individual group or institution, it must embrace and include in its scope all those who have insight or experience, public officials and operating officers of private financial institutions as well as specialists in the field of financial research.

To launch this program on a basis sufficiently stable to demonstrate the feasibility of the approach will require financial support adequate: (1) to meet the expenses of the central staff during a definite period of demonstration; (2) to assure the completion of the specific research projects inaugurated by the staff during that period. Funds for all these projects will not, of course, have to be provided, since in considerable part they will call for the extensive use of the data and facilities of governmental research agencies. The Committee is of the opinion that five years should be sufficient to indicate the value of the proposed program and that steps should immediately be taken to obtain funds. It is recommended that all the various sponsors of the plan be requested to assist in the provision of funds with the exception of cooperating public authorities. The latter are not in a position to finance non-governmental activities. They should be requested to make their contribution to the common effort directly in the form of cooperation on the part of their research agencies.

Administration of the funds should be entrusted to a special committee of the National Bureau of Economic Research having membership drawn from all the groups that cooperate in sponsoring the program. The central staff should be organized by and attached directly to the National Bureau of Economic Research. The projects, however, should be carried out at various places—by governmental research agencies, by institutions organized expressly for economic and financial research, by university departments having research facilities, and by business research bureaus and private business and financial agencies. In addition, the central staff should consult with and secure the criticism of all the cooperating groups both in the formulation of projects and in the analysis of findings. The agency chosen for each project should be one that because of its situation, its resources, and its personnel, is in a position to contribute most. By organizing the support of financial research in this way, the Committee feels that all the talent, resources and skill

the nation possesses in this field can be mobilized for the study and solution of its financial problems.

INVENTORY OF CURRENT FINANCIAL RESEARCH

The inventory of current financial research in Part Three indicates at once the extent of the area which financial problems permeate and the wealth of specialized data, resources and talent available for a more coordinated program looking towards their solution. It is not proposed to summarize the inventory in this report, but rather to indicate the nature of the major gaps in research or deficiencies that the program recommended by the Committee is designed to fill.

The scope of current research indicated by the inventory attests the enormous progress that has been made in the available data since the publication of the reports of the National Monetary Commission. Especially is this true with respect to banking data. There is now available comprehensive information at frequent intervals covering practically all phases of Federal Reserve bank operations and data nearly as comprehensive covering gross assets and liabilities of our commercial banks. This great body of information is to be found in the reports compiled by the Board of Governors of the Federal Reserve System, the Comptroller of the Currency, the Federal Deposit Insurance Corporation, and the various state banking departments. It is available by geographical regions and in some cases it has been classified by the size of banks. Fairly complete information is also available covering bank earnings and expenses, certain major categories of bank assets and liabilities, bank failures and reorganizations, and the movement and structure of interest rates in the money market. Within these broad classifications there is need for much more detailed data, particularly on bank deposits where a clear understanding of the role of money in our economic system requires that material indicating the size, activity and movement of the deposit balances of different economic groups be made available and subjected to painstaking analysis. In addition to these data, which relate largely to the operation of banking institutions as such, there is a variety of information, but much less comprehensive or continuous in character, covering the operation of savings banks, building and loan associations, insurance companies, etc. Great progress has also been made by the Department of Agriculture and the Farm Credit Administration in mapping out the main outlines of the field of agricultural and farm mortgage credit, and by the Department of Commerce in analyzing the balance of payments, and by the Department of Commerce and the Treasury in studying the movement of foreign investment funds into and out of the United States.

Certain major areas of financial activity have, on the other hand, been almost entirely neglected, for example, the general field of consumption loans. That consumer financing in the sense of instalment and personal loan financing has become a major credit service is generally recognized, but we know relatively little of its aggregate size, movement or structure. Another neglected area is the considerable volume of financing that is carried on outside established banking channels in the form of dealer and manufacturer credit, finance company activities, etc. Its existence also is widely recognized, but again we know little of its size, movement or structure. Data covering both these areas are essential if we are to judge the significance of the small current demand for commercial loans at banking institutions. Before we can assess the extent to which the small demand for these loans reflects a decline in the demand for credit, we must have data showing the extent to which these same credit demands are now being supplied, either through other banking activities or through the operations of non-banking credit agencies. Until recently the field of urban mortgage credit, probably the largest single category of credit in our financial system, was also characterized by a complete absence of comprehensive or reliable data. This deficiency is now being rapidly repaired, especially in the case of urban residential mortgage credit, where an enormous amount of material is becoming available through the combined efforts of the Department of Commerce, the Federal Housing Administration, the Home Loan Bank Board, the New York Mortgage Commission, and the National Bureau of Economic Research. Promising as this material is, it still requires amplification in many particulars and a considerable amount of detailed analysis before it can be assimilated into the general body of financial data. Two other major deficiencies are the inadequacy of data concerning long term capital financing, an area in which some progress is being made by the Securities and Exchange Commission, and the inaccuracy of the material covering state, municipal and local public debt.

This brief survey is sufficient to indicate that most of the financial data now available have been compiled by public agencies. The larger share of the analytical work current in the field of financial problems also rests in the main on official initiative and support. Research by other agencies into financial problems has been devoted mainly to the analysis of existing data, although occasionally it has taken the form of small sampling surveys. To a cer-

tain extent, the preponderance of official activities in the field of financial research reflects simply the fact that public authorities have been in a supervisory relationship to financial institutions and have been required in consequence to compile and publish basic data with respect to the institutions under their jurisdiction. It also reflects the fact that basic exploratory surveys designed to open new areas of financial relationships are costly to conduct and have been dependent, therefore, largely upon public funds for support. In addition to these special factors, however, public authorities have been among the first to recognize the value of research as a tool in the development of operating policies. The recent inauguration of research programs by numerous groups of private financial institutions, such as the state programs of banking research described in the inventory, constitutes a promising sign that this situation is changing and that in the future basic financial research will not continue to rest predominantly upon governmental initiative.

The participation of private financial institutions is almost a prerequisite for certain types of basic financial research, especially on such problems as deal with the soundness of credit. The fundamental importance of sound credit is everywhere recognized; without it the most perfectly articulated financial structure will come to grief; with it basic weaknesses may exist in the superstructure of finance without bringing in their train an inevitable and inescapable collapse. Generally as this is recognized, the concept of what does or does not constitute sound credit remains intangible and has still, for the most part, to be reduced to definite principles that can be illustrated from the experience of operating institutions, and adapted to new credit problems as they arise. Without the active participation of operating financial institutions, further progress in this field will be limited in the main to relatively simple generalizations. The analysis of the mortgage data mentioned above, for example, will throw light on some of the principles which should govern the sound extension of mortgage credit; an investigation into the influence of brokers' loan liquidation in 1929 on the deposit balances of consumers will help to reveal the effectiveness of the regulations recently adopted to control the extension of credit on securities. A partial study into methods of financing consumer credit may also be conducted without the participation of operating financial groups. However, to formulate the principles that make for sound credit standards in any fundamental sense will require their active cooperation, not only in providing data covering their operating experience, but also in lending the services of their most expert operating personnel.

The inventory also reveals the relatively limited areas in which specialists in finance at the universities are carrying on basic financial research. Such participation as there is in broader projects, in fact, exists for the most part in connection with those publicly financed or sponsored by research bureaus. This situation reflects the inability of the universities to finance individual programs and the absence of a coordinating agency capable of bringing the university specialists into effective contact with programs inaugurated by other agencies. The costly nature of current financial research has had the unfortunate consequence of separating work at the universities from close contact with work at the frontiers of inquiry. It should be one of the important tasks of a coordinating body to reestablish such contact and to restore to financial research the assistance of those most favored by their position to exercise unbiased judgment.

SPECIFIC PROJECTS

The Committee recommends the following major research projects to the central staff. All are necessary and merit its immediate attention. This program of financial research is in no sense complete. It is advanced rather as a sketch of the principal areas in which a considerable amount of research is needed to repair the deficiencies outlined above. In Part Two there are outlined several additional projects, more specific in nature, which are designed to illustrate the manner in which these major areas may be broken down for analytical purposes.

Comprehensive Survey of the Financial Structure

As indicated above, a comprehensive survey of the financial structure as a whole is urgently needed to provide a background for the analysis of financial problems and to give perspective to proposals for changes in the financial structure. Before we, as a society, can make great progress in the reform of our financial structure, before we are in a position to provide respectable answers to the questions, 'What are the essential financial functions?' and 'What social institutions or organizations are best fitted to perform them?' we need relatively satisfactory answers to the more elementary questions, 'What financial services are now being rendered?' and 'What institutions and organizations are now providing these services?' In other words, we need, as a basis for further analysis of the functioning of our financial institutions, a much more comprehensive picture of the current scope and range of their activities.

This survey must not be limited to central banks and commercial banks where our information is now relatively most complete. It must include the activities of savings banks, building and loan associations, Morris Plan banks, mortgage banks, investment banks, insurance companies, finance companies, and underwriting houses. It must be sufficiently comprehensive, furthermore, to show not only the structure and functions of these various types of financial organization taken individually, but also their relative importance and their interdependence. Without this basic financial survey, comprehensively outlined and filled in with some detail, it is impossible to come to any well considered opinion concerning many of the most pressing financial problems of today. For example, how can we assess the relative importance of fluctuations in instalment financing during (1) the prosperity of the 'twenties, (2) the depression of the early 'thirties, (3) the current revival—if we are only dimly aware of the dollar volume of funds involved, and in no position to contrast incomparably larger concurrent fluctuations in real estate financing? How can we arrive at a balanced judgment concerning the present low demand for commercial loans at our banks if we do not know the extent to which other types of institution are materially expanding their loans in this field? How can we discuss reorganization of the banking structure when we do not have the facts by which to judge the adequacy of banking facilities in many communities and do not know the extent to which local demands for financial services justify the maintenance of different types of local financial institution?

In the opinion of the Committee this comprehensive survey should start with the aggregate needs of the community for various types of financial service. It should seek first to answer the question, 'What are the financial commitments—the financial assets, liabilities, and other equities of the people of this country?' For example, 'What are their aggregate holdings of cash, demand deposits, savings deposits, shares in building and loan associations, investment securities, etc.?' and 'What are their aggregate commitments or debts, on mortgages, instalment paper, etc.?' So far as possible these aggregates should be broken down by business or consumer groups, income groups and by geographic areas. From this basic material a comprehensive picture of financial organization can be built up. In the analysis of the various financial operations that must be performed and the more or less specialized institutions through which they are executed financial services that represent activities conducted directly with the public should be differentiated from those financial services which give flexibility and liquidity to the financial structure.

Both types of service are essential to a well ordered financial system, but the standards by which their operation are to be judged differ greatly. Among the first are included those services which are performed by financial organizations in dealing with the general public—neighborhood banks, savings banks, building and loan associations, etc., which act in the main as retail financial outlets serving the public. The quality of credit, its soundness, and its relative availability for competing needs are determined to a considerable extent by the credit standards to which these institutions adhere and the credit procedures they apply. The second type of financial service is performed mainly within the organization of finance—by the Federal Reserve banks, correspondent banks, acceptance and discount houses, security exchanges, etc. They represent the coordinating elements, the nerve centers of our entire financial mechanism. In recent years the background within which they operate has changed greatly, requiring in many cases a new statement of their responsibilities and functions. For example, central banks, ever since the War, have been asked to assume an increasing degree of responsibility for the maintenance of economic as well as financial equilibrium. Under the pressure of these demands they have developed new instruments of action. The area of activity covered by central banking operations at present, in consequence, differs radically from that which was accepted as standard as late as twenty, or even ten years ago.

The Committee is convinced that in the basic picture thus obtained many of our financial problems would appear in a new perspective. It would throw light on the aggregate volume of debts, on the distribution of debt burdens among different geographic areas and different economic groups, and on relationships between savings, investment and consumption. It would also make it possible for us to distinguish between those financial repercussions which are the direct result of faults in the organization of finance and those which merely reflect more comprehensive forces sweeping the entire economic structure. Phenomena, for example, such as the wiping out of the purchasing power of large groups of consumers during the brokers' loan liquidation in 1929, the freezing of the mortgage market in 1932, and the banking panic of 1933, though they were precipitated in large part by the immediate economic circumstances, reflect primarily faults in the organization of finance. Phenomena, on the other hand, such as the Florida land boom, the War boom in agriculture, and the post-War expansion in urban real estate, originated outside the financial structure, and the resulting dislocations would probably have given rise to repercussions of some magnitude under any organization

of finance. In such cases the problem presented for analysis is the extent to which our financial organization serves to counteract or to accentuate such tendencies. Finally, the material made available should reveal the competitive background within which financial institutions function and should indicate the extent to which facilities for the rendering of financial services are inadequate or redundant.

The central staff should not limit its plans to drawing a broad, cross section picture of our financial structure as outlined above. In order that this picture may be maintained up to date, the staff should seek also to provide for a current recording of basic changes in its major components as they occur. It is not enough, for example, to have a comprehensive picture of the structure of the mortgage market or of consumer financing in 1936. Interest rates, values, debt burdens, and consumer commitments change rapidly, and data indicating the more important of these trends are needed at relatively frequent intervals. It should be possible, once these basic fields have been explored, to provide for the regular compilation and dissemination of this material.

Effects of Legislation and of Public Supervision of Credit

The Committee recommends that the central staff provide, concurrently with the comprehensive survey outlined above, for a general analysis of the effects of legislation and of public supervision of credit on the evolution of the financial structure. In this country financial institutions have long been subject to public examination and supervision with the result that the direction in which they have grown has been affected to a considerable extent by legislation. In most cases, the influence thus exerted has been purposive. For example, the government has sought at times to facilitate and at times to impede the spread of branch banking. It has sought to segregate investment and commercial banking, to throw legislative safeguards around the investment of savings deposits, trust funds, etc. There are also cases, however, in which the influence of legislative enactments has been inadvertent. The fact, for example, that institutions specializing openly in intermediate industrial credit have not developed, and indeed, that evidences of debt to finance intermediate credit needs are difficult to find, implies neither that these credit needs are relatively small in this country nor that they have not been supplied by our financial institutions. Rather banking legislation has favored financial assets in the form of short term commercial notes, and banks as a consequence have tended to finance longer term demands by advancing funds under this form with the understanding that these short term notes would be renewed on maturity. Another example of inadvertent influence is afforded in the field of real estate finance. Legislative preference for short maturity paper was probably a factor in the evolution of the practice of financing long term transactions through the use of three and five year mortgage instruments. A comprehensive survey of the whole field of public supervision of credit, showing the extent to which financial institutions are subject to legal regulation in this country and the part that such regulation has played in the evolution of the credit structure, is badly needed. It should be conducted separately from the comprehensive survey of the structure of finance outlined above, in the sense that it should use a different type of personnel with different training and background. It would be advantageous, however, for the two studies to go forward simultaneously. They have many points in common and in many instances one inquiry would provide material for both.

Review of Credit Standards

The studies outlined above should indicate the sources of various demands for credit and the competitive agencies through which these demands are now being met. They should also indicate whether the existing agencies are those best fitted to supply the various types of credit and whether the present financial superstructure should be modified in the interest of a more stable financial system. For example, they should help provide the data to answer the question, 'Is it desirable for a commercial bank to make instalment consumer loans?' They will not, however, throw light on financial repercussions that arise from faulty credit procedures rather than from points of tension in the structure and organization of credit. They will not answer the question, 'By what means can we distinguish, in the case of instalment consumer credit, between a sound and an unsound loan?' The following three studies recommended by the Committee are designed to meet this type of deficiency—in instalment financing, mortgage financing and investment financing. They are not concerned with the suitability of various types of financial institution to specialize in loans in these fields, but concentrate instead on the procedures and standards required to raise the quality of credit granted irrespective of the lending agency involved.

1. STANDARDS OF CONSUMER CREDIT

Instalment financing of consumer purchasers withstood the strain of the depression so well and showed such relatively small losses throughout the crisis as compared with many other types of credit instrument that banks and other financial agencies, pushed to find outlets for surplus

funds, are now expanding rapidly in this field. This expansion, moreover, is assuming a competitive form, with respect not only to interest rates and other financial charges, but also to the down payment, the term of loan, the security, and the amount extended in relation to the income of the borrower. As a result, pressure is being brought to bear to relax the strictness of the procedures that tended to safeguard instalment financing during the depression. The Committee feels that, in view of its potentialities, this situation deserves careful analysis. At present, it is impossible to decide with any confidence whether these modifications of procedure are justified or whether they constitute introduction of credit standards which are far too lax and which may have serious repercussions. In the present state of knowledge, such judgments cannot be based on data drawn from broad experience, they must be largely expressions of opinion. It is essential, the Committee holds, that an effort be made to gather all the available data on this type of financing for the purpose of identifying those credit standards which are sound and have stood the test of experience.

2. STANDARDS OF REAL ESTATE CREDIT

A similar study is needed in the field of real estate credit. The financing of real estate constitutes one of the most basic and essential financial activities in our economy. It is widely felt, however, that the real estate mortgage was subjected to more abuse and over-extension during the expansion of the 'twenties than any other credit instrument. During the depression the real estate mortgage market was probably more completely frozen than any other domestic financial market. Stimulated by recent legislative changes designed to remedy the most conspicuous abuses in this type of financing, banks and other financial institutions are again expanding their mortgage loans. The recent crisis made material available for a broad analysis of our experience with mortgage financing and for a formulation of fundamental credit standards designed to maintain sound conditions in the mortgage market. Immediate analysis of this material would be of incalculable value to our national economy as a whole as well as to the specific institutions that specialize in mortgage financing.

3. STANDARDS OF INVESTMENT CREDIT

The Committee recommends a third study along similar lines in the field of investment securities, especially those which are finding their way in increasing quantity into bank portfolios. Banks in this country hold large aggregates of savings deposits and have become accustomed, in consequence, to maintain investment portfolios of considerable size. At present, however, under the impetus of a large supply of loanable funds and a small demand for commercial loans, investment securities are fast becoming the predominant category among bank assets. This development has given rise to a considerable degree of apprehension on a variety of grounds. It is feared, for example, that an increase in the long term rate of interest may cause heavy depreciation in the market value of these portfolios, that the smooth functioning of the bond market may be upset by heavy sales by banks and other institutional investors in their desire to avoid this depreciation, and that banks in search of yields sufficient to meet operating costs are tending to lower the quality of their investment holdings. A comprehensive analysis of the extent to which these fears are justified is urgently needed. Information should be made available showing the quality of bonds in bank portfolios, and the extent to which these portfolios consist of long term bonds, whose market value would depreciate in a period of rising long term interest rates, as compared with bonds that are already close to their dates of maturity. In addition to information of this sort the behavior of various types and qualities of investment securities under diverse business and money market conditions should be analyzed. The data for such an analysis are ample, but they are in the portfolios of large institutional investors and in the files of organizations devoted to investment research. A penetrating study designed to reveal fundamental relationships in this area necessitates, consequently, the intimate cooperation of officials from both kinds of institution.

Composition and Behavior of Bank Deposits

Among other major research projects that have engaged its attention, the Committee wishes to endorse especially a detailed analysis of the composition, flow and behavior of deposits in our banks. This study is essential to an understanding of financial developments in recent years and as background material for some of the most important work now going forward in monetary theory. The influence of excessive or deficient reserves on the willingness of banks to expand their loans and investments has been analyzed extensively and ample data are available to measure fluctuations in the total volume of deposits in response to the availability of reserves. During the recent financial cataclysm, however, changes in the total volume of deposits did not always correspond to the availability of reserves. Moreover, the most important factors in the general credit situation were not always those which had to do with the availability of reserves; they were rather those that made for changes in the composition and activity of deposits as between different classes of depositors. The monetary effects of the stock

market collapse in 1929, for example, are not reflected in changes in reserves or in changes in total deposits, but rather are disclosed in the extent to which the repayment of brokers' loans resulted in a transfer of deposits from the balances of potential consumers, who were holding securities on margin, to those of business corporations, which had loaned surplus funds on the call market. To the extent to which this happened, the absence of change in the total volume of bank deposits during the autumn of 1929 concealed one of the important factors in the banking collapse, namely, that the purchasing power of consumers was being seriously depleted. During 1931 and 1932, furthermore, changes in the total volume of deposits failed to reflect the flow of frightened deposits from weak to strong banks, which preceded and helped to precipitate the banking collapse. Our information on debits or transfers of funds was also inadequate and failed to indicate the extent to which a low rate of deposit turnover reflected merely the general stagnation in the business situation as compared with the extent to which it represented a hoarding of purchasing power in the form of idle deposit balances. Since 1933 some studies have been made covering the rebuilding of deposit accounts, but the whole area is full of unknown factors and requires sharp illumination before sufficient data are available to our monetary authorities to afford the basis for a more careful formulation of monetary policies.

PROCEDURE TO EFFECTUATE RECOMMENDATIONS

In the event that this report meets the approval of the National Bureau of Economic Research,[1] the Committee recommends that it be submitted informally to a group composed of representatives of all those concerned with financial research: governmental agencies, private banking and financial institutions, foundations, and universities. The contacts made by the Committee in preparing the report have led it to believe that the response of these groups would be favorable to the program it has proposed. Should this belief prove justified, the Committee recommends that the officers of the National Bureau of Economic Research take such steps as seem indicated to secure the financing required and to provide for the organization recommended.

[1] The Executive Committee of the National Bureau unanimously approved the report on February 11, 1937 and directed its officers to take steps to make effective the program outlined in the report.

PART TWO

Types of Suggested Research Project Tentatively Drafted in Connection with The Committee's Exploratory Work

In Part One the early launching of several major research projects is urgently commended to the attention of the central staff in charge of the financial research program which the Committee proposes. These endorsed projects comprise:

1. A Comprehensive Survey of the Financial Structure
2. An Investigation of the Effects of Legislation and of Public Supervision of Credit
3. A Review of Credit Standards of Financial Institutions in the fields of: (a) Consumer Credit; (b) Real Estate Credit; (c) Investment Credit
4. A Study of the Composition and Behavior of Bank Deposits

Comprehensive in scope, each of these major research projects presents manifold aspects and problems demanding special inquiry and detailed investigation. Indeed, the accomplishment of the research objectives provisionally conceived by the Committee and expressed in its specific recommendations, requires the breaking down of each major research proposal into as many well defined and workable patterns as are expedient for assignment to the competent investigators who may be selected to undertake them and assume responsibility for their completion. This procedure, in fact, may be laid down as prerequisite to the fruitful execution of each of the Committee's research proposals and the successful consummation of the entire plan of financial research it recommends. Only upon the basis of the findings of many subordinate and correlative investigations, paralleling or following one another in orderly sequence, can we adequately reveal the anatomy of the whole financial structure and gain the comprehensive picture of financial organization that is so imperative. Only from many complementary inquiries, too, can the precise effects of financial legislation and public supervision upon credit facilities and the character of credit be finally ascertained; can the study of the credit experiences of financial institutions give rise to better credit procedures and standards and a body of generally applicable credit principles; can the further analysis of the composition and behavior of bank deposits lead to a deeper understanding of the significance of changes and variations

in deposit data. Summary and synthetic studies, building upon and drawing from these partial investigations, must ultimately take form, but these must await the availability of a rich and adequate body of basic research materials.

Taking for granted the inherent nature of the research process, the Committee has properly assumed that it is not bound by its special endorsement of a definite program of financial research to do more than indicate in its report the broad outlines of the research areas it considers highly important. The Committee, however, is fully conscious of the need for careful and painstaking planning of all phases of a given project recommended before any work is started. It has deliberately recognized this need by providing in its recommendations for the organization of a central staff on financial research under the National Bureau of Economic Research, whose primary function would be to formulate detailed research plans, including the determination of appropriate methods and techniques as well as the selection of qualified personnel. Greater elaboration of its proposals for the imminent launching of an active research program, the Committee believes, might hamper unduly the initiative and freedom of action which it is convinced the central staff must have.

In addition, the Committee wishes to reiterate that its program is continuing and hence much broader than its suggestions for immediate research might convey. If the entire program advocated by the Committee is to prove fertile and productive, it must be flexible and responsive to changing economic conditions and problems. It must be endowed with reserve capacity to initiate and undertake new projects in line with altered needs and changing problems. The Committee views the research proposals it recommends as meeting essential requirements for information in the current financial setting, but it also feels that they may serve to provide a foundation for later research that will inevitably build upon their data. In any case, the Committee is convinced that both the full development of its program and the requisite adaptations of its urgent research proposals must be assigned as a major mandate to the central staff.

In the course of its exploratory work the Committee received many suggestions of investigations that might be sponsored in conjunction with its scheme of financial research. Preliminary descriptions of several of the proposed projects were drafted for the Committee as examples of the type of inquiry falling within the compass of its program. Since these were originally prepared purely for its own use, the Committee hesitated to incorporate them in its report lest their inclusion be regarded as a commitment binding on the central staff. However, as they are strikingly effective for purposes of illustration, it has been deemed appropriate to present them here, with the reminder that they do not bear the stamp of the Committee's approval.

The particular purposes served by their presentation as a supplement to the main report merit brief enumeration. First, they exemplify one sort of activity to which the central staff would devote itself, namely, the formulation of well defined research projects and the outlining of definite research procedures. Second, the Committee's proposals of larger scope, as those calling for a comprehensive survey of the financial structure and for an exhaustive study of the composition and behavior of bank deposits, could be effectuated only by a series of smaller, complementary studies, dealing with special phases of these broad subjects. The project entitled, 'Changes in the Capital Requirements of Business Enterprise and the Decline of the Commercial Loan', for instance, is but an essential fragment of any far reaching survey of the anatomy of financial organization. Again, the project 'Major Factors in Fluctuations in Bank Deposits, 1929–1936' is merely a fragmentary study pertinent to the more exhaustive investigation of the composition and behavior of bank deposits. Other projects are listed that relate similarly to this recommendation of the Committee. Third, the project sketches dealing respectively with the consumer, investment and mortgage credit experience of banking institutions amplify in certain particulars the Committee's recommendations for a searching review of prevailing credit procedures and practices in these fields. Finally, several additional projects were drafted to illustrate other types of inquiry that might appropriately be sponsored under the Committee's program. These tentative project sketches are arranged in accordance with their relevance to the research plans advocated by the Committee.

Section A

Projects Related to the Committee's Research Recommendations

CHANGES IN THE CAPITAL REQUIREMENTS OF BUSINESS ENTERPRISE AND THE DECLINE OF THE COMMERCIAL LOAN

General Background

With the rapid growth of corporate cash balances and liquid assets during the 1920's, business borrowing from

banks declined relatively to other types of borrowing. Business loans apparently comprised between 50 and 60 per cent of bank portfolios in 1920; by 1929 they had declined to less than 40 per cent of earning assets; today they apparently constitute less than 20 per cent. Widely commented on by experts and viewed with concern and apprehension by active bankers, this manifest atrophy of business demands for banking accommodation has been variously explained from time to time. At first, emphasis was placed upon business reaction to the financial difficulties accompanying the post-War liquidation, the emergence of hand to mouth buying, improved inventory controls, self-finance, etc. When the relative decline persisted, authorities pointed to the easy capital market conditions and the speculative boom. With the advent of depression and widespread financial crisis, banking difficulties arising out of an inflexible and reputedly illiquid asset structure of banking institutions are said to have caused a shortage of bank credit to business and forced a liquidation of many outstanding business loans. More recently, the continued relative decline of business loans has been ascribed to the monetary and fiscal policies of the Federal government in conjunction with its widespread relief and recovery program as the primary short run explanation, while technological advances in methods of production and distribution, reducing the turnover period of business working capital, have been assigned as the underlying long run influences.

Whatever the merits of these various explanations of the relative decline of business loans from commercial banks, the theoretical and practical implications for the institutional structure and behavior of our financial system are far reaching indeed. What has been, for example, the change in the character of capital demands of business enterprise in the last two decades? On what other types of earning assets have commercial banks come to depend? Can our banking and credit system adapt itself to rely chiefly upon these other types of earning assets? To what technological and other economic forces may the decline in business demands for bank credit be attributed? Has the average turnover period for business working capital been materially shortened in many industries or has the shift to independence from short term debt been dictated by broader considerations rooted in the risks of large scale investment and the various influences affecting the continuity of corporate existence under shifting economic conditions? In what measure have special financing institutions operating with invested funds obviated the necessity that business enterprises finance through banks? To what extent have corporate enterprises with large cash balances assumed increasingly the burden of financing business customers, entering thereby into active competition with commercial banks in supplying working capital for the system at large? Finally, have alterations since 1933 in banking and financial laws governing the operations of banking institutions adequately taken into account changes in the character of demands for borrowed funds by business?

Specific Problems

Intimately related to the study of the behavior of corporate liquid funds, 1929–36, a separate investigation is proposed to deal with the progressive decline of commercial lending by banking institutions. As a specific point of attack, the financial statements of several hundred larger corporations reported in investment manuals would be intensively examined from 1920 to 1936, and analyzed with respect to the relationship of current assets to total assets, notes payable to current assets, inventories and current liabilities, cash and other liquid assets to current and total assets. These data should be classified by industry, size of corporation and in other meaningful ways. Supplementary quantitative data that reflect changes in the working capital and trends in commercial debt of medium and smaller size enterprises having a continuous existence for at least ten years could doubtless be obtained from the credit files of the Federal Reserve banks, the larger city banks, and various credit-rating agencies. In this phase of the inquiry the analyses by Lauchlin Currie and various investment agencies of tendencies in corporate financial practices would be useful.[1]

These facts assembled, the emphasis of the investigation would be shifted to technological changes, internal and external, affecting the working capital requirements of various industries. In this part of the study, among other things, capital turnover, including both total and working capital, would be estimated for those enterprises and industries for which data are adequate. Finally, the inquiry would: (1) study special finance companies, the sources of their capital and manner of operation, with a view to ascertaining how and in what degree their activities have contributed to the declining importance of the commercial loan; (2) examine changing techniques of financing current productive and distributive activities by large and highly integrated enterprises.

[1] Lauchlin Currie, "The Decline of the Commercial Loan," *Quarterly Journal of Economics*, August 1931, pp. 698–709.

MAJOR FACTORS IN FLUCTUATIONS IN BANK DEPOSITS, 1929–1936

General Background

Between 1929 and 1933 the volume of bank deposits belonging to the people of the country declined about 30 per cent. Simultaneously, prices of securities, including high grade bonds, collapsed. The factors responsible for this unparalleled collapse would under any circumstances merit the most careful evaluation. In this particular case, however, investigation must be especially painstaking, since the attendant circumstances were quite other than those which would be expected under ordinary banking and credit theory. Insufficiency of reserves, for example, which theoretically is considered by far the most important factor in deposit liquidation, was not important during this period.

Viewed from the assets side of the bank balance sheet, furthermore, the liquidation of security loans was the largest single factor in this decline, although both call and time loans on securities were freely available at exceptionally low rates throughout the period. The magnitude of the problem posed for theorists in money and banking is illustrated by contrasting the situation in the crisis of 1919–22 with that in 1929–33. In the former, a 6 per cent discount rate, maintained by the Federal Reserve banks over an exceptionally long period, and applicable to a volume of member bank borrowing equal to 150 per cent of their required reserves, resulted in an aggregate decline in deposits of about 10 per cent. During 1929–33, despite a quick drop in discount rates, a negligible volume of member bank borrowing, and a wide availability of excess reserves, the decrease in deposits amounted to 30 per cent.

Equally as challenging as the decline in available bank deposits from 1929 to 1933 is their subsequent rise of more than one-half from 1933 to 1936. Paralleling this rise, there occurred: (a) an unprecedented increase in banking reserves; (b) a sharp decline in interest rates; (c) a bond market boom; (d) a doubling of stock prices; (e) a relatively modest increase in commodity prices; (f) a gradual recovery in production and trade. Granting that extraordinary forces, precipitated by the emergencies of 1932–33 and leading to gigantic fiscal operations on the part of the Treasury as well as far reaching innovations in monetary organization and policy, dominated this rapid change in financial conditions, it still presents many significant angles for inquiry. Theoretically, this rapid growth of deposits should have induced simultaneously a veritable boom in production and trade, a rapid expansion of money incomes, a marked stimulation of capital formation from savings and from bank expansion, and a sharp and extended rise in commodity prices. Indeed, this presumably should have happened on the basis of orthodox theories as well as on those of more modern schools. Under classical theory, the sheer impact of a larger quantity of credit on the economic system should have had irresistible accelerating effects; under modern analysis, the primary and secondary impact of funds introduced into trade by governmental relief and public works expenditure should have found prompt expression in like effects.

This projected investigation can readily be divided into three parts. [1] The specific factors in the decline in deposits from 1929 to 1933 will be studied in the order of their relative importance, which appears to be: (a) bank failures, which account for about one-half of the total decline; (b) security loan liquidation, which accounts for perhaps a fourth more of the total decline; (c) contraction in other banking assets. With both the aggregate magnitude of these factors and their incidence in time from the final quarter of 1929 through the first quarter of 1933 determined, the inquiry would be directed to the specific factors to which bank failures are attributable. In this phase the work of the Federal Reserve Committee on Group, Branch and Chain Banking would be helpful. In addition, however, three aspects of the problem not adequately covered in those reports should be analyzed carefully: (a) the extent to which failures were due to assets regarded as substandard, (b) the extent to which pressure on banks arose from regional deficiencies of funds reflecting deficiencies in the balance of payments, (c) the incidence of hoarding and the importance of transfers of 'smart money' from banks in difficulty to more solvent institutions. Finally, the extent to which pressure on the bond market arose from sales of securities by open banks should be compared with the liquidation of bonds by receivers of closed banks.

[2] In a similar way the basing point for the second part of the project would be the relative importance of specific factors in the increase in deposits subsequent to 1933: (a) the reorganization of banking facilities and the rehabilitation of banking capital with the aid of the Reconstruction Finance Corporation; (b) dishoarding of currency by the public with the reestablishment of financial confidence; (c) the inflow of gold from abroad following dollar devaluation and concomitant foreign political disturbance; (d) the expansion of Treasury currency in consequence of the silver purchase program; (e) the growth of the Federal debt and its considerable absorp-

tion into bank assets; (f) the divergent movements of other elements of bank assets. With these data assembled, investigation would concentrate on the financial aspects of the Federal recovery and relief program and the Treasury operations necessitated by it. Borrowing operations of the Treasury and the movement of its balances would be studied intensively. The disbursement of funds in connection with various phases of the recovery and relief program, and the activities of various Federal agencies, would be carefully traced and related to the movement and activity of deposits in different economic areas and for different classes of banks. Deposit data collected by the Board of Governors of the Federal Reserve System in connection with its study of bank reserves from 1924 to 1935 would prove of immense value for this part of the project, and some use might be made of the large deposit survey, recently concluded.

[3] These two parts of the project completed, it should be possible to trace effectively the sequence of events from 1929 through 1935 with greater detail and authority and to evaluate: (a) the relative efficiency of the almost innumerable measures taken to combat the crisis and promote recovery; (b) the extent to which our financial system should be reorganized further to stabilize bank deposits or bring them under better control. An indication of the limitations to which much of prevailing banking and credit theory is subject when viewed against an adequate factual setting should also be possible.

EFFECT OF BROKERS' LOAN LIQUIDATION IN THE FINAL QUARTER OF 1929 ON CONSUMERS' BALANCES OR INCOME DEPOSITS

General Background

Although speculative phenomena exhibit a close correlation with fluctuations in business activity, their causal interrelationships are still highly obscure. In general, economists have been content to hold that speculative activity primarily reflects business conditions and is not a causal influence of any appreciable magnitude in the volume and activity of business itself. The extent to which such causal relationships do exist, however, requires thorough exploration.

Specific Problem

Among the various problems in this field that might be selected as a point of departure, the relationship of the collapse in security values in the final quarter of 1929 to the volume of *consumers' deposit balances* appears by far the most promising. We know that the aggregate borrowings of brokers who were members of the New York Stock Exchange declined from $8,549,000,000 on September 30, 1929, to $3,990,000,000 on December 31—a decrease of $4,559,000,000 in three months. We know, furthermore, that this decline occurred largely because the collapse in stock prices initiated an automatic calling of margins which forced persons holding stocks on margin to transfer their available cash to New York to prevent liquidation of their securities. Consumers' balances at that time must therefore have been deflated throughout the country in great volume.

Although many economists ascribe major importance in business fluctuations to changes of this character in consumers' balances, relatively little analysis has been devoted to the effects of this particular episode where, from surface indications, these changes probably occurred on a wider scale than at any other time in modern financial history. Mr. Hawtrey, for example, who treats business fluctuations primarily as a credit phenomenon and who traces its effects largely in terms of the effects that changes in consumers' balances exert on consumers' outlays for commodities, discusses this particular episode as not constituting a case in point because practically the entire decrease in brokers' borrowings was reflected in a decline of loans from non-banking lenders, and had little effect upon the aggregate of bank deposits. Mr. Keynes, who views changes in *income deposits* as an extremely important factor in business fluctuations, likewise treats this episode, not as a deflation of *income deposits*, but rather as an example of the liquidation of a speculative 'bear' position against a speculative 'bull' position.

To determine the facts we must ascertain the location and distribution of deposits during the final quarter of 1929. If the liquidation of brokers' loans was entirely at the expense of consumers' balances or income deposits, the investigation would show: (1) no great change in the general ownership of securities, (2) a decrease of some 4½ billion dollars in consumers' deposits during the period offset by a growth of approximately the same amount in the deposit balances of corporations previously lending in the call money market. If, on the contrary, there was no depletion of consumers' balances, the investigation would show: (1) a distribution of deposits essentially unchanged as to ownership during the period, (2) a transfer in the ownership of securities from individuals in debt to brokers at the beginning of the period to those who had been lending funds to brokers. Since all these phenomena were probably happening simultaneously, the aim of the investigation should be to determine their relative importance.

ORIGIN, LOCATION AND MOVEMENT OF CORPORATE CASH BALANCES, 1929–1936

General Background

The appearance during the 1920's of great bodies of free funds at the disposition of corporate management has given rise to new problems in banking and credit (the theoretical implications of which are relatively unexplored). Our basic theory of banking and credit was worked out at a time when the aggregate of capital funds at the disposal of business enterprise was commonly insufficient to finance full operating demands, and the deficiency was borrowed as a matter of course from banks on the basis of short term commercial loans. Under these conditions, fluctuations in the aggregate volume of business deposits closely reflected actual needs for working balances, and the specific banks in which these balances were located were determined by the necessity of maintaining close credit relationships with lending banks as well as by needs for convenient points of disbursement. Since the middle 1920's this picture has become progressively less characteristic of many large and dominant business enterprises.

Smarting under the memory of the difficulties that arose during the commodity price decline in 1920–21, American business managements in many cases decided to maintain themselves in the future as free from current short term commercial debt as possible, and, during the prosperity that followed, succeeded not only in eliminating in large part their current debt, but in addition, in piling up huge floating cash balances greatly in excess of current needs. As a result, during 1929 at a time when business transactions exceeded in volume anything previously experienced, American business was able not only to finance these huge totals without great increase in its commercial borrowing, but in addition to spare a further huge volume of funds for loans in the call market. In 1931, 1932 and 1933 many of these balances were still in existence despite the heavy losses of the depression, and by their large, sudden and erratic movements from bank to bank in search of safety, contributed considerably to the general insecurity of the banks in the period prior to the bank holiday. Data recently disclosed indicate that cash and other liquid assets of business corporations are again increasing and stand today only slightly below their pre-depression peak.

Specific Problem

Study of this problem may begin with the origin and subsequent movement of that body of funds generally known as 'Loans to Brokers for the Account of Others'. It is proposed that a group of the more important corporate lenders of funds on the Stock Exchange in 1929 be studied intensively.[1] From the point of view of their corporate ownership, it would be necessary to determine the business setting out of which the possession of large free balances arose. This would entail analysis of their earnings record, dividend practices, capital securities flotations, and their depreciation reserve policies. The appearance of the balances having been accounted for in their historical setting, it would next be necessary to study their behavior year by year, including the extent to which they were invested in other securities, the conditions under which they were loaned on the call market, and the extent to which and conditions under which they were deposited in banks. It would be especially illuminating to ascertain to what extent they were placed on time deposit in 1930 when returns on open market money rates fell below the time deposit rate, and to what extent their transfer from interior banks to urban centers contributed to the wave of bank failures that accompanied the departure of Great Britain from the gold standard in September 1931. Lastly, it would be pertinent to follow closely the behavior of these corporate cash balances and associated liquid assets during the recovery.

SECTION B

Projects Amplifying the Specific Research Recommendations of the Committee

FINANCING THE CONSUMER AND ITS RELATION TO COMMERCIAL BANKING

General Background

In the decade following 1920 instalment finance companies, personal finance companies, credit unions, etc., emerged in increasing number to meet the ever widening demands for consumer and personal credit accommodation. Commercial banks at first viewed with indifference the rise of special institutions to finance the consumer. Gradually, however, they became more and more involved themselves in financing individuals as a result of: (1) receding local demands of business enterprise for working capital accommodation; (2) the phenomenal growth of instalment and other consumer finance institutions necessitating their recourse to bank borrowing; (3) expanding demands on the part of bank customers to

[1] Without, of course, disclosing names.

finance personal consumption needs, including home financing, as well as to provide funds for supplementing personal investment activities. Here and there banks recognized the necessity of developing special routines to deal with consumer lending, especially for customers of small means. In isolated instances, this recognition found expression in the establishment of personal loan departments.

The depression and accompanying repercussions upon business and investment market credit requirements heightened interest in consumer financing. From 1929 to 1931 personal loan departments of banks increased from 65 to 277; during the ensuing two years of distress a number of them were discontinued. More recently, commercial banking interest in the consumer credit field has again revived, owing chiefly to: (1) the notable recovery of cash resources in the hands of banks, variously caused; (2) the failure of expanding demands for business and investment credit accommodation to keep pace with capacity for meeting demands; (3) the unprecedented levels to which yields of available assets for bank portfolios have fallen in consequence, creating an acute problem of subsistence earnings for banking institutions generally; (4) the excellent record of consumer loans during depression. An additional influence, doubtless of considerable importance, has been the encouragement to consumer financing given by various Federal agencies, notably the Federal Housing Administration in its efforts to promote and popularize insured modernization credits as a boon to construction activity.

Specific Problem

This study would deal with the extent to which commercial banking activity today is concerned with consumer and personal finance, whether primarily the consequence of cumulative banking tendencies of the last twenty years or of the force of present and imminent circumstances. The significance of more adequate factual knowledge on this matter for basic theories of banking and credit, national credit policies, and practical problems and philosophies of bank administration is self-evident.

To facilitate quantitative treatment and analysis of trends a more satisfactory concept and effective definition of the area of consumer finance would have to be developed. The next step would be an anatomical description of the institutional organization of consumer finance facilities with the particular objective of indicating more accurately the interrelationships of commercial banks with specialized consumer finance agencies and the extent to which commercial banks themselves finance consumers. This would require an intensive study of the financial statements of the more important consumer credit agencies, and a cooperative appraisal of loan portfolios of a selected sample of banks in different areas with a view to ascertaining their consumer credit commitments. Current studies of the loan portfolios of closed and active banks in western states would afford supplementary evidence.[1] Should Federal Reserve authorities decide to require the classification of loans in economic as well as purely financial categories in future call reports of banks, reference data of immense value to this study would be made available.

In this general setting, the investigation would be directed to the lending experience of consumer credit agencies over the last ten years or more, and particularly during the depression. It is believed that a wealth of data might be assembled from the following sources: (1) the larger instalment companies; (2) personal and industrial finance companies and the Morris Plan banks; (3) banks with established personal loan departments; (4) other banks that have recently made special studies of their personal loan experience; (5) the internal records of the Federal Housing Administration, which contain a complete description of each insured modernization loan made under the Federal Housing Act. On the basis of these data the relationship of consumer and personal debt to individual income, occupation, and other relevant factors of economic status would be intensively studied for repaid loans and loss loans. Such an analysis should not only yield results of immense practical value for those engaged in consumer finance, but also provide a more adequate basis for appraising the penetration of commercial banks into this field of activity and for evaluating the role of consumer credit as a factor accentuating economic instability.

A final phase of this investigation would involve an examination of state and national legislation bearing on consumer financing as in one way or another affecting the personal lending activities of consumer finance agencies and commercial banks. This would necessitate special consideration of usury and other laws limiting charges on this type of lending and the various practices of consumer finance institutions and banks under those laws. It would also require attention to administrative and other costs entailed in such lending. Data bearing on costs would have to be obtained from consumer credit agencies directly and from banks that have made extensive studies of lending costs.

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[1] For example, the studies of F. L. Garlock of the Bureau of Agricultural Economics, covering Arkansas, Utah and Wisconsin.

THE INVESTMENT EXPERIENCE OF BANKS IN SELECTED CITIES, 1926–1936

General Background

The liquidity and soundness of banking institutions today is primarily dependent on the quality or soundness of the investment assets held. Though this condition is not entirely new in American banking, still it does present aspects that are unique, for the dependence on investment assets is far greater than at any other time. It remains to be established, moreover, that a stable and effective unit banking system can be continuously maintained if the investment account constitutes the bulk of earnings assets.

The following facts serve to illustrate the preponderant importance of investment assets in the contemporary banking situation. Approximately 60 per cent of the earnings assets of all commercial banks in the United States were investment assets on June 30, 1936, in contrast with about 28 per cent in 1929. Excluding notes and bills of the Federal government, the percentage is reduced to 42 as a rough measure of the relative importance of the long term investment account. Even if we ignore all direct obligations of the Federal government, the percentage of investment assests was still 26. If loans on securities are included with investment assets as an indication of the total dependence on investment market assets, the percentage becomes 71.

Perspective on the present importance of investment assets may also be gained by viewing their relative importance as a source of earnings. Prior to 1929 interest and dividends on investments accounted for approximately one-fourth of the earnings from this source of all member banks, though investments constituted a somewhat higher proportion of assets. After 1929, and throughout the depression and recovery, investment income has constituted an increasing share of interest earnings, reflecting both the liquidation of loan accounts and a tendency among banks to hold a greater volume of investments as earnings assets. In 1935 the source of nearly half of member bank interest income was the investment account. During the years of deepest depression, active member banks apparently lost more from write-downs and losses on investment portfolios than on customers' loans, while in the subsequent upswing the appreciation of security holdings has been the source of the bulk of recoveries on loans and securities.

Specific Problem

The crucial importance of investment income for banks today, the importance of investments in total earning assets, and the record of apparent losses for this type of asset, amply justify a study of the investment experience of banks over a period of years. Paralleling a projected study of mortgage experience, this investigation would differ only with respect to the kind of assets covered. Data drawn from the investment records of a number of banks in selected cities and surrounding localities would constitute the working materials for analysis. For each bank cooperating it would be highly instructive to obtain supplementary detail on general investment policies and practices pursued at various times over the period surveyed. Among the useful facts would be information bearing on: (1) the direct expenses of administering investments; (2) the personnel and facilities of investment departments; (3) the extent to which various investment services and those of investment counselors are used and relied on; (4) the nature of other sources of investment advice.

These data assembled, the various investment accounts should be analyzed with respect to quality of security holdings, maturities, marketability, diversification, etc., and the shifts in and activity of bank bond accounts from time to time. The Comptroller's ruling of February 15, 1936, concerning the purchase and sale of investment securities by national banks, issued under the authority of the Banking Act of 1935, would constitute an effective reference base from which this analysis might proceed. The yield fluctuations and the price movements of bonds of different classes, grades and maturities over the entire period and also of investment losses and recoveries, would be studied intensively. The calculation of quality indexes for the investment accounts of separate institutions would be essential to a comparative analysis of banks of different types.

It is proposed that the examination and research divisions of the Board of Governors of the Federal Reserve System and the Federal Deposit Insurance Corporation be urged to make, concurrently with this inquiry, an independent investigation of the investment portfolios of selected member and insured banks as included in examination reports. Such an investigation would provide additional data and at the same time supply an independent analysis and set of conclusions as a check and supplement to the analysis and conclusions of the direct inquiry. Moreover, it should be possible to cover a longer time span in an investigation using examination records than in one using data provided directly by banks.

MORTGAGE LOAN EXPERIENCE OF BANKS IN SELECTED CITIES, 1925–1936

General Background

Since 1920 real estate loans have constituted an increasing proportion of bank loans to customers. Marked differences characterized this development in urban and rural banks, in national and state banks, and in different geographical areas. For banks as a whole, however, mortgage assets came to constitute a progressively more important source of earnings. Slow moving and of limited marketability, they became embarrassing assets as delinquencies and foreclosures mounted from 1929 to 1933. Even so and despite some reduction in the figures of bank holdings during the depression, largely due to write-offs and bank closings rather than liquidation, such assets constitute practically as large a portion of total earning assets as in 1929, approximately 9 per cent. Moreover, they constitute about 22 per cent of customers' loans as against 13 per cent in 1929. As a result of recent modifications of bankings laws, far reaching reforms of real estate financing practice, efforts of the Federal Housing Administration and other agencies to liquefy the mortgage market, and restricted opportunities for bank lending, it is a strong probability that banks generally will increase their mortgage advances in the future.

Specific Problem

In view of these considerations there is urgent need for more adequate quantitative information on the extent and nature of risk incurred in mortgage lending by banks. The object of the project here proposed is to assemble primary data based upon the mortgage loan records of active banks, and to ascertain precisely what the experience of banking institutions has been over ten or more years with this type of lending. Materials for the investigation would have to be obtained directly from a group of banks known to have engaged most actively in this field of operations. Coverage should naturally include large as well as small banks; national, state member and nonmember banks, savings banks, building and loan associations, and a satisfactory regional representation.

SECTION C

Other Illustrative Projects

PROJECTED STUDIES OF BANK EARNINGS AND EXPENSES

EARNINGS of banks must consistently cover expenses if an effective and stable system of banking facilities is to be maintained. From 1922 to 1933 an increasing number of banks failed to preserve the necessary balance between income and outgo, at least a balance adequate to absorb losses, and were consequently compelled to discontinue operations. During the drastic liquidation following 1929 banks generally suffered severe losses which had to be charged off against current earnings, reserves and capital. Even so, the allowances made for losses were admittedly insufficient. In the sweeping banking reorganization of 1933 stringent measures of capital rehabilitation had to be taken in all too many cases. Furthermore, as earning and expense reports for the last two years attest, unabsorbed losses in considerable volume were carried forward for adjustment under more favorable conditions.

Despite a general improvement in banking conditions, reflecting the effects of various monetary policies, banking reforms, widespread business recovery and a phenomenal growth of deposits, the difficulty of balancing income and outgo for many banks has been only moderately alleviated. Earnings have been seriously affected by declining interest yields on marketable assets which banks have come to hold in increasing volume. In addition, slack demands for business and personal accommodation have confronted banks everywhere, and progressive concessions on interest charges to borrowers have been forced. While operating expenses have been severely reduced, thanks to the elimination of interest on demand deposits by law and Federal regulation of interest paid on time deposits, considerable resistance to further reduction apparently exists. As suggested above, moreover, some past losses remain to be absorbed, and reserves for future contingencies provided. This current struggle of banking institutions to cover their expenses out of earnings and to rehabilitate their capital and reserves imperatively challenges analysis, both by those interested in the practical side of banking and by banking theorists.

Published Data on Bank Earnings and Expenses

Data on bank earnings and expenses are made available from several sources. In general they consist of aggregates of earning and expense items of banks reporting to the Comptroller of the Currency, the Board of Governors of the Federal Reserve System, the Federal Deposit Insurance Corporation and several state banking departments. The data on national banks provided by the Comptroller are subdivided by states and reserve cities; those published by the Board of Governors of the Federal Reserve System are subdivided by national and state member banks and by Federal Reserve districts; and those supplied by the Federal Deposit Insurance Corporation are subdivided by all

insured state banks and all insured non-member banks. For 1934 and 1935 the Federal Deposit Insurance Corporation has presented a breakdown of earnings and expenses by size of deposit classes for insured state banks, member and non-member. In addition, the Board of Governors of the Federal Reserve System has recently released a comparable analysis for member banks, and the Comptroller has published similar data for national banks by principal geographic areas and Federal Reserve districts. Supplementing these data, significant operating ratios based on the composite earning and expense records and also broken down by size classes, have been published. Regional analyses are published by the Federal Reserve Banks of Boston, Dallas, Chicago, Cleveland, New York and Philadelphia, and data are available for a few individual states, as Kansas, Iowa, Georgia, Mississippi, for several years as a result of the cooperative efforts of the state banking department and the state bankers' association. Data for Kansas and Iowa are accessible for a longer period than for other states where the reporting of state bank earnings and expenses is relatively recent. The Kansas data, for example, run back as far as 1900; the Iowa data are available from 1924.

Adequacy of Data for Research Purposes

Published data on bank earnings and expenses are insufficient as raw materials for exhaustive statistical treatment. Since they are aggregates of earnings and expenses for groups and classes of banks, it is obvious that the variety of statistical combinations and manipulations grounded on them must necessarily be restricted, and that the range of highly significant questions on banking conditions and tendencies that can be answered by them is narrowly circumscribed.

Notwithstanding these limitations, the data do furnish a basis for certain types of study. Analyzed over a period of years, for example, they may disclose major tendencies in bank earnings and expenses, for national and state member banks as a group, and subdivided by states and regions. For one thing, they are probably adequate for tracing the rise in interest on bank deposits which proved so embarrassing a feature of banking practice when crisis commenced to envelop the entire financial system in 1931. State bank data, where available, are useful for comparisons of state non-member bank earnings and expenses with those of member banks. In addition, national bank statistics afford materials for relating earning and expense trends as between reserve city banks and country banks. Provided that unpublished compilations of various banking authorities are accessible, differences in the course of earnings and expenses as between large and small banks may be traced. Local or statewide studies of bank earnings or expenses, as those under the auspices of bankers' associations, may supply corroborative evidence for the interpretation of trends.

In view of the limited extent and usefulness of the data as described, the possibilities for fruitful investigation of the many problems of bank earnings and expenses do not appear numerous. This judgment, however, is warranted only if supplementary facts are not obtainable. The files of the several public banking authorities would constitute one important source for additional facts; the records of banking institutions themselves another. Recent research activities sponsored by various bankers' associations, as well as the cooperation extended by individual bankers to independent inquiries in different parts of the country, testify to an eagerness on the part of many bankers to facilitate disinterested investigation of banking problems.

Types of Proposed Study

Against this general background, the following two related studies dealing with different aspects of bank earnings and expenses are proposed:

1. Trends and current tendencies in the earnings and expenses of active banks, 1920–1936;

2. Significant earning and expense relationships of a representative sample of banks for selected years, 1926–1936 (an intensive statistical analysis).

TRENDS AND CURRENT TENDENCIES IN THE EARNINGS AND EXPENSES OF BANKS, 1920–1936

General Background

Contemporary tendencies in bank earnings and expenses reflect the play of unparalleled financial influences as well as the repercussions of far reaching legislative reform affecting the entire financial system. They also reflect, however, the conditioning force of many other elements largely accumulated out of the past and best described as long run. In part, these other elements are a matter of internal form, practice and organization developed over a period of years to facilitate the performance of accepted functions within the limits set by banking statute and regulative administration. But they issue also from the external relationships of banks, individually and as a system, with debtors and creditors, relationships only slowly and gradually developed from long and continuous banking operations. Any attempt to appraise and evaluate impartially prevailing earning and expense problems of banks requires as a background an adequate knowledge of previous trends and tendencies,

together with such interpretation of conditioning influences as historical data make possible. Unfortunately, no single published source exists from which a satisfactory background can readily be obtained. This particular study, therefore, is designed to fill such a gap.

Specific Problem

Drawing largely from published information on bank earnings and expenses and such unpublished material as may properly be provided by Federal and state banking authorities, this study would sift and combine available data in as many meaningful ways as practicable. Among the various possibilities for treatment are: (1) a detailed study of the rise in interest on deposits as an expense item and the relative significance of deposit interest at different periods; (2) comparisons of important earning and expense items with a view to determining their relative variability over a period; (3) comparisons of important earning and expense items with series reflective of external conditions affecting bank operations; (4) comparisons of trends and tendencies of national bank earnings and expenses with those of state member banks and, where data make it possible, with non-member banks; (5) comparisons of aggregate national and member bank earnings and expenses in different regions, states, and centers of activity. To the extent possible, in addition, trends should be analyzed on the basis of size classes. Materials assembled for the Federal Reserve Committee on Branch, Chain and Group Banking would be extremely useful in all phases of the project.

SIGNIFICANT EARNING AND EXPENSE RELATIONSHIPS OF A REPRESENTATIVE SAMPLE OF ACTIVE BANKS FOR SELECTED YEARS, 1926–1936

General Background

Studies of bank earnings and expenses according to size of bank have been handicapped by the nature of available data and the restrictions these data have imposed on the methods applicable in analysis. In general, they have tended to show that medium size and small banks typically have had higher expenses per $100 of loans and investments and per $100 of invested capital than larger banks. These results are significant so far as they go, but they do not afford support for inferences concerning the net operating effectiveness of any class of bank. For this purpose, a much more intensive analysis of bank earning and expense data is required, showing, for example, the relationship of high or low net earnings and net deficits to capitalization, to composition of assets, to various items of earnings and expenses, and to losses and recoveries. Moreover, these relationships must be studied by type of bank, as well as size, with especial regard to the factors that are internal and controllable by bank management and those that are external and beyond such control.

Specific Problem

A project is therefore proposed on these neglected aspects of bank earnings and expenses. For this purpose, individual bank income and expense reports for specified years are needed. So far as possible the sample should be representative of commercial banks, as a whole, as judged by several criteria, e. g., the regional and urban distribution of banking facilities, the distribution of banks by incorporation, capital and deposit size. With these data in hand accepted frequency and correlation techniques should be applied to disclose significant relationships. Among the possibilities immediately suggesting themselves are the relationships between high net profits, low net profits or net deficits and region or place of operation, composition of assets and liabilities, composition of earnings and expenses, type of banking charter and Federal Reserve membership, losses and recoveries. On the basis of this completed analysis, it should be possible (1) to draw more adequate quantitative inferences than heretofore respecting the factors accounting for high earnings, low earnings or deficits, by type and size of bank; (2) to isolate more effectively the elements of earnings and expenses controllable by bank managements from those that are external and largely beyond control. The effects of widespread banking reorganization and of adjustments in capital structures since 1933 would be another matter with which this investigation should deal.

CHARACTERISTICS OF BANKING UNITS AND THE AVAILABILITY OF BANKING FACILITIES

Background

In retrospect most banking authorities agree that the fundamental weakness of the American banking structure, when the crisis of 1929–33 broke over it, was an excess of banking units and facilities. A persistent run of bank failures from 1922 to 1929 and a creeping concentration movement, manifesting itself in bank mergers, branch, chain and group banking, had diminished this surplus. Nevertheless, an excess of banking facilities remained the notable feature of the banking structure. As a matter of fact, banking laws, both Federal and

state, which condition and determine that structure, were specifically framed with a view to preserving this feature. Differences in intent and effectiveness characterized banking law in different parts of the country, but did not materially alter the banking situation as a whole.

The disastrous run of bank failures precipitated by the crisis of 1929–33, the sweeping reorganization of banking facilities in 1933 and since, definitely changed the complexion of the problem from one of excess to one of dearth of facilities. Successive measures have been taken to remedy this condition, and changes in banking laws, moderately favorable to banking concentration, have raised banking standards; banking authorities have moved slowly in licensing closed banks and chartering new ones; potentialities for banking profits have not been such as widely to attract new banking capital. Just as the prior surplus of banking facilities varied in economic and geographic regions, in urban and rural centers, so the present dearth is more acute in some areas and centers than in others.

Specific Problem

Public officials responsible for administering public policies of banking organization and active bankers interested in perfecting the banking structure are confronted with complex and difficult questions when they deal with the many aspects of the adequacy of banking facilities. Among the conspicuous gaps in materials available for their use in the absence of fully assembled and analyzed factual data that would: (1) suggest the minimum operating standards necessary for banks of different types and sizes in order to assure survival under average management and business conditions; (2) disclose the nature and sources of economies open to banks of different classes as well as identify the distinctive banking costs that may characterize banks of given types and sizes: (3) indicate the most effective composition of assets in relation to capital and deposit liabilities from the standpoint of profitability and capacity to withstand the tensions of variable business conditions; (4) provide a basis for judging the most effective size of banking unit in terms of community needs for credit and deposit facilities and of survival capacity of banks.

A research project designed to fill this important gap must be primarily analytical in approach and method. For this reason, it is proposed that the collection and assembly of new data essential for its conduct be made the special or collateral task of subsidiary and related studies independently undertaken in connection with the National Bureau's general research program in the field of financial organization, as for example, the proposed studies in the area of bank earnings and expenses. Such studies should be planned with an eye to the factual requirements of this investigation and be related ultimately to it at all stages.

There need be no delay in launching this study, however, because of any dependence on associated projects to provide working data. Some materials are already in existence and others are currently being collected in the course of special studies by the Board of Governors of the Federal Reserve System, the Federal Deposit Insurance Corporation and several state banking departments. Much pertinent information could only be obtained in accordance with specific needs directly from banking institutions and from Federal and state bank supervisory authorities.

The steps to be taken in this research and out of which it would take shape and direction are, tentatively:

[1] A thorough survey of the findings of various banking investigations with the double purpose (a) of discovering clues and leads for further research, and (b) of developing a setting and historical background;

[2] An intensive study of: (a) bank failures by size and location of bank; (b) the causes of bank failures as disclosed by the reports of the Federal Reserve Committee on Branch, Group and Chain Banking, by recent investigations of the Board of Governors of the Federal Reserve System and the Federal Deposit Insurance Corporation, by other official inquiries, and by studies of bank failures sponsored by state bankers' associations;

[3] A special analysis of bank earning and expense data by type and size of bank, based on materials provided by the preceding project, to determine why some banks of special types and within different size classes earn more than others;

[4] A special investigation of the extent of capital impairment, as a result of the crisis of 1929–33, among size classes and by charter and membership status in co-operation with the Comptroller's office, the Board of Governors of the Federal Reserve System, the Federal Deposit Insurance Corporation and Reconstruction Finance Corporation.

[5] A parallel investigation of banking reorganizations and adjustments in capital structures of banks during 1933–35, by type and size of bank.

[6] A primary inquiry into the nature and sources of banking economies open to banks of different classes, together with a companion study of distinctive banking costs that characterize certain types and sizes of bank, based mainly on information gathered directly from banking institutions.

[7] An evaluation of the effects of varying economic conditions under which banks operate on the character of their activities, earnings and expenses, loss experience, etc., based largely on the findings of bank type studies recently completed or now in process, and also on studies of state banking developments sponsored by several state bankers' associations.

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