

EXHIBIT A.

File copy

March 13, 1936

MEMORANDUM

To: Dr. Flexner

From: Mr. Riefler

Subject: Shall the Institute concentrate its work in economics in the field of Finance?

There is an opportunity for the Institute for Advanced Study to carve out for itself a much more unique position in economics than seemed possible as recently as last autumn. To embrace the opportunity, however, requires a fairly definite commitment to cultivate systematically the field of finance and to make additional appointments and to create additional facilities to that end. These commitments may be and probably are more definite than the Institute desires to undertake at present. The situation is such, however, that the whole subject deserves the deepest consideration.

Reasons for Concentration

The advantages of concentrated development of a particular phase of economics, as contrasted with an attempt to cover the whole field, require little comment for an institution dedicated to scholarship on an advanced plane, provided only that the field chosen for concentration be sufficiently important to merit consistent and systematic development. I think you are responsible for the observation that it is only at the undergraduate level that educational institutions should seek to meet a primary responsibility for broad and competent training in all fields of scholarship. In graduate schools and especially in an institution at the post doctoral level, the main emphasis instead should be placed upon achieving distinction in a limited number of carefully selected focal points rather than upon broad coverage. Should such a policy be adopted generally in economics in the graduate schools of this country, the caliber of advanced work would be enormously forwarded. Instead of

diffusing their energies trying to cover the universe, each leading university would concentrate upon quality in some one field with the result, say, that advanced students would train as a matter of course at Harvard if they were interested in general economic theory, at Minneapolis or Stanford if they were interested in agricultural economics, and at Princeton if they decided to specialize in finance. I have consulted President Dodds informally upon this aspect of the subject and have found him not only sympathetic, but anxious to cooperate by building up the Princeton graduate faculty in the same direction. The proposal then is to endeavor to make Princeton as a locality, including both the Graduate School of the University and the work in economics at the Institute for Advanced Study, outstanding in the field of finance.

Choice of finance as the field for Concentration.

The most important decision from the point of view of the Institute does not revolve around the relative advantages and disadvantages of concentration, but rather around the choice of finance as a specific field for concentration rather than, say, economic theory. Here, certain minor advantages accrue from the fact that the Princeton Graduate School has already achieved eminence in that field and that the greater part of my own experience has been gained in dealing with financial problems. In a much more basic sense, however, even without taking into account the specific opportunity outlined below, the field of finance has great merit from the point of view of the Institute.

1. It is of primary social and economic importance. Problems of finance, especially monetary policy, stand at the very center of the public problems with which the world is wrestling and will in all probability continue to wrestle during the next generation at the least. They are problems, furthermore, that call as a matter of course for insight and guidance from the economist.

2. There is no outstanding educational institution in the world which has concentrated heavily in this field. The scholars of outstanding reputation can almost be counted on the fingers of two hands. Most of them work in relative isolation and many of them such as Walter Stewart, Henry Clay, Benjamin Anderson, R. G. Hawtry and Alexander Goldenweiser have no academic connections. Fairly well-defined groups of younger men have grown up around J. M. Keynes and H. Parker Willis, but in neither case are the facilities available so comprehensive or balanced as to constitute an authoritative center of training such as is envisioned in this program.
3. In finance the scholar must of necessity subject the results of his thinking to the facts of real life. If he is to be effective he must combine, furthermore, a broad theoretical background with a high degree of sheer technical proficiency. It is largely for this reason that so large a proportion of the outstanding reputations are found outside the universities and so few of the universities have been able to give their most promising professors sufficient freedom to acquire the technical proficiency required.
4. An extraordinarily broad range of economic problems focus under the general heading of finance. It reaches so far in fact that the Institute would be in some danger of having selected too broad a field for intensive development rather than of having committed itself to activity that might prove too limited in scope. To mention only a few of these ramifications, the proper evaluation of financial and monetary problems requires proficiency not only in problems of central banking, monetary standards of value, and the foreign exchanges. In addition, the student must be expert in financial organization, in the monetary phases of economic theory, in questions of public finance and taxation, in the theory and phenomena of price movements, and in economic fluctuations and the theory of movements of the so-called business cycle.

Cooperation with Government and Foundations

In addition to these general considerations which would in any case mark the field of finance as one which the Institute should canvass most carefully before deciding upon the direction of its emphasis in economics, I feel I have located a very rich and in many senses unique opportunity which the Institute might grasp, if it is in a position to make its decision now. As this opportunity is still in the realm of an idea with no commitments made on any side, I can best describe it by relating personal experiences in recent weeks..

In accordance with the specific projects outlined in my memorandum of last autumn, all of which incidentally fell in the field of finance, I have been endeavoring to see whether it was possible (1) to agree on the individual scholar best qualified to work on each of the problems, (2) to make arrangements



giving him access to needed materials and facilities, and (3) to detach him long enough from his current responsibilities to permit the execution of the project. To date, the difficulties have revolved largely around the last point. I have found the experts whom I had in mind not only willing but anxious to work on these problems and the institutions affected ready to give ample access to facilities. The granting of a more or less indefinite leave of absence to a key individual in a functioning organization, on the other hand, has presented a stumbling block. With the best cooperation in the world, the fact remains that experts of the type I have had in mind cannot leave their organizations for six months, a year, or two years without placing their positions in real jeopardy. I have not, therefore, felt justified in pushing the projects until this major difficulty could be removed.

This contact work, on the other hand, has suggested the opportunity which forms the occasion for this memorandum. In conferences at the Social Science Research Council, at the Federal Reserve Bank of New York, at the Federal Reserve Board in Washington, and also in discussions with a considerable number of individuals who are intimately concerned with the current confusion and conflicts in monetary and financial theory, it has been urged that the Institute should undertake to provide leadership in organizing a comprehensive attack on the theoretical and factual problems involved. While the various concepts as to what might be gained from such leadership are not at all thought through as yet, and could not be until the project was well under way, I think I can best summarize the common attitude which I have found by drawing an analogy showing the contrast between the state of informed thinking on financial and monetary matters today and that which followed the crisis of 1907.

After 1907, Congress appointed the National Monetary Commission to make an exhaustive investigation of the reasons for the crisis and the weaknesses in our financial structure which it had exposed. This undertaking resulted eventually in a huge series of publications, many of which to be sure made relatively little contribution to our thinking on the problem. At the same time a fairly general agreement was reached as to the causes of the crisis, and as to the main elements of reform in our financial structure that were indicated. This diagnosis, which allayed the silver controversy of 1896 and which resulted eventually in the creation of the Federal reserve system, was not confined to economists; it embraced legislators, financial leaders, and statesmen as well. Without questioning too deeply the correctness or depth of the diagnosis reached, the fact remains that the effort, taken as a whole, constituted a major contribution to the ever recurrent problem of bringing the scholar in the social sciences into effective contact with the real problems of modern social organization.

As compared with the recent world wide crisis, that of 1907 appears unimportant from almost any point of view, yet no comprehensive attempt has yet been launched to evaluate it on anything like the authoritative scale that was then undertaken by the National Monetary Commission. It is this leadership which the Institute is being urged to undertake.

I have talked this proposal over with numerous key individuals who would be involved and so far have found them unanimously enthusiastic and urgent that we proceed immediately, with the single exception of Walter Stewart who was friendly, but did not seem to me to be enthusiastic. At the Social Science Research Council, for example, I was requested to frame up a specific proposal immediately so that they could sound out the possibilities of financing the project. At the Federal Reserve Bank of New York, I was urged to go ahead and promised hearty cooperation in making contacts and obtaining

material. At the Federal Reserve Board in Washington, Dr. Goldenweiser was equally enthusiastic and thought that the Board might welcome the opportunity to cooperate formally in a joint, far-reaching investigation of the financial crisis, detailing its own experts to participate and shouldering the heavy expense that might ensue in the detailed examination of its own records. I have also gone over the general scope of the proposal with Stacy May who has made valuable suggestions as to the best form in which an inquiry of this kind should be set up. To summarize these remarks so far: (1) the need for a comprehensive inquiry of the type contemplated is, I think, almost unquestioned; (2) I have found not only enthusiasm for the inquiry, but also an extraordinary desire to cooperate on the part of those whose cooperation would be most essential, so far as I have been able to sound them out; and (3) I have been urged from many sides to try to persuade the Institute to take the leadership in the undertaking.

This raises, I think, two questions which should be decided before the specific implications of the proposal are examined. (1) Is the Institute the best organization to undertake leadership in this undertaking, or should leadership be stimulated somewhere else? In the latter case, I assume, the Institute would still desire to cooperate and participate on a project as close to its interests and ideals as this. The considerations involved in answering these questions can best be formulated by canvassing alternatives. A project of this kind must be authoritative, disinterested, completely free from suspicion of bias, and command the respect of the community. It requires the complete cooperation of the parties at interest, but should not preferably be directed or controlled by them. This rules out automatically the use of

the aegis of such organizations as the Chamber of Commerce, the American Bankers' Association, and the Stock Exchange. It also militates somewhat against the use of a device such as a Congressional Committee of Inquiry or an inquiry inaugurated wholly and completely by the Federal reserve system. With these sponsors eliminated there remain, (a) the universities, none of which is any better equipped than the Institute and all of which are more committed to other activities, (b) special research foundations such as the Brookings Institution and the National Bureau of Economic Research, and (c) the possibility of organizing a special Institute for the purpose in hand, with special Foundation support. On balance, therefore, it would seem that the Institute for Advanced Study is as well equipped as any other organization to assume leadership for the undertaking.

The second question goes to the heart of our problems here, namely; from the point of view of the Institute for Advanced Study, how does such an undertaking fit? Does it represent a unique opportunity to be grasped, or would it divert the Institute from its true purposes? The answers here, I feel hinge mainly around the question of whether the Institute (1) desires to build up its work in economics, and (2) if so, does it desire to concentrate in finance. If it is in a position to answer these two questions in the affirmative, it has here an opportunity to achieve distinction quickly in its chosen field that is unparalleled.

Method of Procedure

Should the Institute choose to cultivate finance and undertake leadership in this undertaking, it would need to proceed something as follows:-

1. It would need to make provision for-

- a. The appointment in the near future of at least two additional professors of outstanding reputation in the field of finance.
 - b. The appointment later of two or three additional professors and also of assistants as need for a more rounded faculty in finance developed.
 - c. The creation of additional clerical facilities.
 - d. The availability of offices and a certain amount of facilities not only for the resident faculty, but also for workers, visiting professors, technical experts, etc.
 - e. The availability of modest travel and entertainment funds for conferences.
2. With these provisions, which would require a total budget possibly as great as \$50,000 next year and \$100,000 annually thereafter, the Institute would be in a position to create a distinctive school of finance. This school would then assume leadership in formulating a broad inquiry into the causes and phenomena of the financial crisis as indicated above. The inquiry would be set up as a project sponsored by the Institute for Advanced Study, to be carried out disinterestedly in co-operation with all of the agencies and interests affected, and to be financed in part by the Rockefeller Foundation and in part by the official agencies involved. While the Institute would be sponsor and assume leadership, little of the actual investigation would be carried on here. The Institute would represent rather a center of intellectual stimulus. Specific problems to be investigated would be proposed here, their exact formulation agreed upon here after full consultation with scholars and experts from outside, and the results of the investigations as they were carried on would be subjected to constant evaluation and advice from the Institute which would act as the rallying point for disinterested and competent scientific opinion.

To make this suggested procedure effective would require a formal request for the cooperation of the official agencies involved, and a formal request to the Rockefeller Foundation for supplementary financing to enable us to bring into the project experts and interested parties from outside the official agencies and the staff of the Institute. The project, I think, should have a general committee on which experts in the official agencies, the Social Science Research Council, outstanding scholars from other universities, and other parties of interest were represented.

Further specific steps in procedure cannot, of course, be formulated at the present time. As I see it, the project should not be conceived as a specific inquiry to be published some time later in the form of a shelf of volumes. Publication of scientific results obtained will, of course, be required, but the method followed should be that of continuous and searching inquiry. At all steps in the process every effort should be made to engage the interest and obtain the critical help and advice of scholars throughout the field so that the inquiry itself would constitute an educational process in advanced scholarship, and the results would represent a real focus of competent and informed opinion.

In driving toward this goal the Institute would, I believe, become the natural center for advanced work in finance throughout the country. In the process of carrying out the inquiry, which would take at the least five years, all of the leading scholars in finance, both here and abroad, would have been in contact with the Institute, most would have taken extended part in the formulation of problems here and the evaluation of results, and many would have been engaged in working on specific phases of specific investigations. In addition, younger men at the post doctoral level who would be used as assistants throughout, would be afforded an unrivalled opportunity for advanced training in finance.

May 31, 1936

Dear Professor Taussig:

Attached is the review for which you have waited so patiently. I am truly sorry for the delay and feel that on any objective basis of judgment it was inexcusable. Personally, however, I found myself in a situation which was distinctly uncomfortable, for I realized that these volumes failed utterly to provoke in me anything of particular significance to say. As you will see, I have finally made a sort of solution of the problem by building the review around that point.

Please forgive me.

Sincerely yours,

Winfield W. Riefler

Professor F. W. Taussig
The Quarterly Journal of Economics
Harvard University
Cambridge, Massachusetts

THE DILEMMA OF CENTRAL BANKING

- Clark, Lawrence E. - Central Banking Under the Federal Reserve System
The MacMillan Company, 437 pp, \$5.00
- Gregory, T. E. - The Gold Standard and Its Future, (Third Edition)
E. P. Dutton & Co., Inc., 185 pp, \$1.50
- Gayer, Arthur D. - Monetary Policy and Economic Stabilization
The MacMillan Company, 288 pp, 8s/6 net
- Hawtry, R. G. - The Art of Central Banking
Longmans, Green & Company, 464 pp, 18/ net
- Durbin, E. F. M. - The Problem of Credit Policy
Chapman & Hall, Ltd., 267 pp, 1s 6d net

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Here are five volumes dealing with problems of money and of central banking, all written during the "Great Depression". Inevitably, therefore, they are dominated by the complications of that period which witnessed at one time or another the collapse of nearly all of the financial arrangements in terms of which banking theorists have been trained to think. These volumes have not been selected as the five most significant monographs dealing with the crisis, nor as five studies directed toward any particular aspect of the collapse; they have not, in fact, been selected at all. They comprise, rather, a typical reviewer's package of recent publications, all by authors of a high level of competence, including two of the most distinguished scholars in the field. As such, they present a peculiarly baffling problem to the reviewer, for, after one has stated (a) that they are all concerned with central banking and (b) that they have all obviously been stimulated by the repercussions of the financial

collapse, one has very nearly stated all that is common to them. Taken as a whole, they give little sense of dealing with a common range of problems; they neither agree nor supplement each other, nor, on the contrary, do they clash directly. There is absent even the negative virtue of controversy, a clean-cut divergence of analysis leading to a clearer delineation of the problem.

In view of these circumstances, some analysis of these volumes from the point of view of their diversity, some discussion of the considerations which may have compelled these authors to take the differing directions which they do, may furnish the best common ground from which to appraise their work. In a sense, this is the most important as well as the most available point of departure for the critic, for lack of agreement among experts on the subject of central banking has gone far beyond the bounds of desirable and stimulating intellectual controversy. It approaches an intellectual scandal with shocking effects of the gravest import upon the formulation of public policies.

Now, what has been injected into the field of monetary problems, what has been omitted to throw the several contributions out of focus with each other? Why is it that a group of qualified and gifted students, each working to explain a definite segment of a general problem, emerge, not with a mosaic in which their separate contributions serve to delineate the problem as a whole, but rather with a series of more or less isolated fragments, each of which possesses validity within its own logic and in terms of its own premises, but which, taken together, give no sense of logical or coherent treatment and seem to increase rather than diminish the current state of confusion in this important area of human knowledge? To arrive at some

sense of the complexities of this problem, let us take these five contributions individually, as samples of current work on central banking, and attempt to state the point of view or background from which the analysis in each case proceeds.

I. Mr. T. E. Gregory in his latest edition of "The Gold Standard and its Future" again takes up the problem raised by the abandonment of the international gold standard and marshals the evidence to demonstrate the necessity for its early reconstruction. Within the limits of its covers, this volume is at the same time more inviting, compelling and convincing than any other of these five works. Inviting because it charts a course of future action in terms of an economic and monetary analysis which we are all equipped to understand, the analysis, in fact, with which we have all been indoctrinated; compelling because the author has at his command the logic of international trade and of the international gold standard, a logic which has been perfected for over a century by some of the finest scholarship in the field of central banking; convincing because Mr. Gregory himself applies this analysis and this logic to our current difficulties with the touch of the gifted expert, never at a loss for the argument or data needed to clinch a point. That it remains convincing only within its covers, however, is amply illustrated, not only by the current contributions of other students, but also by the apathy with which this whole integrated series of concepts is now treated by leaders in industry, finance and government, abroad as well as here.

II. Mr. Lawrence Clark in "Central Banking under the Federal Reserve System" also writes from the background of orthodox banking theory. He undertakes (1) to trace the growth of central banking functions within the Federal reserve system during the first twenty years of its operations, and (2) to classify these operations according to the extent to which they have exemplified or have diverged from the patterns of growth foreseen by some of the chief banking experts who participated in the drafting of the original legislation. A large body of material is assembled within this restricted framework, but no real attempt is made to focus it either on an evaluation of the performance of the reserve system in terms of the problems which it faced, or on an evaluation of the adequacy of the orthodox concepts in terms of which it was framed.

III. Both of the writers so far described have chosen the more orthodox approach and both have concerned themselves directly with monetary phenomena and their implications. Mr. R. G. Hawtry in "The Art of Central Banking" also develops his concepts largely in terms of the operations of financial institutions, but he is really concerned with the effects of central bank operations upon the flow of income. Using his fine logical mind with the precision of a surgeon handling a scalpel, he dissects the concept of a central bank as the bankers' bank, the lender of last resort to the money market, and emerges with a new concept in which the central bank is described solely in terms of its function as the lender of last resort to the economic system as a whole. Under the compulsion of this concept, the myriad financial institutions of the market place become

almost lay figures performing certain serviceable routine functions in their own right, but important primarily as channels or canals by which the operations of central banks in pumping funds into or out of the market at the center are directly reflected in an augmentation or diminution in the purchases of final consumers at the periphery of the financial and economic process. The central bank, accordingly, has one and only one prime responsibility, namely to maintain a stable outlay by consumers; all of its efforts should and must be directed toward that end.

Now, up to this point the concept is still in focus with or at least can be reconciled with accepted theories and practices of central banking. A sharp divergence arises, however, in Mr. Hawtrey's vigorous corollaries, the most important of which he embodies in the phrase "the inherent instability of credit". Taking this characteristic of credit as established, he necessarily evaluates central bank policy from a point of view which is essentially opportunistic and concerned primarily with short-run phenomena. For if credit is inherently unstable and tends to gather momentum rapidly, there is little place in the application of central banking policy for the inclusion of long-run considerations such as the maintenance of economic or financial equilibrium. It is unnecessary in fact, if not improper, for a central bank to consider the long-run implications of financial tendencies toward disequilibrium until they have expressed themselves in a distortion of consumers outlay. This is the most important and far reaching lesson that emerges from his logic. If one accepts the analysis as complete, he is forced to conclude that the course of central bank policy

should be charted primarily on the basis of day to day developments in order that operations may be initiated promptly to counteract fluctuations in consumers' outlay. It is not sufficient that these operations should have a tendency to counteract such fluctuations. If the policy is to be justified, they must succeed, for only then can the inherent instability of credit be prevented from gathering momentum. The whole problem of central banking policy is focussed, therefore, upon short-run developments alone; the central banker must maintain immediate equilibrium, and, provided that he is successful in doing so, the financial problems with which he otherwise would be concerned are either greatly mitigated or tend to disappear. Of the ability of the central bank to counteract distortions in the consumers' outlay, there can be no question in Mr. Hawtry's analysis, for his major premise rests basically upon the assumption that the central bank is always capable of exerting sufficient pressure to force a contraction in the consumers' outlay and likewise is always in a position to flood consumers with sufficient excess balances to force an increase in their expenditures. Thus, the field of vision of the central banker is narrowed to the current phenomena of the market place; and the correct criteria by which he judges that market are the indexes of wholesale commodity prices and of unemployment.

Such, in brief, is the analysis, developed with penetrating insight and skill. Under^{it}, however, central banking, after having been emancipated from excessive devotion to reserve ratios and raised to an Art, is reduced once more to a Trade, and the position of the central banker is again made analogous, not to that of the navigator who lays out the course,

but rather to that of the helmsman who steers it.

IV. Whereas Mr. Hawtry devotes most of his effort to proving that the significance of central bank operations lies in their repercussions upon the flow of income, Mr. E. F. M. Durbin in "The Problem of Credit Policy" assumes this conclusion almost as a matter of course. His analysis is in focus with Mr. Hawtry's, therefore, to the extent that it also centers upon fluctuations and distortions in consumers' outlay. He labors under no illusions, however, concerning the necessity, in a successful development of policy, of maintaining equilibrium on a long-run basis as well as in terms of the current scene. He is also aware that the policies required to achieve these two objectives simultaneously may involve serious conflict. Devoted, in the first part, to an abstract analysis of the effects of the injection of new money upon the income stream, he comes to the conclusion that a credit policy directed toward the maintenance of a constant money value of consumers' income per head would best meet the various requirements of economic equilibrium involved. The most interesting section of this part of the analysis is that which discusses the possibilities of disequilibrium through profit inflation which are inherent in the commodity price stabilization programs that were so widely advocated in the nineteen-twenties.

The latter half of this stimulating study is devoted to suggestions for the execution of the policies proposed. On the side of diagnosis, rather heavy reliance is placed upon the efficacy of six new and interesting statistical indexes which are proposed as guides to credit policy, a

reliance that is surprising in view of the fact that they are purely hypothetical and have never been constructed or tested for reliability. Three of these indexes would be constructed to measure fluctuations, respectively, in the three major categories according to which Keynes has classified deposits--consumers' balances, industrial accounts, and financial accounts--while the other three would measure debits to these same types of accounts. By interpreting divergent or convergent trends in these six series simultaneously, Mr. Durbin believes it would be possible to maintain a fairly accurate current diagnosis of the major economic strains making for disequilibrium. Now, movements of these indexes would undoubtedly be interesting and might well be decisive in their revelations under certain conditions. Their construction, moreover, presents no insuperable statistical problem. It is extremely doubtful, however, whether they could ever be made to function as the main guides to credit policy. The indexes of debits, for example, would be uncertain at best because of the difficult nature of the delicate seasonal adjustment required and because of the inclusion of many fortuitous and duplicating transactions. They could probably never be read with sufficient precision to indicate shifts in deposits as between the different categories of accounts except in the case of drastic movements where the nature of the phenomena involved would already be apparent from other data. None of the indexes, furthermore, would register shifts within any of the six general categories, shifts which also might have important implications to the maintenance of equilibrium.

Toward the close of his study, Mr. Durbin tackles the same Gordian knot that is absorbing the attention of so many economists in Great Britain, namely, how to use credit policy to achieve and maintain full employment in a system of free enterprise operating under the limitation of rigid costs. By the time he gets through he has not only abandoned the maintenance of foreign exchange parities, and been forced to stretch to the full the possibilities of orthodox central bank open market and discount operations; in addition, he finds it necessary to add several new weapons to the arsenal of control: namely, variations in the quality of bank assets and variations in the Treasury budget designed alternately to inject funds into the market through borrowing and then to reabsorb them through super-taxation.

V. One can comprehend the serenity of Mr. Hawtry's general position in the face of considerations such as are raised by Mr. Gregory, since all his conclusions are based upon the assumption that conscious stabilization of economic activity through central bank action is not difficult of achievement. The slant that Mr. Durbin takes is more interesting in that he holds as tenaciously as Mr. Hawtry to the latter's goal despite great scepticism with regard to the effectiveness of the means of action at hand and full realization that the situation is fraught with possibilities of devastating collapse, if credit policy, in its execution, misreads the current scene and sacrifices long-run economic equilibrium at the altar of short-run prosperity. Deeply concerned as he obviously is with this dilemma, and aware of its implications, he does not, at this

parting of the ways, direct his attention to the requirements necessary for the reestablishment of international equilibrium under the gold standard, but chooses instead to push further into the potentialities of credit control. Something of the same choice is made by Mr. Arthur Gayer in "Monetary Policy and Economic Stabilization". In this excellent analysis of recent monetary controversies, Mr. Gayer first stresses with sympathetic insight the genuine values of the position which Mr. Gregory defends, but notes the impediments which economic nationalism has raised to the adoption of effective policies directed toward these ends. He also examines in detail the claims of the alternate objectives of credit policy now under discussion and indicates the logical difficulties which, in their execution, they must be prepared to surmount. Having come also, then, to much the same parting of the ways as that just noted in the case of Mr. Durbin, he presents a strong defense of the right of peoples, under conditions recently prevailing in this nationalistic world, to ameliorate their condition through the adoption of national policies such as the large scale expansion of public works, even though such policies involve the sacrifice of institutions as important as the gold standard. He is judicious and adept throughout in handling the logical implications of the raging monetary controversies with which he deals, and, in addition, supports and illustrates his judgments with a nice handling of the factual data, especially that covering the prosperity period of the nineteen twenties.

To summarize the five authors briefly: Messrs. Gregory and Clark pursue their analysis in the common and more familiar terminology of actual banking and credit operations. Messrs. Hawtry and Durbin, on the

other hand, are concerned with the stabilization of economic activity, and their interest in central banking is secondary, except as central banks may be made an instrument toward the achievement of this goal. Mr. Gayer, finally, who is attracted by the values in all these differing points of view and is aware of their varying implications, solves their implicit contradictions for himself by defending the right and duty of economists to advocate, and of responsible officials to pursue, unorthodox policies in unusual times.

Now the desire to expand the functions of money is not a new phenomenon in central banking history. There have always been heard the voices of distinguished scholars urging control of the issue of money in one form or another for the purpose of affecting certain social ends that lie somewhat outside of the immediate field of monetary phenomena. What is distinctive about the current scene is that this purpose has finally become part of the frame of reference of most scholars in the subject. Not only must they take it into account, a majority, at least, now feel that they must pursue it. When their analysis shows that any particular line of policy directed toward stabilization leads into difficulties or reaches a complete impasse, they no longer drop the goal as unattainable, but are forced by an inner necessity to invent new approaches to the problem. In short, students in the field of central banking have become sensitive to the demand that the central banks should expand their responsibilities to include the stabilization of economic conditions.

As a result, they now analyze the behavior of central banks from various points of view and criticize their actions, not against a single background of defined and accepted responsibilities and duties, but from the several points of attack that economists are exploring in their efforts to find a clue toward a more stable economic order. As a further result, they judge the same central bank action to be either meritorious or pernicious according to the particular line of reasoning which each is pursuing at any particular time. A specific illustration is afforded by the division of competent experts on the wisdom of the Federal Reserve System's celebrated decision to ease the money market in 1927. ^{Mr.} Hawtry, for example, cites that decision as an exemplification of central bank policy at its best. ^{Mr.} Durbin does not comment upon it specifically, but the logic of his approach lends strong support to the view of those who have criticized it on the ground that it ran directly against the requirements of long-run equilibrium. Now, the experience of 1927 is sufficiently recent to remain vivid and at the same time sufficiently remote to permit a full observation of the consequences of that action. It fell in a period, furthermore, characterized by the collection and organization of basic economic data on a scale never hitherto available. The fact that after nine years it can still be the subject of sharp division among experts, even among experts who are agreed that central banks can and should stabilize business activity, throws into high relief the inadequate nature of present attacks on that problem.

In answer to the first of our two questions, then, "What has been injected into the field of monetary problems to throw the several contributions out of focus with each other?", we may at least say (1) that the

desire to use central banks as a medium for economic stabilization has continued to gather momentum, and (2) that the analytical foundations requisite for the translation of this desire into practice are still far from secure. In addition, however, a certain shift of emphasis has taken place which complicates the problem, a shift that is more difficult to define because the authors themselves do not appear to be fully conscious of its implications. Until fairly recently the possibility of using central bank action as a means toward stabilization was regarded primarily as an addition to the other and older responsibilities of central bankers, and not as a redefinition of those duties. It was still accepted, for example, that maintenance of the currency and of liquidity in the money market was a primary function of central banks, the requirements of which preceded in importance their responsibilities for more general economic stabilization. It was, also, rather generally assumed that the most that could be asked of central banks was that they use their great powers as an influence toward economic stabilization, not that they be responsible for its achievement. In much of the current writing on central banking, however, the powers and activities of central banks are treated primarily as immediate instruments of general stabilization, while their other responsibilities tend to be relegated to a subordinate position.

This shift in emphasis supplies an answer to our second question, "What omissions are responsible for the lack of focus in these works?". Traditionally, students of monetary phenomena have been concerned primarily with the requirements of financial stability and financial equilibrium. They have assumed, moreover, almost as a matter of course, that

a correct appraisal of these requirements constituted in itself a contribution toward economic welfare. In these five works taken as a whole, however, the implications of the recent financial collapse receive relatively little consideration. Taken by itself, the collapse is either neglected, or tends to be treated as a by-product of economic instability, and almost no attention is accorded to the lessons which the experience might be expected to contribute to our knowledge of financial organization.

Now, without financial stability and financial equilibrium there can be no economic stability or economic equilibrium. We have, moreover, in the experience of the last fifteen years, a rich body of laboratory material capable of being used to test our theories and especially adapted to a test of the adequacy of our concepts ^{with regard to} the basic requirements of a functioning financial mechanism. It must be used, however, as a basis for a real testing, for a real evaluation of their relative merits, and not as a body of material in which one can find abundant illustrations to support almost any point of view. The failure to recognize this opportunity and to work this rich mine of experience has had the effect, consequently, of omitting from the picture the very phenomena with which students of monetary problems are most intimately concerned. It has also left relatively untouched the one field of activity which holds the greatest promise of bringing focus and unity into their work.

For the deplorable condition of our financial machinery and the inadequacy of our knowledge ^{of the specific measures requisite} for its improvement constitutes a challenge

to economists throughout the field of monetary problems. There is no school of thought in the entire range of current controversy that does not require as a foundation for the superstructure of its logic the existence of a functioning financial mechanism capable of surviving the strains it may reasonably be expected to experience. That mechanism does not exist today, nor has it existed during any of the periods with which current work in central banking is primarily concerned. The pertinent fact of this period is not that costs were too rigid, or that the parities chosen for currency stabilization were out of line, or that speculation existed, or that economic nationalism was rampant. These, together with many other fundamental maladjustments, were all factors in the situation and contributed their quota to the experience as a whole. They do not account, however, for the appalling depth to which the depression ran. The rate at which the economic mechanism functioned for long periods during the twenties yielded abundant evidence that its capacity was sufficient to withstand strains such as these, uneconomic though they were. The outstanding fact of this depression is that during its course there occurred the collapse at many key points of the financial machinery of the world by means of which trade is sustained between countries, income is translated into consumption, and savings are translated into jobs. The economic distortions that are uppermost in our experience today and the utter stagnation of activity by which they were accompanied, were inextricably bound up with that collapse. In no sense can they be considered as isolated phenomena, existing independently

of their financial counterpart. It is idle, moreover, to treat the financial collapse passively as the result to be expected inevitably to follow from the strains present in the economic situation. Of course, it was "caused" by them in the sense that it occurred under conditions of pressure, and, of course, it was accentuated by the ensuing repercussions. The point is that a financial mechanism capable of performing its function in modern economic society must be capable of withstanding adverse economic conditions, conditions much more severe than those which were present as early in the depression as 1930 when the financial structure first began to crumble. The appearance of hoarding as a significant factor in the American economic situation, for example, dates not from 1932 and 1933 when the depression had reached such depth that bank insolvencies were to be expected, but from the autumn of 1930. In that year also the inability of the mechanism of our capital markets to maintain the flow of investment became apparent, while in the international field serious doubts began to arise with respect to the strength of the gold exchange standard. Now it is true that the world was in the midst of a depression in 1930, and that it was the decline in activity from the levels of 1928 and 1929 which exposed these weaknesses in the financial structure. The actual level of economic activity, however, was still fairly high, and the depression had not progressed anywhere near a point that would justify major cracks in the pillars of an adequate financial structure.

Meanwhile

In the absence both of fundamental reorganization of the financial structure and of an acceptable synthesis of current theories on the relation of central bank operations to economic stability, our central banks are impaled on the horns of a dilemma. For the public has accepted as a fact the thesis promulgated by economists, not only that central banks should, but also that they know how to stabilize business activity, and the quality of their performance will be judged in accordance with these standards. This is a type of responsibility that cannot be argued away, no matter how relevant the considerations adduced, and the officers of central banks in the future, to a much greater extent even than in the past, will be bound to make their decisions in the light of that responsibility.

Mr. R. G. Hautrey

London, England

Dear Mr. Hautrey:

During the past week I have been reading with rather more than ordinary care "The Art of Central Banking", partly, I must confess, as the result of a request from Professor F. W. Taussig that I prepare a broad article covering recent literature in the field of money and banking. In the course of this experience, I have become dissatisfied, more acutely than before, with the general published article or review as an aid to the meeting of minds in our field. The questions raised in my mind by your article "Speculation in Wall Street", particularly, are of the kind which simply cannot be dealt with fairly, objectively, ^{or} and adequately within the scope of an article or review. I am turning, consequently, to the informality of direct correspondence to put myself in touch with your thought.

I was on the staff of the Federal Reserve Board in Washington during the years covered by that article, with the responsibility of preparing a continuing series of analyses of the current situation. The experience remains, in consequence, particularly vivid in my mind, and as I pass from paragraph to paragraph of your article I find myself frequently quickening with pleasure as you analyze some difficult point with just the instruments that seem to me correct and with the distribution of emphasis that corresponds with my own understanding of the period. At other points, when your reading of the situation differs from the one I had at the time, I cannot help wondering whether you had the same facts in mind as I, and whether we can, in the light of subsequent events, now paint a clearer picture of the whole experience.

As a specific case in point, you have in the background of your mind, I feel, a general appraisal of the year 1929 as one in which the industrial situation was fairly sound or at least not so unbalanced as to be a cause for special apprehension apart from the stock market and the credit situation. In this position,

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I am sure, you are in substantial agreement with the great majority of competent American observers at that time. Now, it happens that my own feeling about the situation was quite different. I had a host of apprehensions, especially over the building situation, the foreign situation, and the extent to which the relatively high rate of business activity reflected an unstable equilibrium on which a high rate of consumption was based on the utilization of income arising out of ~~the~~ stock market profits.

I cannot possibly go into detail in this letter to indicate the wide range of factual background upon which this judgment was based any more than you could indicate, within the scope of your article, the background upon which you arrived at your judgment concerning the total industrial situation in the United States in 1929. I would like to go into considerable detail, however, in the case of the automobile industry. I choose this industry ^{not only} partly because I ^{would really} ~~am not certain~~ *like a clean picture of how you analyzed it then I can get from your article, but also* ~~of how you regarded it when you prepared your article,~~ partly because of its basic importance in expressing the tempo of American business, and ~~partly~~ because it is ^{now available} the one really major industry in which we have ~~built up~~ a fairly wide coverage of facts. If you have the time and the inclination to do so, I would appreciate a word from you on your reading of the situation in this industry in 1929, not as you saw it then or as you saw it when you wrote your article, but as you see it now in the light of all the available data, both that which I shall cover in this letter and that which I may have missed or neglected.

Specifically, your article notes that the main decline in industrial production in 1929 prior to the stock market break was concentrated in the building and motor industries. Although I have not looked into this phase of the subject recently, I am inclined to agree on this point, having written something to the same effect in, I believe, the review of the month of the Federal Reserve Bulletin for November 1929. In a different section of the article, however, you make the

parallel point that the stock market broke in the autumn of 1929 because the preceding period of high money rates had impaired the prosperity which had given rise to development of an excessive amount of speculation in common stocks. The article is not explicit, however, on the relation of the motor industry to these movements and permits the inference that the decline in motor car production during the summer of 1929 reflected a decline in consumer purchases of motor cars due to a restriction of consumer incomes, caused by the existence of high money rates. It is to ascertain whether you had this particular inference in the back of your mind or not that gives occasion to this letter. If you did, I would appreciate your drawing of the situation as you ^{see} ~~saw~~ it.

I have arranged the relevant data on the motor industry in the accompanying table and charts to show, first, the total volume of activity in this industry in 1929, and, second, the distribution of this activity as between the various months of the year. The data seems to indicate:

A. That total new motor car purchases by domestic consumers in 1929 as a whole, including the low fourth quarter after the collapse in Wall Street, averaged very large, _____ per cent in excess of 1928 and _____ per cent in excess of the annual average during the period 1923-1928, when total new automobile purchases by consumers were making a sort of plateau, indicating that the industry was approaching a saturation point. We do not have the data to split exports of American motor cars, so as to indicate the month to month rate of purchasing by foreign consumers as distinguished from exports to build up the inventories of foreign dealers. The aggregate of motor exports in 1929, however, was also very large, _____ per cent in excess of 1928 and _____ per cent in excess of the average for the years 1923-1928.

B. That the sharp decline in sales of automobiles to consumers in 1929 took place in the month of _____ rather than the month of _____. This would seem to indicate that this drop reflected the drastic collapse in stock

market prices rather than a pressure on consumers' incomes arising out of credit restriction.

C. That production of motor cars in 1929 expanded by an even greater margin than sales to consumers, for the year as a whole, by _____ per cent as compared with 1928 and _____ per cent as compared with the average of 1923-1928. This increase, which was reflected in an expansion of dealers' inventories, was particularly marked during the first six months of the year, when production exceeded the corresponding months of 1928 by _____ per cent, and of the years 1923-1928 by _____ per cent.

D. That in consequence of these facts the sharp decline in automobiles between July and October 1929 reflected primarily an excessive rate of output during the first half of the year rather than a decrease in consumers' demand, which in fact continued at the highest levels in the history of the industry.

The life history of the situation, of course is only partly revealed in this summary. To paint the picture correctly requires a host of impressions, largely of a qualitative rather than a quantitative character. In so far as I have been able to gather them, however, these additional details do not seriously qualify the main outline of the picture indicated above. The three following examples, which come to my mind as I write, will indicate what I mean.

I. In the summer of 1929 we heard rumors that motor manufacturers had seriously over-sold their foreign representatives and that no new orders were being placed from abroad. It may be that a drop in consumer purchases abroad, reflecting the first stages of the coming depression, played its part in this decline. Inasmuch as actual shipments abroad, however - presumably on old orders - continued at a high rate during the summer of 1929, I do not see how this development can be used to explain the decline in motor output in this country at that time, whatever its implications may have been with regard to future activity. Taking a different

approach, it might be argued that the effect of this decline in the export market upon prospective activity and profits was an important factor in the profit outlook for the industry and might presumably account in part for the subsequent drop in the prices of motor equities. If it had been such a factor, however, I would have expected it to work out in the unloading of stock equities by insiders during the summer of 1929, whereas one very important distinguishing feature of the 1929 market collapse, so far as I can judge, was the fact that insiders were not, in the main, aware of the impending turn and had not unloaded their holdings upon the public. So far as I can judge, therefore, the drop in the foreign market for motors, although a fact of primary importance in the real outlook, did not bulk large in 1929, either in the decline in actual motor output during the summer or in the special market position of motor equities preceding the stock market break.

II. There were also certain peculiarities in the internal sales position of the industry which must be considered before an adequate picture of the whole situation can be developed. Among these, the prevalence of installment selling has probably attracted most attention. The attached memorandum shows that a very large proportion, namely _____ per cent of total sales to domestic consumers in 1929 were financed on an installment basis, as compared with _____ per cent in 1928 and _____ per cent on the average for the years 1923-1928. This does not seem to me to have been an unsettling factor prior to the stock market break, however, but rather a factor which might be expected to accentuate a decrease in consumer purchases during any subsequent period when business might decline.

Though it has received less attention, I have personally always felt that the stock market itself constituted an important element in consumer demand in 1928 and 1929, particularly for motors. It is impossible to measure satisfactorily the extent to which the increase in consumers' purchases of motors in 1929 reflected semi-luxury expenditures by consumers in command of non-recurrent

or unstable income dependent upon a continuation of a boiling securities market. The volume of purchases of cars by individuals in receipt of stock market profits, however, was obviously large and was augmented to a certain extent by the purchases of individuals, such as brokers, customers' men, stock salesmen, etc., whose income depended indirectly upon the continuance of an extremely active market. Granting, however, that the presence of this source of buying may have represented a serious potential threat to a continuance of the exceptionally high rate of activity in the motor industry, there was no reason whatever for this potential threat to be translated into an actual decline in consumers' buying prior to the break in security prices. It cannot, therefore, explain the decline in activity during the third quarter of the year.

III. The financial losses experienced by automobile dealers in a year of exceptionally active sales certainly seems at first glance to point in the opposite direction. As 1929 drew to a close it became increasingly apparent that the industry was faced with a seriously impaired position on the part of automobile dealers. Not only were dealers burdened with an over-large inventory of new cars; in addition, it appeared that their inventories of used cars taken in partial exchange for new cars had been allowed to accumulate at an alarming rate. Finally, it was ascertained that dealers' earnings were also seriously impaired because, in their attempt to market their quotas of new cars, they had resorted to a concealed form of price cutting through the device of allowing excessive valuations on used cars acquired as trade-ins. Considered alone, this type of marketing difficulty would seem to point towards an interpretation of 1929 as a year in which consumer purchasing power was impaired, due possibly to credit stringency. When the development is considered in the light of all of the facts in the situation, however, especially with reference to the fact that actual consumer demand reached new high levels prior to the stock market break, this interpretation appears to me to lose force.

My own final interpretation of the whole series of developments, consequently, would be something as follows:

1. Consumer demand for cars prior to the stock market break in 1929, though based in part upon unstable factors, was large and showed a considerable increase over what might normally have been expected in an ordinary year.

2. Large as it was, however, it was seriously over-estimated both by the more important motor producers and by their dealers, with the consequence that dealers' inventories reached abnormal proportions by the middle of the year.

3. In their effort to adjust the situation, dealers resorted to concealed price cutting in the form of increased trade allowances for used cars, while manufacturers cut production schedules heavily beginning in July.

4. This reduction in motor output constituted an important factor in the general decline in industrial production during the third quarter of the year preceding the stock market break, and to the extent that this decline was reflected in unemployment and a cut in consumers' income, presumably had some effect upon the market for automobiles - probably more on the market for used cars than new cars.

5. New car sales remained high until September, sustained (a) by the relatively high, though falling, rate of general business activity, (b) by the widespread use of installment selling, (c) by the continued release of funds to consumers through stock market activities, and (d) by the highly favorable allowances available on used cars.

6. These developments checked for the time the increase in dealers' inventories of new cars but did not correct their inventory position with respect to used cars, which continued to accumulate.

7. During the last quarter of the year following the stock market collapse, both the increase in unemployment and the drastic absorption of consumers' balances in response to margin calls from security brokers were reflected in a

a sharp decline in motor sales, with the result that dealers' inventories, both of new and used cars, remained seriously high despite an increasingly rapid curtailment in the output of new cars.

8. During 1930, consumers' purchases of new cars were sharply lower than in 1929, reflecting the deepening business depression and unemployment as well as the absence of special support derived from stock exchange activities which had characterized the first three quarters of the preceding year. As compared with years prior to 1929, however, consumers' demand made a somewhat more favorable showing , being _____ per cent of 1928 and _____ per cent of the average during the years 1923-1928.

9. This showing, though somewhat more favorable than the comparison with 1929, did not contribute a corresponding degree of support to basic industrial activity, however, due to the fact that _____ per cent of these sales were not supplied out of new production but instead from inventories accumulated by dealers in 1929.

I realize that this analysis is long and may possibly bore you beyond measure. I hope that it does not, that it may possibly add at places to the background of your analysis, and that you will welcome it for that reason. Personally, I have become acutely conscious in recent years of the necessity for a more informed and continuous exchange of impressions between the scattered handfuls of students who are seriously engaged in the art of interpreting current phenomena from the point of view of central banking theory. Now that I am free from official inhibitions, it is my purpose to try to establish some of those contacts through correspondence such as this. Please don't feel obliged to reply or consider this letter at all unless you like the undertaking and unless the spirit in which it is offered is welcome to you and impels a response. If you do care to exchange your thoughts informally I will be glad to undertake to uphold my end of the correspondence.

Sincerely,

File copy

W. A. Riefler
Memo prepared for
the League of
Nations in 1930

MEDIUM TERM CREDIT
IN THE UNITED STATES

The adequacy or inadequacy of existing financial arrangements for meeting the medium term credit needs of large industrial borrowers has never arisen in the United States in acute form. These borrowers are sufficiently important to have access to the large private banking houses, to the open security markets, and to the large commercial banks in the financial centers. They are in a position, therefore, to finance their medium term credit needs either on direct loans from the large private banks or the large commercial banks, or by selling notes in the capital market, (provided the issue is of sufficient size to justify the expense of underwriting). As such firms also frequently maintain regular banking connections with a considerable number of the larger banks in the smaller financial centers, they are also in a position to shift short term loans from bank to bank and thus meet their medium term credit needs without any individual commitments running longer than the customary credit term. Except for periods of genuine credit stringency, therefore, or periods when the capital markets have been relatively closed to new financing, these larger industrial borrowers have not been particularly conscious of a need for more adequate facilities for the financing of medium term credit needs.

The farmer and smaller industrial entrepreneur, on the other hand, are not in a position to use the open capital market and have historically relied mainly on their local unit bank for financing of their medium term credit needs, the loan sometimes being secured by a short term mortgage on their real property assets, (a demand mortgage or a mortgage running for 1, 3, or 5 years), and sometimes taking the form of a short term promissory note (90

days to 6 months). These notes were frequently unsecured, but it was not unusual in the case of small incorporated industrial concerns for securities of the firm to be hypothecated as collateral. Frequently the notes also were secured by the personal endorsement of local individuals of wealth who were personally interested in the borrowing enterprise. Although the term of these notes was short -- 90 days to 6 months -- it was the expectation of both borrower and lender that they would be renewed on maturity.

These arrangements left much to be desired from the point of view of sound credit procedures, but, during periods characterized by relative economic security, they did have the effect of providing an efficient and flexible mechanism for intermediate or medium term credit advances to borrowers of moderate means. The local unit bank was thoroughly integrated in the life of its community both as to management and ownership, and the operations of potential borrowers for intermediate term credit were intimately known to the directorate, which in fact was frequently directly interested in the ventures being financed. Assuming honest management, the local unit bank, therefore, was uniquely situated to pass judgment on the legitimate medium term credit needs of these types of borrowers.

The glaring inadequacy of these procedures became equally apparent with the advent of the serious credit strains which have accompanied recent depressions. The most publicized defect, of course, was the appearance, in a fairly large number of cases, of situations where the local bank was weakened by over-extensions of credit to borrowers directly or indirectly affiliated with the management of the bank. Eliminating these situations, the almost complete absence of liquidity in medium term credit of this type proved to be highly

embarrassing elements in bank portfolios during periods of drain. After banks subject to drains through the clearings had exhausted their liquid open market assets, they found their medium term local loans completely unsuited either for hypothecation or realization. From the point of view of hypothecation they found that potential outside lenders, unfamiliar with local conditions, were usually unable to form any considered judgment on the worth of local loans to local concerns, the value of which depended neither on the ability of the concern to finance payrolls and purchase materials to meet orders on hand, nor on the orderly liquidation of stocks of merchandise, but rather on such intangible factors as potential opportunities for expansion, management, and the ability of that management to adjust to changing future conditions. When hypothecated, therefore, even the better of these loans were marked down at extremely heavy discounts. It was equally found that realization on these loans, in times of crisis, was difficult if not impossible. Their value, irrespective of whether they were secured or unsecured, rested essentially upon the operations of the borrowers as going concerns. In case attempt was made to take possession and to realize on the security, they were found to have little immediate value. In the cases of farm mortgages this was due to the general agricultural depression; in the case of mortgages upon small industrial properties, because of the special purpose value of the physical assets underlying the mortgage; and in the case of pledged securities, because these securities, representing stock in small local concerns, were essentially unmarketable.

The attempt to realize on small industrial medium term loans, moreover, had other repercussions which, though less publicized, exerted strong tendencies toward accentuating the depression. Although essentially medium term loans, contracted to finance medium term operations, they were written, as noted above, in the form of short term loans with the expectation on the part

of both borrower and lender that they would be renewed at maturity. During periods of stability this practice appears to have operated in the direction of conservative finance, in that the lending bank, though expected to renew the loan, was not legally obligated to do so and was in a position in consequence to exert continued pressure on the borrower in the interest of conservative financial operations. During the crisis, on the other hand, this practice proved definitely deleterious. Banks in straitened circumstances and particularly closed banks in the hands of receivers, were reluctant to renew these loans and brought heavy pressure to bear looking toward their repayment as they fell legally due. The result was that small entrepreneurial borrowers found themselves pressed for repayment of commitments long before the industrial operations, which had originally constituted the occasion for borrowing, were matured. They were forced, in consequence, to make heavy sacrifices at a most inopportune time, a phenomenon which has had persistent after effects in a dampening of the spirit of enterprise and an accentuation of the tendency toward the maintenance of an exceptionally high degree of liquidity among industrial firms.

These phenomena constitute the background for the problem of medium term credit facilities for agricultural and small entrepreneurial borrowers as it appears in the United States today. The problem, itself, first became acute in the case of agricultural borrowers during the agricultural crisis of 1920-1923. At that time the sudden collapse of prices for farm products, coming at a time when farmers as a group were heavily overextended, resulted in a wave of failures among small unit banks in predominantly agricultural communities. Lax standards in extending credits and overchartering of banks, frequently on insufficient capital, constituted the major factors in this collapse.

but as the debris was cleared away three things became apparent, one, that agricultural producers could make relatively little use of genuine short term loans, -- their production cycle was longer than industry and required correspondingly longer/loan commitments; two, that much of the short term paper in banks specializing in loans to agricultural producers was in reality intermediate credit paper in that it was expected as a matter of course by both borrower and lender that the loan would be renewed on maturity; and three, that failures were exceptionally high among those banks which specialized in these loans. Recognition of this situation led to the first organized attempt in this country to meet directly the legitimate needs of agricultural borrowers for intermediate credit in a form which would not collapse during a crisis and leave both the local unit bank and the borrowing farmer in an impossibly weakened position. In the plan adopted at that time, the banking laws were amended to permit banks openly to make, and the Federal reserve banks to rediscount, agricultural paper of longer than 90 days maturity. Provision was also made by the Federal government for the organization of intermediate credit banks to serve agricultural borrowers, such banks to have access to the open market for the sale of debentures to obtain funds with which to finance their operations. These measures were enacted into law in 1923.

Admirable as was the diagnosis of the problem facing both farmers and unit banks located in agricultural communities at that time, the intermediate credit banks provided for found little opportunity to function during the immediately ensuing years. This was due largely to simultaneous developments in the farm mortgage field which had the effect, temporarily, of diverting the most pressing needs for intermediate agricultural loans into the mortgage market.

Prior to the crisis of 1920-23, the Federal government had made provision for a more adequate system of long term agricultural mortgage credit through the organisation of the Federal land banks and joint stock/land banks, but due to certain impediments, largely legal in character, these institutions had not been in a position to function effectively until after the post-war crisis had made its appearance. At that time, however, they entered into operation and made available non-local funds for long-term agricultural mortgage loans at interest rates and on terms more favorable than had previously prevailed. At the same time, the larger insurance companies in search of outlets for an expanded volume of investment funds adopted the policy of increasing their farm mortgage loans. Under the impetus of these forces farmers made little use of the new system of intermediate credit banks. They preferred, on the whole, to consolidate their debts into long term mortgages contracted with non-local lenders. As a result they were able to pay off their local banks out of non-local funds without recourse to the new intermediate credit facilities.

Specific requirements for agricultural medium term credit played a smaller part in the more recent crisis of 1930-34. That crisis was so severe and reduced the net income of so many farmers to negative figures that all forms of agricultural credit provided by private lenders collapsed under the strain. The situation was so serious that it required direct intervention on the part of the Federal government armed with direct access to the Federal credit to restore an orderly functioning to the market. As early as 1930, failures were widespread among banks located in agricultural regions and credit curtailment in force in many banks which remained open. By 1931, all types of institutions dealing with farm mortgages were having difficulty and new mortgage money was difficult to obtain. Under these circumstances, the Federal government through the Farm Board, the

Farm Loan Board, and the Reconstruction Finance Corporation at first organized a variety of emergency institutions to alleviate different types of agricultural credit stringency, and later, in 1933, organized the Farm Credit Administration to make a fundamental attack upon the whole problem of agricultural credit. This organization backed by direct access to Federal funds took direction over all of the different federally sponsored institutions dealing with agricultural credit and reorganized them into a coordinated system of agricultural lending institutions capable of meeting all types of needs for agricultural loans.

Since 1933, therefore, the problem of medium term loans in the United States has narrowed down largely to loans for small industrial entrepreneurs. Coincident with the financial and industrial crisis of 1930-34, local banks, as noted above, found themselves embarrassed by their possession of such loans and small industrial borrowers on their part found renewals of loans of this character more difficult to negotiate and new loans much more difficult to obtain. Since the crisis of 1933, this situation has been alleviated somewhat by a return on the part of many individual banks to their traditional lending practices with respect to credit demands originating in the medium term loan needs of small industrial borrowers. By and large, however, a void has been created in our financial facilities which has not as yet been successfully filled. It has been created, first, because the more conservative local banking institutions, i.e., those which were most liquid during the crisis and were least involved in loans of medium term character, have on the whole shown by far the greater tendency to survive, and second, because bankers in general are loathe to recommit themselves heavily in types of loans which brought them the greatest difficulties during the crisis.

A further factor of considerable magnitude has also operated

during recent years, namely, a breakdown in the whole network of local financial relationship upon which the successful advance of medium term funds to local entrepreneurial borrowers was formerly based. The small local entrepreneurial borrower is not likely to be in a position to meet readily objective standards for medium term lending. If he is to represent a good credit risk over a medium term period, it is preferable that he should be expanding. If he is expanding, however, he is probably short of capital, his equity in the enterprises is somewhat extended, and his tangible assets are more likely than not to consist of special-purpose plant and equipment that would be of negligible value on an auction basis. The real basis of medium term credit in such cases rests on the personal financial strength of the backers of the enterprise as well as on the lender's judgment of its potential possibilities and the quality of its management. Prior to the crisis, when the bank was owned and operated by the most substantial citizens of the community, it was more than likely that the bank would have among its own stockholders the responsible backers of those local industrial enterprises that were most in need of medium term credit for expansion. To a certain extent, therefore, the ultimate cushion of risk both for the bank and the local industrial enterprises went back to the same group of leading local interests. During the crisis this cushion of risk became seriously impaired for bank stockholders and directors in general were compelled by circumstances to draw very heavily on their private resources, first, to make good assessments on their bank stock in desperate efforts to maintain the solvency of their banks, and later to make good on the double liability which at that time was attached to holders of bank stocks. After the crisis, therefore, the losses which these local interests had sustained as stockholders and responsible directors in the

various local banks were frequently sufficiently large to impair the value of their endorsement on the notes of the local enterprises in which they were interested. In other words, the community of interest and of financial responsibility that had previously given great strength to the local unitary banking system that prevailed in this country was completely wrecked in many communities by the banking crisis itself. As a result, the banking crisis in and of itself, seriously impaired the financial standing of those groups in each local community upon whose credit the soundness of local medium term industrial advances had formerly been based, and local enterprises that had once represented favorable medium term credit risks were no longer in a position to qualify for such advances.

Several attempts have been made to narrow the void in previously existing credit facilities thus created. Large national manufacturing concerns, such as the automobile companies, have in some cases organized themselves to make available medium term credit facilities to their local dealers. The installment finance companies also, in some cases, have entered the business of financing purchases of industrial equipment on an installment basis. The most ambitious attempts to fill the void, however, have been made by the Federal government. As early as 1932, the appearance of credit stringency in various localities at a time when the national money market was quite liquid led the Federal reserve banks to seek and to obtain permission to make commercial loans directly to industrial and commercial borrowers. They were able to conclude only a small volume of these loans, however, since very few of the applicants ^{or} were able to meet the high standards for commercial/industrial advances that had been written into the law. By 1934, it was becoming generally recognized that such credit

stringency as existed was not due to the unavailability of credit for needs that met acknowledged credit standards, but rather to the unwillingness of banks to continue to make borderline loans. In that year, consequently, the law was amended to permit both the Federal reserve banks and the Reconstruction Finance Corporation to make industrial loans on quite liberal terms as to maturity, interest charges and collateral, provided that they conformed to the test of possessing full and adequate security. Both institutions received a relatively large number of applications as a result of these amendments to the law, but again found only a relatively small number that could meet the standards established. Recently the Reconstruction Finance Corporation has been able to make a somewhat larger volume of advances of this kind by adopting the definition that such advances need have only reasonable security.^{1/} Meanwhile, several attempts have been made to encourage the commercial banks to relax the more rigid credit procedure which they had adopted as a result of the crisis. In 1935, the banking laws were amended to permit the Federal reserve banks to rediscount, under certain conditions, all types of paper presented by their members provided this paper met the test of soundness. More recently examination procedures have been revised to distinguish more sharply between "slow" assets and "doubtful" assets in the portfolios of banks. As a result a bank can now make a medium term credit loan as such and still meet examination requirements and also be in a position to rediscount this paper with its Federal reserve bank, provided always that the paper qualifies with respect to assurances for its ultimate repayment.

^{1/} In 1935 and 1936 the Federal Housing Administration in its efforts to restore activity to the construction trades, undertook to insure lenders against losses on installment loans contracted for the purpose of modernizing real properties. Certain categories of these loans, i.e., those made available to commercial and industrial concerns for the modernization of their real property, met needs that might ordinarily have been classed as medium term credit demands.

Although it is too early to state what the ultimate effects of these measures may be, it is my personal judgment that they have approached, but have not yet reached, the core of the financial problem posed by demands for medium term credits. I do believe, on the other hand, that we are now in a position to define much more definitely what we mean by the problem of medium term credits and to state some, at least, of the requirements which a solution of that problem must meet. The main lessons which we have learned from our experience can be itemized as follows:

A. The term "medium term credit" is much too vague. It must be broken down by categories of borrowers and by types of financial aid required. From the point of view of categories of borrowers, there is likely to be no problem of medium term credit as such with respect to large borrowers. If such borrowers have access to open capital markets where they can sell their securities and to large banking institutions for financing their ordinary credit needs, these sources of funds taken together habitually afford sufficiently flexible financial facilities to meet all needs for medium term credit as such. If large potential borrowers do not have access to open capital markets or to large banking institutions, they are faced with a general problem of lack of financial facilities, of which the need for specific medium term credit facilities would constitute only a minor part.

It is likewise confusing to deal with agricultural needs for medium term credit separately from general agricultural credit requirements. The basic conditions under which agriculture functions vary so basically from those characteristic of commerce and industry, that they require a completely separate approach with respect to sound and adequate financial facilities. For example,

institutions specializing in industrial lending, either on short term, medium term, or long term, do not gain from that experience wisdom in the granting or withholding of their respective types of credit to agricultural producers. Institutions specializing in agricultural credit as such, on the other hand, are much better situated to deal with all types of credit needed by agricultural producers.

Finally, the phrase "medium term credit" as customarily used does not refer to the medium term credit needs of individuals or consumers, though these needs are widely existent, e.g., installment credit needs, and needs for credit to repair and modernize homes. The real area covered by the general phrase medium term credit, when this phrase is used to define a current problem, usually narrows down to the provision of facilities for medium term financing to small and local industrial and commercial entrepreneurs.

B. These needs have long existed and have had access to funds in the past. They have not, however, been recognized openly nor have they had access to sources of funds organized for the purpose of meeting the specific and peculiar requirements of medium term financing. Instead, these loans have been concealed in the form of mortgage loans or in the form of short term industrial and commercial loans. Such practices are definitely deleterious from the point of view of economic stability, deleterious both to the lender and the borrower: to the lender because loans of this character do not conform to the standards of, nor afford the security expected in, mortgage loans or short term commercial and industrial loans; to the borrower because at times of economic pressure, when in any case the hazards of successful management are high, there may be added to these hazards pressure to repay outstanding financial debts at a time and in

a period that bears no relation to the original purpose of the commitment. If an advance of medium term credit to a small industrial borrower is justified, it is justified by the fact that he proposes to use the funds productively in an operation which will require a medium term period -- 2 years, 5 years, possibly 8 years -- to justify its extension, i.e., to liquify the original loan with interest and with profit. There is ordinarily no time within that period when the loan can be called without embarrassment to the borrower nor without undermining the original operation upon which the advance of the funds was justified. It is a matter of prime importance, therefore, that when credits for medium term purposes are advanced, they should openly take the form of medium term credits with terms for amortization or repayment conforming to the expected liquidation of the operation which the funds were originally advanced to finance. By this means the portfolio of the lending institution is made to reflect the genuine character of the assets upon which its solvency is based, and the economic system as a whole is protected against wholly unnecessary accentuation of the strains that are inherent in the cyclical fluctuations of business movements.

C. There is a genuine economic and social justification for creating facilities to make medium term funds available to small entrepreneurial applicants. Current opinion is uncertain and in a state of flux with respect to many of the problems of large as compared with small industry. It is weighing the advantages of mass production against the growth of practices that appear monopolistic; the advantages of highly specialized, centralized controls as compared with the flexibility of decentralized operations; the effects on our population of the growth of large, highly congested urban areas. It is significant that in the heat of this debate there is no important body of opinion that

advocates the dissolution of small industries. It is generally recognized, rather, that the continued existence of a fair proportion of small industrial organizations is necessary to the economic health of a free economy. There are, for example, distinct social advantages in maintaining open the spirit of individualism and enterprise that are characteristically associated with small entrepreneurial concerns; there are also many localities and areas in the modern economic world that can only be organized efficiently by the small entrepreneur, i.e., areas of resources and demand that require for their successful organization the detailed and intimate knowledge of local conditions which only the small entrepreneur can furnish. We cannot forget, finally, that the industry which is outstanding above all others in the world today in the efficiency with which it has adapted productive resources to human needs, the automobile industry, was developed entirely by small entrepreneurs. It is important, therefore, from the point of view of public policy, to make sure that the evolution of our financial mechanism in the direction of more specialized procedures and more soundly organized mechanisms does not also have as an unforeseen by-product the result of withdrawing from the small entrepreneur a source of financial accommodation which is necessary to his survival.

D. The establishment of credit procedures calculated to minimize risk in medium term loans to small entrepreneurs is attended by unusual difficulties. In fact, the specific relevant considerations attending each loan application are so various and differ so widely from one applicant to another as to make any routinized procedure hazardous and essentially inapplicable. For example, these loans are not comparable to commercial loans to finance receivables or goods in transit, or stocks of merchandise awaiting sale, nor to industrial loans to finance payrolls and purchases of raw materials needed to make up goods to meet

orders already on hand. They do not, in general, therefore, fall into categories where their validity can be justified by quick reference to easily ascertainable facts and their repayment more or less guaranteed by insistence upon definite documentary assignments. On the contrary, in the majority of cases, these applications are for loans that are essentially loans of capital. Very often in fact it would be improper to grant these applications in the form of loans at all, in as much as the need of the enterprise is rather for equity capital, or at the least for an increase in its equity capital coincident with and supplementary to the borrowing of medium term funds. This means that the institutions advancing medium term funds must be in a position to make a balanced judgment concerning all of the imponderable factors that in the end will determine the profitability to the borrower of the proposed advance. In other words, the institution advancing medium term funds to small borrowers should actually be as careful and meticulous in ^{its} procedures as the investment banker who undertakes to underwrite an issue of securities for flotation in the capital markets. It should also be in a position to form a judgment on the same range of elements of risk. Unfortunately, however, the average size of medium term credit loans is simply too small to justify the expense of this type of meticulous investigation. At the same time these loans are too large, and the loss involved in any one default would be too great, to justify the lender in resorting to more routinised procedures such as are successfully used to minimise risk in the case of personal loans, installment loans, and mortgage loans on homes.

It is for these reasons that in American experience the local unit bank has been in a better position to pass judgment on medium term advances to small industries than other potentially competing financial institutions. The local

unit bank simply did not have to make an extended investigation of a local applicant for a medium term advance because it was already, as a matter of course, in intimate touch with his business. It is for this reason also that non-local lenders have been relatively unsuccessful in filling the void left in recent years by the partial withdrawal of the local bank from this field. Outside private lenders who have experimented with these loans report that the expenses of preliminary investigation and also of following up the loan after it has been made are frequently prohibitive, unless, as in the case of automobile companies that finance their local dealers, the outside lender is already in a position because of other contacts to be intimately in touch with the borrowing enterprise.

E. The fact that the real needs for medium term advances on the part of small entrepreneurial borrowers usually correspond more closely to needs for advances of capital than advances of credit and frequently border on a need for equity capital, leads to four further major conclusions with respect to the type of financial organization which could most properly specialize in advancing funds to meet this need.

First, it is an extremely difficult field for direct governmental advances. Experience has shown that governmental financial institutions can supplant private lending agencies with a considerable degree of success in the case of advances which are adapted to routinized credit procedures. In these cases the government can protect itself and its operating personnel against corruption and undue pressure for advances by applicants possessing political influence through the adoption of centralized controls and the promulgation of definite credit standards which all applications must meet. In the case of advances of

a capital nature, however, i.e., advances which frequently border on equity funds, the adoption of definite credit standards centrally established frequently has the effect of eliminating automatically a great portion of those applications which constitute the main need for this type of advance. The experience of the Federal reserve banks and the Reconstruction Finance Corporation with industrial loans in this country has amply demonstrated this point. Both institutions found that the great majority of the applications simply did not provide that type of security or the relative certainty of favorable outcome which a conscientious civil servant desires and needs if he is to be in a position to justify the impersonal nature of his decision to advance funds. The great majority of the applications, rather, were of a type which ideally needed consideration by private lending a/ institution that would be risking its own funds and its own capital on the outcome of the advances which it granted.

Second, a financial institution specializing in advances of this character should not be confined to the loan of funds. Provision should also be frankly made for the advancing of equity capital, that is, the purchase of common stock in the enterprise desiring additional financing. Such purchase might be made as an alternative to a loan, or as supplementary to it. In this way, the borrowing enterprise would be protected against over-extension of its equity and the institution advancing medium term funds would be in a better position to average its gains against its losses.

Third, the lending institution advancing medium term funds should have a capital ratio higher than customarily prevails among banking institutions in the United States. At present in this country, commercial banks endeavor to maintain a ratio of capital equal to at least 10 per cent of their deposit liabilities

Ratios as low as these are safe when the assets of the lending institution are closely guarded against risk. A moderately high degree of risk, however, is almost inevitable in the case of institutions advancing medium term funds, if these institutions are really to serve the need that exists among small enterprises. To make such lending sound, therefore, the lending institution should protect itself by maintaining a higher capital ratio, say, between 25 and 40 per cent.

Finally, any mechanism created to meet the need for medium term advances to small enterprises should have access for part of its resources at least to non-local sources of funds. It should be able to obtain funds to finance its operations by, for example, the sale of its debentures either to outside banks or in the capital markets. This is necessary for a variety of reasons, (a) to avoid the necessity of relying upon funds as unsuited to medium term advances as those represented by local deposit accounts, (b) to have access to cheaper sources of medium term funds than is customary in expanding communities that are relatively deficient in savings, and (c) to avoid a general freezing of credit in periods of industrial stagnation when a particular locality as a whole may be under severe pressure and subject to serious drains through the exchanges.

Conclusion

These five main heads summarize most of our experience with this problem to date. As I have indicated above, I do not believe that we have solved it as yet in the United States. Our traditional approach, through the use of the local unit bank, had the advantage that that bank was in a prime position to judge quickly and without undue investigation the legitimacy of a given credit application. It could also follow the subsequent fortunes of the borrowing enterprise

without undue effort. Because of the fact that its own stockholders, with their double liability, were also likely to be personally interested in the fortunes of the borrowing concern, it conformed in an indirect and concealed fashion to many of the equity requirements noted above, i.e., losses on these capital loans many of which bordered on equity commitments, were balanced in a sense by equity gains on successful loans, not gains openly and legally to the banks as such, but effective none the less because they accrued to the stockholders back of the bank. The weaknesses of this system, however, were equally apparent, (a) in the writing of medium term commitments in the form of short term notes, (b) in the exclusive reliance upon local funds to meet capital requirements in an expanding community, (c) in the tying up of deposit money in non-liquid medium term commitments, (d) in the low capital ratio characteristics of banks of deposit, and (e) in the ever-present possibility that unjustified advances would be made to enterprises in which the ownership of the bank was personally interested. The attempts, on the other hand, to fill the void left by the withdrawal of the local unit bank from this field have been only partially effective because public agencies have not been in a position to advance equity funds directly nor to make capital loans which border on equity advances, and because most non-local private agencies have found that the costs involved in the investigation and control of these advances is too great.

A real solution of the problem, therefore, requires a type of financial mechanism different from any that has yet operated in this field in this country. Among our existing financial institutions the large installment finance companies approach more generally than any other to the type of organization that

might be expected to specialize successfully in this field in that they are capitalized at a much higher ratio than banks, their financial standing is high, and in deriving their investment funds they are able to supplement their own capital by the sale of debentures carrying very low rates to a wide variety of banks and also in the open market. Of all financial organizations operating on a national scale in this country, furthermore, the large installment finance companies come nearer than any other to having that kind of intimate local contact and intimate knowledge of local conditions that is a prime prerequisite of success in the field of small-medium term credits. These same companies, however, have achieved their present high credit standing and success in large part because the installment finance business lends itself to highly routinized procedures and standards under which a central office management is in a position to keep highly decentralized lending outlets under effective centralized control. They have not, therefore, met management tests as different as those which would be posed were organized financial institutions to undertake to specialize in medium term credit loans.

The group banking systems which flourished in this country in the decade prior to 1929 may also carry a clue to the answer to this problem. In these systems which, from the point of organization, fell halfway between a unit banking system and a branch banking system, there was combined through a variety of devices a certain degree of local responsibility and local management on the part of the local component banks with centralized ownership and the possibility of centralized access to outside funds. As commercial banking systems, these organizations had a bad record during the crisis and have properly been subjected to heavy criticism. It may be, however, that their experience has more positive contributions to make toward the problem of organizing a financial mechanism really capable of meeting the needs that exist for medium term advances.