FEDERAL RESERVE

Date October 18, 1935.

Office Correspondence

	Chairman Eccles	Subject:
rom	Laudhlin Currie	,

Attached are my recommendations in connection with research in the Division, with accompanying comments by Mr. Goldenweiser. I should very much like to have the opportunity of discussing these recommendations with you sometime.

FEDERAL RESERVE BOARD

Date October 18, 1935

Office Correspondence

_ີ ້າ	Chairman Eccles	Subject:		
From	Mr. Goldenweiser		049	16-852

I transmit herewith a memorandum by Mr. Currie on the problem of research necessary for the formulation of monetary policy. This memorandum may be considered as a supplement to the one I sent you the other day on the work of the Division of Research and Statistics.

I am in general agreement with Mr. Currie on the fact that the particular lines of inquiry which he recommends should be developed and that for that purpose economists with high qualifications will be necessary. I suggested the appointment of one in my memorandum, while Mr. Currie thinks we will need two. I think that there will no doubt be room for two such men if we can find them.

With regard to the particular individual whom Mr. Currie recommends, Mr. Silverman, I wish to reserve judgment until I have had an opportunity to look into the matter further, although Mr. Currie's high opinion of him is, of course, in his favor.

I am in complete accord with Mr. Currie about the fact that this research should be in general his particular field of work and that there should be close cooperation in the matter between all the members of the senior staff.

RECOMMENDATIONS RELATIVE TO RESEARCH IN CONNECTION WITH THE FORMULATION OF MONETARY POLICY

Submitted by Lauchlin Currie

- I The Board's Interest in Monetary Research.
- II The Inadequacy of Current Data.
- III Outline of Type of Research Recommended.
- IV Specific Recommendations.

I - The Board's Interest in Monetary Research.

While research carried on by the Division is complementary to and coordinated with research carried on by private agencies, it is more pragmatic in nature; that is, it is primarily directed towards aiding the Board in the formulation of monetary policy. Hence, not as much help can be obtained from private agencies as would be expected, since their research is confined mainly to interpreting past developments while ours must be concerned more with interpreting present developments and forecasting future trends.

The Board's responsibility for the formulation of appropriate monetary policy outweighs that of any other agency, and the Division should take the lead in initiating and coordinating research designed to provide, improve, and extend the data upon which monetary policy must be based. The responsibility of the Board in this matter has been more widely recognized since the passage of the Banking Act, and this recognition should make it easier for it to obtain new information than was the case hitherto. Its public character and the general importance

of its objective place the Board in a key position in coordinating, guiding and influencing public and other agencies in the collection and analysis of the requisite data.

The Board needs as full information as possible, not only as a basis upon which to formulate its own policy but also to place it in a position to be consulted by the Administration in the formulation of the Government's monetary and fiscal policies. It should be so much better informed than any other agency that the Administration will naturally consult with it in any matters affecting business activity.

In order to coordinate and adapt monetary means to the attainment of the basic objective of policy — the promotion of conditions enabling as full utilization of the productive resources of the country as can be continuously sustained under conditions of stability — the Board must have currently available as full information as practicable on:

- a. The national income and its distribution.
- b. The degree of capacity at which the country is producing.
- c. The nature and the relative magnitude of the forces which will tend to increase or decrease business activity in the immediate future.
- d. The changing conditions of stability.

In deciding upon a course of monetary action, the Board is actually compelled on some basis or other to assess the relative effects, as quantitatively given, of a large number of forces very often in

conflict, and, as I shall indicate in a moment, information currently available is an inadequate basis for such evaluations, both with respect to coverage and proper convergence on the problem of monetary policy. At present, mistakes in forecasting, and hence in monetary policy, are almost inevitable.

One of the chief objectives of monetary research in the Division is to obtain and coordinate data in a manner significant for policy-making purposes, so that the general picture may be shown by a comparatively few series which measure the total and net effect of hundreds of factors. The general picture can then be readily broken down into its component parts and changes in particular series having special business-cycle or forecasting significance singled out as guides for the formulation of monetary policy.

II - The Inadequacy of Current Data Current information on the national income and its distribution.

There are at present no reliable estimates of <u>current</u> national income and its distribution. The estimate compiled by the Department of Commerce is too late to be significant for current purposes.

There is some information currently available on various component parts of the national income, but it is defective. Information on <u>wages</u>, the largest single element in national income, is provided principally by the Bureau of Labor Statistics in cooperation with other Federal and State agencies. The reports received cover only about 30% of all gainfully employed workers. Reporting is on a voluntary basis, which means that the number of establishments reporting

varies from month to month and that only the best organized industries and the best firms tend to report, thus obscuring the nature and extent of changes. It also means that there are no means of checking the accuracy of reports from individual establishments. Information relating to the service industries, private construction, wholesale and retail trade, and finance is particularly poor. Information on wage rates, which is essential for monetary policy-making purposes, is very unsatisfactory.

Only recently have attempts been begun to collect information as to the employment and earnings of salaried workers. No current data are available on the employment and incomes of managerial employees, corporate executives, and proprietors of non-corporate establishments. Nothing is known about the current incomes of professional people and other persons who are self-employed.

In the field of <u>profits</u>, several series on corporate earnings are published by investment services and newspapers. All of these are deficient as indicators of the course of profits for business as a whole, because they cover only corporations which are very large relative to the typical American corporation and in addition include no figures for non-corporate enterprise. In these two fields of small-scale corporate enterprise and non-corporate enterprise there are no current data on profits. Information on the <u>rate of profits</u> is particularly poor. Information as to <u>interest payments</u> also relates primarily to large corporate business units. There is no current information on the aggregate volume of <u>rents</u> and <u>royalties</u> received.

The use of the index of industrial production as an indicator of current income is unsatisfactory on several grounds. It is compiled from a sample of the output of industries, which industries in turn account for only about 40% of all manufacturing measured in terms of value added by manufacture, and 77% of mining. Since manufacturing contributes only about 23% and mining about 3% to the national income, the index is an indication of the physical output of activities which contribute only about 12% to the national income. index is based upon less than 60 series out of the thousands of goods and services in the production of which the national income is earned. Moreover, the importance of various series in the index is proportionate to their importance relative to total manufactures, rather than to their importance relative to economic activity as a whole. While this basis of weighting is the proper one for an index of physical volume of manufacturing and mineral production, it seriously impairs its value as an indicator of current income.

Actual comparison of the index with annual estimates of national income reveals that while the trends of the two series over a number of years agree fairly well, the year-to-year percentage changes show marked differences. Between 1925 and 1924 and again between 1926 and 1927 the two series moved in opposite directions, national income rising and the production index falling. Monthly changes in the index are probably even more unreliable as a measure of changes in income than

yearly changes. Thus, in 1933, it is extremely improbable that the national income rose 69% from March to July, as did the index of production.

Production as a percentage of maximum and "stable" capacity.

No estimates are available except for isolated industries.

Current information on business trends. Much scattered information exists but with the exception of the production index it is not consolidated or rearranged in a manner significant for our purposes.

No estimate of current <u>business</u> and <u>government expenditures</u> is available. The same is true of <u>consumers' expenditures</u>.

One type of expenditure which is of major importance is expenditure on construction. A private agency, F. W. Dodge and Company, compiles current figures on building contracts awarded. These figures are deficient in two respects. In the first place, they are of contracts awarded, and not of expenditure. In the second place, they cover only a portion of the field and this portion varies. Contracts awarded as compiled by Dodge, amounted to fifty-four percent of total construction in 1928, as estimated by Kuznets, and thirty-one percent in 1932. Current rent and building costs series are unsatisfactory, as are also the data on interest rates and the availability of mortgage money.

Scattered data on consumers' expenditures, such as department store sales (about 5% of the total), gasoline sales, automobile sales, chain store and mail order sales, etc., have not been consolidated.

Quarterly corporate income figures available, as pointed out above, are not representative of the profits of all businesses.

Inventory figures have not been consolidated in such a manner as to enable a generalized picture of the current inventory situation to be obtained. The index of the Department of Commerce has many defects.

No information is currently available on changes in the <u>distribution</u> of money in the country.

Current information on <u>orders</u> on the books of business firms is extremely scanty.

The index of production appears to be a reliable indicator of the current trend of production, but is not so reliable as a measure of the degree of change.

Almost nothing is known of the magnitude of <u>current saving</u> out of income.

Existing <u>price indexes</u> are not compiled in such a way as to throw light on profit margins by showing changes in the cost and selling prices of important industries. Neither do they distinguish between monopoly or inflexible prices and competitive or flexible prices.

The list could be greatly extended but the above indicates sufficiently the general paucity of the material.

In view of the inadequacy of existing data, forecasts can be little more than guesses, and the possibility of error is great. The

record of business leaders and the financial press has been notoriously bad. The various forecasting services have had likewise, on the whole, a poor record, particularly since 1929. This is attributable not so much to their lack of economic insight as to the inability with existing material to assess the relative magnitude of the many forces that affect business spending in the immediate future.

III - Outline of Type of Research Recommended

Research in the Division should be continuously directed in the future, as it has been in the past, towards the extension, improvement, and arrangement of data in a manner significant for policy-making purposes. I suggest, in particular, the desirability of doing more work at this time in developing a framework of analysis, in investigating to what extent current data can be utilized to fit into and fill out the framework, and in determining the most feasible way to supply missing information in connection with the following subjects:

1. The National Income and Its Distribution. Knowledge of current movements in the national income is of basic importance to the Board for two reasons. In the first place, to encourage through monetary means a steady increase in real incomes is the very object of the Board's policy. In the second place, the movements of income between industries and between economic classes are of importance in marking transitions between phases of the business cycle and hence as indicating the nature of future developments.

The special interest of the Board in the national income can best be served by the construction of a current index which will measure monthly or quarterly changes. An extensive program of research is necessary as a preliminary to the construction of such an index, both to determine the concepts of income most significant for the Board's purposes and to explore the possibilities of obtaining current quantitative approximations to such concepts. There are two approaches to the general problem of measurement, both of which need to be explored. Income can be measured directly as it passes into the hands of those who receive it in the form of wages, profits, etc., or income can be measured indirectly by adding together the value of goods and services produced by each kind of activity in which income is earned.

These two methods should, with certain qualifications, yield the same results. If the two kinds of information necessary to make complete estimates were available, the two methods could be used to check each other. In the present state of our knowledge it is necessary in each industrial field to use the method for which the most reliable information is available.

2. The Degree of Utilization of Productive Resources. Knowledge of the extent to which the industrial capacity of the country is being used is important not only as an indication of the extent to which the general objective of the Board is being achieved, but also as a guide to monetary policy. As long as there is a substantial measure of slack in the system an increase in demand for goods can be met with but little if any rise in prices. When, however, industry is operating at capacity, an increase in demand cannot be readily met by an increase in goods, and drastic price rises with accompanying speculative phenomena are likely to occur.

The determination of the productive capacities of specific industries, and of the country as a whole, constitutes an extraordinarily difficult problem. The concept of capacity itself involves many difficulties, and must be carefully explored. Thus, the concept of the engineers and the technocrats — the theoretical capacity of various industries, regardless of the labor supply and of costs — is not relevent to our problems. Likewise irrelevent is the capacity envisaged by socialists and communists, which involves a drastic change in the organization of economic society. Our problem, rather, is to determine, under the existing organization, (a) the current capacity of various industries, (b) the current capacity of industry as a whole, and (c) the degree of capacity that can be sustained under conditions of general stability.

It will be seen that the problem of productive capacity is closely bound up with the problem of "normal" employment and unemployment. The concept of normal employment and unemployment is familiar, but little attempt has been made to arrive at it empirically owing largely to the poorness of our employment figures. The inauguration of unemployment insurance offers an opportunity to secure better information on the number of hours worked and the slack in the labor market than has hitherto been available.

If approximations to maximum capacity and "stable capacity" can be obtained, the figures of course must be continuously revised. This may be done by determining and projecting long-term trends of production, supplemented by current figures on output per worker and new additions to the labor market.

<u>3. Business Trends.</u> In interpreting business trends and in forecasting probable trends in the immediate future, it is essential first to develop a framework of analysis so that the multitude of forces affecting business activity may be consolidated and reduced to a manageable number of factors. It is then necessary to attempt to assess in quantitative terms the magnitude of the activity-increasing and activity-decreasing factors.

In addition to endeavoring to secure more information on the current national income and its distribution and on the degree of practicable capacity at which industry is operating, the possibility of securing approximizations to the following consolidations should be thoroughly explored: - series that measure factors that increase or decrease incomes; series designed for use in forecasting increase or decrease of incomes in the immediate future; sources of business and government expenditures; series showing the value of goods produced, goods sold, and changes in inventories; information by industries classified according to their business-cycle significance. In addition, the possibility of developing cost and price indexes throwing light on changes in the profit margins of various industries and indexes showing changes in the current rate of returns on capital in general and in particular fields should be investigated.

This is not the place to set forth the framework of analysis or to explore the methods by which this framework may be filled out in quantitative terms. I am merely indicating very briefly the type of thing I have in mind.

4. Conditions of Stability. The determination of the changing conditions of stability should be a subject for continuous study. It involves difficult problems both of theory and of measurement. I shall here merely indicate the general nature of the problem.

Ours is predominantly a profit economy. The production of goods and services is in the first instance not undertaken as an end in itself, but in order to obtain money profits. Our economic development has been for the most part a by-product of the search for profits. Business expenditures, the main source of incomes, are conditioned by the expectations of profit. An investigation into the conditions of economic stability and instability should, therefore, take as a starting point profits. The various factors making for instability may conveniently and significantly be treated from the viewpoint of their effect on profit expectations.

As is true of other aspects of our problem, profits must be treated both individually and collectively. Whatever concept of profit stability is adopted, it must allow for wide fluctuations in the profits of individual firms and industries. The goal of stability must not be purchased at the price of static conditions. In the words of a recent writer, "the problem of economic balance is the problem of combining stability with change and growth", and change in the capitalist economy necessarily is activated by changes in profits and profit expectations. On the other hand, the extent to which a given average level of profits and profit expectations will result in business spending will depend in part on the composition of the average. In certain industries a

slight rise in profit expectations may lead to a considerable expansion of spending; in others it may have very little influence on spending.

Complete information on all the factors bearing upon profits will doubtless not be available for many years to come. In the meantime, the feasibility of obtaining as much of this information as possible for (a) a representative sample of industry and/or (b) a group of industries having peculiar business-cycle significance, should be investigated.

Assuming that reliable approximations of current profits are obtained, the next step would be an investigation into the probable response in terms of expenditure of industry as a whole and of particular industries to an increase or decrease in profits. One factor is, of course, the general state of business expectations. Another is the degree of slack or unutilized capacity. Another is the degree of competition that prevails. Still another is the cost and availability of loanable funds.

Assuming that forecasts of business spending in the immediate future can be made, the next problem is that of determining whether the expected expenditure is deficient or excessive in relation to stability. Many economists believe that business expenditures should increase only sufficiently to compensate for increases in population, so that money incomes per capita remain stationery. Still others believe that business spending should increase sufficiently to permit of a steady increase in wages and in the gross return accruing to property owners, but not sufficient to increase the rate of return on

capital. Much more research is needed on this subject.

Conditions of stability cannot be treated solely from a domestic point of view. Developments abroad react on the domestic situation. In studying conditions of stability, therefore, account must be taken of unstabilizing developments abroad and measures devised to minimize the effect of such developments on the domestic situation.

The reason why it is so important to arrive at as reliable forecasts as possible of the magnitude of desirable and of probable business expenditures is that allowance must be made for a time interval
between the inauguration of monetary policy and its effect on business
activity. Monetary policy affects business activity as follows: Openmarket operations, or changes in reserve requirements, affect the
availability and the cost of borrowed funds, and hence affect one item
in business costs. The effect of changes in interest charges on future
business spending depends on the importance of interest charges in
relation to other costs and the degree of change that is concomitantly
occurring in other costs, in selling prices and the volume of businesses.

In certain types of business, interest charges are a negligible factor although some spending might be deferred in such businesses by the possibility of getting high returns on money invested elsewhere, and vice versa. In others, such as residential and office building, they are extremely important. A classification of businesses according to the importance of interest costs might be significant for the purpose of testing the current effectiveness of monetary policy. The

effectiveness of changes in interest rates must also be considered in relation to the movements in other costs and selling prices. It is for this reason that the effectiveness of a monetary policy of given magnitude varies. When other costs and selling prices are generally stable, a given monetary policy will naturally be more effective than when these conditions do not prevail. The importance of the timing of policy is therefore evident. Action should be taken while interest charges are still an important element of costs. If deferred until other costs and selling prices are rising or falling rapidly, it will be much less effective in achieving the desired result. Correct timing is dependent upon correct forecasting of future business expenditures. It is, therefore, essential to improve the basis of forecasting.

IV - Specific Recommendations

As the organization chart of the Division indicates, the various members of the senior staff are in charge of various fields of statistics. One man, for example, is responsible for the work done in the field of foreign and international trade statistics. The different members of the senior staff are constantly engaged in improving and extending the material over which they have charge, in answering inquiries, and in preparing current data for presentation. Such work is vital and must always be a major part of the work of the Division.

This organization of work, while necessary, has however a disadvantage. The senior staff is so occupied with the preparation and presentation of current data that they have inadequate time for uninterrupted research on their own account and, generally speaking, juniors are not as yet qualified for advanced research. Consequently we are not equipped at present to undertake research of the magnitude and scope of that discussed above. I recommend, therefore, that two senior economists be employed, who shall devote their full and uninterrupted time to such research.

Work of the type envisaged requires ability of the highest order. The qualifications in general are a thorough training in economic theory, and particularly business-cycle theory and statistics, and knowledge of existing material and sources, combined with a high degree of originality and intellectual independence. The latter qualifications are essential because the work in large part must be of a pioneer nature.

There is one man I know who most fully meets these qualifications. He is A. G. Silverman, at present a senior economist with the Tariff Commission. He is a Harvard Ph. D. and a former Research Associate of the National Bureau of Economic Research. I have known him over a term of years and he has, in my opinion, the finest analytical mind in the field. He has in the past been heartily recommended by Professors Williams, Schumpeter, Gay and Mitchell. I happen to know that he was to be offered the post of chief economist of an important Board if certain developments in the affairs of that Board took place. If a senior economist is to be appointed to work in the fields of

national income and productive capacity, I urge most strongly that an effort be made to obtain Silverman. He has at present a permanent post and is doing responsible work. His interest in the field of national income is such, however, that I think he could be induced to join our organization to work in that field.

For research in the field of measurement of current and future business trends I have another man in mind who is at present in charge of a WPA project. He has had an exceptionally wide experience in the field of business statistics and has concentrated in monetary theory. He is most highly spoken of by people who are familiar with his work, but I would prefer not to make a definite recommendation until I have heard from Professor Viner, under whom he did most of his graduate work.

If appointed, these men would need assistants. Upon completion of our WPA project, Mr. Edmiston would be available for this purpose. I should also like to suggest for consideration Mr. George Eddy, of the Research Division of the Treasury. Both Mr. Goldenweiser and I think very highly of him.

If the research here suggested is to be fruitful from the standpoint of the Board, it should be carried on in close cooperation with
the other members of the senior staff, with constant interchange of
information and ideas. Since I am the least burdened of the directing
staff and I am keenly interested in this type of research, I should
like to take an active part in directing and coordinating the work,
under the general direction, of course, of Mr. Goldenweiser.

Finally, I recommend that the suggested research be initiated as soon as possible, since a year or more must elapse before the work will begin to bear fruit. From the point of view of monetary policy the Board is now enjoying a breathing spell, while the Government is playing the dominant rôle. This breathing spell should be utilized to prepare for the time when the Board must carry the main responsibility for avoiding a boom and converting a recovery into a period of stable prosperity.