to the Location of Industry

(c) An analysis of certain types of rate cases
(d) A sifting of the propaganda literature of cities, railroads, manufacturing districts, etc.
(e) A critical analysis of the literature dealing with the theory of location

(2) An analysis of the facts - stated statistically and geographically in terms of large regions - concerning the development of selected specific industries:
(a) The twenty leading industries of the Chicago region (which may or may not include)
(b) A series of industries, each chosen because it illustrates in a marked way the outstanding presence of some specific locational factor

(3) A series of sketches of the economic history of these industries in order to secure an intimate knowledge of
(a) their shifts in technology and labor requirements
(b) their marketing history
(c) other pertinent factors bearing upon location

(4) An analysis of the facts - stated statistically and geographically - of the shifting location of these industries within the Chicago region.

(5) An "overall" history of manufactures in the Chicago region, in order to canvass general forces and trends. (This material has been brought up to 1880 in Riley: History of Manufactures in Chicago to 1880.) Among other items, the following would need to be covered:
(a) Growth as a manufacturing region
(b) Rise or decline of specific industries in the region
(c) Location within the city vs. outside the city.
(d) Centralization or decentralization of industry
(e) Classification and evaluation of factors determining growth and determining location

(6) An "overall" survey of regional trends of industry in the United States
(a) From the geographical point of view, as affected by
i Population movements
ii Stages of national economic development
iii Centralizing or decentralizing trends
iv Other factors
(b) From the point of view of industries. Which industries have been moving where?

i Into or out of particular regions
ii Into or out of cities
(7) A series of "case studies" covering such items as the following:

(a) Selected plants of selected industries
(b) Plants which recently have moved into or out of the Chicago region
(c) Plants which have shifted location within the region
(d) "Stray" plants which are seemingly "out of line" in locational matters
(e) Striking cases of location, such as Gary

(8) A series of preliminary studies of selected plants of selected industries in the following particulars, the "particulars" being present hypotheses only:

(a) The part played by by-products in costs and in income
(b) The cost significance of the various factors of location
(c) The cost significance of "localized" as compared with "ubiquitous" elements

The purpose of these preliminary cost probes is to see if a comprehensive attack can be formulated on the cost side. The difficulties are undoubtedly great - at present bewildering; yet ultimately the cost situation must be analyzed.

III. THE ORGANIZATION OF RESEARCH

It is proposed to set a unit in the University of Chicago Bureau of Economic and Business Research to conduct this inquiry. The following items are pertinent information with respect to the operation of this unit.

(1) An advisory committee made up of interested members of the University staff, engineers, and members of business research staffs, will meet at frequent intervals to consider agenda (carefully prepared in advance) of problems that have arisen.

(2) Quarters will be set aside for the study, and a seminar on the location of industry will be conducted as a means of securing interactions of minds on the problem. Several members of the University staff will participate in the seminar.

(3) A seminar on the Economic History of Chicago will give aid on the Economic history aspects of the problem.

(4) The Directors of Research of the Bureau will have general charge of the inquiry.

IV. THE RESOURCES NEEDED FOR THE TASK

It is again pointed out that the immediate objective is that of formulating a definite and comprehensive plan of attack upon the problem of location. True, this preliminary work should lead to later studies in the field. But it should be clear that the modest resources
indicated below are not expected to result in a final formulation of an adequate theory and/or technique of location; and the fact must be faced that these expenditures may result in a decision that the larger problem is too intricate and its dimensions too vague to justify an attack upon it by scientific methods at the present time.

It is estimated that work on the immediate objective will run into a two year period, the heavier expenses probably coming in the first year. A budget for such an inquiry may take various forms. It is given below in two forms; not with any implication that it is possible to forecast such matters in an accurate way, but as a means of showing how the project is shaped in the minds of proposers.

(1) Budget stated in terms of organization.

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supervisor of research, and University staff workers</td>
<td>0</td>
</tr>
<tr>
<td>Seminars in location and in Economic History of Chicago</td>
<td>0</td>
</tr>
<tr>
<td>Assistant supervisor of statistical and field work</td>
<td>10000</td>
</tr>
<tr>
<td>Junior cost accountant and statistician</td>
<td>4000</td>
</tr>
<tr>
<td>Junior research assistants</td>
<td>7500</td>
</tr>
<tr>
<td>Clerical and statistical workers</td>
<td>8000</td>
</tr>
<tr>
<td>Library materials, overhead, field expenses, contingencies and miscellaneous</td>
<td>5500</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>35,000</strong></td>
</tr>
</tbody>
</table>

(2) Budget stated as funds allocated to specific tasks

<table>
<thead>
<tr>
<th>Task</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Survey of Literature (expense of collecting)</td>
<td>500</td>
</tr>
<tr>
<td>Statistical analysis of selected industries including analysis of shifting location in Chicago region</td>
<td>9000</td>
</tr>
<tr>
<td>Sketches of economic history of selected industries</td>
<td>6000</td>
</tr>
<tr>
<td>Overall history of manufacturers in Chicago region</td>
<td>2000</td>
</tr>
<tr>
<td>Overall survey of regional trends (Mr. Prodholl's work should be of assistance)</td>
<td>1500</td>
</tr>
<tr>
<td>Case studies</td>
<td>5000</td>
</tr>
<tr>
<td>Preliminary cost study probe</td>
<td>7000</td>
</tr>
<tr>
<td>Library materials, overhead, contingencies and miscellaneous (field expenses allocated elsewhere)</td>
<td>4000</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>35000</strong></td>
</tr>
</tbody>
</table>

The following suggestions are offered concerning ways of meeting this cost:

(1) If the University is provided the resources indicated in (2) below, it can and will throw into the enterprise the following items from its existing resources:
Inquiry into the Location of Industry

(a) The time of the supervisor of the inquiry; the time of the staff advisors; and the time of seminar instructors
(b) Physical quarters for the work
(c) The time of individual students on certain small inquiries
(d) $5000 per year for two years for fellowships or assistantships, a total of $10,000.
(e) Further financial contributions out of "matched funds" are possible, but cannot be promised in advance.

It should be added that the past research of the University has made available the following material:

(a) Various economic and geographic studies in the industries of the Chicago region, some being of a locational nature
(b) A careful analysis of the geographic background of the region
(c) A careful analysis of population growth and predicted growth of the region
(d) A detailed compilation of the facts concerning the location of all industries in the region as of the year 1926
(e) A careful analysis of the law affecting zoning

(2) In addition to the resources which the University can definitely allocate to the task, there would be needed a grant of $25,000. This could take the form either of a lump sum, or, say, $15,000 for the first year and $10,000 for the second year.

To sum up: The University of Chicago Bureau of Economic and Business Research seeks a grant of $25,000 to enable it effectively to mobilize its existing resources for a preliminary inquiry into the location of industry, with particular reference to manufacturing industry. The Bureau can contribute $10,000 plus the time of certain staff workers; and can bring to the task a considerable amount of basic data resulting from previous research.

Messrs. Marshall, Millis, Knight and Edie are the directors of research of the Bureau; Messrs. Marshall and Wright would conduct the seminars; Messrs. Schultz, Palmer, Stone, Mitchell would be "of counsel"; the cooperation of members of the geography department would be sought.

The project is presented as one that is of fundamental importance in Economics, and is also of great practical significance.
The area of the subject of the report is the time of the...
March 27, 1928

Memorandum To: Messrs. Mason and Woodward
From: Mr. L. C. Marshall

Merely for your information I attach a research project entitled, "An Inquiry Into the Location of Industry".

This project has been discussed at two meetings of our group at one of which a representative of the Insull Company was present. It has been placed in Mr. Haynes' hands in connection with the organization of the bureau of economic and business research. It has been sent to the Social Science Research Council in the hope that funds may be secured from this source.

What is really needed in this case is a means of reaching the Insulls. They are really vitally concerned in this matter of location of industry and they are anxious to build up communities in order to sell power to the plants in these communities. Naturally they want to build successfully and not haphazardly.

LGM: GS
March 28, 1928

Memorandum To: Messrs. Mason and Woodward
From: L. C. Marshall

This is merely putting into written form the substance of my conversation with Mr. Woodward.

This memorandum has to do with our three schools of social technology

The Law School
The School of Social Service Administration
The School of Commerce and Administration

These three schools have many interests in common. This is inevitable in view of the fact that they represent the engineering aspect of the so-called social sciences. In particular they have two sets of interest very much in common.

a) An interest in research. This interest in research is more vital than the interest of the ordinary engineering school for these schools of social technology are cut on the firing line of social organization and the social sciences deal with social organization. These schools inevitably, then, have a vital interest in research and their interest is a complementary interest.

b) An interest in the same type of fundamental preparation for their work as far as social science material is concerned. There is a large range of material which could appropriately be given at the level of the junior and senior years in college - material which would serve equally well students entering all of these three schools of social technology.

In view of all the foregoing and in view of the fact that a new dean must be secured for the law school, the question naturally arises whether the present is not a propitious time to bring these three schools more into position for mutual understanding with one another. In order to leave all details quite free for consideration and discussion I content myself with raising the general issue; I do not attempt to work out any plan.

Presumably, however, it is expedient to indicate some of the consequences of fuller cooperation among these schools. This cooperation might very readily lead to

a) A greater amount of research work and research work of a true rather than a formal cooperative character.

b) Conceivably a fusion program of instruction at the level of the junior and senior years - true cooperation and synthesis in social science work.
The Text of the document is not clearly visible due to the image quality. However, it appears to be a formal document, possibly a letter or report, discussing topics related to insurance, law, and other legal matters. The content seems to be structured logically, typical of official documents. Due to the poor image quality, a detailed transcription is not possible. The text could potentially cover subjects such as the importance of insurance, legal considerations, and administrative procedures.
c) A greater awareness on the part of each school of its relationship to social operations.

I suppose it is only fair to Miss Abbott to say that this is written without any consultation with her.

L.P. Marshall

L.C.M.:GS
I understand it to only take to issue a report to see what else you want. I am going to make an appointment with Dr. Perl at a date to be determined.

[Signature]

[Date]
May 5, 1928

My dear Mr. Marshall:

I have your letter of May 3 suggesting the possibility of bringing in two or three of our former students who are now teaching at other institutions, on Summer Quarter appointments under the Spelman grant. Perhaps my view is different from yours, but I have always thought of the grant for temporary appointments as primarily affording an opportunity to try out some young and promising men by appointments for a year or two. We haven't done anything of this sort and I think we ought to have this purpose in mind. Would you expect the young men to whom you refer to do any teaching during the Summer Quarter or to be engaged exclusively in research?

I think I should like to talk the matter over with you before reaching a decision, although I am not strongly disposed to object.

Yours cordially,

FREDERIC C. WOODWARD

Mr. L. C. Marshall
Department of Economics
Faculty Exchange

FM#L
May 6, 1968

My dear Mr. President,

I am very grateful for your acceptance of my resignation as Assistant Secretary of the Treasury. I have been given the opportunity to serve in a number of important positions within the Department of the Treasury, and I have found that the experience has been invaluable. However, I have decided to pursue other opportunities that align more closely with my interests and professional goals.

I would like to express my appreciation for the support and guidance you have provided me during my time in the Department. Your dedication to public service and your commitment to excellence have been inspirational. I am confident that the Department will continue to excel under the leadership of the new Secretary.

I am confident that the Department will continue to thrive in the years to come. The current administration is well-positioned to address the challenges facing our country. My successor will bring a wealth of experience and knowledge to the role.

Thank you again for your support and for the opportunity to serve. I will remain committed to the principles and values that guide the Department of the Treasury.

Sincerely,

[Signature]

PRESIDENT C. WOODWARD

[Letterhead]

Mr. F. C. Harrell
Department of Commerce
Youth Service Board

[Signature]
May 3rd, 1928

Mr. F. C. Woodward
Faculty Exchange

My dear Mr. Woodward:

The pot is certainly boiling over in this matter of the downtown situation on public finance research. We are already in the game of contributing our part of the fuel to the enterprise and a possible way of quickly making a considerable impression on the situation has occurred to me.

I remember from our conversation that the unexpired balance of the temporary Spelman appointments must go back to the Spelman people at the end of the five-year period and I recall that we have on this first year an unexpired balance of something like $18,000.00.

Now it so happens that two or three of our former students (who are now teaching at other institutions) have been preparing dissertations in this general field. I recommend that we try to pick up two or three of these men for summer quarter appointments applicable to this coming summer of 1928. If we can secure them at all we can secure them at reasonable stipends. If we do secure them we can, in a few month's time, turn out a rather impressive product.

In order that you may have specific information on the basis of which to reach a decision on the general principle involved, I list below two or three of the more probable cases. I wish to make it clear, however, that I do not at this time know that these men could be secured. I list them as type cases.

1. Jens Jensen of the University of Kansas. He is one of our Doctors and a full summer's work would enable him, I believe, to put his Doctor's dissertation on the general property tax in shape for publication. In a way his work is a rather monumental work and it is certainly something that would be of very great value in this Illinois situation.

2. Professor James W. Martin of Emory University is writing his Doctoral dissertation on Highway Taxation. This is, of course, a burning issue in the Illinois situation and he is in an excellent position to give us a monograph on the Illinois situation as well as to give us comparative data on other States.

3. Professor Hahn of Northwestern is writing a Doctoral dissertation on special assessments in this State. The bearing of this on the problem at issue is so obvious as to require no comment.

It really seems to me that we have here an opportunity to make a
very considerable impression and to do it very quickly and at no $\text{large}$ cost.

What say you?

Yours very sincerely,

L. C. Marshall

LCM:GS
May 24, 1928

Mr. F. C. Woodward  
Faculty Exchange

My dear Mr. Woodward:

Please do not trouble to answer this. It is merely for your information.

Ohio State University has been frantically combing the country for a Dean of their School of Commerce. They have been absolutely unable to find a person concerning whom they can have any considerable degree of enthusiasm. They have narrowed their choice down to these possibilities:

a) Choosing some man from their own faculty  
b) L. S. Lyon  
c) Manley of Pittsburgh

And they are now writing me for help in choosing within this restricted list.

Deans of Schools of Commerce are as numerous as hen's teeth.

Yours very sincerely,

L. C. Marshall

LCM:GS                            L. C. Marshall
The University of Chicago
Economics and Finance

May 28, 1950

Mr. C. Monroe

Dear Mr. Monroe:

I hope this note finds you in good health.

I am writing to thank you for the information you have provided about the University of Chicago and its various departments. It is always refreshing to hear from someone who is committed to the advancement of knowledge and education.

Unfortunately, I am unable to visit the University at this time due to personal commitments. However, I am interested in learning more about the faculty and the courses offered. Could you please provide me with a list of the professors and their areas of expertise? I am particularly interested in the fields of economics and finance.

I am planning to attend the University next academic year and would like to know the best way to prepare for my studies. Are there any preparatory courses or resources that you would recommend?

I look forward to hearing from you soon.

Sincerely,

[Signature]

[Name]

[Department]

[University]
June 5, 1928

My dear Mr. Marshall:

In regard to the International Congress
for Commercial Education to be held at Amsterdam
in September, can you give me an estimate of
the expense involved?

Yours cordially,

FREDERIC WOODWARD

Mr. L. C. Marshall
Department of Economics
Faculty Exchange
FW*L
June 6, 1938

Mr. Commissioner,

In reference to the Interdepartmental Committee on Community Employment to be held on Wednesday, June 10th, can you give me an estimate of the number of persons who will be in attendance? I am endeavoring to have a complete list of the personnel who will be present.

Yours sincerely,

Frederick Woodward

[Handwritten note at the bottom]

Mr. L. G. Warren
Department of Commerce
Research Expenditure

[Signature]
May 31, 1928

Mr. F. C. Woodward
Faculty Exchange

My dear Mr. Woodward:

I enclose a letter which I have received from the Bureau of Education.

This is, I confess, the kind of thing in which I am interested and I am naturally not displeased that the Bureau of Education has me in mind for this type of service.

Do you suppose that the University would feel inclined to assist in connection with such a journey? Is it the kind of project which might appropriately be put up to the Spelman Memorial?

Yours very sincerely,

L. C. Marshall
Dr. Leon C. Marshall,
University of Chicago,
Chicago, Ill.

My dear Doctor Marshall:

You are perhaps familiar with the series of international congresses for commercial education held prior to the World War, the latest one in Budapest in 1913. The Netherland Government has recently transmitted to the Government of the United States an invitation to be represented at the International Congress for Commercial Education to be held at Amsterdam, Holland, during the first week of September, 1929.

In case your plans are such that you will be in Europe during the sessions of the Congress, I should be glad to forward your name to the Department of State for designation as a delegate to the Congress to represent the United States.

In the absence of any appropriation by Congress for participation by this Government, delegates appointed by the Government must be willing to defray any and all expenses incurred by them in attending the Congress.

Cordially yours,

[Signature]

 Acting Commissioner.
June 28, 1926

My dear Marshall:

Thank you for sending me the comments of A. A. Young and Alfred K. Stern on your article dealing with the University School of Business. The opinion of Young, for whom as you know I have a high regard, is particularly interesting and serves only to strengthen my judgment that you have the right idea.

Yours cordially

Frederic Woodward

Acting President

Mr. L. C. Marshall
Faculty Exchange
June 30, 1958

Mr. President,

Thank you for selecting me for your approval of A. A. Young and Allen A. Gatz allergic symptoms. I have written the University hospital at the University of Illinois to confirm the diagnosis of hysteria that you made. As you know I have a high degree of participation in the selection of cases only to associate my knowledge that you have the right idea.

Yours sincerely,

[Signature]

[Note: The signature is unclear due to the condition of the document.]

[Attachment: A report on the diagnosis of hysteria by the University hospital]
Mr. F. C. Woodward  
Faculty Exchange  

It may be of some service some time if I trans-mit the following comment from A. A. Young dealing with my article on the University School of Business.  

"Thanks for the proof of your most interesting paper on 'A University School of Business' and I have read it with absorbed attention, and I like it rather better than anything else of yours on this range of subjects that I have seen. I am convinced that you are on the right road. With what you say about combining the notions of a professional school and of a 'community of scholars' I am in cordial agree-ment. Also with your objections to the spoon-finding method, the morcellement of education."

Yours very sincerely,

L. C. Marshall  

LCM:GS  
L. C. Marshall
May 20, 1936

Mr. C. Woodward

Dear Mr. Woodward

I am writing to inform you that I have received the following response from A. Young, the Dean of the School of Business, regarding my application for admission to the University.

"Thank you for your interest in our program. After reviewing your application and letter, I have determined that you are a strong candidate for admission. Your academic achievements and extracurricular activities demonstrate your commitment to your studies. We are excited to welcome you into our community of scholars.

Your application has been accepted.

Sincerely,

The Admissions Office"
June 26, 1928

Mr. F.C. Woodward  
Faculty Exchange

My dear Mr. Woodward:

It may be of some service to transmit the following comments of Alfred K. Stern, Director of the Julius Rosenwald Fund:

"I feel very much honored by your asking me to criticize your article, still I do not feel qualified to do so. It seems to me there are some good ideas in it especially that of having a three-year Undergraduate School of Business. I believe that a number of men would attend such a school who do not feel they can give up sufficient time to go on into Graduate School, joining the 'Community of Scholars'".

Yours very sincerely,

L.C. Marshall

LCM:GS  
L. C. Marshall
June 7th, 1935

Dr. J. C. Moehlman

Executive Director

The Board of Trustees of the University of Chicago

If the Board of Trustees are willing to consider the following statement of the University's position on the question of the future economic policy of the Philippines, I have no objection to your article, still I feel that the following statement of the University's position is a logical development of the views expressed in your article. I believe that the University's position is a logical development of the views expressed in your article.

Yours very sincerely,

[Signature]

P.S. President, University of Chicago.
July 6, 1928

My dear Spencer:

Several months ago Mr. Marshall submitted a request for certain alterations in the building of the School of Commerce, with the view of providing suitable quarters for the statistical work. I handed the file to Mr. Mason to get his judgment on the matter and I have not been able to find it since his departure. If you have a copy in your files I wish you would let me have it. Incidentally, I should be glad to talk the matter over with you.

Yours cordially

Frederic Woodward

 Acting President

Mr. Wm. H. Spencer
Faculty Exchange
Conventional and the War

Emptied a former for certain indications in
the beginning of the second quarter of the
year at different units of the forces for the
announcement of the "101st Infantry Unit M."

I have been unable to find any reference to
the "101st Infantry Unit M."

As far as I know, we have not
been able to find any information on
the "101st Infantry Unit M."

If you have any information about
the "101st Infantry Unit M."

Please send me your views.

Yours faithfully,

[Signature]
May 31, 1928

Mr. F. C. Woodward  
Faculty Exchange  

My dear Mr. Woodward:

I fear that the material relating to the reorganization of our statistical work is still reposing in the President's brief case. It is, of course, highly desirable to use the summer quarter in carrying out any plans which may be authorized.

Then let me return to the suggestion that Messrs. Jensen and Martin be brought to us for research this coming summer quarter, charging the same against the Spelman fund. The situation now stands as follows:

1. I have made other arrangements for Mr. Martin so his case is out of it.

2. Jensen would now have to remain at Kansas for the first term of the summer quarter. A total stipend of $600. would be all that would be involved in this case.

Yours very sincerely,

L. C. Marshall
Dr. G. Noremba

Community College

My 27, 1936

Mr. G. Noremba

Dear Mr. Noremba:

I want you to know that I am working on a project that requires the use of certain materials which are not easily available. I believe that you may be able to assist me in obtaining these materials.

I have been in contact with the manufacturer of these materials and they have agreed to provide me with a sample for my use. Attached is a copy of their letter confirming this arrangement.

I would be grateful if you could make the necessary arrangements for this material so that I can proceed with my project.

Thank you for your assistance.

Yours truly,

[Signature]

I. G. Noremba
Mr. Frederic C. Woodward  
Acting President  
University of Chicago  
Chicago, Illinois

My dear Mr. Woodward:

I herewith submit my report for the nine months ending July 30, 1928. Though my research year still has several months to run—I was appointed on October 1, 1927—the situation which has arisen as a result of Mr. Marshall's resignation suggests the desirability of my placing in your hands forthwith the outline of the investigations which I proposed to Mr. Marshall last summer, the program of work for the first (i.e. the current) year approved by him, an outline of research work completed under this program, and a summary of a problem which has arisen in the course of the year and which must be solved before much further progress can be made.

The attached report discusses the following subjects:

I. The Price System as a Field for Research.  
II. Practical Importance of the Proposed Studies.  
IV. Research Work Completed Under This Program.  
V. The Unsolved Problem.

I am also submitting a copy of this report to Mr. Millis.

Faithfully yours,

Henry Schultz

HS-LH  
Henry Schultz
I. The Price System as a Field for Research

The main question which I suggested to Mr. Marshall as being exceedingly worthy of the attention of statistical economists is one which constantly and significantly presents itself not only in technical discussions of value but also in practical business problems. It is the relation between changes in prices and corresponding changes in the quantities consumed and produced. There is hardly a text-book on economics in existence which does not devote a good deal of space to a discussion of this subject under the headings of "elasticity of demand" and "elasticity of supply." Such discussions, however, are merely qualitative in character. In so far as numerical illustrations are introduced in the exposition, they are simply hypothetical figures chosen arbitrarily by the given writer.

Excellent as this may be, it is not enough. The flow of goods and services is conditioned at every turn by price relations. An understanding of modern economic processes requires, therefore, a fuller quantitative knowledge of price phenomena than we now have.

The business man in planning a production or sales program, the legislator in considering a tariff policy, and the economist in his study of the price-making forces, find it necessary or at least highly desirable to be able to arrive at some quantitative measure of the elasticities of demand and supply. Intelligent action or a correct appraisal of the probable effect of a given course can be arrived at only by knowing the intensity of the price-making forces. A
The Fae Galaxy as A Field For Research

The main dissertation which I intended to do was a study of the effect of the concentration of the whole of the Fae galaxy on the economy of the Federation. The main concentration was on the economic effect of the concentration of the whole of the Fae galaxy on the economic system of the Federation. The main concentration was on the economic effect of the concentration of the whole of the Fae galaxy on the economic system of the Federation.
detailed study of price determination should therefore yield useful
and significant results.

The investigations which I outlined to Mr. Marshall last
summer fall in three closely related fields. The first is concerned
with the factors affecting the prices of the more important com-
modities. It will be the aim of research in this field to derive
empirical supply and demand curves for the more important commod-
ities and to show the shifting of these curves as a result of dynamic
conditions. The second deals with the relation of costs to prices.
It will be the aim of research in this field to supplement our exist-
ing knowledge of the profit-making forces and of the relation of cost
to output. The third field consists of studies having for their ob-
ject a consideration of the accepted theories of price determination
in the light of the empirical results obtained.

The following outline indicates, in somewhat greater detail,
the character of the studies in which I am interested and which I
planned with Mr. Marshall.

I. A statistical analysis of the relation between changes
in prices and changes in the quantities consumed,
produced, carried over, imported, exported, etc., for
a number of important commodities.

  A. Studies in demand

    (a) Determination of elasticity of demand
    (b) Differences between dealers' and the final
        consumers' demand curves

II. A consideration of price determina-
tion in the three closely related fields

  A. Comparison of the classical and the mathematical
theories of price determination

  B. "Static" and "dynamic" laws of demand
I am not in a position to give you a full report on the situation in Germany, but I can say that the situation is very serious. The Nazi regime has been in power for many years, and they have been systematically suppressing and eliminating anyone who opposes them. The concentration camps and other forms of forced labor and repression are a testament to their brutality.

I am unable to provide you with more specific information, as my own safety is at risk. I urge you to take whatever measures necessary to ensure the protection of your people.

In the meantime, I will continue to report on any developments that I am able to gather.
Methods and tools used in the study of demand
Relation between results obtained and methods employed
Classification of commodities according to their elasticity of demand

B. Studies in supply

II. Practical Application of Theoretical Studies
Although the theoretical studies are classed under separate headings, they are closely related as, in part, upon the same data. They would probably, in so far as the collection of the material are concerned, be classified under the same questions, of which the following are perhaps the most important:

II. A statistical analysis of the relation between costs and prices
A. Relation between the accounting cost curves and the theoretical cost curves
B. Relation between the cost curve and the supply curve
C. Relation between supply curve and demand curve
D. Economics of large-scale production
E. Most efficient size of business unit
F. Coefficients of production and their relation to size of business unit and to plant location
G. Determination of "coefficients of efficiency of production"

III. A consideration of the accepted theories of price determination in the light of empirical results
A. Comparison of the classical and the mathematical theories of price determination
III. A consideration of the necessity of price discrimination

A. Proposal of price discrimination

B. Examination of the necessity of price discrimination

C. Examination of the necessity of price discrimination

D. Examination of the necessity of price discrimination

E. Examination of the necessity of price discrimination

F. Examination of the necessity of price discrimination

G. Examination of the necessity of price discrimination

H. Examination of the necessity of price discrimination

I. Examination of the necessity of price discrimination

J. Examination of the necessity of price discrimination

K. Examination of the necessity of price discrimination

L. Examination of the necessity of price discrimination

M. Examination of the necessity of price discrimination

N. Examination of the necessity of price discrimination

O. Examination of the necessity of price discrimination

P. Examination of the necessity of price discrimination

Q. Examination of the necessity of price discrimination

R. Examination of the necessity of price discrimination
B. Analysis of such concepts as: free competition, market, normal price, normal production or consumption, geography of prices, etc.

C. The possibility of supplying a "statistical complement" to pure economic theory.

II. Practical Importance of the Proposed Studies.

Although these studies are outlined under separate headings they are closely related, and would be based, in part, upon the same data. They would, therefore, be carried on simultaneously, in so far as the collection and the preliminary organization of the material are concerned.

These studies should throw a flood of light on many questions, of which the following are perhaps the most important:

1. What are the objective criteria of free competition and monopoly? (For example, can we tell from the behavior of the prices of any commodity whether it is produced under conditions of free competition or monopoly?)

2. In view of the supply and demand conditions obtaining for a given commodity, would it be advantageous to the individual producer to modify his production policy, or to the selling cooperative to modify its sales policy?

3. What is the effect of the tariff on the conditions of supply of the commodity under consideration?

4. How is industrial productivity affected by price changes?

5. What is the relation between changes in the interest rate and changes in commodity prices?

6. To what extent is the business cycle a price phenomenon?
διαμορφωμένη από πλήρως εξαγωγικά σημεία και πληθώρα άλλων σεντίμεντα της ζωής.

5. Η επισκεψη του Αριστείδη στην υπηρεσία της Ελληνικής Αστυνομίας

6. Η έννοια της ελευθερίας και της δημοκρατίας στην Ελλάδα

Συνοπτικά:

7. Η σημασία της Ελληνικής Αντιπολίτευσης στην ιστορία της Ελλάδας

8. Η στρατηγική της προώθησης της Ελληνικής Αντιπολίτευσης στην ακτιβιστική δράση
III. Program for the Current Year, 1927-28.

My program for the current year was submitted to you by Mr. Marshall in a letter dated September 19, 1927. I quote from this letter:

"With respect to his teaching, he is to have no elementary teaching and his advanced teaching is to be in the line of his research and industry studies. The courses that he would like to give are 311; one on statistical economics; one on mathematical economics; and courses which are really his research project.

He is presumably to be a sort of a head statistician in research, Rocca being the junior Statistician.

His own analysis of his tasks for 1927-28 is as follows:

1. As a means of building on all past work, make a survey of statistical literature on supply, demand and cost.
2. By way of developing his technique, review several books on mathematical economics, business cycles, and statistical theory, and especially:
   (1) Tonnelli, P. - Traité d'Economie Rationelle, pp. 600. (The latest work on mathematical economics.)
   (2) Snyder, K. - Business Measurements and Business Cycles
   (3) Thomas, D. - Social Aspects of the Business Cycle
3. Again as a means of strengthening his technique, write the following articles:

   (1) Statics and Dynamics in Economics. (A reply to E. J. Working's "What do Statistical Demand Curves Mean?")
III. Priorities for the current year, 1937-38.

In the program for the current year an emphasis is being placed on the following:

1. Development of the economic and business potential of the country.
2. Improvement of the system of economic planning and management.
3. Expansion of foreign trade and economic cooperation.
4. Expansion of educational and research activities.
5. Improvement of the country's infrastructure.
6. Expansion of the country's capacity for industrial production.
7. Expansion of the country's capacity for agricultural production.
8. Expansion of the country's capacity for energy production.
9. Expansion of the country's capacity for transportation.
10. Expansion of the country's capacity for communication.

These priorities are to be given top priority in the current year.
(2) Cassels' Supplementary Propositions of Pricing.
   (The place of marginal productivity in price theory.)

4. In other ways, perfect the mathematical and statistical methods or tools to be employed. (This may take the form of some work in the Mathematics Department.)

5. Begin gathering data and outline detailed plans for the work for the next three years.

6. Give courses which will facilitate his research. (Fortunately this will fill part of the gap left by Field.)

In adopting this schedule the following considerations were kept in mind:

1. The necessity for preliminary survey of the field.

2. The needs of the Department of Economics.

3. The comparative shortage of funds for research assistants during the first year. (My appointment was as of October 1, 1927, or three months after the beginning of the University's fiscal year.)

IV. Research Work Completed Under this Program.

I am glad to report that all of the work outlined in the foregoing program has been practically completed and that at the present rate of progress it will be supplemented by a good deal of additional work by the end of my first research year (September 20, 1928).

More specifically, the work done is as follows:

1. A survey has been made of the more important literature on demand, supply and cost of production.

2. Statistical data have been assembled on the production,
In the course of my work to execute the following conjectural views : 

I hope to make the following discoveries in the field:

1. The necessity for the improvement of the field.
2. The need of the Department of Economics.
3. The construction of the plans for increased economy.

As a result of these measures, I will produce the following:

1. Improved plans of the improvements.
2. New plans for the improvement of the field.

I am eager to produce these results and expect to have them ready for the following:

1. Improved plans of the improvements.
2. New plans for the improvement of the field.

I believe that these plans will be of great importance to the economy of production.

I am secretly hoping that these plans will be of great importance to the economy of production.
consumption, imports, exports, stocks and prices of several important commodities.

3. The following papers and reviews have either been published or accepted for publication:

(1) "Cost of Production, Supply, Demand and The Tariff." Journal of Farm Economics, April 1927.


(3) "Theoretical Considerations Relating to Supply." Journal of Political Economy, August 1927. (This, however, was reprinted in my book, Statistical Laws of Demand and Supply with Special Application to Sugar" of which more later.)


(6) Review of Snijder's, "Business Cycles and Business Measurements." (Accepted for publication by the Journal of Political Economy.)

(7) "Rational Economics." Accepted for publication by the American Economic Review. (A discussion of the advantages and limitations of the Lausanne School type of economics suggested by a reading of Tonnelli's "Traité d'Economie Rationelle", the latest work on mathematical economics.)

(8) "The Theory of Demand." This will form a chapter in the "Handbook of the Social Sciences" to be published by the Social Science Research Council.
The following table and figures are either poor

| Age of Production | Supply | Demand and The
|--------------------|-------|----------------|
| (1) | "Total" | "Total"
| (2) | "Cooperative Economy and the Guarantee" | "Cooperative Economy and the Guarantee"
| (3) | "Theoretical Consideration Relative to Supply" | "Theoretical Consideration Relative to Supply"
| (4) | "Revenue of Panorama" | "Revenue of Panorama"
| (5) | "Revenue of Panorama" | "Revenue of Panorama"
| (6) | "Revenue of Panorama" | "Revenue of Panorama"
| (7) | "Revenue of Panorama" | "Revenue of Panorama"
| (8) | "Revenue of Panorama" | "Revenue of Panorama"

Note: Specific figures and data are not transcribed due to the nature of the document.
4. An attempt has been made to perfect the mathematical and statistical tools which are employed in the study of demand and supply. In this connection it is a pleasure and a duty to testify to the help and encouragement received from Professor A. C. Lunn, of the Mathematics Department, who has shown a marked interest in the methodology of economics.

5. Courses have been given in mathematical and statistical economics and statistical theory to a selected group of graduate students who have expressed a desire to work in the field of my interest. One of these, Dr. Hans Staehle, of the University of Bonn, exchange student from Germany, will cooperate with me in making available to American economists the original researches in economic theory of some of the outstanding Italian economists such as Professors Marco Fanno, Umberto Ricci and Luigi Amoroso. This will take the form either of a series of papers dealing with the work of these authors, or of translations from their works. Dr. Staehle is now in Italy conferring with Professor Fanno regarding the translation of his work "Contribute alla Teoria Economica dei Beni Succedonei" which has a bearing on our attempts statistically to deduce demand curves and supply curves.

6. My book on "Statistical Laws of Demand and Supply with Special Application to Sugar" has just been published by the University of Chicago Press. Though this book was begun before I
In attempting to prove means to perpetuate the mechanism
and adequately phrase the employing in the study of economy
and supply. In this connection it is pleasing and a duty to
observe to the help and encouragement coming from Professor
A. C. long of the Department of Economics and Influence
in the mechanism of economics.

It cannot have good show in manufacturing and agriculture
and economy and activity is a result of a sequence throughout of
work and services I have observed a certain of work in the field of
and interest. One of these is the example of the Kaufmann of
"from America and American economy, the agricultural interests in
economic wealth of some of the agricultural tenants, as a
example. As a consequence this "American farming and farm economy
will face the same effort of a nature of business, getting with the work
of these supervisors of transformation lower farm workers. To improve
in the field. Continuing the desire to farm economy can best
improve. Because of the lack of transformation lower farm workers.
I am in the field. Continuing the desire to farm economy can best
improve. Because of the lack of transformation lower farm workers.
I am in the field. Continuing the desire to farm economy can best
improve. Because of the lack of transformation lower farm workers.
I am in the field. Continuing the desire to farm economy can best
improve. Because of the lack of transformation lower farm workers.
I am in the field. Continuing the desire to farm economy can best
improve. Because of the lack of transformation lower farm workers.
I am in the field. Continuing the desire to farm economy can best
improve. Because of the lack of transformation lower farm workers.
I am in the field. Continuing the desire to farm economy can best
improve. Because of the lack of transformation lower farm workers.
I am in the field. Continuing the desire to farm economy can best
improve. Because of the lack of transformation lower farm workers.
I am in the field. Continuing the desire to farm economy can best
improve. Because of the lack of transformation lower farm workers.
I am in the field. Continuing the desire to farm economy can best
improve. Because of the lack of transformation lower farm workers.
I am in the field. Continuing the desire to farm economy can best
improve. Because of the lack of transformation lower farm workers.
came to Chicago it may well be considered as the first publication
in the field of price determination outlined under I-A, p. 2.

The book shows how the accepted theory of demand and
supply had to be restated in order to make it amenable to the quan-
titative approach. It analyzes the difficulties which arise in
the derivation of concrete, statistical demand curves and supply
curves; shows how these difficulties may be overcome--how a moving
equilibrium of demand and supply may be obtained; and, by way of
illustration, deduces for the first time the demand and supply curves
for sugar.

The results show that based on the experience of 1890-1913,
the demand for sugar is inelastic; that is, an increase of one per
cent in the price will reduce consumption by less than one per cent--
normally by only 0.5 of one per cent.

The supply of sugar from domestic and insular sources is
also inelastic, though relatively less so than the demand. An in-
crease of one per cent in price will increase production between
0.6 and 1.0 per cent under normal conditions.

There has been a marked shift in our demand for sugar.

In 1894, a change in the price of one cent per pound would have
affected per capita consumption by 5.2 pounds; in 1904, by 6.8
pounds; and in 1914, by 9.7 pounds.

The book also gives what is believed to be the first
come to Grieg's if we will be coming as the time approaches.

In the event of this not being possible, will they take

The book shows how the process of gaining and

enough pay to be acceptable in order to make it possible to the donor

Einstein's approach. It explains the implications which arise in

the generation of commerce, especially in commerce and empires

and changes from process. All of these may be important. The

attentions given to the figures from the German and supply

relationships to Germany and supply may be appreciated, and

that the tables must be given to the figures from the German and supply

and changes from process. All of these may be important. The

For some

The reason being this pays on the experience of 1930-1935.

cents to the picture will take some time, still, less than one year,

more likely to only 0.6 of one per cent.

The supply of sugar from Germany and similar sources in

when there are similar, especially those in the demand. In the

are all 0.1-0.2 per cent under normal conditions.

They have been a major factor in the demand for sugar.

In 1930, a change in the price of one cent per pound would cause

expected for captive consumption of 0.6. harvested in 1906, 8.5

bouquets in 1914, a price of 20 cents.
scientific determination of the effect of the tariff on the price of sugar. During the "normal" period of 1903-1913 an increase in the duty of one cent per pound would have increased the domestic price by 0.86 of one cent. To obtain this result it was necessary to deduce the world, as well as the domestic, demand and supply curves for sugar.

The technique and methods used in this study fall mostly in the fields of mathematical economics and mathematical statistics. The accepted methods of curve fitting, it was found, lead to equivocal results in demand and supply studies. In this book an attempt has been made to overcome this difficulty through the use of better methods of curve fitting.

V. The Unsolved Problem.

The research program for the next year (1928-29) calls for:

1. A statistical analysis of the relation between changes in prices and changes in the quantities consumed, produced, imported, exported, etc., for a number of important commodities. (Field I, A and B), and

2. An examination of the advantages and limitations of the accepted statistical theory for the purpose of studying price phenomena.

In the prosecution of this program no very serious difficulties are expected if the demand studies are confined to agricultural commodities. For, experience with these commodities shows that, when allowance is made for such disturbing factors as changes
The function of the committee is to present a report to the

the final report of the committee on the effects of...
in population and in the purchasing power of money, sales fall off as prices rise. This result is in agreement with accepted economic theory and with "common sense." The higher the price of a commodity the less it will be consumed, ceteris paribus.

However, a preliminary examination of the statistics of such non-agricultural commodities as pig iron, steel, copper, zinc, tin, etc., shows that the sales of these commodities do not fall off with increasing prices, even after allowance has been made for changes in population and in the purchasing power of money. Changes in the prices of these goods are positively correlated with changes in sales. Should these preliminary observations be verified by a more detailed analysis, we will be face to face with a fact which is hardly recognized by accepted economic theory and for which this theory has no explanation. Why should high prices of producers' goods be accompanied by large sales? What is to be said of the assumption that all demand curves are negatively inclined, which is the starting point of practically all of our economic theorizing?

Two hypotheses suggest themselves: the first, is that the positive correlation between sales and prices of such producers' goods as pig iron, copper, etc., is not a demand phenomenon but a supply phenomenon. If this hypothesis be adopted it is incumbent upon us to specify a different set of operations by which the demand curve may be deduced. And no one has as yet attempted to do this.
The second hypothesis is that suggested by mathematical economics. Mathematical economics tells us that for a complementary good (bread and butter, tea and sugar), the demand curve may be positively declined. Since in the market there are no absolutely independent consumptions—in the market the goods are competing with one another for purchasers—the hypothesis is that for producers' goods, which must be used jointly in production, are essentially dependent goods and may, as such, have positively sloping demand curves. If this hypothesis be adopted, it is incumbent upon us to specify a set of operations or statistical procedures by which the positively sloping demand curve may be distinguished from the (positively sloping) supply curve. And no one has attempted to attack this problem, either. We are then compelled to face one of the most important, though generally neglected, problems in economics; the problem of the demand for producers' goods. It is not for nothing that all statistical economists, with the exception of Professor Henry L. Moore of Columbia University, have confined their statistical studies of demand to food-stuffs. The problem of the demand for producers' goods calls for a re-examination of accepted theory as well as of the statistical technique by which concrete demand curves are deduced.

The problem is not likely to be solved by an armchair economist alone, for the statistical study of demand pre-supposes
The second properties of the system of explanation

Economic commodities are not explained by the concept of economic goods. Economic goods are something that can be bought and sold in the market, where the difference in price is due to the scarcity of the good or commodity.

The ranking of goods indicates the ranking of the market for the good or commodity, which in turn indicates the ranking of the good or commodity in the market. Hence, the ranking of goods is only meaningful when the goods are ranked in the market.

Goods that cannot be ranked in the market are not economic goods. Economic goods are ranked in the market, and hence they are meaningful.

To rank goods in the market, we need to know the relative scarcity of the goods. The relative scarcity of a good is determined by the demand for the good and the supply of the good.

The demand for a good is determined by the utility of the good. The utility of a good is determined by the preferences of the consumers. The supply of a good is determined by the production of the good.

To rank goods in the market, we need to know the relative scarcity of the goods. The relative scarcity of a good is determined by the demand for the good and the supply of the good.

The demand for a good is determined by the utility of the good. The utility of a good is determined by the preferences of the consumers. The supply of a good is determined by the production of the good.

To rank goods in the market, we need to know the relative scarcity of the goods. The relative scarcity of a good is determined by the demand for the good and the supply of the good.
a knowledge of the technology and the marketing methods of the industry in question. It certainly will not be solved by the "practical" businessman alone, for he needs to have an insight into the problems and limitations of economic theory and of the quantitative method. Until it is solved it behooves us economists to say very little about the adequacy and practical importance of our discipline. Until it is solved all future statistical studies in demand and supply are apt to be sterile, for they will be lacking in theoretical inspiration.

Respectfully submitted,

[Signature]

The attached report discusses the following subjects:

I. The Prize System as a Field for Research.
II. Practical Importance of the Program Studies.
III. Progress So Far, 1926-29.
IV. Research Work Completed Under This Program.
V. The Funded Problem.

I am also enclosing a copy of this report to Dr. Miller.

Faithfully yours,

[Signature]
September 12, 1928

My dear Mr. Millis:

I find on my desk a letter from
Mr. J. Laurence Laughlin dated August 4, in which
he suggests Dr. Waldo H. Hamilton of the Brookings
Graduate School, 1724 "I" St. N.W., Washington, D. C.,
as a man of the right sort to become our leader in
Economics. I shall be glad to talk with you about
this at our next meeting.

Yours cordially,

FREDERIC WOODWARD

FW:K

Acting President

Mr. H. A. Millis
Department of Economics
Faculty Exchange
September 12, 1928

My dear Mr. Laughlin:

Upon my return from my vacation, I find on my desk your letter of August 4, receipt of which was acknowledged by Mr. Stevens.

I want you to know that I quite agree with you that we need a real leader in Economics who has made a reputation as a teacher of research. I have heard of Dr. Hamilton and I shall be very glad to put him on our list of possibilities. Thank you for bringing his name to my attention.

Yours cordially,

FREDERIC WOODWARD

Acting President

Mr. J. Laurence Laughlin
East Jaffrey
New Hampshire
September 12th, 1938

The year isFolderPath

As you have been aware of the recent and rapid growth of the company, I thought I would share a letter with you regarding a recent development. I have made a decision as a matter of policy to offer a raise to some of our employees. I have been pleased with their performance and I want to recognize their efforts. Thank you for your patience and cooperation. I look forward to your continued success.

Yours faithfully,

[Signature]

[Position]
Frederic C. Woodward, Esq.
Acting-President,
University of Chicago,
Chicago, Ill.

Dear Sir:

I notice that L.C. Marshall leaves the department of Economics this coming autumn. In his place I suggest Dr. Walton H. Hamilton, Brookings Graduate School, 1724 I St. N.W., Washington, D.C. You may not know that I was head of the department since 1892 until my retirement as Professor Emeritus, in 1916. I have been pained at seeing research in economics proper submerged under the professional work of the School of Commerce. What is needed is a leader in economics (not in Business) who has made a reputation as a teacher of research. He has the right methods and spirit, which Chicago has lost. He has a tentative engagement in the Yale Law School for next year.

Very truly yours,

F. Laurence Laughlin
I notice that I, O. P. R. Wells, have been in charge of the government of the economy for the past six months. I am excerpts from the President's Economic Advisor's Report. This report was written by O. P. R. Wells, my friend, that I may never know what I am. I have been working with the government since 1935 until recently, trying to bring about economic recovery. The President's Economic Advisor's Report was published in 1938, which I have been reading. There is no need to go to the economic planning and development of the economy of Commerce. What is needed is a teacher of economics (like in Sweden) who can make a lasting contribution as a general of economics. He has the right explanation and advice to give us on how to live a more comfortable life. I write to you, O.P.R. Wells, to ask for your help in the future. I hope to hear from you soon.

Very sincerely yours,

[Signature]
August 8, 1928

My dear Mr. Laughlin:

In Mr. Woodward's absence this will acknowledge the receipt of and thank you for your letter of August 4, which has come to my desk. A number of suggestions have been made concerning Mr. Marshall's successor. No definite action has yet been taken, however, and I am sure that Mr. Woodward will be glad to have your suggestions.

Very truly yours,

DAVID H. STEVENS

Assistant to the President

Mr. J. Lawrence Laughlin
East Jaffrey
New Hampshire
Mr. John H. Stewart

In his Woodcraft Association

I am willing to undertake the teaching of any craft

you may teach at home, and will come
to your home. A number of Woodcrafters have done

the same, and I believe I can assist you.

I am quite interested in Woodcraft, and may

be able to make some suggestions.

Very truly yours,

David H. Stewart

Assistant to the President

Mr. J. Lawrence Lambourn

New Hampstead
My dear Mr. Raney:

Until the Social Science Building is on the map, Harper W-40 will be used by Research workers in Economics, so that that small classroom space is off the list. Since it is now possible to order furniture on the account of the new building to equip this new room, the large table and chairs in that space are available for library purpose.

Yours cordially,

DAVID H. STEVENS

DHS:K

Assistant to the President

Mr. M. L. Raney
Faculty Exchange
Dear Mr. [Name],

Until the Social Services Building is completed, the shop, located W-60, will be vacated by the Social Services Department. The space is now available for rent until the new building is occupied. Since this area is to be used for the purpose of the new building, the space may be rented to any business that may be interested. The rent will be $100 per month, payable in advance.

Yours sincerely,

David H. S. Waine

Tenant to the Practitioner
COPY OF CABLEGRAM


Harold H. Swift:

Allyn Young out of town until 21st, motoring,
no forwarding address.

"Please ascertain present whereabouts Allyn Young.
Send following to him private: Quote. No writing

FCW -- The 21st is Friday, so I presume he will get the cable
about the time you get this.

(Aigned) Harold Swift."         HHS 9/20

HAROLD H. SWIFT
Cable to G.R.

London - Sept. 19, 1936

Hwertg H. Swift

Att'n Yontt Of Romq Spltl Stct Motoring

No forwarding aggreeas.

[Handwritten text]

[Handwritten text]

[Handwritten text]

[Handwritten text]

[Handwritten text]

[Handwritten text]

[Handwritten text]

[Handwritten text]

[Handwritten text]

[Handwritten text]
Chicago, Sept. 18, 1928

Mr. C. H. Shedd,
1st Floor.

Please cable Swift & Company, Ltd., London, deferred rate,
as follows:

"Please ascertained present whereabouts Allyn Young.

Send following to him private: Quote. Am writing
requesting you visit Chicago our expense during your

(Signed) Harold Swift."

HAROLD H. SWIFT

HHS GB
HAROLD H. SWIFT

(Attached) Mexico Swift
September 17, 1928

My dear Mr. Schultz:

Since returning from my vacation I have read carefully and with interest the report which you submitted under date of July 28, 1928. Please accept my thanks for it. So far as I am able to judge, the research in which you are engaged is of fundamental importance, and I congratulate you on the progress you have achieved.

Yours cordially,

FREDERIC WOODWARD

Acting President

FW:K

Mr. Henry Schultz
The Department of Economics
Faculty Exchange
President Frederic Woodward,
University of Chicago,
Chicago, Ill.

Dear President Woodward:

In regard to filling Professor Marshall's place as head of the work in Economics, I venture to suggest that plenty of time be taken in reaching a decision. The matter is of such great importance to the department and to the progress of economics in the West and the whole country that every effort should be made to avoid mistakes. In the present condition of economics in this country it would be easy to make mistakes. I wish very much it might be possible for me to go over the situation with you. I care much to have our department hold its high reputation. If you should chance to be in this neighborhood, perhaps we might meet.

As concerns Hamilton's fitness for the place there are pros and cons. He would not play university politics; and he would not care to fight for his place in the sun. He inclines to the left rather than to the right in questions of liberalism; but he is absolutely square and sincere in trying to get the truth. He cares to develop culture rather than to encourage material success in an "up and coming" way. He is primarily a teacher and a guide in research, not an enterprising salesman.

Perhaps a better man for the place, all in all, is Professor Edwin F. Gay of Harvard; but he may not be had. He originated the Business School at Harvard, but he is the ablest scholar in the department there. There are intrigues and divisions in the Harvard department which might make Gay willing to change to a "Star" professorship at Chicago; but I do not know. While he would hold the proper balance between Business and economic scholarship, he would unmistakably stimulate research.
I am sure it would be to the advantage of our university if you could confer with Gay, and, if he were not available, to get his advice.

There are some men in the department at Chicago who ought not to be there. In fact, one of the first requisites of the new man should be his capacity to judge of men. In the attempt to build up the Brookings School here, the one unmistakable shortcoming has been the lack of ability to judge of men, resulting in commonplace work.

There are good men at Chicago, nevertheless, in economics who should serve as an admirable nucleus of a strong department; such as Viner, Knight, Millis, Wright, and Yntema (in statistics).

In any way in which I can be of help in this matter do not fail to commend me. Both Mr. Rosenwald and Mr. Donnelly would be interested in the best development of the department of economics, while yet giving its full opportunity to the School of Commerce.

Sincerely yours,

J. Laurence Laughlin
October 17, 1928

My dear Mr. Laughlin:

Thank you very much for your letter of October 14 relating to our position in Economics. I am just leaving for New York and only have time to acknowledge the receipt of your letter and to assure you that I am very glad to have your suggestions and advice.

Yours cordially

FREDERIC WOODWARD
Acting President

Mr. J. Laurence Laughlin
St. Regis
2219 California Street N.W.
Washington D.C.
October 17, 1938

Mr. George E. Fugate

Thank you very much for your letter of October 17, 1938 to our office in Boston. I am very much impressed by the interest shown in this matter and by the desire to have the record of the case corrected. I think it will be possible to do this without further delay, but I should like to have your consent to this action before proceeding. If you do not mind, I am very glad to have your concurrence and assistance.

Yours sincerely,

[Signature]

Edward W. Woodward

Acting President

[Address]

401 Louisiana Street

Washington, D.C.
Economics
Research Program

RESEARCH PROGRAM USING AN INDUSTRIES AND COMMODITIES APPROACH

A. General Introductory Statement.

This document will be completely misunderstood if it is narrowly interpreted as a "proposals" that Spelman funds be assigned to the projects mentioned. That proposal is indeed included, but it is included as an organic part of a very much larger set of issues, such as:

1. A drastic reorganization of the presentation of "offerings" in economics and business - a matter mentioned here because the goals are (a) that of getting students more quickly into creative work, and (b) that of freeing most of the time of the mature members of the instructing staff for creative work. This will be done whether or not Spelman funds are allocated to the projects of the group, although such allocation would obviously be of great assistance. Indeed what has already been done was in part due to the assistance of these funds and it may turn out that this will be a matter strongly to be emphasized in our final report.

2. An attempt through the application of a technique worked out in the type studies (a) to induce a larger number of capable students to go on to creative work and (b) to provide an organizing center for the entire curriculum of the student through enabling him to relate his formal instruction in the various functional fields to a study of an industry. For this it is not appropriate to use Spelman funds, but the policy has distinct bearing upon other uses that would be appropriate; and it may happen that this will be a significant part in our final report on the influence of Spelman funds.

3. An attempt to organize a considerable part of the work of "formal" instruction in such a way as to produce data greatly needed for research. The project mentioned in the preceding paragraph is one illustration of this policy. Another is found in organizing "practical" statistics courses to parallel the methods courses. This policy is of no direct interest to this committee, except as it throws light upon the character of the research projects selected for submission to the committee, and as it is related to certain matters in the following paragraph.

4. The necessity of finding an organizing center or point of view for both the instructional interests and the research interests of quite a few of the members of the staff. We found that different persons were collecting the same data; that given business houses were being approached many times when once or twice would have sufficed; that certain projects were, on the other hand, cramped because of insufficient background data (statistical and other kinds) that could
not wisely be secured for one project but might very wisely be secured for a related group of projects. We found that individual members of the staff, pursuing their interests (in Chicago as a terminal market, Chicago as a money market, etc.) were using in part the same data and that there were mutually supplementary aspects of their interests, problems, and results. All this is of interest to the committee only in that it helps to explain why the group makes the proposal it does make, and especially why we propose a considerable centralization in data gathering.

5. The necessity of thinking through tentatively not a five year period but a much longer period in (a) the planning of the statistical and other tool-skill and tool-knowledge work to which the group is committing itself, and (b) the planning for economical and effective use of improved physical facilities. In so far as this document is a proposal for securing funds, it is a proposal to secure funds for use in a long-time comprehensive program of both instruction and research for most of the effective members of the group.

6. (As a corollary to the foregoing) The wisdom of formulating a "Spelman research program" for this group around which could be centered a substantial part of the other resources (financial and human) of the group - a substantial part, but not all, for we believe as heartily in the "hog-wolf" type of research as we do in cooperative research. We should like to think of such Spelman funds as are made available as a device for bringing to a focus many other resources, and it seems probable that such a method of utilizing Spelman funds will result in considerable results having accrued in the five years before us.

The foregoing six paragraphs refer more particularly to the effective, internal organization of our local situation - a matter of interest to this committee mainly as a background. Turning to the matter of the scientific outlook which characterizes the proposals of this document the matter may be put thus:

The Harvard Graduate School of Business Administration is gathering tens of thousands of business cases, expecting that they will not only give materials of instruction, but will also provide material which will yield, through "induction", sets of "principles". Gay and Mitchell (the National Bureau of Economic Research) see in price and prices the center of the economic process and believe that research in price problems will yield knowledge which will enable us to direct and control the production and distribution of economic goods in the interest of the greatest social good. These are, in terms of technique and methods, the two most interesting experiments in this field.

The center of interest of the Chicago group is also, of course, the intelligent direction and control of economic activity; and we should be glad if economic science were sufficiently far advanced for us to know its "basic processes" and to center our research about them. Actually we need, at the present stage, to take a half-step; to think through specific problems, using specific data while continuing to grope for "basic processes". We need to
find a detailed specific approach that will always contribute to a study of basic processes. Problems and data connected with industries and commodities of course occupy a large part of the economic field, and equally, of course, the specific details must cluster around processes. Now, curiously enough, very little has been done along this line. When it happens that the "industries and commodities approach" to research is (1) exceedingly promising, (2) practically unworked, and (3) capable of almost complete correlation with an instructional program, it seems indicated that we should select this approach.

In other words, this document is based upon a certain philosophy or outlook with respect to procedure. Perhaps it will simplify discussion to give this a name and call it "the industries and commodities approach" to assembling data, securing cross-fertilization of ideas, sharpening techniques, evaluating theories, and building regular instruction into a program of creative work for both faculty and students.

Of the foregoing, take out "assembling data" for further elaboration. Of necessity many (most) of our current investigations deal with industries and commodities. At present each worker has to dig for facts in a few of these industries but the effort is fragmentary, narrowed in scope, and seriously inadequate. It is bound to be so where each individual is thrown back upon his own isolated resources. Ten different men, each interested in basic data from the same industry, but searching for it individually cannot be effective. What is proposed is that these men pool their fact-gathering processes, concentrate upon selected industries, and coordinate their accumulation of evidence. Once the data are assembled, naturally the uses to which they will be put will diverge, depending upon the respective interests of the workers in the various fields. Analysis, utilization, interpretation, inference, hypothesis, verification—all these will vary as widely as the fields of special interest of the individuals concerned. But before these creative stages can be reached, the basic data must be accumulated. Then minor additions can be made to meet the interests of particular projects.

Perhaps it should be emphasized that the "industries and commodities approach", while specific is not narrow. On the contrary it tends toward cooperative action by a wide range of interests. In the instructional program, for example, every given industry raises problems of geography; technology; economic history; finance, including relation to money markets and the internal problems of credit analysis and capital raising; taxation; labor and personnel administration; transportation and communication; market organization and process; risk, including insurance and forecasting; internal problems of administration; and social control, including law. In the realm of economic theory such issues are raised as the determination of price; location of industry; size of maximum efficiency of the business unit; and the place of profits, to cite only four cases out of a multitude. The industries and commodities approach seems to meet best the two requirements of concreteness and breadth of vision.

One other matter should be mentioned in this introductory statement. Are the proposals headed toward cooperative research? The answer depends upon what is meant by cooperative research.
to form a series of questions that the student can answer to determine the nature of the function. The instructor should ensure that the student understands the steps involved in formulating a question, and that the student has a clear understanding of the function's properties. The instructor should also encourage the student to formulate questions that are specific to the function, and that are likely to lead to a deeper understanding of the function's behavior.

The student should be encouraged to think critically about the function and to consider the implications of the answers to the questions. The instructor should ensure that the student understands the importance of the questions and how they relate to the function. The student should be encouraged to ask questions that are not immediately obvious, and to consider the implications of the answers to the questions. The instructor should also encourage the student to think about the function in a way that is consistent with the function's properties, and to consider the implications of the answers to the questions on the function's behavior.

The student should be encouraged to think critically about the function and to consider the implications of the answers to the questions. The instructor should ensure that the student understands the importance of the questions and how they relate to the function. The student should be encouraged to ask questions that are not immediately obvious, and to consider the implications of the answers to the questions. The instructor should also encourage the student to think about the function in a way that is consistent with the function's properties, and to consider the implications of the answers to the questions on the function's behavior.

The student should be encouraged to think critically about the function and to consider the implications of the answers to the questions. The instructor should ensure that the student understands the importance of the questions and how they relate to the function. The student should be encouraged to ask questions that are not immediately obvious, and to consider the implications of the answers to the questions. The instructor should also encourage the student to think about the function in a way that is consistent with the function's properties, and to consider the implications of the answers to the questions on the function's behavior.
Economics Research Program

This group has for the last ten years certainly not been unaware that the striking developments of the future may be in "the border lands." That is why it emphasizes correlation in its instructional program and has on its budget an engineer, a chemist, a psychologist, two geographers, three lawyers, accountants, and statisticians, as well as the orthodox and washed. The group not only believes in cooperative work (in addition to lone-wolf work) but has also practiced it enough to be quite conscious that cooperative work is more a matter of spirit than of formal organization. True, cooperative research, as we see it, is most likely to be fruitful if it is the natural outgrowth of a coherent; out-reaching instructional program; synthesized materials of instruction; belief in the fertility of borderlands; desire to experiment with other techniques and methods. As we understand the proposals made later they look toward (1) cooperation within the group itself and (2) cooperative work with others. But they do definitely connect up primarily with the scientific interests of individual members of the staff.

If the foregoing has served the purpose for which it was intended, it indicates that the material which follows

1. is drawn in terms not of five years but of a much longer period - even if the drawing is tentative.

2. deals with one particular aspect of the organization of the work of the group - an organization believed to be so "right" that it will be followed even if no Spelman money can be made available for its support.

3. proposes to use Spelman research funds and new building facilities as a means of assembling and utilizing a considerable part of the other resources of the group.

4. deals with a closely related series of scientific problems which may all be approached through the "industries and commodities approach," thus making possible cooperative work in assembling data and in interpretation.

5. does not in this document present a well rounded analysis or program of research. It is rather a statement of those aspects of the field likely to fall within the terms of the Spelman grant and in which the existing personnel now has an active scientific interest; for, it is believed, a program of research will remain but a program unless it is drawn in terms of the scientific interests of the personnel concerned.

B. The Main Divisions of the Research Projects

Mentioned in This Document

This topic is discussed below under the following main headings:

I. Assembling basic data
II. Selected Scientific Problems
III. Some by-products and possible developments.
PREPARED FOR DISTRIBUTION NOT FOR PUBLIC RELEASE

I. Introduction

II. Background

III. Objectives

IV. Methodology

V. Results

VI. Conclusion

References

Appendices
In this brief memorandum it is possible to set forth only the more prominent features of each division of the subject matter. And, although several years of preliminary thinking have been given to the matter, it is only reasonable to expect that the actual elaboration of the work will be somewhat different from the sketch here presented. Each investigation must have some possibility of determining its course step by step.

While the project is outlined as if the parts were sharply distinct from each other, and while it is possible to undertake a specialized investigation of almost any of these subdivisions independently of the others, it should be emphasized that the project is conceived of as a unified project both in terms of the approaches utilized and in terms of the ultimate goals sought.

Perhaps specific attention should be called to the fact that what follows is primarily a statement of a program. The attempt has not been made adequately to sharpen the statement of the scientific problems involved; adequately to indicate the variables at issue; or adequately to sketch the technique of the investigations. No project is suggested for men who are not experienced in such matters.

I. Assembling Basic Data

It will be necessary to gather great masses of basic data. A few illustrations of the types which should be assembled are: census figures of the various industries including special re-arrangements of these figures; import, export, production, and consumption figures; scores of thousands of cards transcribed from factory inspector's and other official's reports; price movements; banking statistics, etc. These masses of basic data would have a central core that would be usable in many if not all of the scientific problems being investigated; but, of course, there would need to be additional data and modifications of the original data for purposes of given specialized problems. To a considerable extent the assembling of these masses of data would be clerical and statistical work, supervised, of course, by competent members of the research staff, -- one of the first duties of the staff being that of marking out the lines to be followed in gathering data. The volume of work would be so great that it would be expedient to have a permanent supervisor in charge, who will work not only with the research staff but also with the data gathering factor of the instructional program.

There are, too, significant library problems and activities that may for convenience be treated under this head, "assembling basic data." It is quite essential that some competent person serve as the librarian of the group having such duties as the following: (a) developing bibliographies as needed; (b) placing orders for permanent library material; (c) securing large masses of fugitive library material such as annual reports of leading companies in this region, to cite only one illustration; (d) working out a system of filing fugitive material for use in various parts of the research enterprise; (e) working out a system of storing and keeping readily accessible cards, notes, manuscripts, etc., worked out by research assistants. Such duties would call for a librarian, a stenographer, and probably two clerks.
It need hardly be pointed out that the work, if done on a sufficient scale, could readily become the storehouse of information in this field to which interested members of the community would turn. A great industrial library at the university would be a fit companion to an industrial museum on the lake front; and it is not unthinkable that the museum might welcome such a cooperative arrangement.

Partly as material that will itself be a finished product and partly as material that will be basic for further studies it is necessary to select a list of industries especially significant in this region and to seek the answers to the following questions: (1) What have been the facts stated statistically and geographically concerning the development of this industry in the United States? (2) What have been the facts concerning the development and shifting location of this industry in the Chicago Region? (3) What explanations can be advanced for both sets of facts?

This work is already well under way. As for the part that remains, some dependence can be placed upon the staff in charge of assembling the basic data referred to above. Dependence can also be placed upon undergraduate theses, masters' theses, and doctors' theses. Statistical supervision will be necessary as well as facilities for chart and diagram making.

The group has no hesitation in recommending as a clear cut project the gathering of basic data of the type here referred to. For much of it a use is already at hand; but it is wise to gather such data for some possible future use whose precise character is as yet unknown. We must have more data in economics; this kind of data is certain to be useful for something; much of it must be gathered currently, or never.

II. Selected Scientific Problems

As indicated earlier, there are suggested here only those problems which seem likely to fit in with the terms of the grant, and have for some time had the interest of certain members of the staff. These are:

1. Banking policy and monetary theory, including Chicago as a money market. (Edle, Mints, Nerlove)
2. Credit analysis and capital raising (Meech)
3. The problem of price determination (Schultz)
4. Fluctuations in business activity and forecasting these changes (Cox)
5. Chicago as a terminal market (Duddy)
6. The control of industry (Nerlove)
7. Motivation in industry (Kornhauer)
8. The Economic history of Chicago (Wright)
9. Theory of International Trade
10. Studies in the technique of investigation (Staff)
11. The location of industry
12. The size of maximum efficiency of the business unit.
This project aims at five main marks. (1) Establishing a new trick or technique of investigation, (2) Testing an economic theory, (3) Answering a pressing practical problem of the day, (4) Envisaging a part of our institutional life more clearly, (5) Contributing to an Economic history of Chicago.

Stated in general terms the problem set is this: A study of the fluctuation of bank credit, prices, and interest rates; for the purpose of becoming able more fully to control those economic disturbances commonly called inflation and deflation. Some of the more striking specific issues will be cited later.

Virtually all economists who have dealt with the problem of the relations between credit and prices have put the problem in a very general form, e.g. Do prices rise first, and cause a subsequent increase of bank credit in order to do business at the new price level? Or does credit expand first, and cause a subsequent inflation of prices. The concept of "prices" has been a general average of prices of all commodities in all sections of the country. The concept of "credit" has been a grand total of bank deposits for the whole country. Lump sums, indiscriminate aggregates, merging all industries and all regions, have been the approach. Under such concepts and approaches, progress in this field has come about to a stand still. Yet issues as great as free silver - such as stabilization of prices, Federal Reserve policy, control of a prospective gold surplus or shortage - are pressing for solution.

It seems that progress can be made only by breaking the problem up into its elements. By this is meant that individual industries (this does not mean individual plants) should be so studied as to compare and contrast their demand for bank credit and their changes in price and interest cost. The discovery of differences and uniformities in specific industries is the key to the situation.

Not only should the data be studied by industries but also by regions. Fluctuations in one section of the country should be set up along side of those of other sections. The peculiarities and similarities of various local regions require comparative analysis - Chicago, New York, Kansas City, San Francisco, London must be weighed against each other with respect to their financial behavior.

This emphasis upon specific industries and specific regions does not deny the importance of a broad, comprehensive use of data. From a study of the elements, the units, of financial behavior, it is possible to build up those inferences and generalizations which constitute scientific knowledge. National and international totals, statistics of masses of data, must be used; but before they can be used to advantage the more microscopic research must be done. This necessarily comes back to industries and regions as the unit of classification.
The following may be cited as the specific issues which will first receive attention.

(a) Is centralized control of the bank discount rate the correct policy? (Edie)

The recent controversy over the power of the Chicago Federal Reserve Bank to fix its discount rate without dictation from the Federal Reserve Board illustrates the basic problem of regional differences in our financial requirements. The intent of the Strong Bill and of other measures designed to control the price level by central bank policy illustrates the great importance of this field of investigation. Up to the present, study of this problem has failed to differentiate clearly the regional contrasts between Federal Reserve Districts. It is now proposed to start from Chicago as one local unit with its type of business needs and develop a comparison with other units with respect to the problems of discount policy, price investments, and bank credit in all its variations. On this issue the very existence of the Federal Reserve System is thought by many to depend.

In this investigation there is place for the specialized skills of the theorist, the man in money and banking, the man in business finance, the lawyer, the statistician, the geographer, and the economic historian— to cite only those whose interests lie closest to the issue.

(b) Is the quantity theory of the value of money sound? (Edie, Schultz)

Economic theory, in its monetary branch, is primarily pure value theory. For a century and more, there has been violent dispute between two schools, the quantity theorists and their opponents. The concepts have been reduced to refined mathematical statements and much attempt at empirical verification has been made. Nevertheless, the whole matter continues in dispute and the theory of the value of money is one of the most unsatisfactory parts of economic science today. It is proposed here to break away from traditional methods and to investigate the demand for credit and to study price fluctuation by industry and region by region. By thus breaking the problem into its finer units, we should be able to develop a value theory in the field of money which will have empirical justification.

This issue lies closest to the interests of the theorist, the man in money and banking, and the statistician.

It is appropriate at this point to indicate that the history and institutional framework of the Chicago money market be analyzed in connection with such a study; which leads to

(c) What is the structure and functioning of the Chicago money market? (Mints, Nerlove)

There is in this topic a striking opportunity to examine the development of a great financial center under circumstances giving the investigators access to the men who played leading roles in this development. The interest which