

MEMORANDUM

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Econometric Society 1930: How It Got Founded

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Econometric Society 1930: how it got founded

by

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Abstract

The Econometric Society was founded at an “organization meeting” in December 1930. The invitations had been issued by Irving Fisher, Ragnar Frisch and, Charles F. Roos. In June the same year they had sent a form letter to a list of 31 scholars to solicit advice about establishing an international association “to help in gradually converting economics into a genuine and recognized science.” The responses of these scholars from ten different countries are set out at some length in the paper. Rather than persevering in building a constituency of adherents on which a society could be founded the three initiators decided to rush ahead and sent out invitations to an organization meeting to found the Econometric Society at short notice. The paper discusses possible reasons for the change of pace, indicating that Schumpeter had a decisive role, and gives an account of the deliberations of the organization meeting founding the Econometric Society.

Keywords: Econometric Society

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1. Introduction

Ragnar Frisch arrived in USA in early February 1930. He had, thanks to Irving Fisher been invited by Yale University as Visiting Professor. Fisher had discreetly donated the necessary means to Yale for inviting Frisch. He also gave Frisch substantial and additional means from his own coffer to assist him in research projects and odd jobs. Fisher also provided office and work space for Frisch in his spacious quarters on 460 Prospect Street in New Haven. Frisch rented himself and his wife an apartment on 100 Howe Street ten minutes away.

From his arrival and until he left Yale one year later Frisch was in frequent contact with Irving Fisher. Soon after his arrival Frisch re-established contact with Charles F. Roos with whom he and Irving Fisher had worked in 1927/28 to drum up support for an econometric association.¹ Roos was still involved with the American Association for the Advancement of Science and was now at Cornell University. While Frisch had been back in Norway for almost two years 1928-30 he had in between continued to propagate the idea in Europe and discussed it by letter and in direct contact with a number of European scholars from close to a dozen countries.

When the trio of Fisher, Roos and Frisch met again in 1930 they were prepared to move forward with the idea conceived by Frisch and Divisia in 1926 and nurtured by Fisher, Frisch and Roos since 1927. The question was how to continue towards achieving concrete results, namely establishing or at least laying the ground work for an international association to further the idea of *econometrics* as explicated and demonstrated in Frisch (1926). For Fisher this aim merged with his efforts from much earlier of promoting *mathematical economics* as he had done so eminently in his own work and in his effort to revive the mathematical economics tradition back to Cournot. It is part of the Econometric Society lore that, “[a]s early as 1912, while Irving Fisher was vice-president of the American Association for the Advancement of Science, he had attempted to organize a society to promote research in quantitative and mathematical economics. Wesley C. Mitchell, Henry L. Moore, and a few others had been interested but they were too few, and for the time being nothing came of their vision.”Christ (1983, 3).²

Frisch’s European perspective may have differed from the American view of the other two, although Fisher also knew the European side well from travels in earlier years and by correspondence. Frisch may have considered the potential of finding members of some standing for the association to be greater in Europe than in USA based on his impressions from 1927. On the other hand he seemed to be convinced that it offered better prospects to get the organization off the ground in USA rather than in Europe.

Fisher and Frisch seem to have had shared on the one hand the motivation in their venture derived from the impressive advance achieved in physical sciences, carrying with it increasing mathematization and new kinds of mathematics put to practical use, and on the other the somewhat dubious state of economics with regard to any pretence of being a scientific

¹ The history of the founding of the Econometric Society rendered is a somewhat more correct and better documented version of Bjerkholt (1998). The version in Christ (1983) relied mostly on oral testimony many years after the events and deviates on some points from the account given in the paper. Louçã (2007) is based on ample access to original documents and reliable secondary sources but have bungled the facts so much that it is beyond repair. Not even the list of Presidents is correctly stated and several of them have even got their names misspelled.

² The core of the Fisher story from 1912 is surely true although the details are missing. Fisher showed Frisch some of the name lists he had compiled of people interested in mathematics.

discipline. Fisher, Frisch and Roos were all mathematically proficient and shared the view that increased use of mathematics was needed in economics and would serve economics well without being too definitive about what kind of mathematics could be helpful in economics in the future. The influence of science and mathematization could be observed around them. They were e.g. aware of the developments in statistics. Mathematical statistics was an emergent discipline in USA. In the very month Frisch arrived to USA a new journal, *Annals of Mathematical Statistics*, came out with its first issue. The huge American Statistical Association (ASA) had for some time tended “to become divided into two groups - those familiar with advanced mathematics, and those who have not devoted themselves to this field” (King 1930, 1), and ASA had created the new journal to accommodate this development.³ Such observations reinforced the belief of the soundness of their venture to promote a more scientific discipline of economics, reinforced with mathematics and statistics.

* * *

Fisher and Frisch had in recent years both taken an interest in on marginal utility measurement. It came up naturally between them to make a co-operative effort to “push the study of utility measurement further” (Frisch 1932, 5). This didn’t come to anything however as they were not able to find reliable regional price data. Fisher had difficulty finding the time and dropped out while Frisch tried out other approaches and completed during his year at Yale a monograph, the first comprehensive attempt at measuring marginal utility.⁴ He had planned to complete the bulk of work for three or four monographs during that year at Yale but time ran out and his planned monographs on production theory and time series analysis were not completed. During the year at Yale Frisch seemed to have laid the ground work for many, if not most, of the ideas he pursued in the ensuing years. The effort he exerted at establishing an econometric society was quite limited but still very important to Frisch as he saw most of his research as embodiment of the econometric research program he had envisioned.

Shortly after Frisch’s arrival he gave at Fisher’s invitation an opening lecture to the students at Yale on the evening of February 13 1930, titled *What is economic theory?*⁵ The lecture was an early statement in elementary terms of the modern conception of economic theory. A broad view of economic science was outlined, particularly the idea of ‘model’ as the indispensable tool for the development of economic theory. Frisch gave an allegorical introduction to the idea of a ‘model’ in economics and also set out ideas of how to discuss causality and probabilistic relations within a modeling framework. The lecture also comprised a passionate plea for the need for a more scientific economics discipline to cope with the pressing economic problems of mankind. Paul Samuelson wrote many years later, “I believe the word *model* itself may have been introduced by Frisch in its present economic sense” (Samuelson 1974, 8); he may have had in mind the Frisch lecture from 1930.

* * *

³ At the outset the new journal was intended to cover applications of mathematical statistics in the fields of astronomy, physics, psychology, biology, medicine, education, business and economics, see King 1930, 1.

⁴ Frisch submitted the ms. to the publisher in Germany just before he left Yale in early 1932. The book was published as Frisch (1932).

⁵ The lecture is included in Frisch (2010).

Fisher, Frisch and Roos had since 1927 discussed the possibilities for founding an econometric association. Frisch had in the intervening years had extensive contacts with economists and statisticians in Europe and gathered a fair amount of support for the idea. So far there had been little progress. When Fisher, Frisch and Roos met again in 1930 they were determined to advance. They agreed to draw up a list of names for persons to solicit for advice for how to proceed. A list of 31 names was drawn up in June 1930 and a five-page letter sent to the names on the list. The responses were mixed but with an overwhelming support for moving forward with the project.

In the continuation the trio deviated from their own plan for how to proceed. They decided to draw up an extended list of names and invite the persons on it for an “organization meeting” in Cleveland at the end of December for founding an econometric society. The time and place had been chosen to coincide with the joint meetings of associations of economists, statisticians and mathematicians.

The responses to the June letter are set out in some detail in section 2. The organization meeting is dealt with in section 3. Section 4 concludes. The invitation letter for the organization meeting and the name list it was sent to, are set out in the appendix.

2. Asking advice on how to establish an association

Fisher, Frisch and Roos met in mid-June 1930 at Irving Fisher’s house close to Yale University. Roos may have come down for the weekend of June 14-15. The purpose of the meeting was the next step in the joint venture they had initiated in 1927 with discussions about the programmatic idea launched in Frisch (1926) of a new discipline of *econometrics*, and about the follow-up suggestions that had emerged, also in 1926, in letter exchange between Frisch and François Divisia about creating an econometric association and a journal, tentatively named *Econometrica*. During the year Frisch was in USA in 1927-28 they had all been enthusiastic about the idea of *econometrics* and discussed it with others. Frisch had visited several universities and institutions to meet of people whose names had been mentioned to him as possibly interested and worthwhile contacting. But no decisive action had been taken by the time Frisch left in April 1928.

Fisher was a very careful person who knew, partly from his own experience, how difficult it could be to gather support for an academic idea unless it was well prepared and supported. Within the trio Fisher naturally had an influence that reflected his age, position and experience. The other two may have been closer to a role as advisers to Fisher than as equal partners in a troika. Frisch, perhaps also Roos, had great admiration for Fisher and would hardly have even been able to think of an alternative leader for this venture candidate if Fisher for some reason had disappeared from the scene.

It seems likely that it had been decided even before Roos arrived at Yale for the weekend that the next step was to sound out the reactions of carefully selected persons. A form letter was drafted presenting the purpose as “the organization of an international association for the advancement of economic theory ... to help in gradually converting economics into a genuine and recognized science.” It wasn’t obvious how to formulate the purpose of the association. Several of the formulations used by Frisch and others had explicitly pointed to the role of mathematics and to verification of theories. The emphasis on economic theory was always there.

All these formulations could be traced back to Frisch (1926). That was also the case for the key sentence in the letter about converting economics into a science. The term *econometric(s)* was not used in the letter.⁶

The form letter also asked for the recipients' views on a number of questions related to such an international association. The letter may thus be considered as questionnaire or an *enquête* but may be deemed a poorly designed one both in structure and content.

It was decided to write only to a short list of persons who were largely well-established within the profession. Some had retired after a long career. They talked about this list as the "first list", implying in line with what was stated in the letter that a follow-up letter of inquiry would be sent to a longer list. As mentioned above the "first list" comprised 31 names including Fisher, Frisch and Roos.

Of the 28 names they had put on the list there were eight Americans: T. N. Carver, John B. Clark, John M. Clark, Griffith C. Evans, Mordecai Ezekiel, Henry L. Moore and Warren M. Persons and Henry Schultz. Henry Moore (b.1869) had done impressive pioneering work in confronting theory and data in studies of demand and of business cycles. During visits to Europe he had attended lectures by Carl Menger and Karl Pearson and he had met both Walras and Pareto. Moore had suffered from illness in long periods and retired from Columbia University the previous year. John Bates Clark (b.1849) was the oldest person on the list and had studied under Karl Knies of the German historical school. He was nevertheless an outspoken neoclassical economist who for many years until retirement had been professor at Columbia University. Also J.B. Clark's son, John Maurice Clark (b.1884), was on the list. His intellectual luggage combined his father's teachings and a leaning towards institutionalism. He had "inherited" Clark Sr.'s professorship at Columbia University.

Thomas N. Carver (b.1865) and Warren M. Persons (b.1878) were both Harvard men. Persons had been the key analyst when Harvard started its business of economic forecasting in the early 1920s and the creator of the A-B-C framework it relied upon while Carver was chairman of the Department of Economics (Friedman 2009). At the fifth annual conference of the Harvard University Committee on Economic Research President Lowell at Harvard had commended Persons and his colleagues for their effort in developing economics from an inexact to an exact science, while Carver spoke of the need of conducting national affairs by scientific economic principles, while "two great countries of the world are on the rocks largely because the men in control were illiterates in economics."⁷ But the glory and the self-adulation of the early 1920s had all gone.⁸ Persons left Harvard a couple of years before 1930, and was working on his last book, *Forecasting Business Cycles*.⁹

⁶ The purpose was reformulated, presumably by Frisch in the constitution of the Econometric Society, but still traceable to Frisch (1926).

⁷ The words fell at the fifth annual conference of the Harvard University Committee on Economic Research, as reported in Harvard Crimson, October 22, 1923.

⁸ The book was published 1931. The methodological weaknesses of the "Personsche System" had been exposed by the German-Russian statistician Oskar N. Anderson (1929) who was highly regarded as a statistician among the early members of the Econometric Society. In 1930 Persons conjectured, using the system he had developed at Harvard, that recovery would begin early in 1931 and normal conditions restored by the first quarter of 1932, see Glasner (1997, 527).

⁹ Persons had been editor of *The Review of Economic Statistics*, the journal established by Harvard as a review of economic statistics. Soon after Persons left the journal began a transformation into a more regular journal

One may wonder why so many of the Americans on the list came from the older generation but they were after all selected by one of their own, Fisher was born in 1867. Of the younger ones Griffith Evans (b. 1887), a mathematician and mathematical economist had been Charles Roos' teacher at the Rice Institute in Texas and was well connected with both economists and statisticians. He moved to UC Berkeley in 1934. Henry Schultz (b.1893) at the University of Chicago was a versatile economist familiar with all statistical technique in use and specialized in demand analysis of agricultural products. Mordecai Ezekiel (b.1899) was a well-equipped representative of the large group of agricultural economists who mostly had institutionalist oriented education and worked at USDA or an affiliated institution.

Before we leave the American group it can be noted that Wesley Clair Mitchell was not on the list of the recipients of the June letter, while he might well have come out on top in a ranking of the most important American economist by professional economists. We therefore have to assume that his name was discussed before it was decided to omit him on the list. He did, however, receive the November invitation. Then there is the case of Harold Hotelling, who arguably was the most important American member in the ten first years of the Econometric Society (and President in two of them). Hotelling who was of the same age as Frisch, i.e. born 1895, was like Mitchell, not on the list. Hotelling had visited R.A. Fisher at Rothamsted for a period of time but was back at Stanford from the beginning of 1930. A possible hypothesis here of why Hotelling was bypassed is that his striking proficiency in economic theory was not yet known(?). If so, it was an unfortunate mistake. Hotelling got, however, like Mitchell, the November invitation and thus became involved in the Econometric Society from an early stage beginning. He became the first American President of the Society after Fisher.

The second largest group were the five Italians: Luigi Amoroso, Corrado Gini, Umberto Ricci, Alfonso de Pietri-Tonelli and Gustavo del Vecchio. Italy was strong nation in economics at this time, not least mathematical economics. Schumpeter observed that while Italian economics had not been much in the early 1870's in 1914 it was second to none and added that "independently of Pareto, Italian economics attained a high level in a variety of lines and in all applied fields (Schumpeter 1954: 855). Gini (b.1884)'s eminence was in demography and statistics applied to economics and social science in general, more than in economic theory. Amoroso (b.1886) was a prominent follower of Pareto and known for work in mathematical economics, so were also the other three (although Pietri-Tonello threw some doubt over Del Vecchio (b.1883)'s proficiency, see below). Italy was under fascist rule and the development of corporative economics was promoted. Gini in particular was deeply involved with fascism and had been very close to Mussolini in the mid-1920s. Amaroso was also firmly on that side but it hardly affected much of his work. Ricci (b.1879) and de Pietri-Tonelli (b.1883) were anti-fascists; Ricci chose voluntary exile in Egypt from 1931. Del Vecchio had yielded to the pressure of joining the party but perhaps with little enthusiasm.

The four from France comprised Clément Colson (b.1853), François Divisia (b.1889), Jacques Moret, and Jacques Rueff (b.1896). Colson, Divisia and Rueff all belonged to the French engineer-economist school. Colson had been the teacher of Divisia and Rueff (and also René Roy) at the l'École Polytechnique. Colson was the grand old man of France as a proponent of the use

retaining an empirical orientation, a process completed by the name change from vol. 30 in 1948, oddly suppressed in JSTOR, which otherwise reports name changes in an immaculate way.

of mathematics in economics; his students showed him great reverence. As it appears he was far from outdated as a person to solicit for advice. Frisch may even have preferred it to that of Divisia. Divisia had recently published *Divisia* (1928). Jacques Moret was associated for many years with *Revue d'économie politique* in which he wrote much about the activities of the Econometric Society through the 1930s. He had published a well-known book on the use of mathematics in economics (Moret 1915) and translated Irving Fisher's 1892 dissertation into French (Fisher 1917).¹⁰

Only three names were included from England: Arthur L. Bowley (b.1869), A. C. Pigou (b. 1877), and John M. Keynes (b.1883). Bowley was the type of scholar in background and interest who Frisch and Fisher really wanted to enlist in the econometric movement. The attempt to involve Pigou was unsuccessful, and he never joined the Econometric Society. Keynes was an obvious choice on the list but he did not show much interest in the venture.

From Sweden Gustav Cassel (b.1866) and Bertil Ohlin (b.1899) were on the list. Cassel who came to economics from mathematics, exerted great influence in the 1920s as a League of Nations economic expert and author of a widely used textbook, *Cassel* (1924, originally published in German in 1919). Cassel's longtime rival in Swedish economics, Knut Wicksell had died in 1926. The younger generation, the Stockholm School, including Ohlin, preferred to build on Wicksell. Cassel would soon be fading star and wanted nothing to do with the econometric ideas. Ohlin had studied at Harvard in the early twenties. He joined Econometric Society as some of the other Stockholm School economist but none of them showed much interest in econometrics.

Two others on the list with whom Frisch had discussed the ideas of an association and a journal already in 1926 were professor in Berlin, Ladislaus von Bortkiewicz (b.1868), and Eugen Slutsky (b.1868) who had been professor in Kiev before he moved to the Conjunction Institute in Moscow. Both Bortkiewicz and Slutsky had then shown great interest and given constructive advice. But Bortkiewicz lived for only one more year and Slutsky had put economics aside for good – for political reasons. From the fertile circles of intellectuals interested in economics in Vienna only the Austrian School economist Hans Mayer (b.1879) was on the list. Mayer understood mathematical reasoning but was not a proponent of the use of mathematics in economics; see Leonard (2010, 83-91).¹¹ From Denmark Harald Westergaard (b.1853) was on the list; he was a renowned statistician and had earlier in his life engaged in economics. From Poland Wladislaw Zawadski (b.1885) was on the list and known for his monograph on the use of mathematics in economics, *Zawadski* (b.1914), in the Paretian tradition.

Finally Joseph Schumpeter was, of course, on the list. He did not move to USA until 1932 but his two visits to USA prior to his move had coincided with Frisch's visits in 1927 and 1930. Schumpeter had discussed the econometric ideas with Frisch and Fisher in 1928 and later with Frisch in Europe. From his earlier involvement he might thus very well have been an additional signer of the June letter but he did not was not in USA yet, he arrived in early October 1930 and visited Fisher and Frisch at Yale shortly afterwards. Despite their differences in age and

¹⁰ It was through the French edition that Frisch learned about Fisher's work in Paris in the early 1920s.

¹¹ Hans Mayer joined the Econometric Society in 1931 and remained a member until the end of 1930s. At that time most of the intellectuals he had mingled with in 1930 were in exile or dead and Mayer had joined the Nazis.

background Fisher, Schumpeter and Frisch seldom disagreed on any issue related to the founding of Econometric Society and its activity in the early years.

The lists then comprised a number of economists with links to the great names of the marginal revolution in economics. There were economists who had met Walras, such as e.g. Henry Moore, and others who had known as students or contemporaries one or more of great economists like Pareto, Edgeworth, Marshall, Menger, Wieser, Böhm-Bawerk, or Wicksell. But why they had settled just on these names, is not known. Fisher is likely to have exerted major influence in the selection of American names while Frisch may have come up with had most of the European names.

The June meeting ended by the trio preparing the letter they sent to each person on the list. It is an interesting and revealing letter with regard to how the trio was thinking or, rather, what they were worrying about. It also has a number of interesting details, including some slightly puzzling ones. The letter does not use the term *econometric* at all neither to indicate the subject matter nor as part of the name for the proposed association. In fact the letter did not make any specific suggestions of a name for the association. It was only obliquely in the proposed name of the association's journal that Frisch's *econometric* term appeared. The letter is rendered in its entirety below.¹²

The letter of June 17, 1930

460 Prospect Street
New Haven, Conn. U.S.A.
June 17, 1930

The undersigned are writing to ask your opinion as to a project we have been considering, namely the organization of an international association for the advancement of economic theory. As we see it, the chief purpose of such an association would be to help in gradually converting economics into a genuine and recognized science. Such a purpose, we think, can only be realized by giving the association a theoretical scope. Only in this way, we believe, can one make sure that its work will proceed on truly disinterested lines, exempt from national, political and social prejudice. The word theory in this connection should, of course, not be interpreted as synonymous with abstract reasoning only, but as including also the analysis of empirical evidence suggesting or verifying theoretical laws.

According to our present ideas, membership should be subject to election by general vote of the association and should be limited to those who

(a) are thoroughly familiar with general economic theory,

¹² Louçã (2007, 28) states that the letter was an invitation to a "foundational meeting of the Econometric Society" while there is no mention of a foundational meeting in the letter.

(b) have a working knowledge of mathematics as applied to economic theory and statistics,

(c) have some knowledge of accounting,

(d) have published an original contribution to economic theory or to the analysis of such economic statistics or accounting as have a definite bearing on problems in economic theory.

Do you agree that such an association is desirable and if so, do you find that (a) to (d) give an adequate formulation of the requirements for eligibility, or would you suggest some other formulation? Do you think the requirement: "Have some experience in handling statistical data" should be added?

Do you consider yourself eligible for membership according to the conditions (a) to (d) and would you, if enough others do likewise, help form the association and become a charter member?

It is of special importance, of course, that the charter membership should consist only of those with undoubted qualifications. With a view to this we have considered it essential from the very start to have the advice and judgment of a selected group of economists, namely the following, to whom the present letter is being sent:

Luigi Amoroso, University of Rome, Italy
 L. v. Bortkiewicz, University of Berlin, Germany
 A. L. Bowley, London School of Economics, England
 T. N. Carver, Harvard University, Cambridge, Mass., U.S.A.
 Gustav Cassel, Stockholms Högskola, Sweden
 J. B. Clark, 407 West 117th Street, New York City, U.S.A.
 J. M. Clark, Columbia University, New York City, U.S.A.
 C. Colson, École Nationale des Ponts et Chaussées, Paris, France
 François Divisia, École Nationale des Ponts et Chaussées, Paris, France
 G. C. Evans, Rice Institute, Houston, Texas, U.S.A.
 Mordecai Ezekiel, Bureau of Agricultural Economics, Washington, D.C., U.S.A.
 Irving Fisher, Yale University, New Haven, Conn., U.S.A.
 Ragnar Frisch, Oslo University, Norway (pro tem Yale University)
 Corrado Gini, University of Rome, Italy
 John M. Keynes, University of Cambridge, England
 Hans Mayer, University of Vienna, Austria
 H. L. Moore, Columbia University, New York City, U.S.A.
 Jacques Moret, 4 Rue d'Agnesseau, Paris, France
 Bertil Ohlin, Handelshögskolan, Stockholm, Sweden
 Warren M. Persons, 76 MacDougal Street, New York City, U.S.A.
 A. C. Pigou, University of Cambridge, England
 Umberto Ricci, University of Rome, Italy
 Charles F. Roos, Cornell University, Ithaca, New York, U.S.A.
 Jacques Rueff, Institut de Statistique, Université de Paris, France
 Henry Schultz, Chicago University, Chicago, Illinois, U.S.A.
 J. Schumpeter, University of Bonn, Germany
 Eugen Slutsky, Institut für Konjunkturforschung, Moscow, U.S.S.R.
 de Pietri-Tonelli, University of Venice, Italy
 Gustavo del Vecchio, R. Università Commerciale, Trieste, Italy

Harald Westergaard, University of Copenhagen, Denmark
Wl. Zawadski, University of Wilno, Poland

If we receive sufficient encouragement from this group, we expect to send a similar letter to a larger group. Will you please supply the names of persons who, according to your opinion, should be included in this larger group? It would be a great help if you could furnish some references to the publications of those whom you suggest to be included. Before we take any final step, a tentative list of the names thus suggested to us will be prepared, and the list submitted for criticism to those to whom the present letter is being sent.

You will notice that in the requirements for eligibility we have put a good deal of emphasis on the quantitative character of economic theory. As you know, the quantitative movement in economics started on an a priori basis through the introduction of mathematics into economic theory. Afterwards and independently, empirical studies in mathematical statistics were made. Still more recently, a beginning has been made to bridge the gap between these two approaches. These attempts at putting economics on a scientific and quantitative basis by introducing numerical and statistical observations into the theoretical structure we consider as one of the most promising developments in modern economics, and one to which the association should give considerable attention. In our opinion, it will be largely through a constant and close connection between the abstract-rational and the concrete-empirical points of view that the modern quantitative movement in economics will produce significant and lasting results.

We believe that the association should not include those who have merely treated economic problems empirically, without reference to fundamental theoretical principles. If you and the others consulted are in sympathy with us in laying down this policy, mathematical statisticians as such will not be included. They will only be included if they satisfy all the requirements (a) to (d). In practice, the line may be difficult to draw. On this we would like to have your judgment.

According to our present idea, there would be no dues except voluntary ones. To raise the necessary funds we might apply to individuals and to foundations or organizations accustomed to assist research work. If at first sufficient funds should be difficult to raise, the publishing activity of the association might be restricted to a yearly leaflet giving the names of the members with addresses brought up to date and a list of the recent publications of the members. Such a leaflet would stimulate, we believe, an informal private correspondence and exchanging of reprints between the members.

If sufficient funds are raised, it would probably be desirable to create a journal. As we see it, the distinctive feature of such a journal should be to concentrate on the quantitative study of economics in the sense described above. Although such a policy would mean devoting a major part of the journal to mathematical economic contributions, non-mathematical papers might also be accepted provided they made a significant contribution to economic theory or to the numerical verification of the laws of economic theory.

Besides the publishing of original papers there would, in our opinion, be three main functions for the journal:

(1) reviewing and abstracting the more important mathematical economic works, both those currently published in other economic, statistical and mathematical journals, and the outstanding works of the past,

(2) furnishing biographical notes regarding mathematical economists of the past,

(3) preparing a complete and systematic annotated bibliography of mathematical economic literature. This would require the cooperation of correspondents in many countries.

The scope of the journal might perhaps be happily suggested by calling it "Oekonommetrika". Do you think, however, that this name would (by analogy with Biometrika and Metron) suggest the idea of economic statistics only? Do you think that in order to indicate the constructive theoretical scope of the journal, it should be given a name such as "Economic Theory" or "Economic Science"? Have you any other suggestions as to the name of the journal?

Besides the creation and publication of a journal, there might be numerous other possible tasks for the association, as for instance, promoting the establishment of chairs of economic theory including mathematical economics in the universities, helping toward the standardization of the notation and terminology of economic theory, publishing a lexicon of technical terms in economic theory, serving as a bureau of reference for commercial firms who have problems offering theoretical and statistical difficulties, and so forth.

All the suggestions in this letter are, of course, tentative, as the principles on which the association should be built must ultimately be settled by vote of the members. The aim of the present letter is merely to start the ball rolling.

We look forward with keen anticipation to your reply and suggestions.

Very sincerely yours,

Irving Fisher
Yale University

Ragnar Frisch
Oslo University
(Pro tem Yale University)

Charles F. Roos
Cornell University

* * *

The letter provided information but also requested information. It was an *enquête* but a poorly structured one. A number of questions were posed in the letter from very general questions to very specific ones. The response letters arrived over the summer and early autumn to Fisher's address in New Haven, except from Gustav Cassel and Arthur Pigou who did not respond at all.¹³ Four others responded in a minimal way for very different reasons.

Henry Moore responded with regrets that he had to decline to help form the association because of ill health.

Eugen Slutsky responded: *"My name ought to be excluded from the list. ... I feel myself at present to be a mathematical statistician more than an economist."* This somewhat cryptic answer from Slutsky meant that he would not join any association. Frisch did not fully realize that at this point and when he eventually found out it must have been a bad blow for Frisch who had known Slutsky since 1925 and had great admiration for his intriguing "random causes" paper (Slutsky 1927). And more than that, Slutsky had been one of the four persons he consulted in 1926 about the idea of an econometric association and journal. Slutsky had been very supportive and offered constructive advice.¹⁴ Slutsky worked in Moscow at the Institute for Conjuncture Research, i.e. close to the centre of Soviet power. To display an interest in economics, which in USSR meant "bourgeois economics," would evoke accusations of being disloyal.¹⁵

Frisch took upon himself to process the responses, which was a demanding task due to lack of structure in the questions posed. The responses were written in several languages. Frisch translated when necessary and edited it all in English. He managed somehow to put all the answers, either as quotes or a summary formulation into a synoptic table with additional notes. This task was completed by October 21, 1930. Frisch grouped the responses given under the following headings.

General attitude toward the proposal.

The nature of the association and requirements for eligibility.

Name and nature of the journal; name of the society.

Names of persons suggested for the longer list.

¹³ Cassel answered directly to Frisch in a personal letter (in Swedish) one year later when he was asked to confirm whether he accepted charter membership, which he rejected "as I do not wish to have my strivings identified with those of Econometric Society" (Cassel to Frisch, September 14, 1931).

¹⁴ The other three were Bowley, von Bortkiewicz and the Hungarian statistician Charles Jordan who all remained enthusiastic supporters of the initiative, Bowley and Bortkiewicz were on the list.

¹⁵ Slutsky had reason to fear for his life. Several of his colleagues had been arrested within a few years, including Nikolai D. Kondratiev, who had been head of the Institute and hired Slutsky but was removed in 1928. Kondratiev who was very well-known internationally was arrested in July 1930 and executed in 1938.

Frisch also put on paper the names of those who had answered explicitly whether they considered themselves eligible for membership and whether they wanted to join the association. He also noted some other remarks made in some of the response letters.¹⁶

In the reporting of the results below we have thus left out Cassel, Pigou, Moore, and Slutsky for the reasons given above and also Fisher, Frisch and Roos who exempted themselves from responding. The responses from the remaining 24 persons varied in length and scope. Some responded briefly and only to some points, while some others added extended and illuminating comments.

* * *

General attitude toward the proposal

Under this heading there were largely expressions of positive support with nuances of expression.

J.B. Clark: "The proposition is profoundly interesting. The proposal strikes me as practicable and very promising. Success to the undertaking."

J.M. Clark: "I must admit that there is a place for an international organization of persons who are doing serious work in the field of theory."

Carver: "It seems to me that an international association for the advancement of economic theory would be very desirable."

Persons: "Would favor the organization of such an association if authors in quantitative economics find difficulty in securing the publication of good articles and if the association could remedy this. Otherwise would not favor the association."

Evans: "I am heartily in favor of the general plan which you propose."

Schultz: "I believe that there is a need for such an organization."

Ezekiel: "I am interested in your proposal of an international economic association."

Amoroso: "I entirely agree with your proposal for the organization of an international association for the advancement of economic theory, having the chief purpose of helping in gradually converting economics into a genuine and recognized science."

Gini: "Task is difficult but yet it is a good idea."

Ricci: "I agree that an association such as the one described by you is desirable."

Pietri-Tonelli: "I am warmly in favour of the proposed association."

Del Vecchio: "International Association for the Study of Economic Theory would be very useful."

¹⁶ The response letters have been lost along with all other Econometric Society papers in Fisher's possession. In his digest Frisch quoted or summarized what was stated. Some quoted were surely abbreviated but hardly by suppressing important matters.

Colson: “My experience as professor in institutions of learning of very varied student enrolment has led me to the conviction of the absolute necessity of a profound familiarity with mathematical formulae and with their application to the experimental sciences in order to really understand the material dependency between economic phenomena. – I believe in the utility of the association.”

Divisia: “I can assure you of my complete support.”

Rueff: Agrees entirely with the considerations and propositions made by Colson.

Moret: “In presence of the actual confusion your programme appears very interesting. It would be an honor for me to enter your group.”

Bowley: “If there is sufficient support I think that such an association would be useful. For myself I should be glad to support the association.”

Keynes: “I cannot see what purpose such an association would serve unless it were to publish a journal. In general, I regard the multiplication of associations to be an evil, unless they serve a clear and definite purpose.”

Mayer: “I am delighted that a purely theoretical and disinterested organization in economics now will be established through your initiative. The need for such an association has existed a long time. I would be very glad to cooperate to the best of my ability and become a charter member.”

Ohlin: “I am entirely in sympathy with the ideas and views behind your letter and feel certain that an association of this kind could do a lot of good. I should feel very honored if I could take part in the formation of an association of this kind.”

Schumpeter: “I heartily welcome the project of an International Association for Advancement of Economic Theory. I believe that such an organization could do much to coordinate the efforts of many workers the fruits of which are half lost by their isolation. In fact, that it would meet a want which all of us feel keenly at times.”

Westergaard: “Being now 77 years old, I will hardly be able to do much work in an association of this kind.”

Zawadski: “I find that the creation of an International Association for Advancement of Scientific Economics extremely desirable and useful. I cannot but congratulate you on the initiative which you have taken.”

Keynes responded not without a touch of Keynesian arrogance. Rueff’s deference was not very informative. For both Keynes and Rueff these were the only words Frisch squeezed out of their letters. Bortkiewicz passed on this point, perhaps thinking he had answered sufficiently in his supportive letter to Frisch in 1926.

The nature of the association and requirements for eligibility

The tentative requirements for eligibility were listed in the letter, repeated here slightly abbreviated as (a) “familiar with general economic theory”; (b) “working knowledge of mathematics”; (c) “accounting”, and (d) “published with bearing on economic theory” – plus the additional requirement of experience in handling statistical data. The reflections over the requirements brought forth some interesting thoughts, not least from Colson and Schumpeter.

J.B. Clark: “I am inclined to think that the qualification (a)-(d) will no often be found united in one person.”

J.M. Clark: “If the association is to represent theory in general, and not simply one kind of theory, it seems to me that it should not select its membership by a test of fitness for the mathematical-statistical type of work alone, nor set up a journal committed to giving this type of work dominant place. At present, I favor giving the society and journal the broader scope, though there is much to be said for a society and a journal of mathematical-statistical economics.”

Carver: “Yes” to experience in handling statistical data.

Persons: “I would prefer to see an association formed in which the members would be elected but one in which the specific qualifications for membership would not be defined.”

Evans: “What appeals to me is the foundation of an international society small in membership on account of its character but not undemocratic’. I should prefer to eliminate (c).”

Schultz: Does not think (a)-(d) give adequate formulation but finds it difficult to substitute a better one. Agrees that mere empiricists should be excluded. “It is well to recognize that the fundamental theoretical principles of economics are not very clear and that they do not possess the same heuristic properties of the general principles of mechanics and biology.”

Ezekiel: Agrees generally but suggests requirement of statistical experience more important than (c).

Amoroso: “Statistical requirements not to be added but might be substituted for (c).”

Gini: Better to define the field as quantitative rather than “theory”.

Ricci: Suggests reformulation of (d) “... original contribution to economics or the science of finance ...” “We must avoid turning into a statistical society.” “No” to experience in handling statistical data.

Del Vecchio: Suggests rephrasing of (c) to: “Have a general knowledge of statistics and accounting.”

Colson: “I think that the requirements put up are very well formulated. However, I think it might be questioned as the whether the requirement (c) is very necessary. I do not know whether the English word accounting has the meaning, at the same time precise and common, as the word comptabilité has in French. I think I would put up in principle an option between accounting and

statistics, suggesting the following formulation: (c) Have some knowledge of accounting or some experience in handling statistical data.

It is obvious that we must not admit to the society other members than those who are capable of appreciating and applying the intimate connections that link any really scientific study of economic phenomena (and also any phenomena susceptible of measurement) to mathematics. But on the other hand, we ought not to exclude those scholars who have not published works applying directly mathematics to economic phenomena if we want to have an association large enough to exert a real influence and to maintain a journal.

This is a point which I would like to emphasize. In France we have very few mathematical economists, although Walras and Cournot were our compatriots. The teaching of political economy is unfortunately under the faculties of law and until the last few years the use of mathematics in economic works was not looked upon very favorably. However, I notice that during the last few years a certain tendency among the most intelligent of our jurist-economists to admit this use and to regret that it is not mastered. I would not impede this movement in our country and in the other countries where it would tend to appear. That is why I would not exclude those who are only capable of understanding mathematical works without being able to take active part in the work. Of course this does not mean that the society should be open to people who are only sympathetic to the movement without being capable of following the mathematical works.

Above all, I would avoid hurting those economists who are interested in facilitating the use of more precise methods in our science without being able to use these methods themselves. It would be very unfortunate to provoke a reaction against our ideas by the people who hold the majority of the chairs and the official executives who have consequently great influence on the youth."

Divisia: "The requirements for eligibility (a), (b), (c), (d) formulated in your letter seem to me to be quite appropriate. Some people may find that they are too severe, but I think that severity is indispensable in order that the association should not deviate from its object. The condition (c) seems to me a little accessory as compared to the three others but I do not see any inconvenience in maintaining it on the same level.

I am not in favor of adding the condition about experience in handling statistical data. I question very greatly the value of certain statistical methods now in vogue. My objection against them is primarily that they are not animated by the theoretical spirit and I would not like to see them put on the same footing as theory itself. In accordance with you, I think, that those who are preoccupied only with mathematical statistics should not in this capacity alone form part of the association. They should be admitted only if they have fulfilled all the conditions (a) to (d). I do not think that the above rule ought to create in practice any serious difficulty. I think that the difficulties would be more to be feared from the opposite policy."

Moret: "I quite agree with you that conditions (a) to (d) give an adequate formulation of the requirements for eligibility." "No" to experience in handling statistical data.

Bowley: "(c) and perhaps (b) may be dropped, and the word 'modern' added to (a)."

Bortkiewicz: “It seems to me to be quite legitimate to emphasize the quantitative character of economics. But quantitative is not necessary mathematical.”

Bortkiewicz quoted Marshall: “Ricardo himself had no mathematical training. But his instincts were unique; and very few trained mathematicians could tread as safely as he over the most perilous courses of reasoning. Even the acute mind of Mill was unequal to the task.” (Marshall (1936, App. L, p.836).

“Would it not be advisable to formulate broader requirements for eligibility – something like, a thorough familiarity with theory coupled with the conviction that the quantitative analyses of economic relations are of fundamental importance.”

Schumpeter: “The right to propose or vote on the eligibility of members should be confined to a small group; else the qualifications will fatally approach zero point before long.” Suggests later a 2nd class of members, admitted freely. “I cannot too strongly urge that a clear choice should be made between 2 possible politics: Either strictly organ of mathematical economics or all economists of standing.

I should not trust too much to the ‘vote of members’ lest the true aims might be lost sight of. Either the association is to be strictly the organ of those who believe that no truly exact theory is possible, without mathematics. Or, it is to be the organ of, if possible, all theorists of standing, many of whom would naturally not meet condition (c). Both policies are defensible, but it would be a source of difficulties if you failed to adopt one of them. The first of these difficulties presents itself at the very outset: If I look over the men whose names are on p.2 of your letter, I see several among them, who, whilst theorists of eminence are yet entirely non-mathematical and even opposed to the use of mathematics: e.g. I esteem, and personally like Professor Mayer; I am glad therefore, that you have included him; but if his name should appear among the original members, it is not easy to see on what principle it will be possible to exclude such men as Fetter and Taussig or Spiethoff. To avoid needless offence, you will be driven to including them; and you will finally have an association consisting undoubtedly of economists of rank, but of whom a majority might, and probably will, be strangers to the aims described on your page 3. I am not, let me say it once more, arguing against this. ... All I say is that if this be intended, leading men of all scientific parties ought to be included from the first, and smaller men ought to be excluded even if they happen to have written a paper on mathematical theory. If this, on the other hand, is not your intention, the requirement of knowledge of mathematics ought to be interposed very strictly – or else there will be offence, and much unnecessary antagonism from many worthy men.

I should not advice to retain requirement (c): Most economists will meet it anyhow, and emphasizing accounting carries with it – unjustly perhaps – an undesirable flavor of ‘subalternity’. I should not add experience in handling data.”

Mayer: “The designation of what constitutes the field of theory and the requirements for membership I find fortunate and I agree.”

Ohlin: “Your formulation of the 4 conditions for eligibility is good.” “No” to experience in handling statistical data.

Westergaard: "It is hardly possible to single out mathematical investigations. Ricardo, for instance, was not a mathematician. Historical investigations are very important...I find accounting unnecessary. Answers "Yes" to experience in handling statistical data.

Zawadski: "I am in absolute agreement with you on the manner of looking upon economic science and also on requirements for an organization."

Name and nature of the journal; name of the society

Persons: "Before undertaking the starting of such a journal I should certainly ascertain if authors find any difficulty at the present time in securing the publication of original papers on mathematical economics or economic statistics."

Evans: The name *Oekonommetrica* seems open to the object you mention. There ought to be a Greek combination of economic & technical science which would be suitable.

Schultz: "The name *Oekonommetrika* will not, I believe, suggest the idea of economic statistics only. I prefer, however, some such term as *Economic Science*."

Ezekiel: "I am at present inclined to doubt the desirability of attempting the publication of an economic journal since there are already so many journals in the field...However...a list of those interested...and a complete bibliography...would seem desirable."

Amoroso: "I attach the greatest weight to the annotated bibliography. As regards the name of the journal I prefer *Oekonommetrika* to every other as it seems to me the most expressive and significant."

Gini: Suggests name *The Journal of Quantitative Economic Science*. Not afraid of "mere empiricism."

Ricci: "I am in favor of the leaflet eventually enlarged into a journal with the aims (1)(2)(3). I suppose, however, the members will always be (morally) free to contribute original papers to other (old and established) reviews of general economics. The name *Oekonommetrika* is rather funny. I would choose *Review of pure economics* or *Review of quantitative economics*."

Pietro-Tonelli: Suggests name *Journal of the Association for the Improvement of Mathematical and Statistical Economics*.

Colson: "I do not especially like coined words, and I would therefore be little tempted by the name *Oekonommetrika*. On the other hand, the name *Economic Science* and *Economic Theory*, often used by economists who are not in the least mathematicians, do not define our special aim precisely. On the whole, everything taken into consideration, I think that the name *Economic Theory* would have the least draw-backs."

Divisia: "As to the name of the journal I think that the formula *Economic Science* is very dangerous. It seems to indicate that we want to monopolize economic science and that we are the only ones who represent the true economic science. This may perhaps be at the bottom of our thoughts but I do not think that the time has yet come to proclaim it. I would even add that

it may seem a little ridiculous to adopt so important a name for a periodical that would perhaps in the beginning be rather modest. In this respect, it seems to me that we ought to present ourselves as cultivating a certain method of economic research (or group of methods) because we think they are good, and not because we have the pretention to decide definitely the question of knowing whether other methods may also be interesting. As to this question, we will see later, judging from the results.

The name *Economic Theory* is more particular – perhaps too particular. I fear that it would be misinterpreted as indicating an aim of only elaborate theories without any aim at concrete verification and applications to practice. (The words of current language will always be interpreted in some way or other by those who read them.) I would therefore prefer the word that you (Ragnar Frisch) have coined, and coined very fittingly [*Oekonommetrika*]. It seems to me to be clear. It characterizes the “econometric” tendency, and simply in order to favor the development of this tendency it is very important to give a name to it.

I have no reservations to make except as to the orthography. *Oekonommetrika* is certainly very correct but rather heavy. Your original way of spelling the word, namely “econometrica” is less correct but very much more elegant, it seems to me, and more beautiful. The first is merely a bad translation. The second is a new word and a very welcome one. *Econometrica* has also the advantage of giving the current language the adjective “econometric” which you have already used and which seems to me indispensable.

In German we probably would have to write ökonometrisch, in English econometric, in Italian econometrico (econometriche), in French économétrique. The way of spelling the title of the journal would, therefore depend on the language in which it is published. If it is published in several languages it seems to me that it would be best to take the Latin spelling. One could, of course, also take the Greek word but then with Greek characters. I do not especially like a Greek word written in Latin characters, nor do I like the title of a journal written in Greek.

Econometrica would also have the advantage of being close to the orthography of the English and the French, which are, the two international languages. As to the proposal of writing two m’s in the word econometric, I am the one who suggested to you that this would be the etymologically correct solution, but I am not at all in favor of this way of spelling it. It is not beautiful.

I propose calling the new journal *Econometrica* and the association “The International Association for the Advancement of Econometric Studies” (“Association internationale pour le développement des études économétriques”). In my opinion the term *Oekonommetrika* [*Econometrica*] does not in the least suggest the idea of economic statistics only.

The functions (1), (2) and (3) of the journal seem to me to be all right but possibly there would be some interest in enlarging them somewhat by including not only the works on mathematical economics but also works presenting economic theories under such a form that it would require only a little effort to put them into equations. I would not like to have us ignore what I would call mathematical theories in formation.

Regarding the name of the association itself, I think that this is a question that ought to be studied very closely. From the beginning of your circular letter it seems that you have been thinking of a name somewhat like this “International Association for the Advancement of Economic Theory”. This suggestion corresponds very well with the object of the association but I

question whether it should be taken as the banner of the association. If the association takes such a name there would be many economists who would want to be members but do not meet the requirements (a), (b), (c), (d). Would it be possible to refuse them without hurting them and without seeming to pronounce a sort of exclusion against them, and without having the appearance of wanting to monopolize economic theory?

I fear that if we don't watch our step in this question we would risk provoking in France and no doubt also in other countries regrettable confusions. It seems to me that we ought above all to attempt to advance in an atmosphere of peace; our association has only one object, which is thoroughly disinterested, to favor the scientific work of the advancement of the association. I do not think that we ought to risk at any price being taken for a machine of war, and if it seems to me that this pitfall is rather easy to evade.

Bowley: If (b) is maintained thus confining the association to a special field this should be indicated in the name of the association.

Bortkiewicz expressed that some danger exists of interpreting *Oekonommetrika* as referring to actual measurements; Bortkiewicz suggested *Journal of Economic Research* but admits this is colorless.

Schumpeter: "I have no objection to the name *Oekonommetrika* except a philological one; I think it ought to be *Oekometrika*. If general theory is to be the goal, I should prefer *Economic Theory*, the choice depending on the choice of policy."

Mayer: Prefer *Economic Theory* or *Economic Science* to *Oekonometrika*. Agrees with our suggestions as to scope of the journal.

Ohlin: Prefers *Economic Science* to *Econometrika*..."A journal with the objects you mention should be started as soon as possible."

Westergaard: Prefers *Economic Theory* to *Econometrika*.

Wl. Zawadski: Prefers *Economic Science*.

Everyone threw in proposals for the name of journal for which there was no indication of financial viability. Only a couple of persons touched upon the name of the association.

Names of persons suggested for the longer list

J.M. Clark: Mitchell, F.C. Mills, Viner, Douglas, Kemper Simpson, E.J. Working, H. Working, Secrist.

Evans : E.B. Wilson, Hotelling, Ewald Schams, J. Tinbergen, W. Leontieff, P.N. Rosenstein-Rodan.

Schultz: Jacob Viner, Frank H. Knight.

Ezekiel: Holbrook Working, Fred Waugh, Louis Bean.

Amoroso: Felice Vinci, Costantino Bresciani-Turroni.

Ricci: Gino Borgatta, Marco Fanno, Ulisse Gabbo, Guido Sensini, Costantino Bresciani-Turroni.

Pietri-Tonelli: “I consider a mistake the inclusion in your list of Professor Del Vecchio. He has no knowledge at all of mathematics. In a recent article he has proved not to know how to read the letters of a rectangle. The inclusion of names like this would false the purposes of the association at least in our country. Professor Gini is principally a valuable statistician. Professor Ricci himself will judge if he may be included in your list.”¹⁷

Del Vecchio: “Rudolfo Benini, Costantino Bresciani-Torroni, Marco Fanno, Felice Vinci.”

Colson: Darmois (Université de Paris), René Roy.

Divisia : René Roy.

Moret: Albert Aupetit.

Bowley: Hawtrey.

Bortkiewicz: Costantino Bresciani-Turroni.

Schumpeter: von Beckerath, Schneider, Marschak.

Mayer: Hayek, Haberler, Morgenstern, Schams, Weinberger, Rosenstein-Rodan, Schönfeld, von Beckerat, Kromphardt, Staehle, Bilimovic, Furlan, Tinbergen, Leontieff.

Bresciani-Torroni proposed by four! He was also in exile for political reasons.¹⁸

The June letter asked whether the respondent considered himself eligible? This was perhaps not a very well thought out question. Membership wouldn't in any case be based upon self-declaration of eligibility. Several bypassed the question. Those who answered “Yes” were:

Amoroso, Bortkiewicz, J.M. Clark (conditioned on (b) and (c) being constructed with sufficient liberty), Colson, Divisia, Ezekiel, Mayer, Ohlin, Schultz (“with lenient judges I might just squeeze through”), Pietri-Tonelli, Del Vecchio, Zawadski.

A further question was whether the respondent wanted to join the association. This was perhaps not a very useful question and got even fewer responses. Those who answered “Yes” were:

Amoroso, Bortkiewicz, J.M. Clark (“I should be glad to be a charter member of such an association if it successfully solves the problem suggested above. I should be reluctant to lend support to the complete capturing of ‘theory’ by the mathematical-quantitative method; especially as I expect to do my main work in theory, but not mainly in that field”), Divisia, Mayer, Pietri-Tonelli, Del Vecchio, Zawadski.

Consistency prevailed, no one wanted to join without having first claimed eligibility!

¹⁷ Pietri-Tonelli's remark seems to mean that he leaves to Ricci to advise on whether Gini belongs on the extended list. Pietri-Tonelli and Ricci were anti-fascists while Gini had been and still was deeply involved in Mussolini's fascist transformation of Italy.

¹⁸ Bresciani-Turroni's reputation within the Econometric Society. He was elected to the Council in 1937. In 1938 he was offered by Frisch (on behalf of Cowles) to become Research director of the Cowles Commission. It didn't come to anything as Cowles didn't get the Rockefeller support he had hoped for; instead CC struggled on without a research director.

There were some additional comments. Bortkiewicz suggested to limit the number of members to, e.g. 50 to begin with start with, increasing every 5 years. Evans suggested that “small dues” might be advisable. Ricci stated that if dues were necessary he would prefer annual fixed dues to voluntary contributions.

Ricci mentioned that “meetings of members will be in future very useful.” This was the only mention of meetings! The lack of mention in the response letters is of course due to the fact that the June letter did not mention meetings as an activity of the association.

The long section on the journal in the letter started by conditioning on funds being available. But no funds were available. Frisch had found out much earlier that Rockefeller Foundation as the great benefactor for economic research in very many countries, did not support journals. It seems odd that the letter did not ask more explicitly about possible sources for financial support. Ohlin responded, however that some contributions towards the covering of the costs might perhaps be obtained from the Rask-Ørsted Foundation in Copenhagen.¹⁹

At the end of the June letter some possible tasks for the association are mentioned, such as e.g. efforts to establish chairs in mathematical economics. But none of these issues were brought up in the responses apart from a remark by Del Vecchio suggesting that a collection of standard works in mathematical economics be made.

* * *

In struggling with putting the responses together Frisch could not avoid noting that some of the responses were of much greater value than others. He made the remark in his digest that there was a group of eleven persons who could be taken as a “nucleus giving advice on the next move to be made.” This group of eleven comprised Fisher, Frisch and Roos, while the other eight chosen from their responses were Amoroso, Bortkiewicz, Bowley, Colson, Divisia, Ricci, Schumpeter and Zawadski. Thus both Henry Schulz and Hans Mayer were bypassed here. Frisch’s remark about giving advice on the next mode to be made was, indeed, heeded at the election of Council members at the organization meeting as the “nucleus” was close to identical with the Council elected at the organization meeting.²⁰

There are some 2-3 other points in the letter and in Schumpeter’s response which are of relevance to make sense of what happened between the June questionnaire and the organization meeting. We return to that below.

3. The organization meeting of the Econometric Society, December 29, 1930

The responses to the letter of June 17, 1930 were far from unanimous but there was nevertheless an overwhelming – although generally expressed – forthcoming and positive attitude towards the idea of establishing an international association with a journal to go with it.

Frisch had completed the synoptic table or “digest” on October 21, 1930. About one month later Fisher, Frisch and Roos decided on the next move, which was to send out invitations for a meeting to found an association (which was now instead denoted ‘society’ to the names on the June list and additionally 52 new names, altogether 83 names. The invitation form letters were dated November 29, 1930 and is given in the annex together with list of 83 names. This

¹⁹ Bertil Ohlin was Professor in Copenhagen 1925-30.

²⁰ The “nucleus” comprised two Italians and two French. Ricci and Colson were dropped out, while Amoroso and Divisia were elected, see below. In addition one more American was added (Wilson)

abrupt move is slightly at variance with what was explicitly stated in the June letter, namely that the next step would be to “send a similar letter to a larger group” for which the letter asked for proposals for names. The names proposed in the responses to the June letter are, however, not included among the 52 new names. And the stage of seeking further advice from a larger group was dropped in favor of going and went directly to founding the association or society.

This happened at short notice, and the founding that followed was hardly a very well prepared founding; that can be concluded from the poor turnout alone.

Fisher may have been much more hesitant about this than his two much younger fellow conspirators. Years later at a luncheon during an Econometric Society meeting in New York in 1941 Irving Fisher reminisced about his entry more than fifty years ago into mathematical economics, “then cultivated only by Walras, Pareto, Edgeworth, and a few others”. He spoke in that connection “of his own skepticism, only eleven years ago, when Ragnar Frisch and Charles F. Roos suggested to him the formation of the Society” (*Econometrica* 10, March 1942, 183).

But there are also indications of some reorientation from June to November, as to what was to be founded, i.e. what kind of association/society. Thus one is left to wonder about what happened in the interim. The underlying idea in the June letter seems to have been to work patiently to gather support and perhaps compile a list of founding members (or charter members) on the structure of the association could be erected. Instead it was decided to jump directly to the founding of an association without having much of a membership list. In favor of this move counted on the one hand the quite positive support received in the responses to the June letter and perhaps the fear of losing momentum if the process dragged further out, and Frisch left USA. On the other hand a better preparation and a more orderly process could have given association a better start in life but at the risk of collapse of the entire venture.

Indications of new thinking having emerged in the interim are evident. One point already mentioned, is, although it may seem superficial, that it was no longer about an ‘association’ but a ‘society’. The June letter did use the term ‘society’ at all, although some of the correspondents did. What is the difference in connotation between ‘association’ and ‘society’? Does ‘society’ convey something more elitist and higher level, as e.g. in the difference between the Mathematical Association of America and the American Mathematical Society?

A much more substantial difference is that the November letter introduced two groups of members, regular members and Fellows. This was completely absent in the June letter. This was a very substantial difference as the fellowship was introduced not just as an honorary bestowment as it perhaps is in some associations. The draft constitution attached with the letter (but not reproduced here) stated clearly that the ultimate authority within the society to be was vested in the Fellows while regular members had minimal influence on society affairs. The June had only a passing remark at the end that the vote by members was the ultimate authority within the association. No one commented upon it apart from Schumpeter who reacted to it in no unclear words. He also argued in favor of a “2nd” class of members, admitted freely.”

This makes it pretty clear that Schumpeter has exerted a strong influence before the November letter was conceived. Schumpeter, who returned to USA in September 1930 and can be deemed to have been as deeply committed to the idea of an econometric society as Frisch

and Fisher. It seems overwhelmingly likely that he was involved in a decisive way, overcoming Fisher's doubts.²¹

But there is a further interesting aspect here. The eligibility requirements for membership as stated in the June letter are identical with the eligibility requirements for fellowship as stated in the draft constitution and quoted from it in the November letter. This fact could be laid out as implying that the original idea of founding an econometric association as set out in the June letter was really for founding a more closed and elitist association. The reorientation to a Society with two levels of members, regular members and Fellows, and with the power vested in the Fellows, can then be seen as a much better proposal both with the regard to promoting econometrics through a low threshold for joining the society and for keeping the society on the right track and animated by the true econometric spirit through the power exerted by a relatively small group of Fellows. Schumpeter in his response to the June letter very clear-sightedly stated that the regular members should be admitted freely but this advice was not heeded, see below.

* * *

The November invitation letter referred naturally to the responses to June letter:

“The opinions expressed in the answers seem preponderantly in favor of giving the society a rather distinct character, namely as an international society for the advancement of economic theory in its relation to statistics and mathematics. This is also in accordance with our own views. ... If you are ready to help form the society, we invite you to attend an organization meeting which will be held at the Statler Hotel in Cleveland, Ohio, U.S.A. at 8 P. M. on Monday, December 29, 1930.” (Form letter dated November 29, 1930, signed by Irving Fisher, Ragnar Frisch and Charles F. Roos.)

The venue had been chosen as one of the conference hotels during the joint annual meetings of the professional associations. One month later, December 29, 1930, sixteen persons, no more, no less, turned up at the meeting. The organization meeting was a low-key event, hardly announced at all apart from the invitations that had been sent out, and fitted unobtrusively into a vacant room on a Monday night at the joint meeting of the American Economic Association, American Statistical Association and the American Mathematical Society.

Of the 83 persons on the invitation list, including the trio who had signed the invitation, 48 resided in Europe, 32 in USA (including some visiting Europeans), 1 was in China, 1 in Japan, and 1 in Brazil. It could hardly surprise the initiators that many of the invitees, especially from overseas, would not be able to come to Cleveland expressly for the meeting. This was indeed

²¹ Correspondence or documents to shed further light on Schumpeter's role behind the scene have not yet been found. After Schumpeter's death Frisch reminisced about a Sunday spent with Schumpeter at the home of Fisher, most likely in the autumn of 1930: “I shall never forget one whole Sunday which he and I spent in the home of our mutual friend, Irving Fisher, on Prospect Street, New Haven. We were each of us brimful of things we wanted to talk over with the others. Fisher browsed around in his big office in the basement, ... from his huge files most of the charts and tables he wanted. Schumpeter and I had brought along our own ‘toys’. And so we passed the whole day, having a meal hurriedly when strictly necessary, continually conversing, injecting ideas and receiving suggestions in the most cordial atmosphere. When we thought we had just begun, we found out that it was already late at night” Frisch (1951, 88).

foreshadowed in the invitation, which still expressed the hope that “the formal enactment of the society will, in all probability, take place.”

But wasn't 16 persons a small turnout on a list of 83, even when admitting that many of those on the list lived in Europe or even further away and would hardly have considered crossing the ocean to be present however interested. It must have been a disappointing turnout. In fact it was even worse than the crude numbers indicated as one on closer scrutiny one would find that only ten of those present at the organization meeting were on the invitation list, namely Ragnar Frisch, Harold Hotelling, William F. Ogburn, J. Harvey Rogers, C. F. Roos, Josef Schumpeter, Henry Schultz, W. A. Shewhart, Ingvar Wedervang, and Edwin B. Wilson. The other six were Karl Menger, Frederick C. Mills, Oystein Ore, M. C. Rorty, Carl Snyder, and Norbert Wiener. Thus the question can be posed of why and how these latter six came to attend the organization meeting. Without claims on full certainty a reasonable explanation can be offered. On the day of the organization meeting the American Mathematics Society opened by an afternoon session, which was a joint session with the American Statistical Association, whose meeting had opened the same day, and also joint with Sections A and K of the American Association for the Advancement of Science.

The joint session, which took place in the Hotel Statler had three speakers, G.C. Evans spoke on a theory of economic crisis with Henry Schultz as discussant, Frisch spoke on decomposing empirical time series with Oystein Ore as discussant, and Harold Hotelling spoke on recent improvements in statistical inference with Walter Shewhart as discussant. All three speakers with discussants reappeared at the organization meeting a couple of hours later. Ore was professor in mathematics at Yale and was in Cleveland as specially invited to give a lecture at the AMS meeting. He was a friend of Frisch from student days in Oslo and we may reasonably presume that Frisch brought him for the organization meeting. Karl Menger who visited USA 1930/31 on a Rockefeller fellowship, was like Ore also in Cleveland as invited to give a lecture at the AMS meeting. Norbert Wiener took part in the AMS meeting and so did both Frisch and Roos, all three were members of AMS. Malcolm Rorty was the current President of ASA and naturally present at the joint session. Carl Snyder was a former President, while Fisher, Ogburn and Mills were the next three presidents of ASA. Edwin B. Wilson of Harvard who had been a student of J.W Gibbs gave the Eighth Gibbs Lecture at the AMS meeting on the following day. Thus Wilson had a reason to attend the joint session but unlike the others just mentioned he had received the November invitation for the meeting.

Thus it seems that most, if not all, of those attending the organization meeting in the late evening of December 29, had good reasons for attending the joint session and partaking in the likely mingling of people in its wake, in the same building and just a few hours before the organization meeting. We can reasonably assume that the six “uninvited” persons were picked up at that session (without completely ruling out prior informal contacts). But very few of the American scholars who took part in the joint meetings in Cleveland came to the organization meeting.²²

It is not unusual to come across summary accounts of the foundation of the Econometric Society denoting the sixteen persons present at the organization meeting as the bold founding

²² It may be noted that none of the agricultural economists were at the organization meeting and only two were on the invitation list: Holbrook Working and Mordecai Ezekiel. Ezekiel was in Germany at this time.

fathers of the Society, or speaking of the organization meeting itself in solemn terms as the “inaugural conference of the Society” (Louçã 2007, 31). It was a modest beginning. The credit for boldness accrues to Fisher, Frisch, Roos and Schumpeter for moving ahead with the founding of the Society without having more than an embryonic list of members and no resources. So what were the sixteen persons gathered in the meeting room at Statler Hotel the night of December 29, 1930 if they were not founding fathers? The report from the meeting published in *Econometrica* in its first issue 1933 called them simply the “organizing group.”

* * *

According to the report from the organization meeting (*Econometrica* 1, 71-72) Frisch had circulated a draft of tentative constitution “based on ideas which had been obtained in an extensive correspondence carried on by himself, Professor Fisher, and Professor Roos, with economists and statisticians throughout the world.” Schumpeter was elected chairman of the meeting and Roos as recorder. The report further conveyed that all of those present took an active part in the discussion and revision of the constitution before it ended in a vote. This part of the proceedings lasted most of the first two hours of the meeting, ending in Schumpeter’s motion that the Society should be considered founded. The motion was accepted unanimously. A committee of three (Frederic Mills, Frisch and Roos) was appointed to phrase the constitution properly.²³

The election of the President (Irving Fisher) and the Council members took another 30-45 minutes. Thus the first meeting of the Econometric Society was adjourned. The report was not explicit about the substance of the discussion (or disagreement, if any) at the meeting, neither on the constitution nor on the elections.

The November invitation – like the June letter – refrained from naming the association/society it proposed but the November letter came much closer with its wonderful phrase: “So far, we have been unable to find any better word than *econometrics*.” But even this is strange as the draft constitution accompanying the letter was headed “Tentative draft of Constitution of the Econometric Society” and dated November 1930.

The Econometric Society Council elected at the organization meeting in 1930 comprised the following ten members from seven different countries of residence:²⁴

Irving Fisher, Yale University
 Luigi Amoroso, University of Rome
 L. v. Bortkiewicz, University of Berlin
 A.L. Bowley, London School of Economics
 François Divisia, Ecole Nationale des Pont et Chaussées, Paris
 Ragnar Frisch, University of Oslo
 Charles F. Roos, Smithsonian Institution Building, Washington
 Josef Schumpeter, University of Bonn²⁵

²³ The adopted Constitution was (after editing) published in *Econometrica* 1, January 1933, pp.106-108.

²⁴ The constitution adopted stated that the number of Council members should be at least 7 and at most 15.

E. B. Wilson, Harvard University
 Wl. Zawadski, University of Wilno

The meeting made no changes in the draft constitution's subtitle of the Econometric Society, *An International Society for the Advancement of Economic Theory in its Relation to Statistics and Mathematics*, which ever since has been rendered on the front cover of *Econometrica* (and apart from the changeover from association to society comes directly from the first sentence of the June letter).

The first part of the constitution on 'Scope of the Society' underwent only some minor linguistic improvements. But it was discussed, at least its key sentence, unmistakably originated by Frisch, *Its main object shall be to promote studies that aim at a unification of the theoretical-quantitative and the empirical-quantitative approach to economic problems and that are penetrated by constructive and rigorous thinking similar to that which has come to dominate in the natural sciences*, because Frisch later gave Divisia the following account:

"It is true that there was at the beginning of the meeting some confusion particularly in regard to the interpretation of the term 'quantitative', some people seeming to understand by this term simply 'statistics'. But after a long and very elucidating speech by Schumpeter who emphasized that economic theory must be at the basis of the work which the Society should have in view, this question was cleared up in a way which I think is definitive. I attach particular importance to the fact that after Schumpeter's talk the American members dropped Wesley C. Mitchell as their candidate for Council Membership. (Divisia to Frisch, July 28, 1931).

The second part of the constitution on 'Members', was discussed at some length, although not much changed at the meeting. The adopted text was as follows:

The Society shall consist of two classes of members: regular members and Fellows. Members of either class shall be subject to election. To become a regular member, a person must be proposed to the Council by two members of the Society. Once a year the Council shall nominate new members and these nominations shall be voted upon by mail by all members. No person can be elected to membership unless he is nominated by the Council. During the first year following the organization meeting of the Society, the Council shall have the authority to invite eligible persons to become charter members.

Notice the cumbersome rules for regular membership. A new member had to be proposed by two members. The Council then could approve the proposal by nominating the person for membership, which was then effectuated in a vote by mail of all members! The vote by members was interpreted at the outset as implying unanimity in all votes cast. One sentence was deleted from the proposed paragraph on membership: "A person nominated must have sufficient knowledge of economics to be able to appreciate the work of the Society." But

²⁵ It was Josef Schumpeter who signed at the organization meeting in 1930. In the report from the meeting in *Econometrica* in 1933 the printed signature was by Joseph Schumpeter. Schumpeter had crossed the Atlantic for the last time, he never returned to Europe.

qualifications were still required on a judgmental basis, not anyone was eligible for membership. The adopted rules turned out in practice not only to be cumbersome but also causing embarrassment whenever a member expressed an interest in blocking new entrants. These cumbersome rules, instead of the “admitted freely” as Schumpeter proposed became a severe burden for Fisher who was President in the first four years. After some years Fisher, indeed, took an initiative to simplify the membership procedures considerably.²⁶

The adopted rules for regular membership can perhaps be understood as reflecting a need to protect the Society from being co-opted and to retain an element of exclusivity. Some may outright have appreciated the exclusivity of the Society implied by this power of members to block others from entering. But Schumpeter’s clear-sightedness was the two-layer membership society rather than the single-layer, high-entry barrier outlined in the June letter. Schumpeter’s remarks seem to indicate little belief in its viability.

Fellowship in the Econometric Society meant more than a distinction bestowed on selected members. In the Econometric Society the decision power was according to the constitution vested in the Fellows.

There was also a third category of members, namely ‘Charter membership’, only to be granted during 1931. Neither the tentative draft nor the adopted constitution was clear as what it meant and its relation to the other categories.²⁷ The lack of clarity added to problems for Fisher but limited to the first year during which 173 charter members were accepted.

The cumbersome membership rules and different opinions on how to practice the charter membership delayed the preparation of a membership list. The question was posed whether the Society in 1931 should have both charter members and also regular members? How should the Council go about compiling a charter member list? Some read about the foundation of the Society as disseminated by in journals or newspapers and expressed interest in joining. The Council members, on Frisch’s suggestion, initiated proposals for charter membership. In practice two (or more) Council members proposed each charter member. Then it required a vote by the Council to approve the membership. When the Council had voted on a number of proposals each person approved would receive a letter that charter membership had been granted, whether or not the person had actually applied for membership or had any idea that his/her name had been proposed for membership.

The third part of the constitution was on Fellows. Here the draft text was influenced by consultation and discussions with persons in European countries as well as in the US, and overly detailed with regard to qualifications:

When the Council finds it warranted, it may nominate a member for election as a Fellow. The person nominated must have been a regular member for at least one year. Each

²⁶ Fisher pointed out in 1934 that the constitution might be interpreted to mean that the Council had the power to name a committee to act for it in nominating candidates for membership and recommended that the task could be left to the officers of the Society Council, thereby effecting a considerable reduction in trouble and expense. Fisher further recommended and got accepted that in elections of members, it sufficed that 90 percent of the total vote and 90 per cent of the vote of the candidate's fellow countrymen were both YES. (November 1934, Econometric Society Minute Book, p.19).

²⁷ There would in fact be two kinds of charter members; it was at the outset meant to be a very well qualified member. During 1931 the charter membership was also used as a kind of honorary membership offered to influential persons, who not necessarily had econometric qualifications.

year the Council shall offer the members an opportunity to suggest names for the nomination for Fellowship. In general, a person nominated for Fellowship should satisfy the following requirements:

- (1) be thoroughly familiar with general economic theory,
- (2) have a working knowledge of mathematics as applied to economic theory and statistics,
- (3) have some experience in handling statistical data,
- (4) have some knowledge of accounting,
- (5) have published original contributions to economic theory or to the analysis of such economic statistics, mathematics or accounting as have a definite bearing on problems in economic theory.

However, in the case of a person of great accomplishment, the Council might interpret conditions (2), (3), and (4) liberally, for instance, relaxing on conditions (3) or (4) in the case of a mathematician of high standing. Nominations for Fellows are voted on by mail by the Fellows of the Society. The first Fellows shall be elected by the Council.

(...) The annual meeting of the Fellows represents the highest authority of the Society. In important cases, the annual meeting of the Fellows may decide by a simple majority vote to subject any decision of the meeting to ratification by mail-vote among all Fellows.

The draft of the requirements for fellowship gave a somewhat bland impression of what was required to become a fellow, adding up skills like boy scouts. The exception clause was not unproblematic either. The organization meeting decided in the end on a much simpler and flexible formulation of the requirements. To be eligible for nomination for fellowship a person “must have published original contributions to economic theory or to such statistical, mathematical or accounting analyses as have a definite bearing on problems in economic theory.”

The fellowship elections were important and essential in the life of the Society as the fellows represented the highest authority. Difficulties arose when it came to election of fellows, because the knowledge of candidates for fellowship in other countries was poor among many of those involved. Neither the number of fellows to be elected nor the voting procedure was touched upon in the constitution. The first election of fellows had to put off until 1932 as eligibility got fellowship required one year’s membership. Also the fellowship became a burden on Fisher who handled most of the work involved himself. He started up the first election process in 1932 but it was not completed until August 1933. He had hoped to complete two rounds of elections but the next election did not take place until 1935 with Divisia as President and Roos as Secretary.

4. Conclusion

The preparation of the establishment of the Econometric Society was a long-lasting process which started in 1926 and brought to maturity (if that is the right word) at the very end

of 1930. The solicitation of advice on how to advance the venture of founding an econometric association initiated by Irving Fisher, Ragnar Frisch and Charles Roos through the June letter of 1930, sent to a list of 31 names as set out above, resulted in responses which give an interesting picture of the situation at the time. The letter could certainly have been better structured and the set of respondents also strengthened. After the responses to the June letter had been returned there seem to have taken place an abrupt change of plans in an effort to undertake the foundation of the Econometric Society through at an organization meeting arranged at short notice, rather than building up a constituency of charter members.

The effort of founding an international econometric society around 1930 may be deemed as a venture with a considerable risk of falling by the wayside. The venture could not have succeeded without exceptional efforts by a small handful of dedicated and gifted men. But even so it might not have succeeded without continued efforts and dedication, luck and Alfred Cowles 3rd.

Annex: The invitation for the organization meeting November 29, 1930 and the list of addressees

Prospect Street,
New Haven, Connecticut,
U.S.A.
November 29, 1930.

In reference to our circular letter of June of this year regarding the establishment of an international society for the advancement of economic theory, we are glad to inform you that we have received answers from practically all those consulted. In general, the answers and suggestions received are very encouraging. It, therefore, seems desirable to proceed at once with the actual formation of the society.

Of course, any final decision must be made by the society itself when formed, but to help forward its organization, we venture, in advance, to express our own tentative suggestions.

The opinions expressed in the answers received seem preponderantly in favor of giving the society a rather distinct character, namely as an international society for the advancement of economic theory in its relation to statistics and mathematics. This is also in accordance with our own views. The main object of a society formed on this basis would be to promote studies that aim at a unification between the theoretical-quantitative and the empirical-quantitative approach to economic problems and which are penetrated by a constructive and rigorous way of thinking similar to that which has come to dominate in the natural sciences. Any activity which seems susceptible of ultimately furthering such a truly scientific unification between theory and factual studies in economics would be in line with the scope of such a society.

If you are ready to help form the society, we invite you to attend an organization meeting which will be held at the Statler Hotel in Cleveland, Ohio, U. S. A. , at 8 P. M. on Monday, December 29, 1930. Information regarding the room where the meeting will be held may be obtained at the information desk of the hotel. At this meeting the formal enactment of the society will, in all probability, take place. We realize that it will be impossible for many Europeans to attend at this time. But, on the other hand, it will be difficult to get a majority present at any organization meeting, and it seems that in this respect the date and place suggested is the best we can get. Practically all Americans and those Europeans who are now in America and who will be interested in the formation of the society will be in Cleveland at that time, since the American Economic Association, the American Statistical Association, and the American Association for the Advancement of Science will meet there.

In case you will be present in Cleveland we would appreciate it if you would communicate with any of the undersigned, at the Statler Hotel, some day before the organization meeting of our Society.

At the meeting various practical questions regarding the organization of the society will be discussed and the constitution of the society will be voted upon. Enclosed you will find a tentative draft of such a constitution. From this draft you will notice that we now suggest two groups of members, regular members and Fellows, the latter category alone being subject to any strict requirements for

eligibility. This is done in order to give a larger group of persons an opportunity of joining the society and thus give their support to the work which the society fosters.

Have you any criticisms or suggestions to make regarding this draft? Any such criticisms or suggestions will be given thorough attention and we will be glad to submit them at the organization meeting in case you are unable to attend.

At the organization meeting, a President of the society and a Council will probably be elected. If you wish to propose candidates for the Presidency or for the Council, will you please communicate the names to us as soon as possible?

The Council will probably be elected with the understanding that it is to act as the responsible authority of the society until a body of Fellows is established. Very likely this cannot be done until sometime next year. It may also be well to give the Council the authority to incorporate the society if the Council deems this advisable. The Council will also have to appoint a Secretary for the Society.

As to the name of the Society, we consider it essential that the name should indicate quite clearly the specific object which the society has in view. If the society is formed with the scope we have suggested, it seems advisable to coin a word, since no current single word will connote exactly the correct idea. So far, we have been unable to find any better word than "econometrics". We are aware of the fact that in the beginning somebody might misinterpret this word to mean economic statistics only. But if the complete subtitle of the society is always given in the official publication and in the letterheads of the society, and if the members and Fellows of the society persist in using the word "econometric" and "econometrics" in their proper sense, we believe that it will soon become clear to everybody that the society is interested in economic theory just as much as in anything else.

Will you kindly at your earliest opportunity let us know whether you would like to have us propose your name as a charter member at the organization meeting? Your answer to this question will not entail any financial obligation on your part. In case your name is accepted, the formal invitation to become a charter member will, of course, be made later by the Council, and if the organization meeting decides to have dues (annual or otherwise) this will be stated in the invitation .

Will you also let us know whether you expect to be present at the organization meeting in Cleveland on December 29, 1930?

We look forward with keen anticipation to your reply and suggestions.

Sincerely yours,

Irving Fisher
Yale University

Ragnar Frisch
Oslo University
(pro tem Yale University)

Charles F. Roos
Cornell University

E. Altschul (Dr.), Frankfurter Gesellschaft für Konjunkturforschung, Frankfurt, Germany

Luigi Amoroso (Prof.), University of Rome, Rome, Italy

Oscar N. Anderson (Prof.), Handelshochschule, Varna, Bulgaria

Étienne Antonelli (Prof.), Université de Lyon, Lyon, France
 Bagge (Prof.), Stockholms Hogskola, Stockholm, Sweden
 Olegario Baños (Prof.), University of Santiago, Santiago, Spain
 Boninsegni (Prof.), Université de Lausanne, Lausanne, Switzerland
 L. v. Bortkiewicz, University of Berlin, Berlin, Germany
 G. H. Bousquet (Prof.), Université d'Alger, Alger, Algeria
 E. B. Bouvier (Prof.), Université de Lyon, Lyon, France.
 Pierre Boven (Dr.), care of Université de Lausanne, Lausanne, Switzerland
 A. L. Bowley (Prof.), London School of Economics, England
 H. E. Bray (Prof.), Rice Institute , Houston, Texas, U.S.A.
 John B. Canning (Prof.), Stanford University, Stanford University, Calif. U.S.A.
 T. N. Carver (Prof.), Harvard University, Cambridge, Mass., U.S.A.
 Gustav Cassel (Prof.), Stockholms Hogskola, Sweden
 Chin Tau Chen, 5 Pao Chu Li, Recreation Road, Tientsin, China
 J. B. Clark (Prof.), 407 West 117th Street, New York City, U.S.A.
 J. M. Clark (Prof.), Columbia University, New York City, U.S.A.
 C. Colson (Prof.), École Nationale des Ponts et Chaussées, Paris, France
 François Divisia (Prof.), École Nationale des Ponts et Chaussées, Paris, France
 G. C. Evans (Prof.), Rice Institute, Houston, Texas, U.S.A.
 Mordecai Ezekiel (Dr.), Bureau of Agricultural Economics, Washington, D.C., U.S.A.
 Irving Fisher (Prof.), Yale University, New Haven, Conn., U.S.A.
 A. W. Flux, Royal Statistical Society, 9 Adelphi Terrace, Strand, W.C.2 , London, England
 M. Fréchet (Prof.), Faculté de Sciences de l'Université de Paris, 1 Rue Pierre-Curie, Paris 5,
 Ragnar Frisch (Prof.), 100 Howe Street, New Haven, Conn., U.S.A.
 Corrado Gini (Prof.), University of Rome, Italy
 Gottfried Haberler (Dr.), Doblinger Hauptstrasse 55, Wien, Austria
 L. Hamburger (Dr.), Dedelstraat, The Hague, Holland
 Hudson B. Hastings (Prof.), Yale University, New Haven, Conn., U.S.A.
 Friedrich A. Hayek (Dr.), Osterreich. Institut für Konjunkturforschung, Wien, Austria
 Henderson (Prof.), London School of Economics and Political Science, London, England
 Harold Hotelling (Prof.), Stanford University, Stanford University, Calif., U.S.A.
 G. T. Jones, c/o Laura Spelman Rockefeller Foundation, 61 Broadway, New York City
 Charles Jordan (Prof.), University of Budapest, Budapest, Hungary
 John M. Keynes (Prof.), University of Cambridge, Cambridge, England
 W. I. King (Prof.), Fayerweather Hall, Columbia University, New York City, U.S.A.

Kondratieff (Dr.), Institut für Konjunkturforschung, Moscow, U.S.S.R.

Otto Kühne (Dr.), Werfstrasse 2a, Stralsund, Germany

Wassily Leontief (Dr.), Kiel University, Kiel, Germany

Hans Mayer (Prof.), University of Vienna, Vienna, Austria

Wesley C. Mitchell (Prof.), Columbia University, New York City, U.S.A.

H. L. Moore (Prof.), Columbia University, New York City, U.S.A.

Jacques Moret (Dr.), 4 Rue d'Agnesseau, Paris, France

Oskar Morgenstern (Dr.), Zeitschrift für Nationalökonomie, I Schottengasse 4, Wien, Austria

Tobias Moscoso (Dr.), Escola Polytechnica, Universidade do Rio de Janeiro, Brazil

M. d'Ocagne (Prof.), École National des Ponts et Chaussées, Paris, France

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Bertil Ohlin (Prof.), Handelshögskolan, Stockholm, Sweden

F. Pearson (Prof.), Cornell University, Ithaca, New York, U.S.A.

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Umberto Ricci (Prof.), University of Rome, Rome, Italy

E. C. Rhodes (Dr.), University of London, London, England

L. C. Robbins (Prof.), London School of Economics, London, England

D. H. Robertson (Lecturer), University of Cambridge, Cambridge, England

J. H. Rogers (Prof.), Yale University, New Haven, Conn., U.S.A.

Charles F. Roos (Prof.), Cornell University, Ithaca, New York, U.S.A.

Jacques Rueff (Prof.), Institut de Statistique, Université de Paris, France

Ewald Schams, c/o Social Science Research Council, 230 Park Avenue, New York City

Henry Schultz (Prof.), 1 Chicago University, Chicago, Illinois, U.S.A.

J. Schumpeter (Prof.), Harvard University, Cambridge, Mass., U.S.A.

W. A. Shewhart, Bell Telephone Laboratory, New York City, U.S.A.

N. J. Silberling (Dr.), 21 Wheeler Hall, University of California, Berkeley, Calif.

Eugen Slutsky (Prof.), Institut für Konjunkturforschung, Moscow, U.S.S.R.

Piero Sraffa (Prof.), Kings College, Cambridge, England

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S. Takagi (Prof.), Keiogijuku University, Tokyo, Japan

J. Tinbergen, Willebrordur Str. 160 a³, Rotterdam, Holland

Thompson (Prof.), 98 Howe Street, New Haven, Conn.

de Pietri Tonelli (Prof.), University of Venice, Venice, Italy

Willem L. Valk (Dr.), Gentschestraat 50, Scheveningen, Holland

Gustavo del Vecchio (Prof.), R. Università Commerciale, Trieste, Italy

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Otto Weinberger (Dr.), Erdbergstrasse 8 2/y, Wien, Austria

R. B. Westerfield (Prof.), Yale University, New Haven, Conn., U.S.A.

Harald Westergaard (Prof.), University of Copenhagen, Denmark

A. C. Whitaker (Prof.), Stanford University, Stanford University, Calif., U.S.A.

E. B. Wilson (Prof.), School of Public Health, Harvard University, Cambridge, Mass., U.S.A.

Holbrook Working (Prof.), Food Research Institute, Stanford University, Calif., U.S.A.

Wl. Zawadski (Prof.), University of Wilno, Poland

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