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**DEPARTMENT OF APPLIED ECONOMICS**

**COLLEGE OF AGRICULTURAL, FOOD, AND ENVIRONMENTAL SCIENCES**

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The Evolution of Professional Economics Associations, 1777–2000**

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## **Abstract**

Scholarly societies in economics (and many other professions) are clubs that provide members with a range of club goods, many of which have broader and economically significant spillover consequences for society at large. Yet surprisingly little is known about the historical evolution or current composition of these associations. This analysis of the development of professional economics societies worldwide provides perspectives on the evolution of the economics research industry they serve. Although the origins of current economic associations can be traced at least as far back as 1777, almost all of the growth in professional economics associations has been concentrated in the past 125 years and especially between 1945 and 2000. At the beginning of the 20<sup>th</sup> century almost all economic associations were general economics societies. The fractionalization of the profession, leading to a proliferation of associations with sub-disciplinary focus began in 1920 and accelerated after 1960. By 2000, almost two thirds of all economic associations served sub-disciplines ranging from law and economics through fisheries economics to public choice and game theory. There are comparatively few economic associations in the poorest parts of the world that are often most in need of the public goods economists can provide.

**Keywords:** Professional associations; club goods, economic societies, knowledge

# **Organizing the Economics Academy: The Evolution of Professional Economics Associations, 1777–2000**

## **I. Introduction**

Professional associations are pervasive in academic disciplines and private industry and critical to the creation and utilization of new knowledge. Arguably they are among the most important institutions researchers and the professions (for example, law, medicine, and engineering) establish for creating, accumulating, and sharing knowledge. Generally, at least in their origins, professional associations are innately voluntary organizations created by individuals who rationally expect their own efforts to be more valuable if they can exploit spillover benefits from the research of others and if others become an attentive audience for the results of their programs. Inherently, therefore, professional associations are clubs and, as such, provide their members with club goods. They also, often intentionally and sometimes accidentally, provide spillover benefits to society. As the need for these goods expands, so professional associations expand, reflecting the development of the disciplines they serve. The history of the evolution of professional associations sheds light on the growth and development of the academic and research enterprise in those disciplines.

Professional associations have a long history in economics. They have been in existence for over 225 years, but the number and composition of those associations has changed markedly even over relatively short periods of time. Here we provide new perspectives on the long run evolution of the economics profession by examining the global development of professional economics association since the middle of the eighteenth century.

## II. Professional Associations as Economic Entities

Professional associations are quintessentially clubs in which membership is voluntary and that provide a limited supply of some services (Buchanan 1965). Economic associations are a case in point. Membership is generally restricted only in that those who want to join must be willing to pay the annual entry fee. In some respects, the major commodities produced by economic associations are pure public goods. The knowledge presented in the associations' publications is non-rival and non-excludable (no one has to be a member of an economics association to read its journals). However, access to journal space by producers of research, utilization of opportunities to build career-related networks at conferences, and other services provided by these clubs are often rivalrous and, at least in the short term, in limited supply. For example, the act of publishing simultaneously has both public and club good elements. Once created, the knowledge is (almost) freely available but one member's use of journal space on the margin denies use by another. Moreover, other services provided by associations (for example, networking access) closely correspond to club goods and an increase in membership results in congestion and higher costs.<sup>1</sup>

As congestion costs increase, incentives for the creation of new clubs grow (Sandler 1992). In the contexts of professional associations, congestion costs are likely to increase when the population seeking access to a fixed number of clubs increases. Similarly, as per capita incomes increase (or the research grant analogs rise) *ceteris paribus* the proportion of a fixed population seeking club membership is likely to increase. Both of these phenomena provide incentives for the

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<sup>1</sup> Academic and research based professional associations provide many services in addition to the obvious enterprises of publishing journals and organizing professional meetings. These include developing and implementing technical product standards, establishing regulatory protocols for product testing and release, professional certification or licensing, monitoring professional performance, developing and implementing educational standards and protocols, managing job markets for professional skills, and serve as informants and advocates in the formation and implementation of public policy (a mix of rent seeking lobbying and providing information that may improve allocative efficiency). While associations of economists such as the American Economic Association do not perform all of these tasks, and may not want to perform some of them (for example, certification of professional competency and development of product standards), they are certainly widely viewed as essential elements of the economics research and higher education academies.

creation of new clubs. Moreover, as specialization of interests develops, heterogeneity among population members in terms of sub-discipline, geography, and language provides added incentives for the creation of new clubs (professional associations). In contrast, innovations in technology may increase the optimal quantity of the club good being offered and act to increase the optimal size of a club. The evidence presented in this paper indicates that both phenomena have been at work in the economics profession. Over the twentieth century, for example, many older economics associations continued to grow, while a plethora of new clubs formed.

Despite their pervasiveness and widespread acceptance as productivity enhancing institutions, professional associations have been largely ignored by economists as a subject-matter for research. The structure, conduct, performance and effects of the professional associations that serve research industries have simply not been addressed, notwithstanding the continued attention economists have given to the importance of institutions in productivity and economic growth (for example, Commons, 1950; Knight, 1952; Olson, 1965; and Ruttan, 1997). One reason may be that very little is known about those institutions. In fact, from an industry-wide perspective, data have not even been available to economists about the professional associations that serve their own disciplines, including the numbers of such organizations, their origins, primary foci, and geographical distribution.

Data do exist on the annual membership of the AEA since its establishment in 1886 (Siegfried 1998) and limited survey data on the composition of that membership by institutional affiliation, gender, and geographic location have been made available by the AEA since the mid 1980s. The National Science Foundation (2001) has provided information on numbers of recipients of undergraduate and graduate degrees in economics since 1967 and on the broad sectoral employment of economists in government, business and industry, and education since 1993. Recently Stock and Siegfried (2001) presented cross section information on the

employment and composition by gender and ethnicity of Ph.D graduates in economics from U.S. universities. While all of these sources contain useful information, they each provide only partial pictures of the development and structure of the global economics research and education industry.

A further interesting and useful indicator of the evolution of a knowledge generation and transfer industry that has yet to be systematically examined is the establishment and growth of professional societies linked to the industry. Here, we present new data on the origins and changing orientations of professional economics associations across the world. These data complement and substantially expand our understanding of the long-term development, growth, and structural evolution of the industry in which economists work.

### **III. Professional Associations Data**

Data were obtained on the names, membership numbers, date of origin, disciplinary or sub-disciplinary focus, and geographic location for each economic society or association in existence in 2000. The data were constructed as follows. A primary source of information on extant economics associations is the list of economic associations and societies with active websites compiled by Christian Zimmermann (2001). A total of 310 professional economic associations were identified using this list. However, not all professional economic associations had active web sites in 2000. A second important primary source of information is the 47th edition of “The World of Learning” published by *Europa Publications* (Europa 1997) which contained an extensive inventory across all disciplines of academic institutions, learned societies, and international, cultural, scientific, and educational organizations worldwide. An additional 37 professional economics associations were identified through this source resulting in information on a total of 347 professional economic associations that served the worldwide economics profession in 2000.

Published data were not available from these sources for many associations on dates of origin, functions, membership and other key attributes. Where this was the case, we contacted each association's current officers (president, secretary, and so on) to request the missing information. Data on dates of origin and disciplinary orientation were obtained for 277 of the 354 organizations. Information on numbers of association members were obtained for a subset of 122 associations. Among these associations, numbers of members ranged from 27 (Health Economics Association of Ireland and Conselho Federal de Economia, Brazil) to over 20,000 (American Economic Association) with an average membership of about 1,100 and a median membership of about 450.<sup>2</sup>

These data were used to construct the cumulative number of associations that functioned in any given year subsequent to the year in which the oldest association in the data base was established. The cumulative data are presented in figure 1, which decomposes the associations into those with a general or discipline wide orientation (for example the AEA) and those with a sub-disciplinary focus (for example, the American Agricultural Economics Association and the Econometrics Society). These estimates do understate the actual numbers of professional associations active in each year within the sample period (except for 2000 and perhaps 1777) for two reasons. First, data on the origins of 77 societies in the data base (approximately 22 percent of the associations) could not be obtained. Second, some societies were established and then later merged with others or otherwise became defunct.<sup>3</sup> Nevertheless, these data provide new insights about the changing size and structure of the economics profession over a considerable period of time.

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<sup>2</sup> Only seven of the 123 associations for which membership data were available had less than 100 members while 35 had in excess of 1,000 members.

<sup>3</sup> For example, the Australian Economics Society was formed in 1887 (Butlin 1947) and remained active until 1899, when it was dissolved. Three decades later, in 1925, the Economic Society of Australia and New Zealand was founded and because it is still in operation is included in our data base. The original Australian Economics Society is not in our data base for the period 1887 to 1899 because it was not continuously in existence.



## IV The Development of Economic Associations: 1777-2000

### A. Historical Trends

At least one economic association, the *Real Sociedad Economica de Amigos del Pais de Tenerife* (the Royal Economic Society of Friends of the Land of Tenerife), has been in continuous existence since 1777.<sup>4</sup> The second oldest association in the data base, the Royal Statistical Society (Britain), was founded in 1834, providing nascent econometricians with a distinct chronological advantage over economists who, generally did not get around to establishing their own professional associations until fifty years later. Perhaps regrettably, the American Economic Association, founded in 1886, is not the oldest professional association in the world or even the oldest economics association, but at least it had the privilege of predating the Royal Economic Society (originally called the British Economic Association), which was not founded until 1890. By 1900, at least fifteen professional associations involving economists had been established, all but one in Europe and the United States including the Netherlands, Belgium, Denmark, Germany, Sweden, Norway, Finland, Uruguay, and Scotland (in addition to Spain, the United States and the United Kingdom).

Between 1900 and 1918, the number of economics associations increased modestly to 22, including the first economic societies to be established on the continents of Africa and Asia (the Egyptian Society of Political Economy, Statistics and Legislation in 1909 and the Indian Economic Association in 1918). Fifteen of the 22 associations in existence in 1918, about two thirds of the total, had a general or broad orientation. Seven were specialized (sub-discipline oriented)

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<sup>4</sup> In 1997 this society had 490 members. Its focus is eclectic and includes moral, material, cultural, and economic interests (Europa 1997). The Nationale Nederlandsche Huishoudelijke Maatschappij (National Netherlands Economic Society) was also founded in 1777 as the Oeconomische Tak van de Hollandsche Maatschappij der Wetenschappen (Economic Branch of the Holland Society of Sciences, which itself was founded in 1752). In 1797 it became an independent society called the Nationale Nederlandsche Huishoudelijke Maatschappij (National Netherlands Economic Society), now called the Nederlandsche Maatschappij voor Nijverheid en Handel (Netherlands Society for Industry and Trade). We excluded it from our data base, judging it to be a civil society organization to promote discussion, consensus building and stimulate public and private economic initiatives in the Netherlands rather than a scholarly society as such.

economic associations such as the Royal Statistical Society (founded in 1834), the European Association of Fisheries Economists (founded in 1901), the National Tax Association (founded in 1907), and the American Association of Agricultural Economists (founded in 1917).<sup>5</sup>

Between 1918 and 1940, essentially the period between World War I and World War II, the number of professional associations across the world expanded from 22 to 42, a steady but relatively gradual rate of growth. In 1940, 22 of the associations, only just over half of the total, were general economics associations and 20 were specialty societies. Thus, during the interwar period, seven new associations were founded as general economics societies to serve economists in different countries and regions and 13 economic associations were established to serve economics practitioners in sub-disciplines (of which six were agricultural economics associations and one a resource economics association). In 1940, agricultural economics, with seven associations, and econometrics, with three associations, accounted for half of the specialty societies.

Between 1940 and 1960, the number of professional economics associations more than doubled to 90 societies, consisting of 46 general economics associations and 44 specialty societies. Exactly half of the 48 new associations that emerged between 1940 and 1960 were general economics associations. Among the 24 new sub-disciplinary associations, five focused on economic history, four on agricultural economics, three on real estate and urban economics, and two on public economics and political economy.

The process of expansion and geographic and sub-discipline specialization continued between 1960 and 1980. By 1980, a total of 155 professional economics associations were functioning in over 60 countries. About 55 percent of these associations (84) were sub-disciplinary in orientation while about 45 percent (71) were general economics societies. Most

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<sup>5</sup> This association was founded by Richard T. Ely and other members of the AEA. In 1919 it merged with the American Farm Management Association, which had been established by agronomists in 1910, to become the American Farm Economics Association, and re-branded itself as the American Agricultural Economics Association in 1968.

the 65 new economics associations created between 1960 and 1980 were sub-disciplinary societies (40). Seven of these new sub-disciplinary societies were economic history associations, seven were agricultural economics associations, five were real estate, urban and regional economics associations, three were resource and environmental economics associations, and three were financial economics and risk economics associations. Other new sub-disciplinary associations were concerned with industrial economics, education and welfare economics, economic development, econometrics and (for the first time) game theory.

Geographically, between 1960 and 1980 new societies were established in 24 different countries. The overwhelming majority of these new associations (80 percent of the total) were established in developed economies. Another three were located in transition economies, two in Brazil, one in China, and five were international associations. Only three of the new associations established between 1960 and 1980 were located in lower income developing countries (Malaysia, Nigeria and South Africa).

The number of professional economic associations for which dates of origin were available continued to expand in the 1980s and 1990s, increasing from 155 societies in 1980 to 279 societies in 2000.<sup>6</sup> Among the 124 societies established during the last two decades of the twentieth century for which dates of origin are known, only 28 percent (35 associations) were general economics associations while the remaining 72 percent (89 associations) were specialty societies. The new specialty associations covered a truly diverse range of topics, and were less concentrated in traditional sub-specialty fields such as agricultural economics and economic history.

### *B. Sub-Disciplinary Specialization*

Data on the distribution of economics associations by disciplinary focus are presented in table 1 and panel b of Figure 1. In 1900, among the fourteen extant economic associations twelve were

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<sup>6</sup> As noted above, the total number of societies extant in 2000 was 347.

general economics associations and only two had any sort of sub-disciplinary focus (the Royal Statistical Society and the Société Royale d'Economie Politique de Belgique). By 1960, as discussed above, at least 90 economics associations were operating, of which almost half (44) were specialty associations. Eleven of these were agricultural economics associations; ten addressed public economics and political economy issues, and seven were economic history associations. Thus in 1960 these three sub-disciplines accounted for 64 percent of the specialty societies.

Forty years later, in 2000, within this frame of reference the picture had changed substantially. Among the 279 associations for which dates of origin are available, of the 189 societies established after 1960, only one third (63 societies) were general economic associations while two thirds (126 societies) were specialty societies. Among the 347 economic societies functioning in 2000, only 131 (38 percent) were general economic associations while 218 (62 percent) were specialty societies.

Among these 218 specialty associations, the largest category was economic history with 34 associations (9.8 percent of all associations and 15.6 percent of specialty societies), followed by agricultural economics with 28 (8.1 percent of all associations), resource and environmental economics with 26 (7.5 percent of all associations), and regional and urban economics (including real estate) with 21 (5.4 percent of all associations). Three other specialty categories had ten or more associations (public economics and political economy with 19, econometrics/mathematical economics with 17, and economic development with 15). New associations also proliferated in relatively new fields such as game theory (9), welfare economics (8), financial economics (7), health economics (6), and law and economics (5).

Especially since 1960 and even more rapidly since 1980, economists have expanded the range of sub-disciplinary associations in which they participate. This almost surely reflects increased specialization within economics both in relation to analytical tools (as evidenced by the

emergence of nine associations that focus on game theory) and institutions and sectors (as evidenced by the emergence of societies in the categories of resource and environmental economics, law and economics, and health economics). It is also in part a result of the increase in the size of the economics profession and increases in resources that permit researchers to participate in more associations.

### *C. Geographic Distribution*

Where scientists assemble is at least a partial indicator of where they work. In 2000, the overwhelming majority of professional economics associations were located in developed countries (246 or 69 percent). The current situation is little different than the historical situation. Figure 2 shows the changing geographic distribution of societies for which dates of origin are available over the period 1900 to 2000. In 1900, only one of a total of 14 economic associations in the world was located outside of Europe and North America (in Uruguay). By 1930, 26 of a total of 35 associations (74 percent) were located in developed countries, four were international associations, one was situated in what is now a transition economy, and only four (11 percent) were located in developing countries (Egypt, India, and South Africa, in addition to Uruguay). Thirty years later, in 1960, while the total number of associations had increased to 90, the number of associations in developing economies had increased only to 13 (14 percent of the total).

In 2000, only 33 out of a total of 279 associations (12 percent of the total and generally not the largest associations) were located in developing economies and 12 more (4 percent) in transition economies. Moreover, only 6 of the world's 64 poorest income countries were served by their own economic associations.<sup>7</sup> Fifty two associations (15 percent) were explicitly international associations, only some of which had relatively large proportions of members from developing countries. These data strongly support the view that, as is the case for many other

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<sup>7</sup> The 64 low-income countries were classified as such in World Bank (2001). They had per capita incomes in 2000 of less than \$460 (1995 U.S. dollars).

knowledge and generation transfer industries, populations in poor countries are much more poorly served by economists than are populations in rich countries. This shortfall may be particularly crucial if, as Harberger (1993) and others have argued, the need for well-trained economics policy practitioners in such settings is particularly great. The data presented in Figure 2 demonstrate that the proportional gap between developed and developing countries with respect to professional economic associations has persisted since the 1900s. Thus, while the numbers of professional economics associations in both the developed and developing countries have been growing at about the same rate, the absolute gap has been expanding.

#### *D. The “Fractionalization” Process*

Since the 1920’s, and even more rapidly since the 1960s, new professional economics associations have been created whose foci are sub-disciplinary. This process of “fractionalizing” professional economics associations by sub-disciplines (and to some degree spatially) since the 1920s and especially since 1960 is in large part a consequence of three factors. (1) the expanded scope of the work of economists in international, national, and regional government, and private-sector activities, coupled with potential gains from specialization within sub-disciplines, (2) the sheer increase in the size of the profession<sup>8</sup> (that was also associated with a massive expansion of higher education in the United States and other developed countries)<sup>9</sup> which both expanded the demand for professional publication outlets and may have created diseconomies of size with respect to some associations, and (3) rising per capita real incomes and per capita real research funds that increased the effective demand for the club goods provided by professional associations.

Measuring the evolution of the size of the economics profession is difficult. One indicator is annual total membership in the AEA, which is readily available for the period 1876 to 2000.

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<sup>8</sup> AEA membership, for example, also expanded markedly between 1940 and 1960 from 3,148 to 10,837 members and further expanded to about 20,000 by 2000.

<sup>9</sup> In the United States, for example, total enrollments in degree granting institutions of higher education expanded from about 2.2 million students in 1947 to about 4.1 million students in 1961 and to about 13.1 million in 2000.

Figure 3 presents annual data on membership in the AEA and our cumulative estimates of numbers of associations (the associations for which dates of origin are available) for the period 1900 to 2000. Even the most casual inspection of the trends in these two variables suggests that they are relatively closely correlated and in fact the simple Pearson correlation coefficient is 0.96. While not the only thing that matters, one important force in creating more economics “clubs” over the past 100 years has clearly been the increase in the numbers of economists.

The data in figure 3, however, also tell an additional tale. The size of at least one important economics association, the AEA, has also grown substantially over the past 100 years, as (of course) have the sizes of many other general economics societies such as the Royal Economic Society. While this could reflect an inadequate provision of clubs, it also is consistent with the notion that over time technological change has increased the optimal amount of the club good a given club can provided. In one area, journal space, it is clear that over the long run individual associations have expanded the amount of the club good it offers. In 1940, the total number pages published by three major economics journals—the American Economic Review, the Journal of Political Economy, and the Economic Journal—was 1,777; by 1960, the aggregate page count had increased to 2,602, and by 2000 it had expanded to 4,721 (Smith, Pardey and Chan-Kang 2004).

## **VI. Conclusion**

Over the past two centuries, the economics profession and economics research has expanded and evolved mainly in developed countries along with per capita incomes, real GDPs, and post-secondary education. Almost all of the growth in professional associations has been concentrated in the last 125 years and especially between 1945 and 2000. In 1918 there were 22 economic associations for which dates of origin were available; in 2000 there were 277 such associations (a thirteen fold increase) and a total of 347 economic associations were serving the economics

profession. In 1900, almost all economic associations were general economics societies. In 2000, almost two thirds served economics sub-disciplines ranging from law and economics through fisheries economics to public choice and game theory. Among the first sub-disciplines to develop their own associations were agricultural economics, economic history, and public economics and political economy. Only much more recently have specialty associations for areas such as game theory and resource and environmental economics appeared, albeit in response to different mixes of methodological developments and policy related concerns.

As in many contexts, in economics, “clubs” and the club goods they provide have proliferated as the population that competes for those goods has grown. Along the way, positive spillovers and truly public goods have also been created for the broader communities in which economists work. However, it is clear that economic associations are few and far between in the poorest countries of the world who are often most in need of the public goods economists are capable of providing.



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**Table 1:** Distribution of Economic Associations Among Sub-Disciplines

Category	1900 <sup>a</sup>		1960 <sup>a</sup>		2000 <sup>a</sup>		All Societies in 2000 <sup>b</sup>	
	Total (count)	Proportion (percent)	Total (count)	Proportion (percent)	Total (count)	Proportion (percent)	Total (count)	Proportion (percent)
General Economics	12	85.7	46	51.1	109	39.1	131	37.8
Game Theory	0	0	0	0	7	2.5	9	2.6
Economic History	0	0	7	7.8	26	9.3	34	9.8
Economic Development	0	0	3	3.3	12	4.3	15	4.3
Econometrics/Math Econ	1	7.1	3	3.3	10	3.6	17	4.9
Monetary and Forecasting Economics	0	0	0	0	2	0.7	3	0.9
International Economics	0	0	1	1.1	4	1.4	4	1.2
Financial Economics	0	0	0	0	6	2.2	7	2.0
Industrial Organization	0	0	0	0	3	1.1	4	1.2
Agricultural Economics	0	0	11	12.2	27	9.7	28	8.1
Resource and Environmental Economics	0	0	3	3.3	19	6.8	26	7.5
Labor Economics	0	0	0	0	5	1.8	5	1.4
Welfare Economics	0	0	2	2.2	6	2.2	8	2.3
Health Economics	0	0	0	0	5	1.8	6	1.7
Regional and Urban Economics	0	0	4	4.4	15	5.4	21	6.1
Law and Economics	0	0	0	0	3	1.1	5	1.4
Public Economics and Political Economy	1	7.1	10	11.1	16	5.7	19	5.5
Other Field Societies	0	0	0	0	4	1.5	4	1.4
Not Classified	0	0	0	0	1	0.4	1	0.3
Total Number of Associations	14	1.0	90	1.0	279	1.0	347	1.0

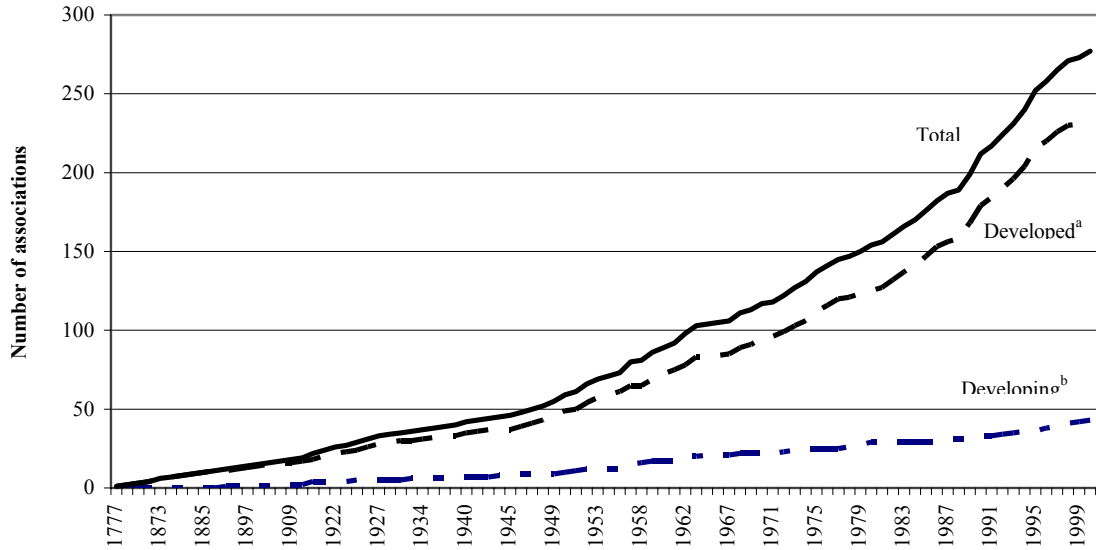
Source: Compiled by authors. See text for details.

<sup>a</sup> These data are for the 279 societies for which dates of origin are available

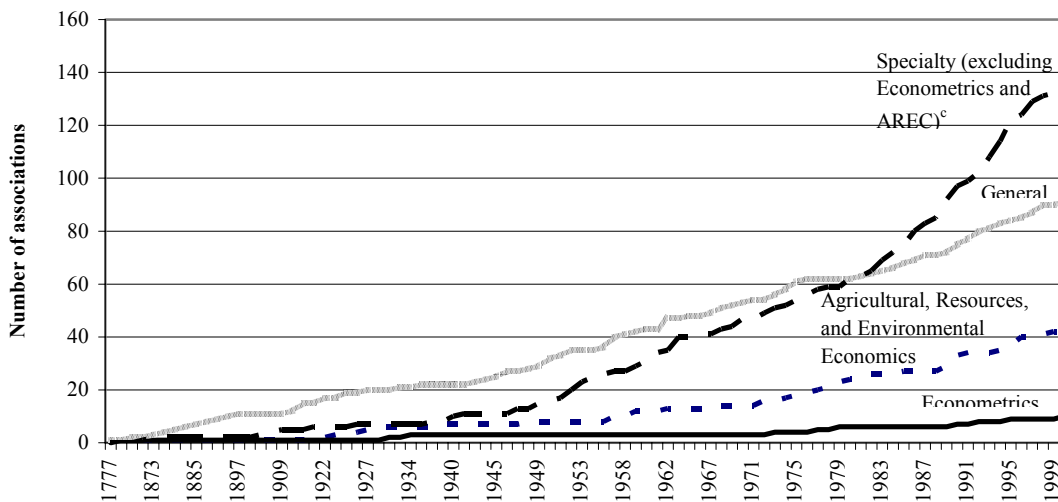
<sup>b</sup> These data are for all 347 societies included in the data base.

**Figure 1: Professional economic associations by regions of the world**

**Panel a: Cumulative Distribution of Economic Associations**



**Panel b: Cumulative Distribution of Economic Associations by Fields**

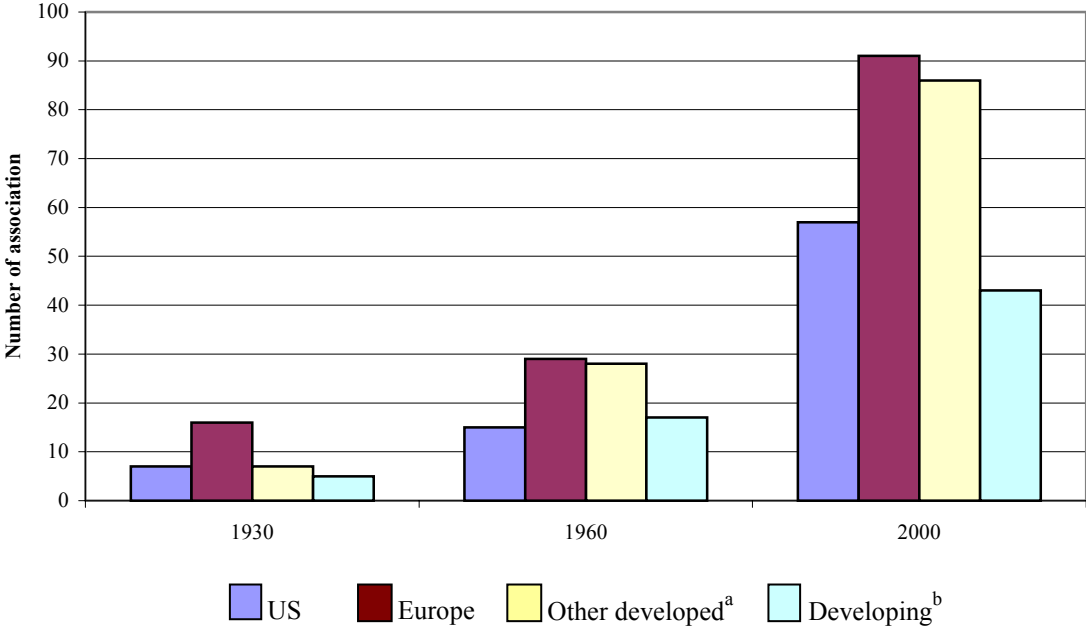


Source: See Figure 1.

Notes: Associations where year of foundation was unknown or unavailable were excluded.

- Developing countries include less-developed countries and transition economies.
- Developed countries include international associations.
- Specialty includes the following fields of economics: mathematical economics, development economics, economic education, economic history, economic and game theory, financial economics, risk and insurance forecasting, business cycles, monetary economics, health economics, industrial economics, regulation, international economics, labor and demographic economics, law and economics, public economics, political economy, public policy, regional and urban economics, real estate, and welfare economics.

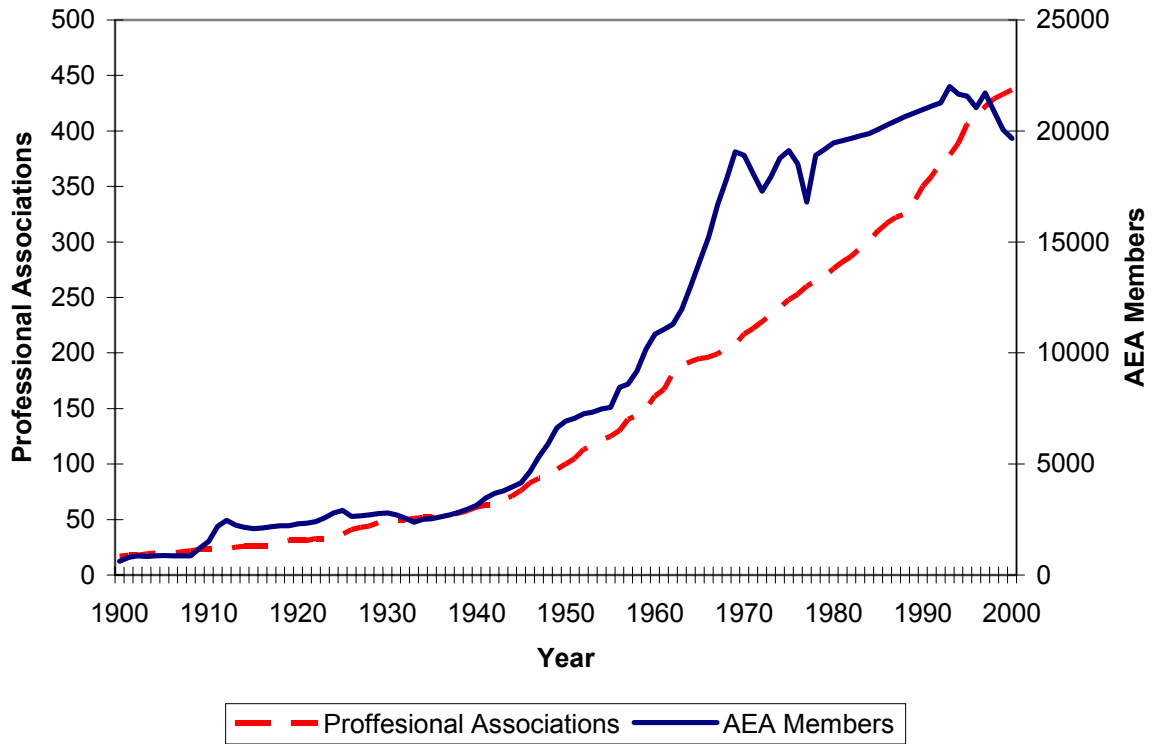
**Figure 2:** Changing geographical distribution of economic associations by region



Source: See Figure 1.

- a. Developing countries include less-developed countries and transition economies.
- b. Developed countries include international associations.

**Figure 3:** AEA Membership and Professional Economic Associations: 1900-2000



Source: For professional associations see Figure 1. For AEA membership see AEA (various years).