



Who are the Gatekeepers of Economics? Geographic Diversity, Gender Composition, and Interlocking Editorship of Journal Boards

This is a pre print version of the following article:

Original:

Baccini, A., Re, C. (2024). Who are the Gatekeepers of Economics? Geographic Diversity, Gender Composition, and Interlocking Editorship of Journal Boards. REVIEW OF POLITICAL ECONOMY, 1-28 [10.1080/09538259.2024.2303654].

Availability:

This version is available <http://hdl.handle.net/11365/1254315> since 2024-01-23T15:10:20Z

Published:

DOI:10.1080/09538259.2024.2303654

Terms of use:

Open Access

The terms and conditions for the reuse of this version of the manuscript are specified in the publishing policy. Works made available under a Creative Commons license can be used according to the terms and conditions of said license.

For all terms of use and more information see the publisher's website.

(Article begins on next page)

WHO ARE THE GATEKEEPERS OF ECONOMICS? GEOGRAPHIC DIVERSITY, GENDER COMPOSITION, AND INTERLOCKING EDITORSHIP OF JOURNAL BOARDS

 **Alberto Baccini**

Dipartimento di Economia Politica e Statistica
Università degli Studi di Siena
Siena, Italy
alberto.baccini@unisi.it

 **Cristina Re**

Dipartimento di Economia Politica e Statistica
Università degli Studi di Siena
Siena, Italy
cristina.re@uniupo.it

ABSTRACT

This study investigates the role of editorial board members as gatekeepers in science, creating and utilizing a database of 1,516 active economics journals in 2019, which includes more than 44,000 scholars from over 6,000 institutions and 142 countries. The composition of these editorial boards is explored in terms of geographic affiliation, institutional affiliation, and gender. Results highlight that the academic publishing environment is primarily governed by men affiliated with elite universities in the United States. The study further explores social similarities among journals using a network analysis perspective based on interlocking editorship. Comparison of networks generated by all scholars, editorial leaders, and non-editorial leaders reveals significant structural similarities and associations among clusters of journals. These results indicate that links between pairs of journals tend to be redundant, and this can be interpreted in terms of social and intellectual homophily within each board, and between boards of journals belonging to the same cluster. Finally, the analysis of the most central journals and scholars in the networks suggests that journals probably adopt 'strategic decisions' in the selection of the editorial board members. The documented high concentration of editorial power poses a serious risk to innovative research in economics.

Keywords Gatekeepers of Economics · Social Network Analysis · Editorial boards · Diversity

Acknowledgments: *This work has been developed as part of a PRIN project 2017MPXW98 funded by the Italian Ministry of University. The project involve the building of a database of the editorial boards of economics journals for the period 1946-2019. The data here presented are only a part of the database and will be released with all others at the end of the project. Thanks to Alberto Montesi for his fundamental bibliographic assistance in finding information about the boards. Eugenio Petrovich contributed to the design of the database and to the development of routines for disambiguation and standardization. Livia Tarini, Martina Cioni and Daria Pignalosa contributed to the building of the database. Thanks to Lucio Barabesi, Oddný Helgadóttir and Jakob Kapeller for their comments and suggestions.*

1 Introduction

Quantitative approaches have recently gained increasing attention from economists, as they allow us to uncover aspects of the recent history of economic thought and the professional role of economists that may remain hidden to traditional qualitative methods [Duarte and Giraud, 2016, Marcuzzo and Zacchia, 2016]. In this paper, we use quantitative tools to investigate the characteristics of gatekeepers in the field of economics. Specifically, we focus on members of editorial boards and editorial leaders of economics journals, as these scholars play a pivotal role in shaping both the trajectory of economic sciences and the careers of economists. Editorial board members are gatekeepers of science [De Grazia, 1963, Crane, 1967]: through their selection of manuscripts to be published in journals, they can influence the direction of research within a discipline by deciding which studies to support and which to reject. They also wield considerable influence over the careers of scholars who seek to publish their work. Given the crucial role that editors play, numerous studies have examined the composition of editorial boards, its correlation with publication outcomes, and its evolution over time.

This paper aims to enhance our understanding of the composition of editorial boards in the field of economics, shedding light on the characteristics of economics gatekeepers. Until now, studies of economics editorial boards have typically employed limited datasets or specific approaches. For instance, Hodgson and Rothman [1999] examined the institutional backgrounds of editors and authors for the top 30 economics journals in 1995, revealing that 70.8% of journal editors were affiliated with institutions in the United States, with twelve universities accounting for more than 38.9% of all editors. Their main concern with such a high concentration of institutional power is the threat to “the potential for innovation and change” (p.166). A similar concentration of editors affiliated with prestigious institutions was found by Gibbons and Fish [1991] in a study of the 25 top economics journals from 1970 to 1979. They also discovered that, among the 575 editors, Harvard had the most members (36, which corresponds to 9.1 percent of all members), Stanford was second (29 members, 7.3 percent), followed by MIT (25), Chicago (24), and Pennsylvania (22). Wu et al. [2020] also noted that academic journals in economics remain heavily dominated by US institutions, with 48.55% of editors coming from the US, using a sample from 2019 that included 6,916 editors affiliated with 246 economics journals. Addis and Villa [2003] focused on gender distribution, analyzing the presence of male and female economists on the editorial boards of thirty-six Italian economics journals published from 1970 to 1996. Their findings indicated that women were underrepresented and predominantly occupied lower-ranking positions. Baccini and Barabesi [2010] were the first to propose and analyze the interlocking editorship network generated by individuals serving on the editorial boards of multiple economics journals, revealing a cohesive network of editors (90% of the journals are directly or indirectly connected) containing different components. Lastly, Ductor and Visser [2023] conducted a study involving 106 economics journals spanning the period from 1990 to 2011, employing also IE analysis. Their research underscored the presence of a discipline characterized by a significant concentration of both institutional and individual power, particularly within the more prestigious journals. Furthermore, they emphasized a strong negative correlation between the duration of editorial tenure and the impact of a journal.

This study investigates the country, institutional, and gender distribution of editorial boards in economics journals, as well as the characteristics of the interlocking editorship networks they create, on an unprecedented large scale. Our analysis is based on a comprehensive database that includes all 1,516 journals listed in the *EconLit* database with an active editorial board in 2019. For each journal, we manually compiled a database containing the names of board members and their affiliations, resulting in a dataset with over 44,000 members representing more than 6,000 institutions and 142 countries. This dataset offers an unprecedented opportunity to investigate the phenomenon of gatekeeping in contemporary economics on a large scale.

The article is organized as follows: Section 2 presents a literature review of studies on editorial boards in various fields. In Section 3, the dataset and research questions are described. Sections 4, 5, and 6 report on the geographic distribution, institutional distribution, and gender composition of editorial board members, respectively. These sections outline the differences between all editorial roles and editorial leaders, considering all journals and each journal separately. In Section 7, the analysis of the interlocking editorship is presented. Section 8 examines the most central journals and editorial leaders within the interlocking editorship network, separately analyzing the network formed by female scholars. The analysis concludes with some policy recommendations for implementing practices aimed at diversifying the members of editorial boards.

2 Literature review

Since the inception of gatekeeping analysis in the sociology of science, significant attention has been directed towards the role of journal editors, who are regarded as the primary gatekeepers of scientific knowledge [De Grazia, 1963, Crane, 1967]. This emphasis on editors likely stems from their pivotal role in shaping the trajectory of scientific knowledge by selecting works deemed worthy of publication. Their activities also indirectly impact the careers of scholars, particularly

in the last 20-30 years, as academic success increasingly relies on quantitative bibliometric indicators. According to Merton [1942], the fundamental role of editors should align with the normative ideal of 'universalism,' wherein scientific contributions are evaluated solely based on their intellectual merit. Nevertheless, concerns have arisen regarding the extent to which editors actually promote the best scientific output. These concerns are rooted in worries that social biases, linked to scholars' demographic or institutional characteristics, may also come into play. Crane [1967] provided empirical evidence that authors' academic affiliations, doctoral origins, and professional age tended to be similar to the distribution of those characteristics among journal editors, and these factors significantly influence editorial decisions in the selection of journal articles. Other studies proved that a narrow composition of the editorial board, in terms of similar education, research background, and academic experience, can restrict the themes and methodologies that are published in a journal (for a comprehensive review, see Mazov and Gureev [2016]).

For these reasons, numerous studies have centered their focus on the composition of editorial boards, examining its correlation with publication outcomes and its evolution over time. Additionally, investigations into the composition of editorial boards have been employed to evaluate journal internationalization and gender balance. They have also served as indicators of research influence across geographic regions, institutions, gender, and groups of scholars.

In particular, Zsindely et al. [1982], in their examination of the *geographic distribution* of editorial boards across 252 scientific journals, identified a significant correlation between the number of editorial board members from a particular country and the quantity of journals and authors associated with that country. Notably, Israel, Western Europe, the United States, and Canada exhibited an overrepresentation on editorial boards in comparison to their share of academic publications and scholarly journals. Conversely, Japan, India, and the Soviet Union were found to be underrepresented. Larger-scale studies have arrived at similar findings, highlighting that manuscripts submitted by authors from countries outside those of the editorial board members are more likely to face rejection. Additionally, in the case of most international journals, the majority of editorial board members are U.S. citizens (see Mazov and Gureev [2016] for a review). Braun and Dióspatonyi [2005a,b] interpreted this phenomenon as an indication that the United States had held a dominant scientific position since 1982 and that this dominance had not waned up to that point, despite other countries increasing their numbers of published papers and citations. Leydesdorff and Wagner [2009] demonstrated that China had recently become the second-largest nation in terms of both publications and citations, yet this diversification of the research landscape had not yet been reflected in the composition of editorial boards. According to Braun and Dióspatonyi [2005a, p.1548] "journal papers and citations are just a corollary" and "the control and screening activity of journal editorial boards [...] is of paramount importance". They believed that the predominance of U.S. scientists as editorial board members and Editors-in-Chief was "represents one of the explanations, and probably one of the most important one, which interprets the world dominant position of the US in science publication in most of science fields" [Braun and Dióspatonyi, 2005b, p.319].

Another stream of studies focuses on the *gender composition* of editorial boards. Much like the analysis of geographic distribution, these studies aim to examine the gender composition of editorial boards and discern if there are disparities in the representation of men and women within the scientific fields covered by a journal. In such cases, an overrepresentation of one gender among editorial board members can potentially lead to biased paper selection, affecting not only gender balance but also specific subject areas, methodologies, or theories [Stegmaier et al., 2011, Metz et al., 2016]. Mauleón et al. [2013] suggests that increased participation of women on editorial boards can positively influence the attraction of female researchers to their respective scientific disciplines, because women in gatekeeper positions can be perceived as role models for graduate students and junior researchers. The first analysis of female representation in editorial positions was conducted by Hatfield et al. [1995]. They observed the low presence of women in the research sector and questioned whether this pattern extended to the editorial level. Their analysis focused on the gender composition of Editor-in-Chief roles in the 100 most influential clinical medicine journals. They found that in 92 out of 96 journals, the most important editorial positions were occupied by men in 92 out of 96 journals, while only 4 by women. In one case, a woman shared the position with three other men. Subsequent studies on the same topic conducted in different fields have yielded similar findings, indicating male domination in editorial boards and a significant gap between the number of female researchers and their representation on these boards. While there has been an increase in the number of women serving on editorial boards, this change has occurred at a slower rate than the increasing presence of women in scientific fields. Moreover, there are fewer women in editorial boards of the most prestigious journals and in the role of Editor-in-Chief (see Mazov and Gureev [2016] for a review).

More recently, the concept of *Interlocking Editorship (IE)* has emerged as a framework for examining the structural characteristics of editorial board networks. Initially proposed by Baccini [2009], an IE network is defined as a network that arises from the presence of the same individual on the editorial boards of multiple journals. The underlying idea is that the number of editorial board members shared between two journals can be viewed as an indicator of journal similarity, i.e., the IE approach measures journal proximity based on common editorial board membership. Another perspective on the IE network is its utility in identifying scholarly communities, often referred to as "invisible colleges", as well as academic elites. This pertains to editors who hold multiple board positions or occupy central

positions within the network, which in turn grants them significant influence over editorial decisions. Notably, Baccini et al. [2020] discovered that the interlocking editorship network of journals bears similarities to both the co-citation network and the interlocking authorship network of journals. Consequently, studying journal communities within the IE network yields results akin to those obtained by examining communities in the other two networks. The IE framework has found application in various research fields through Social Network Analysis (SNA). In addition to the already mentioned economics, these fields include statistics [Baccini et al., 2009], information and library science [Baccini and Barabesi, 2011, Liwei and Chunlin, 2015, Ni and Ding, 2010], finance [Andrikopoulos and Economou, 2015], knowledge management and intellectual capital fields [Teixeira and Oliveira, 2018], communication sciences [Goyanes and De-Marcos, 2020], tourism [Lockstone-Binney et al., 2021]. These studies have offered valuable insights into the clustering of journals within specific fields or research areas, as well as the underlying structure of editorial gatekeeping. In recent times, the IE network has also been employed to investigate the geographical distribution of co-editor networks in oncology, revealing a core-periphery geographical structure [Csomós and Lengyel, 2022].

3 Data and research questions

The main objective of this study is to update and enrich the knowledge about the composition of editorial boards of economics by studying it on a database that includes all the 1,516 journals indexed in *EconLit*, with an active editorial board in 2019. *EconLit*, published by the American Economic Association (AEA), provides bibliographic coverage of the major scientific economics-related literature and it is the main source of references in the field of economic literature worldwide. The list of journals was compiled from AEA website in April 2019 (https://web.archive.org/web/20190716024210/https://www.aeaweb.org/econlit/journal_list.php).

The data on the members of the editorial boards was directly collected from the websites of the journals. For each member, the following data were manually entered: name and surname, role, journal name, affiliation if declared. All the information was manually standardized. For name and surname the manual standardization was conducted after an automatic disambiguation based on string similarities.

The final database collects data about 60,638 seats, classified in 477 distinct roles, and occupied by 44,460 scholars. The average number of seats per journal turned out to be 40 and the average number of seats per scholar, i.e., the mean rate of participation, was 1,36.

The seats associated with an affiliation are 53,964; 1,406 seats are held by scholars with multiple affiliations; in these cases, for simplicity, the analysis consider only the first affiliation, i.e.the one listed as first in the journal's website.

For 6,674 seats held by 6,179 scholars no affiliation was available; they represent respectively 11% and 13.9% of the total number of seats and scholars. The affiliated institutions are 6,081. Each distinct affiliation was associated with a country by using the Google Maps Text Search API and by manually cleaning wrong attributions. In this way, 53,700 affiliations, 96.8% of total, were associated to 142 different countries.

The gender was attributed to scholars by using an algorithm, based on the package **genderize.io**, that considered both the first name and the country of the member's affiliation, in order to take into account geographical variability in the association between names and gender (e.g., the name 'Andrea' is mainly attributed to men in Italy but to women in English-speaking countries). The gender was coded on a binary scale (male – female) not having the possibility to obtain self-reported gender data. We apologize to all those who are represented in the sample and who do not self-identify along the hetero-normative binary and hope that future studies might have more resources to contact people individually to report on self-identified data. We have been able to attribute gender to 39,761 individuals (89.4% of the total).

The analysis requested the identification of journal editorial leaders, i.e. scholars who have the highest editorial ranking in the journal. Since each journal classifies roles differently, we needed to establish a consistent classification method to identify individuals we will henceforth refer to as 'editorial leaders'. To this end, two different procedures were adopted. The first one, simply consisted in considering as editorial leaders the scholars classified by journals as Editor-in-Chief, Co-Editor-in-Chief, Deputy Editor-in-Chief or Joint Editor-in-Chief. By this procedure, 981 people are identified as editorial leaders in 687 journals, i.e., the 45.28% of the 1,516 journals of the database. For the rest of journals, a second more complex procedure was adopted. It consisted of the direct identification of journal editorial leaders who were classified with a generic name such as Editor, Co-Editor, Director. In these cases the editorial leaders were identified by considering their hierarchical position, first or last, in the list of editorial board members. In a few journals the editorial leadership appear to be held collectively by more than three scholars, grouped in a higher hierarchical position than other members of the boards. Also in these cases we decided to preserve the information and to classify these small groups as editorial leaders. In sum, a total of 2,893 editorial leaders in 1,448 (95.45%) journals were identified. Each journal has on average 2 editorial leaders.

Table 1 reports the main quantitative features of the final dataset.

Table 1: Editorial boards of economics journals in 2019: data description

Elements	n.
Journals	1,516
Seats in the editorial boards	60,638
Distinct scholars	44,460
Distinct female scholars	13,282
Distinct affiliations	6,081
Distinct countries	142
Distinct roles	477
Seats without affiliation	6,674
Seats without country	8,416
Seats without gender	5,603
Distinct Editorial Leaders	2,893
Distinct female Editorial Leaders	705
Distinct Editorial Leaders seats	3,010

As for the research questions, the dataset has been used, firstly, to explore the composition of the editorial boards of economics journals in order to verify their degree of homogeneity in terms of geographic affiliation, institutional affiliation, and gender. This composition is compared with the data on the population of economists, as registered in RePEc [2023].

The second research questions is about social and intellectual similarity among journals. More specifically, we ask whether it is possible to measure the social similarity between pairs of journals and whether this similarity allows for the identification of clusters of relatively similar journals. To this end, we adopt a network analysis approach, by focusing on relations among journals represented in terms of interlocking editorships (IE). As anticipated in Section 2, the IE fundamental unit is the scholar holding multiple seats in different journals. The descriptive analysis of the IE permits us to discuss the notions of prestige and editorial power. The social and intellectual similarity among journals is explored by computing a measure of similarity between each pair of journals based on the number of editorial board members shared between them, as in Baccini et al. [2020].

Three different similarity networks are constructed and compared: the complete IE network, the IE network created by scholars holding at least one editorial leadership position, and the IE network created by scholars who hold many seats but are never editorial leader. This approach allows us to verify if the structure of the similarity networks and clusters of journals inside them are stable when the links among journals are generated by scholars with different editorial power.

The final descriptive research question is about the most central journals and editors within the complete IE network. Finding the most central journals and editors in the IE network helps to identify the most influential editorial gatekeepers. These central nodes often have a significant impact on shaping the field, as they hold editorial power and are connected to a wide range of scholars and journals. This analysis is conducted also in a gender perspective, by exploring also the network generated by women scholars. By identifying these influential gatekeepers, insights can be gained to understand the distribution of influence and potentially address issues related to diversity, inclusion, and concentration of power in academic publishing.

All these steps allow us to identify who the gatekeepers of economics are and to detect differences related to roles and gender on an unprecedented large scale, providing a comprehensive answer to the fundamental question underlying this research.

The network analysis and visualization were realized with PAJEK (version number 5.14) and GEPHI (version number 0.9.5).

4 Geographic distribution

Table 2 presents the 10 most represented countries among the affiliations of editorial board members and editorial leaders. The percentage of each country in relation to all editorial roles was calculated from 51,608 seats where country attribution was possible, representing 85.1 percent of the total number of seats. Similarly, for editorial leaders the percentage of each country was calculated using 2,480 seats with attributed countries, representing 82.5% of the total of editorial leaders seats.

The United States stands out as the most represented country, holding 33.6% of all seats and 35.4% of editorial leader seats. It is followed far behind by the United Kingdom with 9.2% and 9.1%, respectively. Among the top 10, only countries categorized as influenced or part of Western nations are represented. Moreover, the five most represented countries collectively occupy the majority of seats, accounting for 54.8% of all editorial seats and 57.9% of editorial leader seats. While 142 countries have at least one seat in a journal, only 81 countries (approximately 43%) have at least one editorial leader seat.

Table 2: Seats at the editorial tables. The 10 most represented countries.

All Editorial Roles			Editorial Leaders		
Country	Total	Percentage	Country	Total	Percentage
United States	17329	33.6	United States	879	35.4
United Kingdom	4737	9.2	United Kingdom	225	9.1
Italy	2154	4.2	Germany	141	5.7
France	2057	4.0	Italy	96	3.9
Canada	2007	3.9	Canada	94	3.8
Germany	1899	3.7	Spain	72	2.9
Spain	1750	3.4	Australia	67	2.7
Australia	1653	3.2	France	66	2.7
Turkey	1254	2.4	Netherlands	58	2.3
Netherlands	911	1.8	Japan	48	1.9

These results can be compared with data on the actual geographic distribution of economists to determine if there are differences between members of the editorial roles and economists in general. The most readily available data comes from RePEc [2023], which collects data about economists in 2023. The three-year difference from our database is short enough to assume that the distribution of economists by country has not changed dramatically in the meantime.

The comparison of the geographic distribution of editorial seats in Table 2 with the country affiliation of economists registered in RePEc [2023] in Table 3 shows that the United States, the United Kingdom, Canada, Australia, Turkey, and the Netherlands are over-represented in the editorial boards of economic journals. All the other countries are instead under-represented. In particular, Russia ranks 8th and China 10th among the top 10 most represented countries in RePEc. When examining the geographic distribution of editorial boards, China ranks 12th for all editorial roles with 796 seats and 24th for editorial leaders with 20 seats. Russia, on the other hand, is positioned at 38th with 242 seats for all editorial roles and at 29th with 13 seats for editorial leaders.

Table 3: The 16 most represented countries in RePEc (2023).

Country	Total	Percentage	Country	Total	Percentage
United States	11966	20.8	Australia	1543	2.7
United Kingdom	3820	6.7	China	1399	2.4
France	3724	6.5	Japan	1195	2.1
Germany	3520	6.1	Netherlands	1152	2.0
Italy	3352	5.8	Romania	1149	2.0
Spain	2450	4.3	India	1147	2.0
Canada	1692	2.9	Switzerland	1040	1.8
Russia	1578	2.7	Turkey	892	1.5

As for the country composition of the board of each journal, a concentration metric is developed by calculating the proportion of seats for each country represented on the board. Journals are defined as ‘highly concentrated in terms of geographic diversity’ when a single country holds at least 50% of the total seats, or of the editorial leader seats. Table 4 reports the number and percentage of the highly concentrated journals in terms of geographic diversity.

When considering all editorial roles, 504 journals (33% of the total) exhibit a high concentration of geographic diversity, that is, they have a significant number of members affiliated with the same country. Of these, 273 journals are associated with the United States, 23 with Turkey, 22 with Spain, 17 with France, 16 with Italy, 14 with Germany, and only 12 with the United Kingdom. These journals can be regarded as nationally based journals, and their presence contributes to the ranking of the most represented countries in the editorial boards, as shown in Table 2. It’s worth noting that 12 journals have all their editorial board members affiliated with the same country. Three of them are from the United States (*American Economist*, *American Law and Economics Review*, *Financial Markets, Institutions and Instruments*).

When considering only editorial leader seats, 967 journals (64% of the total) are highly concentrated in terms of geographic diversity. Table 4 shows that for 860 journals, the editorial leader comes from a single country. The countries with more than 50% of editorial leaders in each journal taken separately are again the United States (322 journals), the United Kingdom (75), Germany (40), Italy (36), Spain (32), and France (29).

Table 4: Seats at the editorial tables. Journals highly concentrated in terms of geographic diversity.

Range	All Editorial Roles		Editorial Leaders	
	N° Journals	% Journals	N° Journals	% Journals
50%-59%	162	11.75	9	0.59
60%-69%	120	8.71	47	3.10
70%-79%	103	7.47	36	2.37
80%-89%	71	5.15	12	0.79
90%-99%	36	2.66	3	0.20
=100%	12	0.87	860	56.73

The analysis of the geographic distribution of editorial seats in economics journals reveals a predominant presence of scholars affiliated with the United States, both as editorial board members and as editorial leaders. This dominance holds true when considering all journals collectively and when analyzing the boards of individual journals. Furthermore, this presence on editorial boards is disproportionately higher compared to the number of economic authors affiliated with the United States. In contrast, Russia and China are underrepresented on editorial boards relative to the number of economics authors from these countries. These results confirm that, as of 2019, the United States maintains its position as the leading scientific power in economics, with the United Kingdom and other Western countries (particularly Germany, Italy, France, and Spain) following at a significant distance.

5 Institutional distribution

Shifting our focus to the institutional level, we can determine whether some universities or research centers are more represented than others on editorial boards and assess their degree of concentration. Table 5 reports the ten most represented institutions in the editorial boards of economics journals. In this case, the percentage for each institution has been calculated based on 53,964 seats (89% of the total) for which an affiliation could be attributed. Similarly, the percentage for editorial leader seats is calculated over 2,580 (14.2%) total editorial leader seats with affiliations.

Table 5 reveals that the most represented institution is the University of California, both in all editorial roles and in editorial leader seats. Nevertheless, this result is magnified due to the difficulty in uniformly understanding which campus of the University of California scholars belong to, during the process of standardization of affiliations. Table A1 in the Appendix provides affiliations as reported on the websites of journals for a generic ‘University of California’ and its campuses. In any case, the majority of the most represented institutions are located in the United States. There are only two exceptions among all editorial roles: the London School of Economics and the University of Oxford. Among editorial leaders, only the London School of Economics is in the top 10, outside the United States.

In this case, too, affiliation diversity is higher for all editorial roles compared to editorial leaders: there are 6,081 different institutions represented in total seats, whereas editorial leaders are affiliated with only 1,036 institutions (17%). Moreover, the concentration is slightly lower for all editorial roles compared to editorial leaders: the top 10 institutions collectively represent 8.2% of total seats for all editorial roles and 11.7% of editorial leader seats.

The lower concentration in all editorial roles compared to editorial leader seats is confirmed when the analysis is conducted at the individual journal level. In this case, the concentration of institutions in each journal is calculated by considering the proportion of seats from each institution on the board over the total number of seats on each journal’s board. A journal is considered ‘highly concentrated in terms of institutional diversity’ if at least 50% of its editorial board seats are occupied by members from a single institution. Table 6 reports the number and percentage of highly concentrated journals in terms of institutional diversity. Out of 1,516 journals, only 30 (2%) exhibit a high concentration of members affiliated with the same institution. None of these institutions are among the Top 10 most represented institutions in Table 5. Only three journals have all editorial members coming from the same institution: *Economic Outlook* from Curtin University (Australia), *Journal of Islamic Economics, Banking and Finance* from the University of Bahrain (Bahrain), and *Strategic Finance* from Corvinus University of Budapest (Hungary).

Focusing on editorial leader seats, there are 801 high-concentration journals (52.8% of the total), among which 781 journals exhibit an extreme concentration with editorial leaders belonging to a single institution. The three most represented institutions among the journals with extreme concentration are the University of California (15 journals), the University of Bologna (7), and Florida State University (7).

Table 5: Seats at the editorial tables. The 10 most represented institutions. (* See the Appendix for data about University of California).

All Editorial Roles			Editorial Leaders		
Institution	Total	Percent.	Institution	Total	Percent.
University of California*	1091	1.32	University of California*	46	1.78
London School of Economics	566	1.05	University of Pennsylvania	29	1.12
University of Pennsylvania	500	0.93	MIT	29	1.12
Harvard University	478	0.89	University of Chicago	26	1.01
Columbia University	412	0.76	London School of Economics	24	0.93
New York University	384	0.71	Harvard University	24	0.93
Michigan State University	381	0.71	Northwestern University	22	0.85
University of Oxford	345	0.64	University of Washington	21	0.81
Stanford University	337	0.62	Stanford University	21	0.81
University of Washington	329	0.61	Yale University	20	0.78
			New York University	20	0.78
			Columbia University	20	0.78

Table 6: Seats at the editorial tables. Journals high concentrated in terms of institutional diversity.

Range	All Editorial Roles		Editorial Leaders	
	N° Journals	Percentage	N° Journals	Percentage
50%-59%	12	0.79	4	0.26
60%-69%	6	0.40	10	0.66
70%-79%	3	0.20	6	0.40
80%-89%	2	0.13	0	0.00
90%-99%	4	0.26	0	0.00
=100%	3	0.20	781	51.52

Therefore, it is possible to state that it is difficult to identify ‘hegemony’ by any particular institution in the editorial boards of economics journals. Instead, there is a widespread representation of US universities and some UK universities.

6 Gender composition

The analysis of gender composition in economics journal editorial boards requires a brief contextualization. In general, women are underrepresented in the field of economics, with a more significant disparity at higher academic positions. As documented by Lundberg and Stearns [2019], the field of economics became substantially less male-dominated during the 1980s and 1990s, but this growth in female representation has stalled. The proportion of female assistant professors and PhD students has remained relatively constant since the mid-2000s, and is around 25%. In contrast, women’s representation at senior levels has been increasing but remains at nearly 14% as of 2017. This difference between the initial positions and higher positions held by women within the profession is consequently referred to as a kind of ‘glass ceiling’. The database used here enables us to explore whether this vertical gender segregation is reflected in the composition of editorial boards.

Gender information could be assigned to scholars occupying 55,035 seats, representing 90.76% of the total available seats. For editorial leaders, 2,781 were gender-identified, accounting for 92.5%. As shown in Table 7, women occupy approximately 25% of the total available seats and editorial leader seats, while men account for the remaining 75%. At first glance, it cannot be said that there is vertical segregation: women are underrepresented within editorial boards or among editorial leaders only because there are fewer of them within the profession.

Table 7: Seats at the editorial tables. Gender composition.

Gender	All Editorial Roles		Editorial Leaders	
	Total	Percentage	Total	Percentage
Female	13282	24.13	705	25.35
Male	41753	75.87	2076	74.65

However, there could be ‘horizontal segregation’ with women being more represented in certain fields or journals. To investigate this hypothesis, the gender composition of editorial boards for each journal is analyzed separately. A journal

can be considered to have a ‘high male composition of seats’ if more than 50% of its seats are held by men. The number and percentage of journals with a high male composition of editorial boards is reported in Table 8: 1,322 journals, i.e. 87% of economics journals, have a high male composition of board. Furthermore, if the threshold is set at 75% male, 725 journals (47.8%) exceed this threshold. Table 9 presents the top 10 journals with the highest proportion of women on their editorial boards, of which three journals are focused on gender or feminist topics.

Regarding editorial leader seats, there are 974 journals (64.2% of economics journals) where at least 50% of editorial leader seats are held by men. Among these, 873 journals (57.6%) have more than 75% of editorial leader seats occupied by men, and 836 journals (55%) have men holding all 100% of editorial leader seats. In contrast, only 262 journals (17%) have more than 50% of editorial leader seats occupied by women, and among these, 235 journals (15.5%) have 100% of their editorial leader seats held by women.

Table 8: Seats at the editorial tables. Journals with high male composition of seats.

Range	All Editorial Roles		Editorial Leaders	
	N° Journals	% Journals	N° Journals	% Journals
50%-59%	122	8.05	15	0.99
60%-69%	268	17.68	51	3.37
70%-79%	426	28.10	54	3.56
80%-89%	357	23.55	15	0.99
90%-99%	114	7.52	3	0.20
= 100%	35	2.31	836	55.15

Table 9: Seats at the editorial tables. The 10 journals with more female presence.

Journal Name	All Editorial Roles	
	% Women	Editorial Seats
Feminist Economics	81.91	94
Monetary Policy and the Economy	77.78	18
Indian Journal of Gender Studies	76.00	25
Indiana Business Review	75.00	4
Journal of Economic Perspectives	68.75	16
International Business and Global Economy	66.67	24
Pennsylvania Economic Review	66.67	6
Journal of Economic Literature	64.71	34
Studies in Family Planning	64.29	28
Focus on European Economic Integration	62.50	16

Summing up, the overall presence of women in the editorial boards of economics journals, whether for all editorial boards or for editorial leaders, is similar to that observed in academic positions, accounting for approximately 25% of total seats in both cases. However, women are more prominent in some journals than in others: in 47% of journal boards and 57.6% of editorial leader seats, the presence of women falls below 25%. These results suggest that, unlike academic positions, there is not a form of ‘vertical segregation’ or ‘glass ceiling’ but ‘horizontal segregation’ of women on some editorial boards. In this case, the horizontal segregation is probably related to the fact that some topics are more women-intensive, or that only a few journals care about gender balance in selecting their editorial board members. This last hypothesis will be checked in the following Sections.

7 Interlocking Editorship Networks

Up to this point, the unit of analysis has been the editorial board seat. However, a scholar can hold multiple seats simultaneously. In fact, the composition of an editorial board contributes to a journal’s prestige. Therefore, journals appoint ‘famous’ or ‘influential’ scholars to enhance their reputation and attract the ‘best’ [Baccini and Barabesi, 2010]. Conversely, editors of journals with strong reputations wield significant power [Faria, 2005]. Hence, scholars tend to accept multiple roles on different editorial boards

The descriptive analysis of the distribution of scholars based on the number of seats they hold is presented in Figure 1. When considering all editorial roles, approximately 79% of scholars occupy only one seat. The remaining 9,520 scholars (21.4%) hold more than one seat, with a maximum of 24 seats held by a single scholar. In the case of editorial leaders, however, only 110 scholars (3.7%) hold more than one seat, with a maximum of 4 seats held by the same

person. Moreover, women tend to hold fewer seats simultaneously. For all editorial roles, only 17.6% (1,837 out of 10,424) of women hold more than one seat, with a maximum of 13 seats held by a single person. In the case of editorial leaders, the distribution is quite similar between genders, with a similar 3.5% of women scholars (24 out of 681) holding more than one editorial leader seat, with a maximum of 3 editorial leader seats held by the same person.

In summary, there are ‘prominent’ or ‘prestigious’ economists who sit on many editorial boards, but very few scholars act as editorial leaders in multiple journals. This suggests that editorial leaders hold the real editorial power and have a high editorial workload, making it difficult for a scholar to serve as an editorial leader in more than one journal. On the other hand, the role of a member of an editorial board may appear honorary for scholars – predominantly men – sitting on the boards of many journals. In turn, it may seem that being selected as an editorial board member can enhance a journal’s prestige rather than simply conferring effective power to the scholar on the board.



Figure 1: Distribution of scholars according to the number of seats held in the editorial boards of economics journals.

7.1 Social and intellectual similarities in the interlocking editorship network of journals

The mentioned difference among ‘powerful’ editorial leaders and ‘prestigious scholars’ who sit on many boards suggests analyzing whether there are different structural characteristics in the networks they create. In general, an interlocking editorship approach can be used to explore the different structural properties of the networks generated by the crossed presence of scholars in many boards contemporaneously. An interlocking editorship network is a bipartite network with two sets of nodes, editorial board members and journals, and edges linking members to the journals where they sit. Specifically, three interlocking editorship networks are constructed. The first one (‘Complete network’) is the standard interlocking editorship network, created by considering all editors on journal boards, regardless of their role. The second is the interlocking editorship network formed by scholars who do not hold an editorial leader position (‘No-EL network’). The third interlocking editorship network is created by the subset of scholars who hold at least one editorial leader position (‘EL network’).

The exploratory analysis focuses on the projected one-mode network of journals of the three IE networks: two nodes, representing journals, are connected by an edge if they share at least one scholar in their editorial board. The weight of the edge is represented by the number of common scholars. These three networks are represented in Figure 2 by using the Fruchterman-Reingold algorithm on GEPHI [Bastian et al., 2009].

Table 10 shows that the Complete network is the most connected and dense, while the EL network is the least connected and dense. Moreover, the distribution of the link weights, i.e. the distribution of number of common editors between

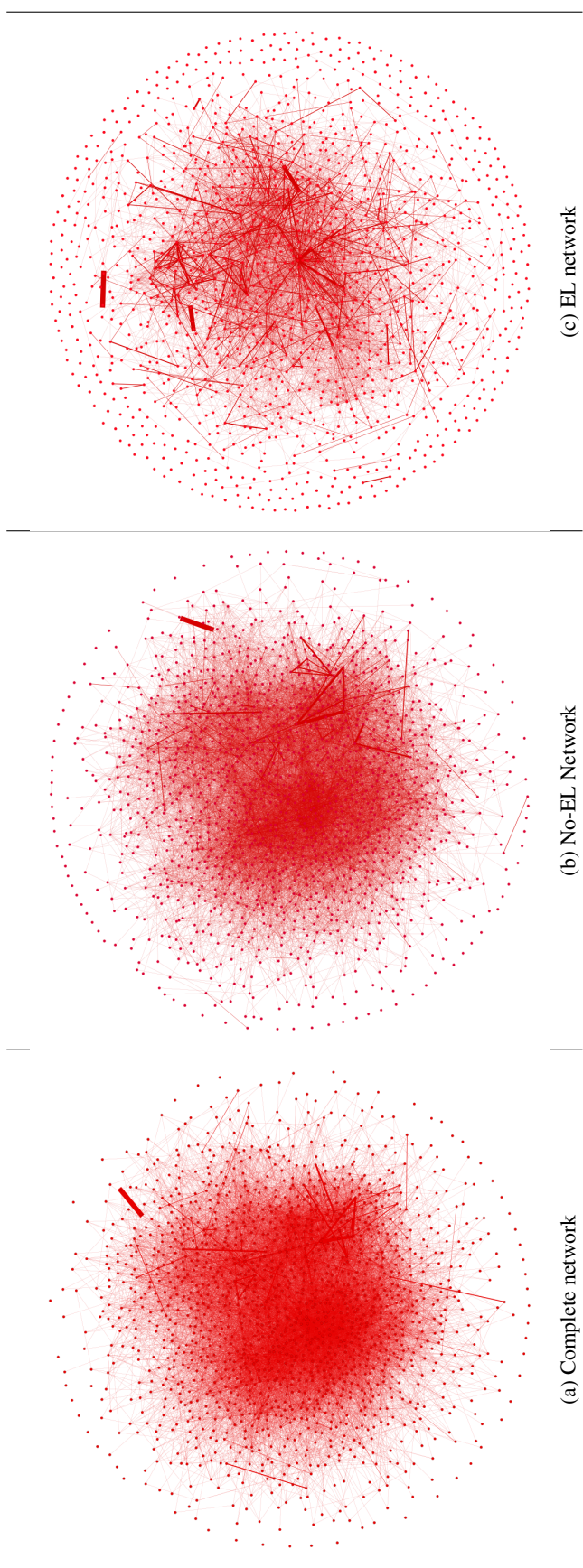


Figure 2: The interlocking editorship networks. A link between two nodes indicates that two journals share at least one member of editorial boards. The size of the edges is proportional to the number of common scholars. The Complete network is built by considering all the editorial board members; the No-EL network is generated by the subset of scholars who do not hold an editorial leader position; the EL Network is generated by scholars who hold at least one editorial leader position.

Table 10: Basic statistics of the IE networks of journals.

	Complete Network	No-EL network	EL Network
N. of journals	1,516	1,516	1,516
Number of links between journals	20,321	15,995	6,149
Lowest value of line	1	1	1
Highest value of line	173	169	17
Number of links with value =1	15,904 (78.26%)	12,801 (80.03%)	5,444 (88.53%)
Number of links with value =2	2,655 (13.06%)	1,966 (12.29%)	504 (8.19%)
Number of links with value >2	1,762 (8.68%)	1,228 (7.68%)	201 (3.23%)
Density	0.017	0.013	0.005
Average Degree	26.81	21.10	8.11
Betweenness Centralization	0.043	0.043	0.051
Number of weak components	50	74	372
N. of journals in the largest component	1,467 (96.77%)	1,442 (95.11%)	1,103 (72.75%)
Isolated journals	46 (3.03%)	69 (4.55%)	314 (20.71%)

pairs of journals, indicates the highest values for the Complete network, intermediate for the No-EL network, and the lowest for the EL network. The proportion of total links with a weight of 1, indicating that a pair of journals shares only one board member, is 78.26% in the Complete network, 80.03% in the No-EL network, and 88.53% in the EL network. The highest value of a link is respectively 173, 169, and 17 in the three networks. The values of network betweenness centralization are quite similar but slightly higher in the third case, suggesting that there are more central actors in the EL network.

The Complete network and the No-EL network are less fragmented than the EL network. The EL network is composed of 372 weak components compared to 74 in the No-EL network and 50 in the Complete network. Moreover, the largest component of the EL network is smaller than in the other two networks; it contains 72.75% of the journals compared to 95.11% in the No-EL network and 96.77% in the Complete network. Finally, in the Complete network, isolated journals, i.e., journals without any common board member with other journals, are only 46 (3.03%), whereas there are 69 (4.55%) journals in the No-EL network and 314 (20%) in the EL network.

The distinct characteristics of the three networks analyzed so far suggest that editorial leaders have varying levels of involvement in the formation of interlocking editorship networks. Editorial leaders likely hold greater editorial power, have a higher workload, making it more difficult to serve on multiple editorial boards. This probably explains the lower density and greater fragmentation of the EL network. However, it cannot be excluded that editorial leaders exercise their editorial power also by guiding the selection of the other members of editorial boards.

These different structural properties of the three IE networks suggest to explore whether the three networks are also globally different and if they are composed by different communities of journals. More precisely, the three IE have different underlying social structures formed respectively by all the editorial boards members, by the no-EL members and by EL. The question is whether these social structure are globally different or not, and if they formed or not different clusters of journals.

To this end, Jaccard similarities between pairs of journals are computed as in Baccini et al. [2020] for the three networks. More specifically, if A_i and A_j represent the sets of board members of the i -th and j -th journal, the Jaccard coefficient is defined as

$$J_{ij} = \frac{|A_i \cap A_j|}{|A_i \cup A_j|}, \quad (1)$$

where $|\cdot|$ denotes the cardinality of a set. It is apparent that $0 \leq J_{ij} \leq 1$. Hence, the similarity between two journals is proportional to the number of board members they share: when two journals have exactly the same set of editors, i.e. when $A_i = A_j$, the maximum similarity $J_{ij} = 1$ occurs. In contrast, the minimum similarity $J_{ij} = 0$ is achieved when two journals have no common editors, i.e. when $A_i \cap A_j = \emptyset$. In the complete network, similarities are computed by considering all the editorial board members. In the other two networks, Jaccard similarities are computed by considering the appropriate sets of editors: the No-EL and EL respectively.

Similarity among journals are organized in three different similarity networks. In view of conjecturing about the global difference among the networks, it is possible to compute the generalized distances correlations suggested by Székely et al. [2007]. It is defined in the interval $[0, 1]$. Values close to zero indicate no or very weak association between a pair of network; larger values indicate a stronger association. The distance correlations were evaluated in the R-computing environment [R Core Team, 2013] by using the `dcor` functions of the package **energy**.

Table 11 reports the generalized distance correlations between the three similarity matrices of the three networks. The generalized distance correlations allow to test whether the information obtained changed when networks are built by considering the links generated by different sets of scholars. The very high values of distance correlation, higher than 0.9, indicate that the distance between the three networks is very low. In other words: the three networks obtained by using different sets of scholars have very similar structure and convey the same information about the connections among economics journals.

Table 11: Generalized distance correlation between networks of journals.

	Complete network	No-EL network	EL network
Complete network	1	0.999	0.936
No-EL network		1	0.926
EL network			1

In fact, the Complete network incorporates the structure of both the No-EL and EL networks. Therefore, it is possible to measure the contributions of these two networks to the complete one, by using the partial distance correlation proposed by Székely and Rizzo [2014]. It measures the degree of association between the similarity matrix of the complete network and one of the two other network, by removing the effect of the other. The partial distance correlations were evaluated in the R-computing environment [R Core Team, 2013] by using the `pdcor` of the package **energy**. The computed partial distance correlation between the complete network and the No-EL network, by removing the effect of EL network, is 0.987; while the partial distance correlation between the complete network and the EL network, by removing the effect of No-EL network, is 0.776. Thus, it can be concluded that the contribution of the No-EL network to the complete network is greater than that of the EL network.

To corroborate these results, a comparative analysis of the communities or clusters surrounding the three networks has been conducted. Communities are searched by using the Louvain algorithm [Blondel et al., 2008] and the Leiden algorithm [Traag et al., 2019] based on modularity, both available in the in the package **igraph** of the R-computing environment [R Core Team, 2013]. Table 12 reports the number of clusters detected with the two algorithms, the values of modularity and quality. Modularity and quality measure how effectively a network is partitioned into distinct communities, by comparing the relative density of edges inside communities with respect to edges between distinct communities. The range of modularity and of quality is $[-1, 1]$. A value of -1 indicates that there are no edges connecting nodes within communities, whereas a value of 1 indicates that all edges of the network are within communities and no edges exist between communities. The number of communities detected by using one or the other algorithm is nearly identical. More precisely, for measuring the association between the communities detected through the two algorithms, the values of Rand index [Rand, 1971] are computed and reported in the last column of Table 12. These values are very near to the maximum value of 1 and indicate that both algorithm generate nearly identical results.

Table 12: Communities and modularity values in the interlocking editorship networks of economics journals.

Network	Louvain Algorithm		Leiden algorithm		Rand Index
	n. of Clusters	Modularity	n. of Clusters	Quality	
Complete network	65	0.51	68	0.52	0.94
No-EL network	89	0.52	92	0.53	0.94
EL network	394	0.68	392	0.68	0.96

As expected, the number of communities is much higher in the less dense EL network compared to the other two networks. The EL network has also a higher modularity/quality value than the complete and No-EL network: this notwithstanding the connections between nodes within communities are denser than connections between nodes of different communities in all the three networks. These results indicate that the three networks can be partitioned in clusters of journals that have a relatively high degree of social similarity [Baccini et al., 2020].

The problem is now to verify if the communities of journals detected in the three networks are associated. The communities obtained in the three networks with the two different algorithms are compared by using again the Rand index, whose values are reported in Table 13. These values indicate a strong association among the communities obtained in the three networks.

Table 13: Values of Rand index for the association between communities detected in the networks of economics journals by using Louvain and Leiden algorithms.

	<i>Louvain Algorithm</i>		
	Complete network	No-EL network	EL network
Complete network	1	0.91	0.89
Network of No EL		1	0.89
Network of EL			1
	<i>Leiden Algorithm</i>		
	Complete network	No-EL network	EL network
Complete network	1	0.93	0.88
Network of No EL		1	0.89
Network of EL			1

In sum, the comparison of the three networks of journals reveals that the EL Network is more fragmented than the others, but all the three networks exhibit highly correlated structures. Furthermore, the three networks can be partitioned in communities that are also highly correlated. These results suggest that members of the editorial boards generate similar connections among journals regardless of their role, but with varying degrees of intensity. Scholars who hold the position of editorial leaders, probably due to the workload requested by their position, tend to be involved in fewer journals and therefore contribute less to the connections among journals. But the connections they generated are structurally similar to the most numerous connections generated by the other members of the boards.

The association between network structures and communities can be explained by the presence of a significant degree of social homophily within each board: indeed when members with different roles are considered, they tend to generate similar connections among journals, resulting in similar communities. This indicates that links between pairs of journals tend to be redundant, generated both by editorial leaders and by other members of the board.

Although communities of journals are properly defined in terms of social similarity, it can be suggested that social similarity goes hand in hand with intellectual similarity, as documented by Baccini et al. [2020] for economics journals in 2006. It can be conjectured that editorial leaders of economics journals have an indirect role in defining the network structures: they exercise their power by selecting as editorial board members scholars socially and intellectually ‘similar’ to them, who have time to be part of many boards by reinforcing or creating new links with other journals. As documented in previous studies [Baccini, 2009, Baccini and Barabesi, 2010, Baccini et al., 2020] the different communities detected in the interlocking editorship network gather not only different fields of economics, but also groups of highly specialized journals or groups of journals sharing a common methodological approach to economics. To give interpretive substance to the notion of social and intellectual homophily requires a fine-grained analysis of the main characteristics of the communities identified, which is beyond the scope of this paper.

7.2 The most central journals in the interlocking editorship network

The Complete network can be used to highlight the most central journals, which, as mentioned earlier, is vital for potentially identifying the most influential gatekeepers. To this end, three standard measures of centrality of nodes are computed: degree, betweenness, and closeness centrality. These three measures generated three rankings of journals highly correlated: the highest correlation is between the All degree rank and both closeness rank (0.92), intermediate value is between degree rank and betweenness rank (0.79), while the lowest correlation is between betweenness rank and closeness rank (0.77). Therefore, for the sake of simplicity, the discussion will focus on journal degrees.

Figure 3 illustrates the degree distribution of the journals, where the degree of a journal represents the number of journals linked to it by at least one common editor. Figure 3 reveals that the distribution is right-skewed, with 15 journals having a degree greater than 100. The median degree is approximately 4, the average degree is 26.8.

Table 14 presents the top 10 journals with the highest degree. *Economics: The Open-Access, Open-Assessment E-Journal* is in the first position, linked to 257 other journals by at least one common editor, followed by the *Journal of Risk and Financial Management*, connected to 194 other journals.

All these journals are indexed in Scopus or Web Of Science; three (*Emerging Markets Finance and Trade*, *Journal of International Business Studies*, *Management Science*) are also in prominent position in Scopus ranking of Journals. It can be only conjectured that the composition of editorial boards of these journals may be guided by a ‘strategy’ aimed at gaining prestige through the selection of ‘prestigious’ members, i.e. members already sitting in other boards.

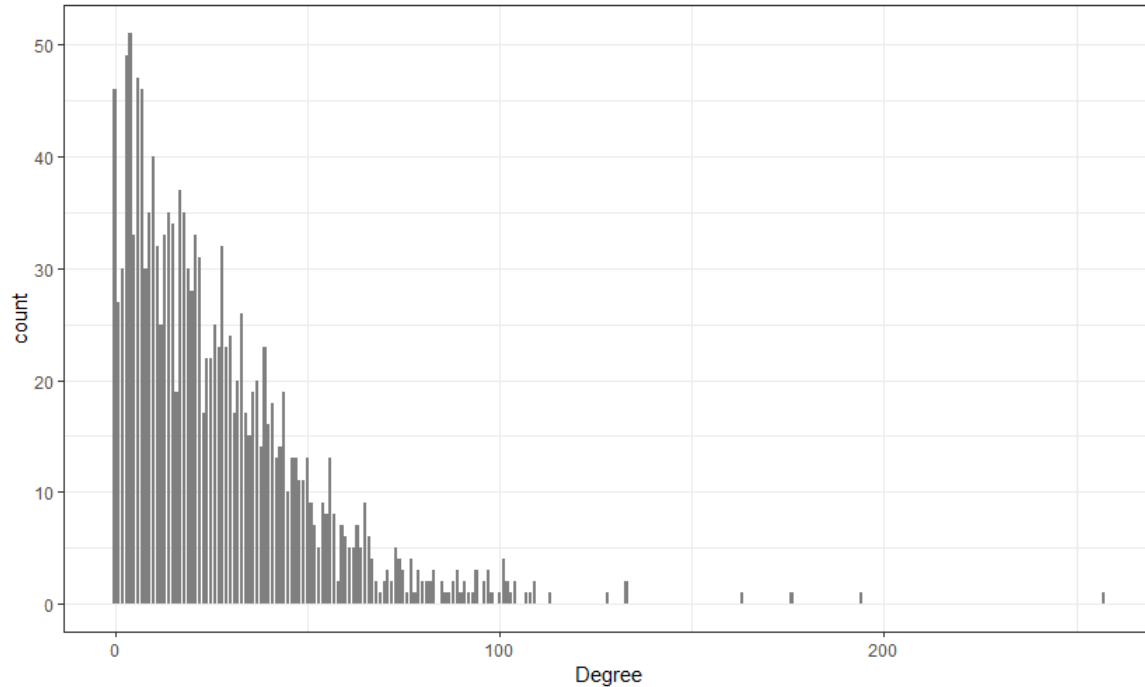


Figure 3: Distribution of economics journals according to their degree in the interlocking editorship network.

Table 14: Economics journals with the highest degree.

Journal name	Degree	Rank Degree
Economics: The Open-Access, Open-Assessment E-Journal	257	1
Journal of Risk and Financial Management	194	2
Panoeconomicus	176	3
Emerging Markets Finance and Trade	163	4
International Economics and Economic Policy	133	5
Management Science	133	5
Pacific Economic Review	128	7
Journal of International Business Studies	113	8
Review of International Economics	109	9
Structural Change and Economic Dynamics	109	9

A different scenario emerges when examining the network of journals generated solely by female scholar. Recall that, as seen in Section 6, women represents 25% of the total number of seats available and they hold fewer seats simultaneously. In this case as well, the rankings of journals based on various centrality measures exhibit high correlations (all exceeding 0.8). The degree distribution remains right-skewed, but the maximum degree is considerably lower, as depicted in Figure 4. The average degree drops to 5, indicating that, on average, one journal is linked to five other journals; 285 journals (20%) are isolated.

Table 15 presents the most central journals in the interlocking editorship network generated by women. Only three out of ten journals are also among the most central in the complete network: *Management Science*, *Journal of International Business Studies* and *Panoeconomicus*. The remaining seven journals specialize in specific economic perspectives or topics, such as feminist economics, business, human development, or behavioral economics. Some are published by scholarly societies that prioritize gender diversity representation, including the *Journal of Economic Literature* by the American Economic Association and the *Italian Economic Journal*, which is the journal of the Italian Economic Association.

These findings validate the previous observation that women tend to hold fewer seats simultaneously because economics ‘prestigious scholars’, selected for editorial boards, are predominantly men. It further underscores the existence of a form of ‘horizontal segregation’ among women, resulting in their concentration within specific journals.

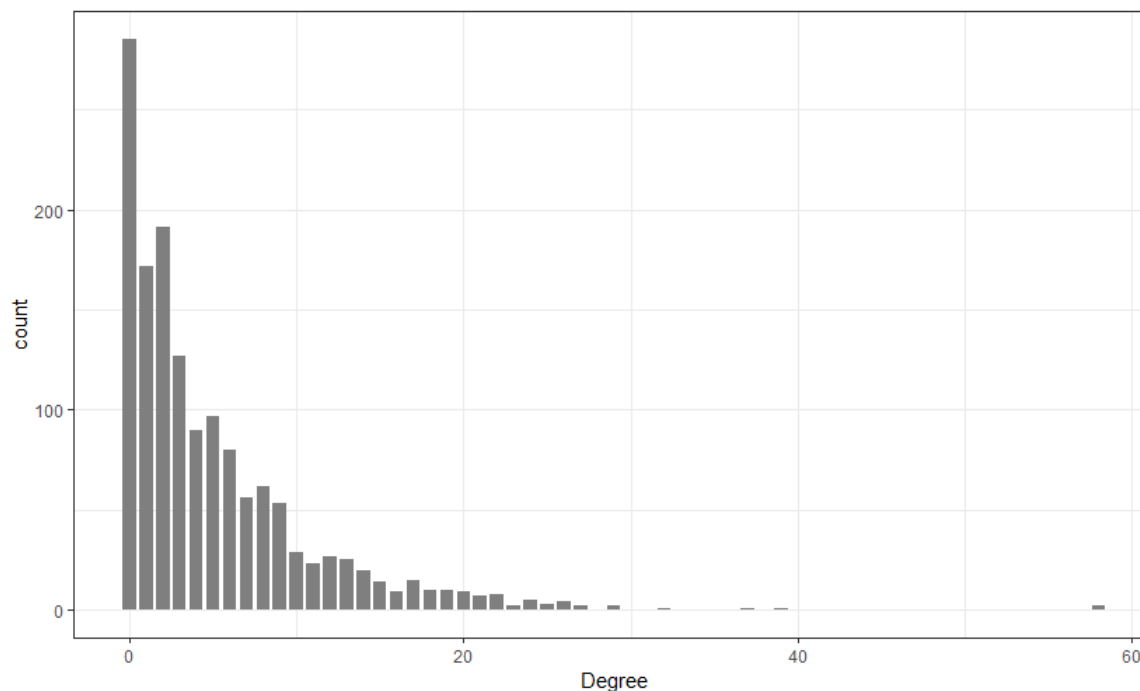


Figure 4: Distribution of economics journals according to their degree in the interlocking editorship network built by considering only female scholars.

Table 15: Economics journals with highest degree in the interlocking editorship network built by considering only female scholars.

Journal name	Degree	Rank Degree
Management Science	58	1
Feminist Economics	58	1
Journal of International Business Studies	39	3
Journal of Business Research	37	4
Journal of Economic Literature	32	5
Management and Organization Review	29	6
Journal of Human Development and Capabilities	29	6
Italian Economic Journal	27	8
Review of Behavioral Economics	27	8
Panoeconomicus	26	10

8 Editorial leaders: prestige or editorial power?

So far, it has been observed that journals are highly connected through editors who serve on numerous boards. To understand who the scholars that create these connections are, it is possible to use the network of editors. In this network, nodes represent members of editorial boards and the weight of each edge indicates the number of editorial boards on which the pair of scholars sit together. The presence of the same person on the editorial board of more than one journal can be analysed to study the ‘editorial power’ and ‘academic prestige’ of scholars. For prioritizing editorial power over academic prestige, the network is built by considering scholars who serve as editorial leader of at least one journal. The most central scholar in this network probably hold the most editorial power.

Due to high correlation among different measures of centrality, the comments are limited to the simplest degree centrality. In Figure 5 it is represented the degree distribution of scholars who serve as editorial leaders in at least one economics journal. This distribution is right-skewed, with 197 (6.8%) isolated editorial leaders, 316 (11%) linked to only one other editorial leader, and the majority having less than six links. On the far right tail, there are 21 editorial leaders linked to over 60 other editorial leaders. Table 16 presents the top ten of the editorial leaders according to their degree.

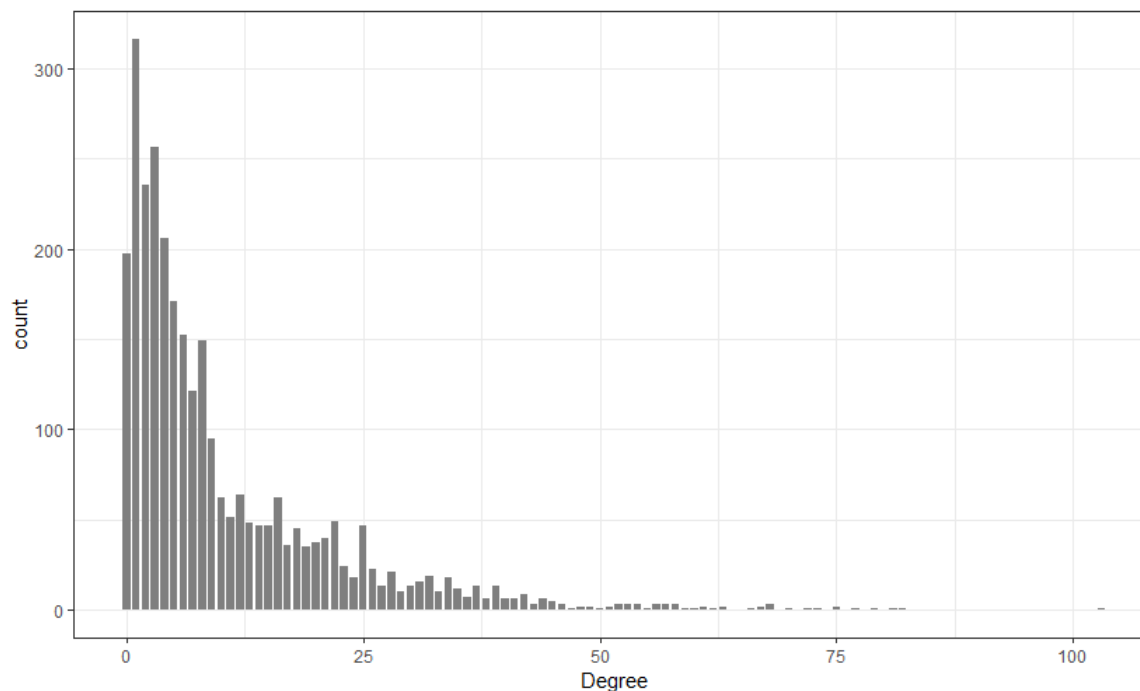


Figure 5: Degree distribution of scholars who serve as editorial leader in at least one economics journal. “Degree” refers to the number of links to other scholars who also serve as editorial leader in at least one economics journal.

Table 16: Editorial leaders with highest degree.

Name	Degree	Rank Degree
James J. Heckman	103	1
Douglas J. Cumming	82	2
Brian M. Lucey	81	3
Vernon L. Smith	79	4
Keun Lee	77	5
Thanasis Stengos	75	6
Stephen J. Turnovsky	75	6
Menzie David Chinn	73	8
Andrés Rodríguez-Pose	72	9
Oliver E. Williamson	70	10

James J. Heckman holds the top position; he serves as Editor-in-Chief for one of the Top Five Journals, the *Journal of Political Economy*, also sits on 12 other editorial boards, including the *Economics: The Open-Access, Open-Assessment E-Journal*, which was previously identified in Table 14 as the most central journal in the interlocking editorship network. Douglas J. Cumming, who ranks second, is the Editor-in-Chief of *Annals of Corporate Governance*, sits also in other 17 editorial boards, including the *Journal of Risk and Financial Management*, which is the second most central journal, and the *Journal of International Business Studies*, which is the eight most central journal. Brian M. Lucey, who serves as Editor-in-Chief for the *International Review of Economics and Finance*, sits also in other 12 editorial boards, including the *Journal of Risk and Financial Management*, *Panoeconomicus*, *Emerging Markets Finance and Trade*, which are among the top ten most central journals. All the remaining most central editorial leaders sits in at least one board of most central journals.

These results seem to indicate that the ‘strategy’ we have observed journals adopt to gain more prestige, selecting scholars who serve as editorial leader for other journals as members of their editorial boards, not only gives centrality to these journals, but also to the scholars who accept to sit in their boards. Thus, it is challenging to separate the editorial power from the scholarly prestige of individuals who serve as editorial leaders. Indeed, if a scholar has editorial power by serving as editorial leader in a journal, then they can enhance their individual prestige by accepting invitations to sit on the editorial boards of other journals seeking to bolster their own prestige by selecting renowned scholars.

As all the most central editorial leaders are male, a focus is made on the network generated by female editorial leaders. In this case as well, the network formed by female editorial leaders exhibits very different characteristics, as women editors generally tend to hold fewer seats simultaneously. The degree distribution, shown in Figure 6, reveals that a significant proportion of female editorial leaders, 32.89% (224 out of 705), are not linked to other female editorial leaders. The average degree is only 2. Table 17 lists the scholars with the highest degrees. The maximum degree is 14 held by Jennifer L. Blouin and Judith Clifton.

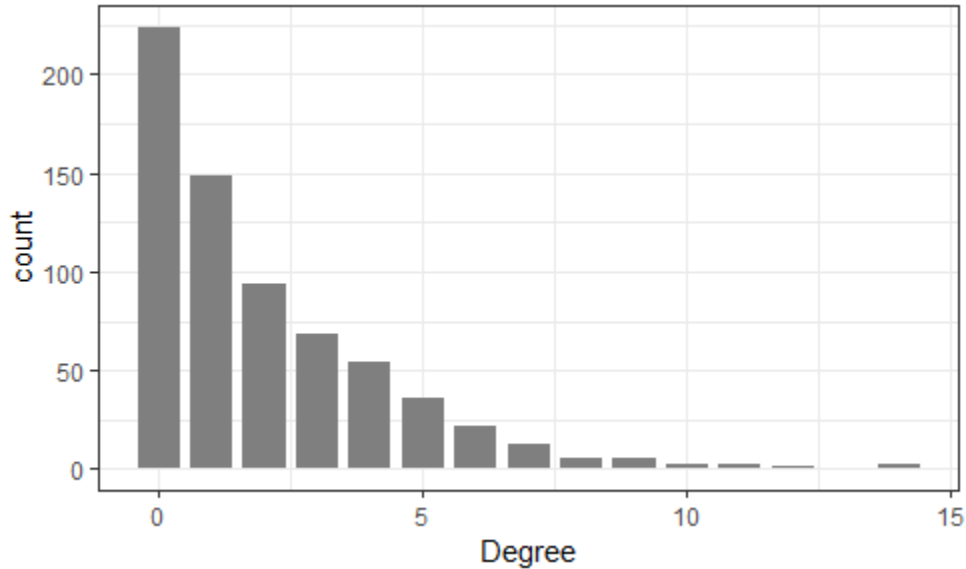


Figure 6: Degree distribution of female scholars who serve as editorial leader in at least one economics journal. "Degree" refers to the number of links to other female scholars who also serve as editorial leader in at least one economics journal.

Jennifer L. Blouin, who serves as Editor-in-Chief for the *Review of Accounting Studies*, sits in 6 other boards; analogously Judith Clifton, who serves as Editor-in-Chief for the *Cambridge Journal of Regions, Economy and Society*, sits in 5 other boards. In both cases, none of the journals where they sit are among the most central journals in the network of journals and in the network of journals based on female editors.

Table 17: Female editorial leaders with highest degree.

Name	Degree	Rank	Name	Degree	Rank
Jennifer L. Blouin	14	1	Elisa Giuliani	10	7
Judith Clifton	14	1	Renee Adams	9	10
Sebnem Kalemlı-Özcan	12	3	Catherine Tucker	9	10
Leah Boustan	11	4	Amy K. Glasmeier	9	10
Emmanuelle Auriol	11	4	Xuan Tian	9	10
Lori A. Beaman	11	4	Diane W. Schanzenbach	9	10
Mar Reguant	10	7	Ping Wang	9	10

These results seem to confirm that women tend to participate less to the ‘strategic decisions’ in the selection of the editorial board members. Women are often less invited to join editorial boards of journals with the goal of enhancing the publication’s prestige. This may be due to the challenge women face in translating their editorial power as editorial leaders into personal prestige, particularly in a male-dominated discipline as economics.

9 Conclusions and policy recommendations

Editorial board members have been identified as the gatekeepers of scientific knowledge, as they determine which research is published and their decisions significantly impact individual careers. Consequently, editorial roles, especially in leadership positions within highly influential journals, hold considerable power over the discipline. This study conducted an exploratory analysis of the composition of editorial boards for 1,516 active economics journals in 2019.

The analysis examined the individual characteristics of board members and the main features of the interlocking editorship networks they generated.

The editorial boards of economics journals display a high degree of homophily, meaning that members tend to share similar characteristics. This phenomenon can be observed in various ways. Firstly, the boards member come in majority from Unites States institutions and are mainly men. In fact, more than the 33% of all seats and more than the 35% of editorial leader seats are held by scholars affiliated in the United States. The geographic concentration is higher in editorial leader seats, whose scholars come from 84 countries, compared to 151 countries declared for all editorial roles. Moreover, the 5 most represented countries hold the 42% of all editorial seats and the 49% of editorial leader seats. In comparison with the proportions of country affiliation of economics as registered in RePEc [2023], the United States, the United Kingdom, Canada, Australia, Turkey and Netherlands are over-represented in the editorial boards, while all the other countries are under-represented. In particular, China and Russia are not among the top 10 countries most represented on editorial boards but they are among the top 10 countries most represented in terms of the proportion of economics authors. Furthermore, 33% of journals have over 50% of their members affiliated with the same country, which is the United States in most cases. This editorial board members are mainly affiliated to elite universities, in particular from the United States and United Kingdom. For editorial leader seats the members come only from 1,036 institutions (the 17% of total affiliations of our database). The gender composition of editorial boards reflect the under-representation of women in economics and, unlike in academic positions, suggests the existence of a a form of ‘horizontal segregation’ of women in certain editorial boards. Indeed, women hold about 24% of the available seats in the editorial boards and in the editorial leader seats, which is a proportion similar to that of female authors in economics [RePEc, 2023]. However, a very high proportion (87%) of editorial boards are composed of more than 50% of male scholars.

Secondly, we have developed a network analysis, which mainly consisted in comparing three different journal networks: the complete interlocking editorship network, generated by the crossed presence in different boards of the same scholars; the No-EL network, generated by scholars who do not hold an editorial leader position; and the EL network generated by scholars who hold at least one editorial leader position. The three networks shows very high distance correlations: the information they contain are very similar. Moreover, the clusters of journals identified in the three networks are also highly associated. These results suggest the existence of a high degree of social and intellectual homophily inside each board: different members in different roles tend to generate similar connections between journals. This may be due to the indirect role of Editors-in-Chief in selecting as editorial board members scholars ‘similar’ to them.

Finally, the analysis of the most central journals and scholars in the networks suggests that journals probably adopt ‘strategic decisions’ in the selection of the editorial board members. Some of the most central journals appear to select as members of their editorial boards scholars who serve as editorial leader for other journals. This enhances the centrality in the network of these journals, but also of the scholars who accept to sit in their boards. It can be speculated that this reinforcement mechanism is designed to trigger an editorial Matthew effect, which involves both journals and scholars simultaneously. The mechanism could translate the editorial power owned by an editorial leader in personal prestige; in turn the presence of prestigious scholars in a board may reinforce their prestige and possibly the editorial power of editorial leaders. In view of corroborating this conjecture future research should explore the relation between centrality in the interlocking editorship network and measures of impact of journals. Data showed that women tend to be excluded from this editorial game.

The results obtained suggest that economics journals, and hence economics as a field, are characterized by editorial boards that are dominated by scholars from the United States, with a prevalence of men and a high concentration of editorial power among a few elite institutions and scholars that are socially and intellectually similar. The strategic selection of board members seems to reinforce this homophily. As Hodgson and Rothman [1999] have already warned, this high concentration of editorial power carries a serious risk for innovative research in economics. Therefore, it is crucial to implement practices aimed at minimizing this concentration in order to foster pluralism.

The study we have presented is helpful in achieving this objective as it not only confirms the findings of other partial studies on the same topic but also broadens the concept of homophily that editors should consider when selecting their board members. Our analysis also reveals that some journals published by scholarly societies that prioritize gender diversity representation, for example, exhibit a higher female presence than others. Thus, it is likely that some steps in this direction are being taken. However, as this analysis shows, these measures are not sufficient and likely rely on only a few factors. In our opinion, efforts should be directed towards reducing homophily in a broader sense. In this regard, the Guidelines for New Editorial Appointments of the American Economic Association American Economic Association [2022] introduce a valuable innovation: they emphasize that “Editors are encouraged to consider how a candidate would add to the diversity of the existing board, including (but not limited to) intellectual diversity (methods and fields of study), institutional diversity (where a person works and where they were trained), demographic diversity (including gender, race and ethnicity), and geographic diversity (national and international)”. In addition to this prescription, there

are term limits for editorial board members, particularly in editorial leader positions, that are implemented to prevent the long-term concentration of power. These updated procedures seem a very interesting innovation to promote diversity, ensure regular turnover, and include fresh perspectives, and they probably should be adopted by all journals.

APPENDIX

For the affiliations, we have focused our attention on what was declared on the websites of the journals. In the case of the University of California, the campus was not always specified, making it challenging to uniformly determine which campus the scholars belong to, as the majority simply indicated ‘University of California’ generically. Therefore, we will present the distribution of seat affiliations as declared.

Table A1: University of California seats distribution

	All Editorial Roles	Editorial Leaders
University of California	498	35
University of California Berkeley	206	11
University of California Los Angeles	132	8
University of California Davis	71	6
University of California Irvine	65	5
University of California Riverside	47	4
University of California Santa Barbara	36	1
University of California Santa Cruz	27	1
University of California San Francisco	3	

References

- E. Addis and P. Villa. The editorial boards of italian economics journals: women, gender, and social networking. *Feminist Economics*, 9(1):75–91, 2003. doi:10.1080/1354570032000057062. URL <https://www.tandfonline.com/doi/abs/10.1080/1354570032000057062>.
- American Economic Association. Aea guidelines for new editorial appointments, 2022. URL <https://www.aeaweb.org/journals/policies/appointment-procedures#diversity>.
- A. Andrikopoulos and L. Economou. Editorial board interlocks in financial economics. *International review of financial analysis*, 37:51–62, 2015. doi:10.1016/j.irfa.2014.11.015. URL https://www.sciencedirect.com/science/article/pii/S1057521914001896?casa_token=J_ULr_doZb0AAAAA:4pDfHwcG4hUv2j_1sybwK8Yli0RVqH1-Uqr-fG3t-6NGAwxAhzhnkt1NwR_LIIIZjN_jcN0n.
- A. Baccini. Italian economic journals. a network-based ranking and an exploratory analysis of their influence on setting international professional standards. *Rivista italiana degli economisti*, 14(3):491–512, 2009. doi:10.1427/31429. URL <https://www.rivisteweb.it/doi/10.1427/31429>.
- A. Baccini and L. Barabesi. Interlocking editorship. a network analysis of the links between economic journals. *Scientometrics*, 82(2):365–389, 2010. doi:10.1007/s11192-009-0053-7. URL <https://akjournals.com/view/journals/11192/82/2/article-p365.xml>.
- A. Baccini and L. Barabesi. Seats at the table: The network of the editorial boards in information and library science. *Journal of informetrics*, 5(3):382–391, 2011. doi:10.1016/j.joi.2011.01.012. URL https://www.sciencedirect.com/science/article/pii/S1751157711000137?casa_token=q0wb5YUtSFwAAAAA:-GH_ktQiE7HUgJKL0MKhaZ1K50cTzw3oI4qcYDebixyk1ls7UMax-hdBu3afbJFh5vhj61I.
- A. Baccini, L. Barabesi, and M. Marcheselli. How are statistical journals linked? a network analysis. *Chance*, 22(3):35–45, 2009. doi:10.1080/09332480.2009.10722969. URL <https://www.tandfonline.com/doi/abs/10.1080/09332480.2009.10722969?journalCode=uha20>.
- A. Baccini, L. Barabesi, M. Khelifaoui, and Y. Gingras. Intellectual and social similarity among scholarly journals: An exploratory comparison of the networks of editors, authors and co-citations. *Quantitative Science Studies*, 1(1):277–289, 2020. doi:10.1162/qss_a_00006. URL <https://direct.mit.edu/qss/article/1/1/277/15560/Intellectual-and-social-similarity-among-scholarly>.
- M. Bastian, S. Heymann, and M. Jacomy. Gephi: an open source software for exploring and manipulating networks. *Proceedings of the international AAAI conference on web and social media*, 3:361–362, 2009. doi:10.1609/icwsm.v3i1.13937. URL <https://ojs.aaai.org/index.php/ICWSM/article/view/13937>.
- V. D. Blondel, J.-L. Guillaume, R. Lambiotte, and E. Lefebvre. Fast unfolding of communities in large networks. *Journal of Statistical Mechanics: Theory and Experiment*, 2008(10):P10008, oct 2008. doi:10.1088/1742-5468/2008/10/p10008. URL <https://arxiv.org/abs/0803.0476>.

- T. Braun and I. Dióspatonyi. Counting the gatekeepers of international science journals a worthwhile science indicator. *Current Science*, 89(9):1548–1551, 2005a. doi:10.3103/S0147688216030035. URL <http://www.jstor.org/stable/24110926>.
- T. Braun and I. Dióspatonyi. World flash on basic research. *Scientometrics*, 62(3):297–319, 2005b. doi:10.1007/s11192-005-0023-7. URL <https://link.springer.com/article/10.1007/s11192-005-0023-7>.
- D. Crane. The gatekeepers of science: Some factors affecting the selection of articles for scientific journals. *The American Sociologist*, pages 195–201, 1967. URL <https://www.jstor.org/stable/27701277>.
- G. Csomós and B. Lengyel. Geographies of the global co-editor network in oncology. *PloS one*, 17(3):e0265652, 2022. doi:10.1371/journal.pone.0265652. URL <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0265652>.
- A. De Grazia. The scientific reception system and dr. velikovsky. *American Behavioral Scientist*, 7(1):45–49, 1963. doi:10.1177/000276426300700106. URL <https://journals.sagepub.com/doi/abs/10.1177/000276426300700106?journalCode=absb>.
- P. G. Duarte and Y. Giraud. The place of the history of economic thought in mainstream economics, 1991–2011, viewed through a bibliographic survey. *Journal of the history of economic thought*, 38(4):431–462, 2016. doi:10.1017/S1053837216000481.
- L. Ductor and B. Visser. Concentration of power at the editorial boards of economics journals. *Journal of Economic Surveys*, 37(2):189–238, 2023. doi:10.1111/joes.12497. URL <https://onlinelibrary.wiley.com/doi/full/10.1111/joes.12497>.
- J. R. Faria. The game academics play: Editors versus authors. *Bulletin of Economic research*, 57(1):1–12, 2005. doi:10.1111/j.1467-8586.2005.00212.x. URL <https://onlinelibrary.wiley.com/doi/10.1111/j.1467-8586.2005.00212.x>.
- J. D. Gibbons and M. Fish. Rankings of economics faculties and representation on editorial boards of top journals. *The Journal of Economic Education*, 22(4):361–372, 1991. doi:10.1080/00220485.1991.10844728. URL <https://www.tandfonline.com/doi/abs/10.1080/00220485.1991.10844728>.
- M. Goyanes and L. De-Marcos. Academic influence and invisible colleges through editorial board interlocking in communication sciences: a social network analysis of leading journals. *Scientometrics*, 123(2):791–811, 2020. doi:10.1007/s11192-020-03401-z. URL <https://link.springer.com/article/10.1007/s11192-020-03401-z>.
- C. Hatfield, T. Ostbye, and C. Sori. Sex of editor in medical journals. *The Lancet*, 8950(345):662, 1995. doi:10.1016/s0140-6736(95)90572-3. URL [https://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736\(95\)90572-3.pdf](https://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736(95)90572-3.pdf).
- G. M. Hodgson and H. Rothman. The editors and authors of economics journals: A case of institutional oligopoly? *The economic journal*, 109(453):165–186, 1999. doi:10.1111/1468-0297.00407. URL <https://academic.oup.com/ej/article-abstract/109/453/165/5128687>.
- L. Leydesdorff and C. Wagner. Is the united states losing ground in science? a global perspective on the world science system. *Scientometrics*, 78(1):23–36, 2009. doi:10.1007/s11192-008-1830-4. URL <https://akjournals.com/view/journals/11192/78/1/article-p23.xml>.
- Z. Liwei and J. Chunlin. Social network analysis and academic performance of the editorial board members for journals of library and information science. *COLLNET Journal of Scientometrics and Information Management*, 9(2):131–143, 2015. doi:10.1080/09737766.2015.1069947. URL <https://www.tandfonline.com/doi/abs/10.1080/09737766.2015.1069947>.
- L. Lockstone-Binney, F. Ong, and J. Mair. Examining the interlocking of tourism editorial boards. *Tourism Management Perspectives*, 38:100829, 2021. doi:10.1016/j.tmp.2021.100829. URL <https://www.sciencedirect.com/science/article/pii/S2211973621000428>.
- S. Lundberg and J. Stearns. Women in economics: Stalled progress. *Journal of Economic Perspectives*, 33(1):3–22, 2019. doi:10.1257/jep.33.1.3. URL <https://pubs.aeaweb.org/doi/pdfplus/10.1257/jep.33.1.3>.
- M. C. Marcuzzo and G. Zacchia. Is history of economics what historians of economic thought do?: A quantitative investigation. *Is History of Economics What Historians of Economic Thought Do?: A Quantitative Investigation*, pages 29–46, 2016. doi:10.19272/201606103002. URL <http://digital.casalini.it/10.19272/201606103002>.
- E. Mauleón, L. Hillán, L. Moreno, I. Gómez, and M. Bordons. Assessing gender balance among journal authors and editorial board members. *Scientometrics*, 95(1):87–114, 2013. doi:10.1007/s11192-012-0824-4. URL <https://link.springer.com/article/10.1007/s11192-012-0824-4>.

- N. A. Mazov and V. N. Gureev. The editorial boards of scientific journals as a subject of scientometric research: a literature review. *Scientific and Technical Information Processing*, 43(3):144–153, 2016. doi:10.3103/S0147688216030035. URL <https://link.springer.com/article/10.3103/S0147688216030035>.
- R. K. Merton. A note on science and democracy. *Journal of Legal and Political Sociology*, 1: 115–126, 1942. URL <https://heinonline.org/HOL/Page?handle=hein.journals/jolegpo1&id=115&collection=journals>.
- I. Metz, A.-W. Harzing, and M. J. Zyphur. Of journal editors and editorial boards: who are the trailblazers in increasing editorial board gender equality? *British journal of management*, 27(4):712–726, 2016. doi:10.1111/1467-8551.12133. URL https://onlinelibrary.wiley.com/doi/full/10.1111/1467-8551.12133?casa_token=00fk01_nhaIAAAAA%3ACoJFwA8aK0zGaeGOV2NJwoh9K2M2tc10aM9KqTrKO_f_6dFvqYSHPXdxXwp4An4da9IqfAvYKEnl.
- C. Ni and Y. Ding. Journal clustering through interlocking editorship information. *Proceedings of the American Society for Information Science and Technology*, 47(1):1–10, 2010. doi:10.1002/meet.14504701202. URL <https://asistdl.onlinelibrary.wiley.com/doi/full/10.1002/meet.14504701202>.
- R Core Team. R: A language and environment for statistical computing, 2013. URL <http://www.R-project.org/>.
- W. M. Rand. Objective criteria for the evaluation of clustering methods. *Journal of the American Statistical Association*, 66(336):846–850, 1971. doi:10.1080/01621459.1971.10482356.
- RePEc. Female representation in economics, as of february 2023, 2023. URL <https://ideas.repec.org/top/female.html>.
- M. Stegmaier, B. Palmer, and L. Van Assendelft. Getting on the board: the presence of women in political science journal editorial positions. *PS: Political science & politics*, 44(4):799–804, 2011. doi:10.1017/S1049096511001284.
- G. J. Székely and M. L. Rizzo. Partial distance correlation with methods for dissimilarities. *Annals of Statistics*, 42(6):2382–2412, 12 2014. doi:10.1214/14-AOS1255. URL <https://projecteuclid.org/journals/annals-of-statistics/volume-42/issue-6/Partial-distance-correlation-with-methods-for-dissimilarities/10.1214/14-AOS1255.full>.
- G. J. Székely, M. L. Rizzo, and N. K. Bakirov. Measuring and testing dependence by correlation of distances. *The Annals of Statistics*, 35(6):2769–2794, 2007. doi:10.1214/009053607000000505. URL <https://projecteuclid.org/journals/annals-of-statistics/volume-35/issue-6/Measuring-and-testing-dependence-by-correlation-of-distances/10.1214/009053607000000505.full>.
- E. K. Teixeira and M. Oliveira. Editorial board interlocking in knowledge management and intellectual capital research field. *Scientometrics*, 117(3):1853–1869, 2018. doi:10.1007/s11192-018-2937-x. URL <https://link.springer.com/article/10.1007/s11192-018-2937-x>.
- V. A. Traag, L. Waltman, and N. J. van Eck. From louvain to leiden: guaranteeing well-connected communities. *Scientific Reports*, 9(1):5233, 2019. ISSN 2045-2322. doi:10.1038/s41598-019-41695-z.
- D. Wu, X. Lu, J. Li, and J. Li. Does the institutional diversity of editorial boards increase journal quality? the case economics field. *Scientometrics*, 124(2):1579–1597, 2020. doi:10.1007/s11192-020-03505-6. URL <https://link.springer.com/article/10.1007/s11192-020-03505-6>.
- S. Zsindely, A. Schubert, and T. Braun. Editorial gatekeeping patterns in international science journals. a new science indicator. *Scientometrics*, 4(1):57–68, 1982. doi:10.1007/bf02098006. URL <https://akjournals.com/view/journals/11192/4/1/article-p57.xml>.